

2023-2024

**OSSAA
DISTRICT
CHAMPIONSHIP**

High School

GAME 1

Welcome to the Oklahoma Secondary School Activities Association Academic Bowl. Audience, please remember this competition is between the two teams here. Do not whisper or say aloud the answer to the question. Please turn off all cell phones, tablets, or any device that can receive or send messages. If these go off, even silently, they could interfere with the wireless system used in our competition. Even if this room is not wireless, an adjoining room could be using a wireless system. Coaches, team members, and guests are to sit behind their team. As in all contests, sportsmanship is important. Coaches, your protests need to be at the allowed times. Team members, you will remain quiet while the opposing team is answering during both the toss-up and sixty second quarters.

Respect for the opponent, spectators, coaches, and officials is necessary at all levels of athletics and activity programs. At today's game, everyone's behavior should be characterized by generosity and genuine concern for others. Sportsmanship is everyone's responsibility, do the right thing.

- Introduce yourself and the chief judge.
- **Give your four count.** – Do this for every match (Game Procedures A – 11)
- Have the chief judge check the buzzers.

Note (do not read):

Official closest to scorekeeper: Make sure that scorekeeper has **full names** of students and check after first few questions that they are fully shading in correct answers, and marking correct answers only.

Official closest to timekeeper: Make sure the timekeeper is starting the clock and clearing for the first few questions.

OSSAA 2023-2024

DISTRICT GAME 1 FIRST QUARTER TOSS UP QUESTIONS

		Team One	Team Two
1.	This Rodgers and Hammerstein musical details the life, death, and redemption of Billy Bigelow, a former barker for a traveling show. Which musical is named after a carnival ride for children?		
	Answer: Carousel	_____	_____
2.	Math Computation: What is the sum of the infinite geometric series that begins with 45 and has a common ratio of two fifths?		
	Answer: 75	_____	_____
3.	This poem is the oldest surviving Spanish epic. Which poem tells the story of the conqueror of Valencia once exiled with only his horse for leading an unauthorized campaign.		
	Answer: <u>El Cid</u>	_____	_____
4.	Science computation: What is the total resistance, in ohms, flowing through a parallel circuit of 2 resistors if the resistances through them are both 16 ohms?		
	Answer: 8	_____	_____
5.	This Canadian city is the oldest French speaking community in North America. Which city is also the only walled city in North America?		
	Answer: <u>Quebec City</u>	_____	_____
6.	One of the more famous lines from this movie is “a boy’s best friend is his mother.” Name this movie in which Norman Bates attacks a girl in the shower at his motel.		
	Answer: <i>Psycho</i>	_____	_____
7.	Built to commemorate this battle, <i>The Motherland Calls</i> is the largest statue of a woman in the world. Which World War II battle, one of the bloodiest in the history of warfare, stopped the German advance into the Soviet Union?		
	Answer: Battle of <u>Stalingrad</u>	_____	_____

OSSAA 2023-2024

DISTRICT GAME 1 FIRST QUARTER TOSS UP QUESTIONS

		Team One	Team Two
8.	Math Computation: Solve the following equation for x: $5(2x - 8) = 3(4x + 7)$ [5 times the quantity 2x minus 8 equals 3 times the quantity 4x plus 7].		
	Answer: (x=) -61/2 (or -30½ or -30.5)	_____	_____
9.	In 1991, this author's second novel, <i>The Firm</i> , spent 47 weeks on the New York Times Bestseller. Which author's newest release, <i>The Exchange</i> , a sequel to <i>The Firm</i> , is scheduled to release in October 2023?		
	Answer: <u>John Grisham</u>	_____	_____
10.	This type of solar energy uses pumps or fans to move liquids through the system. Which type of solar energy gathers its supply using photovoltaic cells?		
	Answer: <u>Active</u> solar	_____	_____
11.	This ranch, on the Salt Fork river in Indian Territory, was established in 1879. Which ranch was known for its Wild West Shows, which included the performers Bill Pickett, Tom Mix, and Buffalo Bill?		
	Answer: <u>Miller Brothers 101 Ranch</u>	_____	_____
12.	In February 2023, this player and T.J. Warren were traded for Mikal Bridges, Cameron Johnson, Jae Crowder, and 4 first-round draft picks. Which forward is now the 13 th highest scoring player in NBA history?		
	Answer: <u>Kevin Durant</u>	_____	_____
13.	This Scandinavian fish dish is usually dried and then soaked in lye, giving it a gelatinous texture. Which dish is made from white fish, most often cod?		
	Answer: <u>Lutefisk</u>	_____	_____
14.	Math Computation: What is the reduced probability that a flipped coin will end up tails twice out of five flips?		
	Answer: 5/16	_____	_____

OSSAA 2023-2024

DISTRICT GAME I FIRST QUARTER TOSS UP QUESTIONS

		Team One	Team Two
15.	This compound word is a slang term for pretending to be a different person online. Which word also names a popular fried dish often served with hush puppies?		
	Answer: Catfish	_____	_____
16.	In prokaryotic cells, this structure separates the cell from its environment. Which part of the cell controls the passage of materials into and out of the cell?		
	Answer: Plasma <u>membrane</u> (or cell membrane)	_____	_____
17.	In the U.S. presidential line of succession, the heads of the 15 Cabinet departments are included and their place is determined by this order. What criterion determines the position of a Cabinet department head in the line of succession?		
	Answer: Order in which the departments were created (except any equivalent answer)	_____	_____
18.	In January 2023, this country announced plans to overhaul its judicial system, limiting the power of the courts to rule against the executive and legislative branches. In which country did protests cause Prime Minister Benjamin Netanyahu to temporarily halt his overhauling process?		
	Answer: Israel	_____	_____
19.	This ballet, originally titled <i>Ballet For Martha</i> , was named for Hart Crane's poem <i>The Dance</i> . Which ballet by Aaron Copland contains a set of variations on the Shaker hymn "Simple Gifts."		
	Answer: <u>Appalachian Spring</u>	_____	_____
20.	Math Computation: Add and simplify the following radicals: $\sqrt{243} + \sqrt{108}$ [radical 243 plus radical 108]		
	Answer: $15\sqrt{3}$ [15 radical 3] (or 15 square root of 3)	_____	_____

Moderator: (Check score with chief judge and scorekeeper.)

The score at the end of the first quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Cooches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge: (Restate the score if they have changed because of protests.)

(In case of a tie after the first quarter) Since the score is tied, we will continue with additional toss-up questions until one team scores. (Restate the score if necessary)

2nd Quarter – Sixty Second Instructions

Moderator The second quarter of sixty second questions is about to begin. Everyone please be seated.

The categories for the 2nd quarter are: (Brief description)

1. CULINARY ARTS – INTERNATIONAL FOODS
2. ANATOMY- LOCATIONS OF BONES
3. U.S. GOVERNMENT – CONSTITUTIONAL AMENDMENTS

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) is ahead at this time, they will have the choice to play or defer until the 4th quarter.

- You will have 10 seconds to make your decision. (School name) do you choose to play or defer?
- (Address playing team) You will have 10 seconds to choose your category (re-read the above categories)
- (If the 10 second buzzer goes off, the moderator will ask for an immediate response.)
- Since (school name) is playing first, they may move to a position behind their captain. (Other team) will put down their pencils until their time to play. Captain, all answers will come from you unless you defer to another student.

Moderator (School name) You have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your choice.

The selections are:

- 1.
- 2.

Moderator (Check the score with the chief judge and score keeper.)

The score at the end of the first half is:

(School name) _____ has _____ points

(School name) _____ has _____ points.

Are there any questions? Cooches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out. (Pause briefly for protests.)

This concludes the first half of play. We will pause for substitutions

Substituting team members, please check in with the scorekeeper. WE WILL NOW BEGIN 3RD QUARTER TOSS-UP QUESTIONS.

OSSAA 2023-2024

**DISTRICT GAME 1
SECOND QUARTER
60 SECOND QUESTIONS**

CULINARY ARTS - INTERNATIONAL FOODS

Directions: Given a brief description, identify the following international food dishes.

- | | | |
|-----|---|-------------------------------|
| 1. | Middle Eastern deep fried ball made from ground chickpeas or fava beans | Falafel |
| 2. | Italian pasta in cream sauce with eggs and bacon | Pasta <u>Carbonara</u> |
| 3. | British sausages and mashed potatoes topped with onion gravy | Bangers and Mash |
| 4. | Japanese rice and seaweed roll featuring raw fish | Sushi |
| 5. | Peruvian dish of raw fish marinated in citrus juice with onions and peppers | Ceviche |
| 6. | Spanish national rice dish tinted with saffron | Paella |
| 7. | Middle Eastern dish made of fried and smashed eggplant | Baba Ganoush |
| 8. | Mexican sauce mixing chiles, nuts, and unsweetened chocolate | Mole |
| 9. | Israeli poached eggs in tomato sauce with chiles and spices | Shakshouka |
| 10. | Hungarian beef-based stew featuring paprika | Ghoulash |

EXTRA:

- | | | |
|----|---|------------------|
| 1. | German pork sausage cooked with beer, potatoes, and red cabbage | Bratwurst |
| 2. | Korean spicy fermented vegetables | Kimchi |

OSSAA 2023-2024

**DISTRICT GAME 1
SECOND QUARTER
60 SECOND QUESTIONS**

ANATOMY - LOCATIONS OF BONES

Directions: Identify the general location in the human body where the following bones are to be found.

- | | | |
|-----|----------------|------------------------------------|
| 1. | Fibula | Leg |
| 2. | Metacarpals | Wrist (or hand) |
| 3. | Sternum | Chest |
| 4. | Zygomatic Arch | Face (or skull) |
| 5. | Humerus | Arm |
| 6. | Sacrum | Pelvis (or butt or similar) |
| 7. | Temporal | Skull (or head) |
| 8. | Lunate | Hand |
| 9. | Malleus | Skull (or ear) |
| 10. | Parietal | Skull (or head) |

EXTRA:

- | | | |
|----|-----------|-------------------------|
| 1. | Calcaneus | Foot (or ankle) |
| 2. | Hyoid | Neck (or throat) |

OSSAA 2023-2024
DISTRICT GAME 1
SECOND QUARTER
60 SECOND QUESTIONS

U.S. GOVERNMENT - CONSTITUTIONAL AMENDMENTS

Directions: Given a brief description, identify the number of the amendment to the U.S. Constitution.

1.	Presidential voting for District of Columbia	23
2.	Prohibition of alcohol	18
3.	Prohibits cruel or unusual punishment	8
4.	Federal income taxes	16
5.	Protects rights of life, liberty, and property	5
6.	Rights of citizenship	14
7.	Unnamed rights kept by the people	9
8.	Rights reserved to states	10
9.	Two-term presidential limitation	22
10.	Prohibits lawsuits against states	11

EXTRA:

1.	Women's right to vote	19
2.	Punishment for states denying voting rights	14

OSSAA 2023-2024

DISTRICT GAME 1 THIRD QUARTER TOSS UP QUESTIONS

Team One Team Two

21. In this less familiar Mark Twain novel, Tom Sawyer and Huck Finn travel by hot air balloon to Africa. Which novel could be considered a sequel to the books featuring the individual adventures of each of those characters?

Answer: Tom Sawyer Abroad

22. When a sample of blood is spun in a centrifuge, this component comes to the top. What is this yellowish component that makes up 55 percent of the blood?

Answer: Plasma

23. In 1896, Nikola Tesla and George Westinghouse opened the world's first major plant for this type of power at Niagara Falls. Which type of power plant is the focus of the Niagara Power Visitors Center located four miles downstream from the main falls?

Answer: Hydroelectric

24. At the 2023 Grammy Awards presentation, this song was named Best Rap Song and helped win Kendrick Lamar Best Rap Performance. What song includes the lyrics "I come from a generation of pain where murder is minor."

Answer: "The Heart Part 5"

25. This American artist founded the Stone City Colony and Art School in Iowa and is known for his paintings featuring Iowa cornfields and subjects from American history. Which artist's most famous work is titled *American Gothic*?

Answer: Grant Wood

26. **Math Computation:** There is an upcharge of 18% on a couch that costs \$460. How much will the upcharge be?

Answer: \$82.80

27. In this short story, the narrator's visit to the gloomy home of a sick friend is the setting for a tale of horror. Which story by Edgar Allen Poe features twins Roderick and Madeline, a dilapidated house, and a scary lake?

Answer: The Fall of the House of Usher

OSSAA 2023-2024

DISTRICT GAME 1 THIRD QUARTER TOSS UP QUESTIONS

		Team One	Team Two
28.	Science computation: A watermelon is dropped from a hovering helicopter, hitting the ground after 5 seconds. Assuming gravity is 10.0 meters per second squared and using the equation $\Delta x = 1/2at^2$ [delta x equals one half a t squared], how high above the ground was the helicopter in meters?		
	Answer: 125	_____	_____
29.	After the Battle of Waterloo in 1815, Napoleon made his formal surrender aboard this ship of the Royal British Navy. Which ship was named for the mythological Greek hero who slew the Chimera?		
	Answer: (H.M.S.) Bellerophon	_____	_____
30.	In March 2023, this state prepared for a red tide, as the <i>Karenia brevis</i> organism bloomed and turned the water reddish-brown. Name this state where the counties Pasco, Manatee, and Sarasota were affected.		
	Answer: Florida	_____	_____
31.	This 20 th century British composer based his <i>War Requiem</i> on the antiwar poems of Wilfred Owen. Which man composed the operas <i>Billy Budd</i> and <i>Death in Venice</i> ?		
	Answer: Benjamin <u>Britten</u>	_____	_____
32.	Math Computation: Find the limit as x approaches infinity of the function: $f(x) = (40x^3 + 12x + 48) / (16x^3 + 13x - 8)$ [F of x equals the quantity 40 x cubed plus 12x plus 48 end quantity over the quantity 16 x cubed plus 13x minus 8 end quantity].		
	Answer: 5/2 (or 2&1/2 or 2.5)	_____	_____
33.	In 1668, John Dryden became a salaried member of the Royal house when he was appointed to this position for excellence in writing. Which two-word position was later granted to William Wordsworth and Alfred, Lord Tennyson?		
	Answer: <u>Poet Laureate</u>	_____	_____

OSSAA 2023-2024

DISTRICT GAME 1 THIRD QUARTER TOSS UP QUESTIONS

		Team One	Team Two
34.	This critical distance at which the escape speed for an object is equal to the speed of light, is proportional to an object's mass. What name for this distance is taken from the German scientist who studied its properties?		
	Answer: <u>Schwarzschild</u> radius	_____	_____
35.	The three great rivers of India originate in this triple-ridged mountain chain. Which mountain chain's name comes from the Sanskrit for "Abode of Snow?"		
	Answer: Himalayas	_____	_____
36.	In March 2023, this incendiary politician claimed there is a "trans mafia" that conspires with Antifa to abuse children. Which conspiracy theorist represents the 14 th district of Georgia in the U.S. House of Representatives?		
	Answer: Marjorie Taylor <u>Greene</u>	_____	_____
37.	This sculptor is one of the reasons Rome is nicknamed the "city of fountains." Which 16th century sculptor's fountains include the Fountain of the Four Rivers in Navona Plaza and the Fontana della Barcaccia at the foot of the Spanish Steps?		
	Answer: GianLorenzo <u>Bernini</u>	_____	_____
38.	Math Computation: What is the surface area, in terms of square inches, of a cylinder that has a radius of 4 inches and a height of 9 inches? Put your answer in terms of pi.		
	Answer: 104 pi	_____	_____
39.	In Shakespeare's play Macbeth, it is foretold that Macbeth shall not be killed by a man of woman born, foreshadowing his death at the hands of this man. Which character has been "untimely ripped" from his mother's womb, fulfilling the witches' prophecy?		
	Answer: MacDuff	_____	_____
40.	Science Computation: According to the Aufbau principle, what orbital shell is filled after the 2p orbital?		
	Answer: 3s	_____	_____

Moderator (Check score with chief judge and scorekeeper.)
The score at the end of the third quarter is:
(school name) _____ has _____ points
(school name) _____ has _____ points
Coaches you may approach your team for 30 seconds to assist in any questions.
This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge (Restate the score if they have changed because of protests.)

4th Quarter – Sixty Second Instructions

Moderator The fourth quarter of sixty second questions is about to begin. Everyone please be seated.
The categories for the 4th quarter are: (Brief description)
1. HUMANITIES – WOMEN IN THE OLD TESTAMENT
2. LANGUAGE ARTS – LITERARY TEMS
3. MATH – FACTORS OF QUADRATICS
Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.
Because (school nome) chose first in the 2nd quarter, (schaal nome) will have the first choice this quarter.

You will have 10 seconds to choose your category.
(Active team) may move to a position behind the captain. (Other team) put down your pencils.
Captain, all answers will come from you unless you defer to another student.

Moderator (School name) You will have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your selection.

The selections are:

- 1.
- 2.

Moderator (Check the score with the chief judge and score keeper) The scare at the end of the game is:
(School nome) _____ has _____ points
(School nome) _____ has _____ points

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is nat a charges time aut.
(Restate the score if it has changed)

(If the gome is tied, sudden death questions will be asked.)
Because the game is tied, sudden death tass-up questions will be osked. Would either team like ta make substitutions? Again, this is not a time for coaches to confer with their team. (Pause far substitutions.)

Moderator This concludes the game. Congratulations to both teams. Please check your bracket and move to the next round as quickly as possible.

OSSAA 2023-2024

**DISTRICT GAME 1
FOURTH QUARTER
60 SECOND QUESTIONS**

HUMANITIES - WOMEN IN THE OLD TESTAMENT

Directions: From the information given, identify these women mentioned in the Old Testament of the Bible.

- | | | |
|-----|---|----------------------|
| 1. | Abraham's wife | Sarah (Sarai) |
| 2. | Mother of Ishmael | Hagar |
| 3. | Prostitute who saves Joshua's spies in Jericho | Rahab |
| 4. | Judge of Israel, summoned Barak to be her general | Deborah |
| 5. | Betrays Samson to the Philistines | Delilah |
| 6. | Mother-in-law of Ruth | Naomi |
| 7. | Mother of Moses | Jochebed |
| 8. | Esther replaces this woman as Queen of Persia | Vashti |
| 9. | Wife of Ahab who threatens Elijah | Jezebel |
| 10. | Wife of Moses who saves him from angel sent to kill him | Zipporah |

EXTRA:

- | | | |
|----|--|----------------|
| 1. | Mother of Jacob and Esau | Rebekah |
| 2. | Sister of Moses who releases him in the Nile River | Miriam |

OSSAA 2023-2024

DISTRICT GAME 1 FOURTH QUARTER 60 SECOND QUESTIONS

LANGUAGE ARTS - LITERARY TERMS

Directions: Given a brief definition, identify the following literary terms.

- | | | |
|-----|--|---------------------|
| 1. | Study of the meaning of language | Semantics |
| 2. | Slang associated with a particular career or activity | Jargon |
| 3. | Main character working against the hero or heroine | Antagonist |
| 4. | Pattern of end rhyme in a poem | Rhyme Scheme |
| 5. | Social or regional variety of a particular language | Dialect |
| 6. | Audience's emotional release at the end of a tragedy | Catharsis |
| 7. | Character created to contrast with another character | Foil |
| 8. | Using a word or phrase to mean exact opposite of literal meaning | Irony |
| 9. | Central idea in a literary work | Theme |
| 10. | Use of language to create vivid pictures in a reader's mind | Imagery |

EXTRA:

- | | | |
|----|---|--------------------|
| 1. | Expression that has lost value due to overuse | Cliché |
| 2. | Blended word, such as smog | Portmanteau |

OSSAA 2023-2024

**DISTRICT GAME 1
FOURTH QUARTER
60 SECOND QUESTIONS**

MATH - FACTORS OF QUADRATICS

Directions: Find the factors of each of the following quadratic expressions. {Moderator – the answers can be in either order, but they must have both.}

- | | | |
|-----|------------------|----------------------|
| 1. | $x^2 + 7x + 10$ | $x + 2$ and $x + 5$ |
| 2. | $x^2 - 10x + 21$ | $x - 3$ and $x - 7$ |
| 3. | $x^2 - 3x - 54$ | $x - 9$ and $x + 6$ |
| 4. | $x^2 + 4x - 32$ | $x - 4$ and $x + 8$ |
| 5. | $x^2 + 15x + 54$ | $x + 9$ and $x + 6$ |
| 6. | $x^2 - 3x - 40$ | $x + 5$ and $x - 8$ |
| 7. | $x^2 - 16x + 48$ | $x - 12$ and $x - 4$ |
| 8. | $x^2 - 12x - 45$ | $x - 15$ and $x + 3$ |
| 9. | $2x^2 + 9x + 4$ | $2x + 1$ and $x + 4$ |
| 10. | $3x^2 + 14x - 5$ | $3x - 1$ and $x + 5$ |

EXTRA:

- | | | |
|----|------------------|----------------------|
| 1. | $x^2 + 14x - 51$ | $x + 17$ and $x - 3$ |
| 2. | $x^2 - 4x - 60$ | $x + 6$ and $x - 10$ |

OSSAA 2023-2024

DISTRICT GAME 1 EXTRA QUESTIONS

Extra:

		Team One	Team Two
E1.	This river, which formed the Royal Gorge, originates in the Colorado Rockies. Which river has ports in both Catoosa and Muskogee, Oklahoma?		
	Answer: <u>Arkansas River</u>	_____	_____
E2.	The Super Bowl trophy is named for this man. Who was this coach who led the Green Bay Packers to five NFL championships?		
	Answer: <u>Vince Lombardi</u>	_____	_____
E3.	This celebrity chef's first cookbook was titled <i>The French Chef</i> . Which woman hosted a television show of the same name on Boston's public television station in the 1960s?		
	Answer: <u>Julia Child</u>	_____	_____
E4.	Math Computation: What are the coordinates of the center of an ellipse with the following equation: $(x + 12)^2 / 64 + (y - 9)^2 / 196 = 1$ [the quantity x plus 12 end quantity squared over 64 plus the quantity y minus 9 end quantity squared over 196 equals 1]?		
	Answer: <u>(-12, 9)</u>	_____	_____
E5.	In English grammar, the word "very" functions as this part of speech. Which part of speech modifies verbs and adjectives?		
	Answer: <u>Adverb</u>	_____	_____
E6.	This branch of biology deals exclusively with the study of plants. Which branch includes the structure, properties, and biochemical process of plants?		
	Answer: <u>Botany</u>	_____	_____

2023-2024

**OSSAA
DISTRICT
CHAMPIONSHIP**

High School

GAME 2

(BEGINNING OF GAME)

Welcome to the Oklahoma Secondary School Activities Association Academic Bowl. You have previously been instructed regarding the rules. Please turn off all cell phones, tablets, or any device that can receive or send messages. Coaches, team members, and guests are to sit behind their team. Coaches, your protests need to be at the allowed times.

Respect for the opponent, spectators, coaches, and officials is necessary at all levels of athletics and activity programs. At today's game, everyone's behavior should be characterized by generosity and genuine concern for others. Sportsmanship is everyone's responsibility, do the right thing.

- Introduce yourself and the chief judge.
- **Give your four count.** – Do this for every match (Game Procedures A – 11)
- Have the chief judge check the buzzers.

Note (do not read):

Official closest to scorekeeper: Make sure that scorekeeper has **full names** of students and check after first few questions that they are fully shading in correct answers, and marking correct answers only.

Official closest to timekeeper: Make sure the timekeeper is starting the clock and clearing for the first few questions.

OSSAA 2023-2024

DISTRICT GAME 2 FIRST QUARTER TOSS UP QUESTIONS

		Team One	Team Two
1.	Section 8 of this Article of the U.S. Constitution empowers Congress to propose and pass laws. Which Article contains the statement known as the Elastic Clause?		
	Answer: Article I [one]	_____	_____
2.	This molecular shape occurs in ammonia. In which shape do the two paired electrons in the central atom repel the other three atoms in the shape, like the nitrogen and three hydrogen atoms?		
	Answer: <u>Trigonal Pyramidal</u>	_____	_____
3.	According to Freud's Theories, this part of a person's mental structure is guided by the reality principle. Which structure of personality does the thinking, planning, and deciding?		
	Answer: Ego	_____	_____
4.	In 2023, one week after six people were killed at the Covenant School, students in this large Southern city walked out of class as a call for gun reform. Name this city where the students marched to the Tennessee Capitol building.		
	Answer: Nashville	_____	_____
5.	This famous novel opens with a "throng of bearded men, in sad-coloured garments and grey steeple-crowned hats" outside a prison door. What is the title of this novel about a Puritan woman accused of adultery?		
	Answer: <u>The Scarlet Letter</u>	_____	_____
6.	Math Computation: Divide the polynomial, $x^3 - 4x - 15$ [x cubed minus 4x minus 15], by the binomial, $x - 3$. You could use synthetic division or long division to find this answer.		
	Answer: $x^2 + 3x + 5$ [x squared plus 3x plus 5]	_____	_____

OSSAA 2023-2024

DISTRICT GAME 2 FIRST QUARTER TOSS UP QUESTIONS

		Team One	Team Two
7.	The Battle of Pittsburg Landing, better known by this name, took place in April 1862. Which battle in southwestern Tennessee resulted in more than 10,000 casualties on each side?		
	Answer: Shiloh	_____	_____
8.	This chemical is released when platelets in the blood are affixed to the damaged wall of a blood vessel. What is this "S" chemical that makes the blood vessel constrict and helps to induce clotting?		
	Answer: Serotonin	_____	_____
9.	In 1914, the painting known as the <i>Rokeby Venus</i> , by this artist, was attacked by a woman with a meat cleaver. Which Spanish artist also painted the work titled <i>Las Meninas</i> ?		
	Answer: Diego Velazquez	_____	_____
10.	In March 2023, the largest team fine in NASCAR history was assessed against this team. Which team was punished for modifying air-deflecting pieces on cars for William Byron, Alex Bowman, and two others?		
	Answer: Hendrick Motorsports	_____	_____
11.	This type of light comedy takes its name from the French term for stuffing in turkey. Which type of play is exemplified by Shakespeare's <i>The Taming of the Shrew</i> and <i>She Stoops to Conquer</i> by Oliver Goldsmith?		
	Answer: Farce	_____	_____
12.	Math Computation: What is the mean of the following set of quiz scores: 22, 48, 55, and 79?		
	Answer: 51	_____	_____
13.	This thronelike saddle was invented for riding on the back of an elephant. What name was given to this saddle, often used by royalty, which could be decorated with gold, silver, and jewels to show the ruler's wealth?		
	Answer: Howdah	_____	_____

OSSAA 2023-2024

DISTRICT GAME 2 FIRST QUARTER TOSS UP QUESTIONS

		Team One	Team Two
14.	ALS is the acronym for this disease which ended Lou Gehrig's baseball career and ultimately his life. What is the full name of this neurological disorder that causes muscle atrophy and paralysis?		
	Answer: <u>Amyotrophic lateral sclerosis</u>	_____	_____
15.	This comic opera by Gilbert and Sullivan is set in the fictional Japanese town of Titipu. In which opera does Yum-Yum fall in love with Nanki-Poo?		
	Answer: <u>The Mikado</u>	_____	_____
16.	In April 2023, NASA named the four astronauts who will fly on this spacecraft scheduled to launch from Earth in November 2024. Name this spacecraft expected to circle the Moon and return to Earth ten days later.		
	Answer: <u>Artemis II</u>	_____	_____
17.	The 1951 Pulitzer Prize for Poetry went to this author's collection titled <i>Complete Poems</i> . Which author's poems include <i>Under the Harvest Moon</i> and <i>Chicago</i> ?		
	Answer: <u>Carl Sandburg</u>	_____	_____
18.	Math Computation: What is the equation of the line, in slope-intercept form, through the points (-13, -4) [negative 13 comma negative 4] and (-17, 16) [negative 17 comma 16]?		
	Answer: <u>$y = -5x - 69$ [y equals negative five x minus 69]</u>	_____	_____
19.	This island republic was put under the control of the United States after the Spanish-American War. Which nation consists of more than 7600 islands?		
	Answer: <u>Republic of the Philippines</u>	_____	_____
20.	Examples of this type of device include touchscreens, keyboards, printers, and mice. What term, beginning with "P", identifies an external device that provides data input or output for the computer?		
	Answer: <u>Peripheral</u>	_____	_____

Moderator: (Check score with chief judge and scorekeeper.)

The score at the end of the first quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Coaches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge: (Restate the score if they have changed because of protests.)

(In case of a tie after the first quarter) Since the score is tied, we will continue with additional toss-up questions until one team scores. (Restate the score if necessary)

2nd Quarter – Sixty Second Instructions

Moderator The second quarter of sixty second questions is about to begin. Everyone please be seated.

The categories for the 2nd quarter are: (Brief description)

1. POTPOURRI – PEOPLE NAMED BOB OR BOBBY
2. POTPOURRI – CONTAINS THE WORD GOLD
3. POTPOURRI – CONTAINS THE WORD SILVER

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) is ahead at this time, they will have the choice to play or defer until the 4th quarter.

- You will have 10 seconds to make your decision. (School name) do you choose to play or defer?
- (Address playing team) You will have 10 seconds to choose your category (re-read the above categories)
- (If the 10 second buzzer goes off, the moderator will ask for an immediate response.)
- Since (school name) is playing first, they may move to a position behind their captain. (Other team) will put down their pencils until their time to play. Captain, all answers will come from you unless you defer to another student.

Moderator (School name) You have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your choice.

The selections are:

- 1.
- 2.

Moderator (Check the score with the chief judge and score keeper.)

The score at the end of the first half is:

(School name) _____ has _____ points

(School name) _____ has _____ points.

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out. (Pause briefly for protests.)

This concludes the first half of play. We will pause for substitutions

Substituting team members, please check in with the scorekeeper. WE WILL NOW BEGIN 3RD QUARTER TOSS-UP QUESTIONS.

OSSAA 2023-2024

**DISTRICT GAME 2
SECOND QUARTER
60 SECOND QUESTIONS**

POTPOURRI - PEOPLE NAMED BOB OR BOBBY

Directions: Identify each of the following people or characters named Bob or Bobby.

- | | | |
|-----|---|-------------------------------------|
| 1. | Lives in a pineapple under the sea | <u>SpongeBob SquarePants</u> |
| 2. | Movie character from <i>The Waterboy</i> | Bobby <u>Boucher</u> |
| 3. | Main character from Talladega Nights | <u>Ricky Bobby</u> |
| 4. | American painter and TV host of "Joy of Painting" | Bob <u>Ross</u> |
| 5. | Hall of Fame college basketball coach for Indiana University | Bob <u>Knight</u> |
| 6. | Jamaican reggae singer of "I Shot the Sheriff" | Bob <u>Marley</u> |
| 7. | Reclusive chess grandmaster who was often searched for | Bobby <u>Fischer</u> |
| 8. | Food Network Star | Bobby <u>Flay</u> |
| 9. | Held long jump world record for 22 years | Bob <u>Beamon</u> |
| 10. | Entertainer who hosted the Oscars 19 times and toured with the USO 57 times | Bob <u>Hope</u> |

EXTRA:

- | | | |
|----|--|-------------------------------|
| 1. | Protagonist from <i>Journal of an Adventure Through Time and Space</i> | Bobby <u>Pendragon</u> |
| 2. | Singer of "Blowin' in the Wind" | Bob <u>Dylan</u> |

OSSAA 2023-2024

**DISTRICT GAME 2
SECOND QUARTER
60 SECOND QUESTIONS**

POTPOURRI - CONTAINS THE WORD GOLD

Directions: Given a brief description, identify each of the following. All answers will contain the word "gold".

- | | | |
|-----|---|-------------------------------------|
| 1. | First place in athletics event wins this | Gold Medal |
| 2. | Surge of miners when the precious metal is discovered | Gold Rush |
| 3. | Extremely popular breed of dog | Golden Retriever |
| 4. | Alloy of gold and nickel or gold and palladium | White Gold |
| 5. | Region of Queensland, Australia | Gold Coast |
| 6. | Someone in a relationship solely because of money | Golddigger |
| 7. | Bird of prey in North America | Golden Eagle |
| 8. | 1974 James Bond movie | The Man with the Golden Gun |
| 9. | NBA team from California | <u>Golden State</u> Warriors |
| 10. | Do unto others as you would have them do unto you | The <u>Golden Rule</u> |

EXTRA:

- | | | |
|----|--|-----------------------|
| 1. | Breakfast cereal brand distributed by Nestle | Golden Grahams |
| 2. | 1995 James Bond movie | Goldeneye |

OSSAA 2023-2024

DISTRICT GAME 2 SECOND QUARTER 60 SECOND QUESTIONS

POTPOURRI - CONTAINS THE WORD SILVER

Directions: Given a brief description, identify each of the following. All answers will contain the word "silver".

- | | | |
|-----|---|--------------------------------|
| 1. | 2012 RomCom starring Bradley Cooper and Jennifer Lawrence | Silver Linings Playbook |
| 2. | Alloy that is 92.5% silver and rest is usually copper | Sterling Silver |
| 3. | Treasure Island character | Long John Silver |
| 4. | Legendary weapon against werewolves | Silver Bullet |
| 5. | Nickname for Nevada | Silver State |
| 6. | Amusement Park in Branson | Silver Dollar City |
| 7. | Marvel comics superhero | Silver Surfer |
| 8. | Commissioner of the NBA | <u>Adam Silver</u> |
| 9. | Band who released Better Nature in 2015 | Silversun Pickups |
| 10. | Small wingless insect in the Shysanura order | Silverfish |

EXTRA:

- | | | |
|----|--|----------------------|
| 1. | Adult male gorilla | Silverback |
| 2. | Luxury model produced by Rolls Royce from 1980 to 1997 | Silver Spirit |

OSSAA 2023-2024

DISTRICT GAME 2 THIRD QUARTER TOSS UP QUESTIONS

		Team One	Team Two
21.	The Tokyo Imperial Hotel, designed by this architect, survived the Great Kanto Earthquake of 1923. Which architect's design of the hotel was unique for its use of natural and man-made light and its copper fixtures on the roof?		
	Answer: Frank Lloyd <u>Wright</u>	_____	_____
22.	Science computation: A projectile is launched horizontally off the end of a cliff that is 256 feet tall. Use $\Delta x = 1/2at^2$ [delta x equals one half a times t squared] and an acceleration due to gravity of 32 feet per second squared to find how long it takes the projectile to land in seconds. Use the correct number of significant digits in your answer.		
	Answer: 4	_____	_____
23.	The texts, songs, and actions used regularly in a religious service are known by this L word. Which collective noun is defined as a religion's rites and practices of public worship?		
	Answer: Liturgy	_____	_____
24.	In the Genus version of this game, the categories are Geography, Entertainment, History, Art & Literature, Science & Nature, and Sports & Leisure. Which board game, first released in 1982, has players attempting to collect all 6 pieces of their pie?		
	Answer: <u>Trivial Pursuit</u>	_____	_____
25.	In order to circumvent a 1948 Supreme Court ruling against segregation at the OU's law school, the Oklahoma legislature set up a new law school to accommodate this woman. Which native of Chickasha filed this lawsuit?		
	Answer: Ada Louise <u>Sipuel</u> Fisher	_____	_____
26.	Math Computation: A quadrilateral has vertices at (5, 2), (9, 6), (12, 5) and (9, -1). What are the coordinates of the quadrilateral if it is reflected over the y-axis?		
	Answer: (-5,2), (-9,6), (-12,5), (-9,-1)	_____	_____

OSSAA 2023-2024

DISTRICT GAME 2
THIRD QUARTER
TOSS UP QUESTIONS

Team One Team Two

27. The main ingredients in this type of Greek casserole include ground meat and sliced eggplant. What is the name for this layered casserole resembling lasagna?

Answer: Moussaka

28. In this type of visual illusion, retinal impressions persist after the removal of a stimulus. What is the term for this illusion such as the spot of light one sees after a camera flash when a picture is taken?

Answer: Afterimage

29. This three-letter word came to English by way of the Chinese and indicated the addiction associated with opium. Which word is defined as a strong desire or craving?

Answer: Yen

30. After the U.S. ambassador visited his opponent in the upcoming elections, this president told a rally for the "Gray Wolves" group that his government needed to "teach America a lesson". Name this current President of Turkey.

Answer: Recep Tayyip Erdogan

31. The Teapot Dome scandal involved Navy oil reserves in this state. Which state is the least populated state in the U.S.?

Answer: Wyoming

32. **Math Computation:** Solve the following equation to find G: $\sqrt{(3G - 5)} = 8$ [the square root of the quantity 3G minus 5 equals 8].

Answer: (G=) 23

33. When Moses led the Israelites out of Egypt, the tribe descended from this man was the only one that did not bow down to the Golden Calf. Name this son of Isaac whose descendants were destined for priesthood.

Answer: Levi

OSSAA 2023-2024

DISTRICT GAME 2 THIRD QUARTER TOSS UP QUESTIONS

		Team One	Team Two
34.	In a eukaryotic cell, each of these structures is surrounded by eight protein granules assembled in an octagonal shape. What cell structure creates a hole in the wall of the nucleus?		
	Answer: Nuclear pore	_____	_____
35.	One of this author's short stories has the same title as the Walt Whitman poem <i>I Sing the Body Electric</i> , and his first short story collection was titled <i>Dark Carnival</i> . Which American author wrote the 1950 classic <i>The Martian Chronicles</i> ?		
	Answer: Ray Bradbury	_____	_____
36.	At the 2023 Grammy Awards presentation, these two singers won the award for Best Pop Duo/Group Performance. Name these singers of "Unholy."		
	Answer: Sam Smith and Kim Petras	_____	_____
37.	Blue mud found at this location in 1864 turned out to be high quality silver ore. Which major discovery of silver ore prompted the admission of the Nevada territory as a state?		
	Answer: Comstock Lode	_____	_____
38.	Math Computation: What is the first derivative of: $\csc x$ [cosecant x]?		
	Answer: $-\csc x \cot x$ [negative cosecant x cotangent x]	_____	_____
39.	This French artist's "La Grande Odalisque" can be seen at the Louvre Museum in Paris. Name this French Neoclassical painter who also depicted a poet reaching divinity in "The Apotheosis of Homer."		
	Answer: Jean Auguste Dominique Ingres	_____	_____
40.	Science computation: Given that the half-life of uranium 235 to lead-207 is about 704 million years, how old, in years, would a rock formation be if it had a 12.5% ratio of uranium-235 to lead-207?		
	Answer: 2112 million years (or 2 billion, 112 million years)	_____	_____

Moderator (Check score with chief judge and scorekeeper.)
The score at the end of the third quarter is:
(school name) _____ has _____ points
(school name) _____ has _____ points
Coaches you may approach your team for 30 seconds to assist in any questions.
This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge (Restate the score if they have changed because of protests.)

4th Quarter – Sixty Second Instructions

Moderator The fourth quarter of sixty second questions is about to begin. Everyone please be seated.
The categories for the 4th quarter are: (Brief description)
1. MATH – SOLVING SIMPLE LOG EQUATIONS
2. GEOGRAPHY – WORLD GEOGRAPHY
3. HUMANITIES – FIGURES IN GREEK MYTHOLOGY
Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.
Because (school name) chose first in the 2nd quarter, (school name) will have the first choice this quarter.

You will have 10 seconds to choose your category.
(Active team) may move to a position behind the captain. (Other team) put down your pencils.
Captain, all answers will come from you unless you defer to another student.

Moderator (School name) You will have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your selection.

The selections are:

- 1.
- 2.

Moderator (Check the score with the chief judge and score keeper) The score at the end of the game is:
(School name) _____ has _____ points
(School name) _____ has _____ points

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out.
(Restate the score if it has changed)

(If the game is tied, sudden death questions will be asked.)
Because the game is tied, sudden death toss-up questions will be asked. Would either team like to make substitutions? Again, this is not a time for coaches to confer with their team. (Pause for substitutions.)

Moderator This concludes the game. Congratulations to both teams. Please check your bracket and move to the next round as quickly as possible.

OSSAA 2023-2024

**DISTRICT GAME 2
FOURTH QUARTER
60 SECOND QUESTIONS**

MATH - SOLVING SIMPLE LOG EQUATIONS

Directions: Solve each of the following simple logarithmic equations. You do not need to say "x equals".

- | | | |
|-----|--|--------|
| 1. | $\log_2 32 = x$ [log base 2 of 32 equals x] | (x=) 5 |
| 2. | $\log_4 64 = x$ [log base 4 of 64 equals x] | 3 |
| 3. | $\log_x 216 = 3$ [log base x of 216 equals 3] | 6 |
| 4. | $\log_x 125 = 3$ [log base x of 125 equals 3] | 5 |
| 5. | $\log_7 x = 3$ [log base 7 of x equals 3] | 343 |
| 6. | $\log_2 x = 7$ [log base 2 of x equals 7] | 128 |
| 7. | $\log_3 1/81 = x$ [log base 3 of 1 over 81 equals x] | -4 |
| 8. | $\log_x 343 = 3/2$ [log base x of 343 equals three halves] | 49 |
| 9. | $\log_{125} x = 2/3$ [log base 125 of x equals two thirds] | 25 |
| 10. | $\log_{49} x = -1/2$ [log base 49 of x equals negative one half] | 1/7 |

EXTRA:

- | | | |
|----|--|-------|
| 1. | $\log_{64} 128 = x$ [log base 64 of 128 equals x] | 6/5 |
| 2. | $\log_{64} x = -3/2$ [log base 64 of x equals negative three halves] | 1/512 |

OSSAA 2023-2024

**DISTRICT GAME 2
FOURTH QUARTER
60 SECOND QUESTIONS**

GEOGRAPHY - WORLD GEOGRAPHY

Directions: Identify each of the following about world geography.

- | | |
|--|---------------------------------|
| 1. Lowest point on Earth's surface | Dead Sea |
| 2. Peninsula that includes Sweden and Norway | Scandinavia |
| 3. Lake on Red River created by Denison Dam | Lake <u>Texoma</u> |
| 4. Largest ocean | Pacific |
| 5. Former name of Democratic Republic of Congo | Zaire |
| 6. World's largest non-polar desert | Sahara |
| 7. Highest state capital in U.S. | <u>Santa Fe</u> |
| 8. North America's tallest mountain | Mt. McKinley (Denali) |
| 9. Island chain that includes San Cristobal and Santa Cruz | <u>Galapagos</u> Islands |
| 10. Oldest city in the United States | Saint Augustine |

EXTRA:

- | | |
|------------------------------------|---------------------------|
| 1. World's driest non-polar desert | Atacama |
| 2. World's newest country | <u>South Sudan</u> |

OSSAA 2023-2024

DISTRICT GAME 2 FOURTH QUARTER 60 SECOND QUESTIONS

HUMANITIES - FIGURES IN GREEK MYTHOLOGY

Directions: Given a beginning letter and a brief description, identify these characters in Greek mythology.

- | | | |
|-----|---|-------------------|
| 1. | A- King of Mycenae who led his troops to war against Troy | Agamemnon |
| 2. | C- King of the Titans | Cronus |
| 3. | M- King who wished for a golden touch | Midas |
| 4. | C- Muse of epic poetry | Calliope |
| 5. | D- Greek god of wine | Dionysus |
| 6. | F- The three goddesses of vengeance | Furies |
| 7. | E- Nymph who fell in love with Narcissus | Echo |
| 8. | P- Wife of Hades, Queen of the Underworld | Persephone |
| 9. | V- God of fire and the forge | Vulcan |
| 10. | T- Mother of Achilles | Thetis |

EXTRA:

- | | | |
|----|---|-----------------|
| 1. | R- Titan who was mother of Greek gods and goddesses | Rhea |
| 2. | Z- God of the West Wind | Zephyrus |

OSSAA 2023-2024

DISTRICT GAME 2 EXTRA QUESTIONS

Extra:

		Team One	Team Two
E1.	In 1981, this play about the life of a famous composer, won the Tony Award for Best Play. Which play, titled with the composer's first name, was later made into a hit movie starring Tom Hulse?		
	Answer: Amadeus	_____	_____
E2.	This “show about nothing” featured characters such as George, Elaine, Jerry, and Kramer. Which top-rated show of the 1990s centered around Jerry and his friends in the Upper West Side of Manhattan?		
	Answer: Seinfeld	_____	_____
E3.	In 1521, Pope Leo X conferred this title on Henry VIII, and it is still stamped as F.D. on British coins. Which ecclesiastical title, held by British monarchs, proved to be ironic in Henry's case, as he was excommunicated in 1533?		
	Answer: <u>Defender of the Faith</u>	_____	_____
E4.	Complete the following definition from calculus: F has a relative ____ [blank] at c if F of C is less than or equal to F of X for all X in some interval from U to V containing C.		
	Answer: <u>Minimum</u>	_____	_____
E5.	In opera, this two-word term indicates the soprano lead. Which Italian term is equivalent to the term diva?		
	Answer: <u>Prima Donna</u>	_____	_____
E6.	Science computation: Use Gay-Lussac’s Law to find the final temperature of a gas held at constant volume if the gas was originally at 300 kilopascals and 450 Kelvin before being pressured to 600 kilopascals. Put your answer in Kelvin.		
	Answer: 900	_____	_____

2023-2024

**OSSAA
DISTRICT
CHAMPIONSHIP**

High School

GAME 3

(BEGINNING OF GAME)

Welcome to the Oklahoma Secondary School Activities Association Academic Bowl. You have previously been instructed regarding the rules. Please turn off all cell phones, tablets, or any device that can receive or send messages. Coaches, team members, and guests are to sit behind their team. Coaches, your protests need to be at the allowed times.

Respect for the opponent, spectators, coaches, and officials is necessary at all levels of athletics and activity programs. At today's game, everyone's behavior should be characterized by generosity and genuine concern for others. Sportsmanship is everyone's responsibility, do the right thing.

- Introduce yourself and the chief judge.
- **Give your four count.** – Do this for every match (Game Procedures A – 11)
- Have the chief judge check the buzzers.

Note (do not read):

Official closest to scorekeeper: Make sure that scorekeeper has **full names** of students and check after first few questions that they are fully shading in correct answers, and marking correct answers only.

Official closest to timekeeper: Make sure the timekeeper is starting the clock and clearing for the first few questions.

OSSAA 2023-2024

DISTRICT GAME 3 FIRST QUARTER TOSS UP QUESTIONS

		Team One	Team Two
1.	In this epic poem, the Redcrosse Knight battles the evil wizard Archimago. In which poem did author Edmund Spenser depict Queen Elizabeth I as a character named Gloriana?		
	Answer: <u>The Faerie Queene</u>	_____	_____
2.	Math Computation: Convert into a binary number, the base ten number 62.		
	Answer: 111110 [one one one one one zero]	_____	_____
3.	When Balboa discovered this body of water in 1513, he named it the South Sea. Which body of water's name was changed after Magellan remarked that it had a peaceful nature?		
	Answer: <u>Pacific Ocean</u>	_____	_____
4.	Science computation: What is the magnitude of a force acting on an object to maintain equilibrium if one force pushes north at 16.0 Newtons and another force pushes west at 30.0 Newtons? Make sure to express your answer in Newtons with the correct number of significant digits.		
	Answer: 34.0 {must say point zero}	_____	_____
5.	This sculptor associated with Existentialism and Surrealism was known for his long, thin human figures. Which sculptor's works include bronze stick-thin figures and plaster human heads?		
	Answer: <u>Alberto Giacometti</u>	_____	_____
6.	This movie had its world premiere at the South by Southwest film festival and saw worldwide release on March 31, 2023. Name this movie in which the bard Edgin Darvis tries to rescue his daughter Kira from Forge and Sofina.		
	Answer: <i>D&D: Honor Among Thieves</i>	_____	_____
7.	In Greek mythology, Stheno and Euryale were the less famous of these three sisters. The best known member of which group of winged females lost her head to Perseus?		
	Answer: Gorgons	_____	_____

OSSAA 2023-2024

DISTRICT GAME 3 FIRST QUARTER TOSS UP QUESTIONS

		Team One	Team Two
8.	In calculus, this method of integration is used to find the volume of an object with a hole in it that is rotated around an axis. Which method involves finding the area of the outside distance minus the inside distance, each squared, and multiplying by pi?		
	Answer: <u>Washer method</u>	_____	_____
9.	The Oklahoma artists known as the Kiowa Five were known for their revival of this style of art, named for the account books from which the paper was taken. Which style of art was practiced by the Plains tribes in the 1800s?		
	Answer: <u>Ledger art</u>	_____	_____
10.	This section of a mitochondrial organelle holds about 70 percent of the total protein in the organelle. What term is used for the region surrounded by the inner membrane?		
	Answer: <u>Mitochondrial matrix</u>	_____	_____
11.	This Native American mixed vegetable dish may contain many vegetables but will almost always have corn and lima beans. Which dish's name comes from the Narragansett language and roughly translates to broken corn kernels?		
	Answer: <u>Succotash</u>	_____	_____
12.	In April 2023, Israel launched its largest airstrikes in 17 years at this country in response to rockets fired from there the day before. Name this country that had a 34-day war with Israel in 2006.		
	Answer: <u>Lebanon</u>	_____	_____
13.	In 2005, author Isabel Allende wrote a book featuring this masked hero depicted in a movie starring Antonio Banderas. Which masked hero's calling card is the last letter of the Latin alphabet?		
	Answer: <u>Zorro (or Don Diego de la Vega)</u>	_____	_____

OSSAA 2023-2024

DISTRICT GAME 3 FIRST QUARTER TOSS UP QUESTIONS

		Team One	Team Two
14.	Math Computation: Solve the following logarithmic equation for x: $\log_x 1/27 = -3$ [log base x of one over 27 equals negative 3]. Answer: (x=) 3	_____	_____
15.	This U.S. government position has been held by such notables as Robert Kennedy, Janet Reno, and Merrick Garland. The holder of which position serves as the head of the Department of Justice? Answer: <u>United States Attorney General</u>	_____	_____
16.	The Andromeda Galaxy is classified as this type of galaxy. Which type of galaxy contains a flattened Galactic disk with outstretched arms, a central bulge with a dense collection of stars, and a large halo of old stars? Answer: Spiral	_____	_____
17.	This mythological hero convinces Charon to ferry him across the River Styx in order to search for his wife. Which renowned musician finds his wife in the Underworld only to lose her forever because he cannot resist looking back? Answer: Orpheus	_____	_____
18.	This designation identifies Girl Scouts typically in kindergarten or first grade. What name is used for girls in the lowest level of scouting? Answer: Daisies	_____	_____
19.	According to the author, this 1932 non-fiction work details the "beauty that can be produced by a man, an animal, and a piece of scarlet serge draped on a stick." What is the name of this book about bullfighting written by Ernest Hemingway? Answer: <u>Death in the Afternoon</u>	_____	_____
20.	Math Computation: An isosceles right triangle has a hypotenuse of 28 inches. What is the area of the triangle in square inches? Answer: 196	_____	_____

Moderator: (Check score with chief judge and scorekeeper.)

The score at the end of the first quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Coaches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge: (Restate the score if they have changed because of protests.)

(In case of a tie after the first quarter) Since the score is tied, we will continue with additional toss-up questions until one team scores. (Restate the score if necessary)

2nd Quarter – Sixty Second Instructions

Moderator The second quarter of sixty second questions is about to begin. Everyone please be seated.

The categories for the 2nd quarter are: (Brief description)

1. BIOLOGY - SPELLING

2. U.S. HISTORY – INFLUENTIAL PEOPLE

3. MATH – VOLUMES OF RECTANGULAR PRISMS

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) is ahead at this time, they will have the choice to play or defer until the 4th quarter.

- You will have 10 seconds to make your decision. (School name) do you choose to play or defer?
- (Address playing team) You will have 10 seconds to choose your category (re-read the above categories)
- (If the 10 second buzzer goes off, the moderator will ask for an immediate response.)
- Since (school name) is playing first, they may move to a position behind their captain. (Other team) will put down their pencils until their time to play. Captain, all answers will come from you unless you defer to another student.

Moderator (School name) You have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your choice.

The selections are:

1.

2.

Moderator (Check the score with the chief judge and score keeper.)

The score at the end of the first half is:

(School name) _____ has _____ points

(School name) _____ has _____ points.

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out. (Pause briefly for protests.)

This concludes the first half of play. We will pause for substitutions

Substituting team members, please check in with the scorekeeper. WE WILL NOW BEGIN 3RD QUARTER TOSS-UP QUESTIONS.

OSSAA 2023-2024

**DISTRICT GAME 3
SECOND QUARTER
60 SECOND QUESTIONS**

BIOLOGY - SPELLING

Directions: Spell each of the following words commonly found in a high school biology course.

- | | | |
|-----|---------------------------|--------------------------------|
| 1. | Biomass | B-I-O-M-A-S-S |
| 2. | Diffusion | D-I-F-F-U-S-I-O-N |
| 3. | Gamete [ga-meet] | G-A-M-E-T-E |
| 4. | Parasitism | P-A-R-A-S-I-T-I-S-M |
| 5. | Hemophilia | H-E-M-O-P-H-I-L-I-A |
| 6. | Lysosome | L-Y-S-O-S-O-M-E |
| 7. | Symbiosis [sim-by-oh-sis] | S-Y-M-B-I-O-S-I-S |
| 8. | Heterozygous | H-E-T-E-R-O-Z-Y-G-O-U-S |
| 9. | Phloem [flo-um] | P-H-L-O-E-M |
| 10. | Xylem [zy-lum] | X-Y-L-E-M |

EXTRA:

- | | | |
|----|-------------|------------------------------|
| 1. | Abiogenesis | A-B-I-O-G-E-N-E-S-I-S |
| 2. | Archaea | A-R-C-H-A-E-A |
-
-

OSSAA 2023-2024

**DISTRICT GAME 3
SECOND QUARTER
60 SECOND QUESTIONS**

U. S. HISTORY - INFLUENTIAL PEOPLE

Directions: Given a brief description, identify the following influential people in U.S. history.

- | | | |
|-----|--|--------------------------------------|
| 1. | His motto was buy in bulk and sell cheap | Sam <u>Walton</u> |
| 2. | President who implemented Trail of Tears | Andrew <u>Jackson</u> |
| 3. | President with a fourteen point plan | Woodrow <u>Wilson</u> |
| 4. | Author of <i>Silent Spring</i> | Rachel <u>Carson</u> |
| 5. | Circus owner who said there was a sucker born every minute | P.T. <u>Barnum</u> |
| 6. | Founded Hull House | Jane <u>Addams</u> |
| 7. | Developed first polio vaccine | Jonas <u>Salk</u> |
| 8. | Piloted the first transatlantic flight | Charles <u>Lindbergh</u> |
| 9. | Gave "Cross of Gold" speech | William Jennings <u>Bryan</u> |
| 10. | Wrote <i>Civil Disobedience</i> | Henry David <u>Thoreau</u> |

EXTRA:

- | | | |
|----|--|----------------------------|
| 1. | Introduced Mickey Mouse | Walt <u>Disney</u> |
| 2. | Wrote the pamphlet <i>Common Sense</i> | Thomas <u>Paine</u> |
-

OSSAA 2023-2024

**DISTRICT GAME 3
SECOND QUARTER
60 SECOND QUESTIONS**

MATH - VOLUMES OF RECTANGULAR PRISMS

Directions: Given the length, width, and height of each prism, find the total volume, in cubic units, of each of the following rectangular prisms.

1.	Length of 2, width of 4, height of 7	56
2.	3, 4, 6	72
3.	4, 5, 9	180
4.	3, 9, 12	324
5.	4, 5, 11	220
6.	6, 7, 12	504
7.	9, 10, 12	1080
8.	7, 11, 20	1540
9.	5, 14, 25	1750
10.	12, 18, 30	6480

EXTRA:

1.	5, 6, 12	360
2.	7, 14, 40	3920

OSSAA 2023-2024

DISTRICT GAME 3
THIRD QUARTER
TOSS UP QUESTIONS

		Team One	Team Two
21.	This Native American weapon got its name from an Algonquian word meaning to knock down. Early versions of which weapon had a double pointed stone through a hole bored in a handle or a stone head tied to a handle with sinew?		
	Answer: Tomahawk	_____	_____
22.	North Atlantic and Antarctic Circumpolar are two examples of these ocean features. What are these movements of ocean water that occur at or near the ocean surface called?		
	Answer: Currents	_____	_____
23.	This art movement of the early 20 th century took its name from a painting by Wassily Kandinsky. Which art movement was structured around the idea that color and form carried concrete spiritual value?		
	Answer: Der Blaue Reiter (The Blue Rider)	_____	_____
24.	When this quarterback retired in 1978, he owned NFL records for passing completions, attempts, touchdowns, interceptions, and rushing yards. Which man led the Minnesota Vikings to three Super Bowls appearances, all defeats?		
	Answer: Fran <u>Tarkenton</u>	_____	_____
25.	This ancient Greek playwright, known for his comedies, has the honor of having the most works preserved from that time period. The works of which Greek playwright include <i>The Wasps</i> and <i>The Frogs</i> ?		
	Answer: Aristophanes	_____	_____
26.	Math Computation: Convert an angle of 11 pi over 6 radians into an equivalent angle in degrees.		
	Answer: 330	_____	_____
27.	This U.S. city, once the capital of Russian America, is known for its signature totem poles. Which Alaskan city was the site of the signing of the Alaska purchase in 1867?		
	Answer: Sitka	_____	_____

OSSAA 2023-2024

DISTRICT GAME 3 THIRD QUARTER TOSS UP QUESTIONS

		Team One	Team Two
28.	Science computation: Using Boyle's Law, a gas with a volume of 1200 milliliters is under pressure at 8.0 atmospheres. If the pressure is decreased to 6.0 atmospheres, what will be the volume of the gas in milliliters?		
	Answer: 1600	_____	_____
29.	Part II of the oratorio <i>Messiah</i> ends with this famous musical piece. Which work by Handel, first recorded by the Mormon Tabernacle Choir in 1910, is often performed during the Easter season?		
	Answer: Hallelujah Chorus	_____	_____
30.	In April 2023, the U.S. National Institute on Aging announced plans to fund a \$300 million project for a database tracking the health of people suffering from this disease. Name this neurodegenerative disease that often causes dementia.		
	Answer: Alzheimer's	_____	_____
31.	This Middle English author was the first to be buried in Westminster Abbey's Poets' Corner. Which author's most famous work includes stories told by the Miller and the Pardoner?		
	Answer: Geoffrey Chaucer	_____	_____
32.	Math Computation: Find all solutions to the equation: $x^2 - 45 = 124$ [x squared minus 45 equals 124].		
	Answer: (x=) 13, -13 {must have both or may say plus or minus 13}	_____	_____
33.	In August 1941, President Franklin Roosevelt and British Prime Minister Winston Churchill met in Newfoundland, jointly announcing this charter. Which charter included 8 "common principles" that would be supported by the U.S. and Great Britain in the postwar world?		
	Answer: Atlantic Charter	_____	_____
34.	This 6-letter term from botany is defined as the topmost layer of foliage in a forest. Which thick layer of a rainforest blocks more than 90% of the sunlight striking the trees?		
	Answer: Canopy	_____	_____

OSSAA 2023-2024

DISTRICT GAME 3 THIRD QUARTER TOSS UP QUESTIONS

		Team One	Team Two
35.	In the architecture of medieval castles, this term refers to the open area enclosed by the outer wall of the castle. Which term, beginning with "B," indicates the area holding the supply buildings necessary for castle life?		
	Answer: Bailey	_____	_____
36.	Less than a week after being expelled from the Tennessee House of Representatives, these democratic lawmakers were reappointed to their former seats. Name either of these two men who were reappointed to their former seats after leading protests calling for gun reform.		
	Answer: Justin <u>Pearson</u> and Justin <u>Jones</u> {name either one}	_____	_____
37.	According to Greek mythology, this item was the only thing that remained after Pandora's box was opened. What item did Dante's <i>Inferno</i> indicate must be abandoned at the entrance to Hell?		
	Answer: Hope	_____	_____
38.	Math Computation: There are 25 red chips, 35 blue chips, and 40 white chips in a bag. What is the reduced fractional probability that a white chip, then a red chip will be drawn, after replacing the white chip? Make sure to reduce your fractional answer.		
	Answer: 1/10	_____	_____
39.	Oklahoma's symbols include these four state mammals. Name the four official state mammals of Oklahoma.		
	Answer: White-tailed deer, Mexican free-tailed bat, Bison, Raccoon	_____	_____
40.	Sharpey's fibers connect this portion of a bone to the diaphysis [di-af'i-sis]. What is this fibrous connective tissue membrane surrounding the bone?		
	Answer: Periosteum [per-e-os'te-um]	_____	_____

Moderator (Check score with chief judge and scorekeeper.)
The score at the end of the third quarter is:
(school name) _____ has _____ points
(school name) _____ has _____ points
Coaches you may approach your team for 30 seconds to assist in any questions.
This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge (Restate the score if they have changed because of protests.)

4th Quarter – Sixty Second Instructions

Moderator The fourth quarter of sixty second questions is about to begin. Everyone please be seated.
The categories for the 4th quarter are: (Brief description)
1. SCIENCE - INVENTORS
2. MUSIC - COMPOSERS
3. LITERATURE – SHORT STORIES AND AUTHORS
Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.
Because (school name) chose first in the 2nd quarter, (school name) will have the first choice this quarter.

You will have 10 seconds to choose your category.
(Active team) may move to a position behind the captain. (Other team) put down your pencils.
Captain, all answers will come from you unless you defer to another student.

Moderator (School name) You will have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your selection.

The selections are:

- 1.
- 2.

Moderator (Check the score with the chief judge and score keeper) The score at the end of the game is:
(School name) _____ has _____ points
(School name) _____ has _____ points

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charges time out.
(Restote the score if it has changed)

(If the gome is tied, sudden deoth questions will be asked.)
Because the game is tied, sudden death toss-up questions will be asked. Would either team like to make substitutions? Again, this is not a time for coaches to confer with their team. (Pause for substitutions.)

Moderator This concludes the game. Congratulations to both teams. Please check your bracket and move to the next round as quickly as possible.

OSSAA 2023-2024

**DISTRICT GAME 3
FOURTH QUARTER
60 SECOND QUESTIONS**

SCIENCE - INVENTORS

Directions: Identify the inventors of each of the following items or processes.

- | | | |
|-----|---------------------|-------------------------------|
| 1. | Polio vaccine | Jonas <u>Salk</u> |
| 2. | Diesel engine | Rudolf <u>Diesel</u> |
| 3. | Gas burner | Robert <u>Bunsen</u> |
| 4. | Rabies immunization | Louis <u>Pasteur</u> |
| 5. | Barometer | Evangelista <u>Torricelli</u> |
| 6. | Digital calculator | Blaise <u>Pascal</u> |
| 7. | Air brake | George <u>Westinghouse</u> |
| 8. | Safety razor | King <u>Gillette</u> |
| 9. | Seismograph | John <u>Milne</u> |
| 10. | Microwave oven | Percy <u>Spencer</u> |

EXTRA:

- | | | |
|----|------------------------|-----------------------|
| 1. | Centigrade thermometer | Anders <u>Celsius</u> |
| 2. | Stethoscope | Rene <u>Laennec</u> |

OSSAA 2023-2024

**DISTRICT GAME 3
FOURTH QUARTER
60 SECOND QUESTIONS**

MUSIC - COMPOSERS

Directions: Given the title of a musical work or group of works, name the composer.

- | | | |
|-----|-------------------------|--------------------------------|
| 1. | Hungarian Rhapsodies | Franz <u>Liszt</u> |
| 2. | White Christmas | Irving <u>Berlin</u> |
| 3. | Peter and the Wolf | Sergei <u>Prokofiev</u> |
| 4. | The Planets | Gustav <u>Holst</u> |
| 5. | The Rite of Spring | Igor <u>Stravinsky</u> |
| 6. | The Goldberg Variations | Johann Sebastian <u>Bach</u> |
| 7. | La Mer | Claude <u>Debussy</u> |
| 8. | Slavonic Dances | Antonin <u>Dvorak</u> |
| 9. | The Mephisto Waltz | Franz <u>Liszt</u> |
| 10. | The Magic Flute | Wolfgang Amadeus <u>Mozart</u> |

EXTRA:

- | | | |
|----|-------------------------------|-------------------------------|
| 1. | L'Orfeo | Claudio <u>Monteverdi</u> |
| 2. | Music for the Royal Fireworks | George Frideric <u>Handel</u> |

OSSAA 2023-2024

**DISTRICT GAME 3
FOURTH QUARTER
60 SECOND QUESTIONS**

LITERATURE - SHORT STORIES AND AUTHORS

Directions: Given the title of a famous short story, name the author.

- | | | |
|-----|---|------------------------------------|
| 1. | Rikki Tikki Tavi | Rudyard <u>Kipling</u> |
| 2. | The Red Pony | John <u>Steinbeck</u> |
| 3. | An Occurrence at Owl Creek Bridge | Ambrose <u>Bierce</u> |
| 4. | The Celebrated Jumping Frog of Calaveras County | Mark <u>Twain</u> (Samuel Clemens) |
| 5. | The Most Dangerous Game | Richard <u>Connell</u> |
| 6. | The Secret Sharer | Joseph <u>Conrad</u> |
| 7. | The Yellow Wallpaper | Charlotte Perkins <u>Gilman</u> |
| 8. | The Luck of Roaring Camp | Bret <u>Harte</u> |
| 9. | The Rocking-Horse Winner | D. H. <u>Lawrence</u> |
| 10. | The Monkey's Paw | W.W. <u>Jacobs</u> |

EXTRA:

- | | | |
|----|---|----------------------------|
| 1. | The Diamond as Big as the Ritz | F. Scott <u>Fitzgerald</u> |
| 2. | Where Are You Going, Where Have You Been? | Joyce Carol <u>Oates</u> |
-

OSSAA 2023-2024

DISTRICT GAME 3
EXTRA QUESTIONS

Extra:

		Team One	Team Two
E1.	This dish, created in the 1930s, is the national dish of Thailand. Which stir-fried rice noodle dish typically has peanuts, shrimp, a scrambled egg, and bean sprouts?		
	Answer: <u>Pad Thai</u>	_____	_____
E2.	This team shocked number one seed Purdue in the first round of the 2023 NCAA Men's basketball tournament. Name this team that went on to lose to FAU in the second round.		
	Answer: <u>Fairleigh Dickinson University (FDU)</u>	_____	_____
E3.	In writing, the name for this symbol comes from the Greek word for little star. What symbol is often used to indicate there is explanatory material at the bottom of the page?		
	Answer: Asterisk	_____	_____
E4.	Math Computation: Convert 444 inches into feet.		
	Answer: 37	_____	_____
E5.	In this 1935 Supreme Court case, the court ruled that the National Recovery Act was unconstitutional. Name this case that came to be known as the Sick Chicken Case.		
	Answer: <u>Schechter Poultry v. United States</u>	_____	_____
E6.	The DWV virus has been most devastating to these insects which live in colonies. What insects are experiencing catastrophic colony collapse caused by the deformed wing virus?		
	Answer: Bees	_____	_____

2023-2024

**OSSAA
REGIONAL
CHAMPIONSHIP**

High School

GAME 1

Welcome to the Oklahoma Secondary School Activities Association Academic Bowl. Audience, please remember this competition is between the two teams here. Do not whisper or say aloud the answer to the question. Please turn off all cell phones, tablets, or any device that can receive or send messages. If these go off, even silently, they could interfere with the wireless system used in our competition. Even if this room is not wireless, an adjoining room could be using a wireless system. Coaches, team members, and guests are to sit behind their team. As in all contests, sportsmanship is important. Coaches, your protests need to be at the allowed times. Team members, you will remain quiet while the opposing team is answering during both the toss-up and sixty second quarters.

Respect for the opponent, spectators, coaches, and officials is necessary at all levels of athletics and activity programs. At today's game, everyone's behavior should be characterized by generosity and genuine concern for others. Sportsmanship is everyone's responsibility, do the right thing.

- Introduce yourself and the chief judge.
- **Give your four count.** – Do this for every match (Game Procedures A – 11)
- Have the chief judge check the buzzers.

Note (do not read):

Official closest to scorekeeper: Make sure that scorekeeper has **full names** of students and check after first few questions that they are fully shading in correct answers, and marking correct answers only.

Official closest to timekeeper: Make sure the timekeeper is starting the clock and clearing for the first few questions.

**OSSAA 2023-2024
REGIONAL GAME 1
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	Firearms featuring this ignition mechanism were first invented in France in the early 16th century. Which mechanism followed the matchlock and wheel lock on firearms used by the colonists in the Revolutionary War?		
	Answer: Flintlock	_____	_____
2.	Math Computation: What is the area, in square feet and in terms of pi, of a circle that has a circumference of 34 pi feet?		
	Answer: 289 pi	_____	_____
3.	This fictional detective has read more books than anyone else in his hometown of Idaville. Which young crime-solver, created by Donald Sobol, charges 25 cents plus expenses to solve petty crimes?		
	Answer: <u>Encyclopedia Brown</u>	_____	_____
4.	Science computation: A spring undergoing simple harmonic motion has a period of 16.0 seconds. What is the frequency of vibrations in hertz?		
	Answer: 0.0625	_____	_____
5.	In 1901, this self-professed anarchist used a receiving line at the Temple of Music in the Pan-American Exposition to gain access to President William McKinley. Which man shot McKinley, who died 8 days later from his wound?		
	Answer: Leon <u>Czsolgosz</u> [tshol-gosh]	_____	_____
6.	In June 2023, this former presidential candidate and televangelist passed away. Which man was head of Regent University and the Christian Broadcasting Network and founded the Christian Coalition?		
	Answer: Marion Gordon "Pat" <u>Robertson</u>	_____	_____
7.	In this art printing process, a mirror image of the original is created. Which process, used by Andy Warhol, combines water-based ink and grease to create the image?		
	Answer: Lithography	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 1
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	Math Computation: What is the reduced rate of change of the line that goes from point (54,1950) [54 comma 1950] to point (79, 1200) [79 comma 1200]?		
	Answer: -30	_____	_____
9.	In literature, this tragic flaw is defined as excessive pride leading to defiance of the gods. Which flaw in Greek tragedy can be seen in the fall of Icarus and the downfall of Oedipus?		
	Answer: Hubris	_____	_____
10.	Soon after birth, all of the hyaline cartilage has been changed to bone except that at the end of bones and these plates. Which plates allow the longitudinal growth of long bones while young?		
	Answer: <u>Epiphyseal</u> [e-pif'i-see-ul] plates	_____	_____
11.	In February 1587, this woman was executed at Fotheringay Castle by order of Queen Elizabeth I. Which cousin of the queen had claimed to be the rightful heir to the crowns of Scotland, France, England, and Ireland?		
	Answer: Mary, Queen of Scots (or Mary I)	_____	_____
12.	This actor admitted that he had been to "hell and back" during a fight with an undisclosed illness in early 2023. Name this actor who was filming <i>Back in Action</i> with Cameron Diaz in April when he supposedly had a stroke.		
	Answer: Jamie Foxx	_____	_____
13.	This opera by Carlo Menotti is about a boy whose leg is healed after he gives away his crutch. What is the title of this opera specifically composed for American television?		
	Answer: <u>Amahl and the Night Visitors</u>	_____	_____
14.	Math Computation: What is the exact value of the sine of 30 degrees?	_____	_____
	Answer: 1/2 (or 0.5)	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 1
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
15.	Italian sonnets usually have two distinct sections, the eight line octavo and this six line section. What Italian word meaning turn identifies this section that contains a rhetorical shift in thought or argument?	_____	_____
	Answer: Volta		
16.	These narrow-edged teeth at the front of the mouth are specifically adapted for cutting. Name these teeth, which are prominent in rodents.	_____	_____
	Answer: Incisors		
17.	The Incas and the Chinese used this ancient technique for farming in mountainous terrain. Which technique involves constructing successive levels of flat surfaces resembling steps along a slope in order to plant crops?	_____	_____
	Answer: <u>Terrace</u> Farming		
18.	In July 2023, the Israeli air force carried out several airstrikes on cities in this country. In which country was the city of Hom hit on July 1, followed by Damascus on July 19 th ?	_____	_____
	Answer: Syria		
19.	The spider, which represents her mother, is a common motif in this sculptor's work. Which woman created the sculptured giant spider <i>Maman</i> ?	_____	_____
	Answer: Louise <u>Bourgeois</u>		
20.	Math Computation: How many different permutations are possible if 4 people out of 7 are chosen for a committee?	_____	_____
	Answer: 35		

Moderator: (Check score with chief judge and scorekeeper.)

The score at the end of the first quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Coaches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge: (Restate the score if they have changed because of protests.)

(In case of a tie after the first quarter) Since the score is tied, we will continue with additional toss-up questions until one team scores. (Restate the score if necessary)

2nd Quarter – Sixty Second Instructions

Moderator **The second quarter of sixty second questions is about to begin. Everyone please be seated.**

The categories for the 2nd quarter are: (Brief description)

1. SCIENCE – MALE ANIMAL NAMES

2. ENTERTAINMENT – MUSIC OF 1983

3. ENTERTAINMENT – TELEVISION SHOWS OF 1983

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) is ahead at this time, they will have the choice to play or defer until the 4th quarter.

- You will have 10 seconds to make your decision. (School name) do you choose to play or defer?**
- (Address playing team) You will have 10 seconds to choose your category (re-read the above categories)**
- (If the 10 second buzzer goes off, the moderator will ask for an immediate response.)**
- Since (school name) is playing first, they may move to a position behind their captain. (Other team) will put down their pencils until their time to play. Captain, all answers will come from you unless you defer to another student.**

Moderator **(School name) You have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your choice.**

The selections are:

1.

2.

Moderator **(Check the score with the chief judge and score keeper.)**

The score at the end of the first half is:

(School name) _____ has _____ points

(School name) _____ has _____ points.

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out. (Pause briefly for protests.)

This concludes the first half of play. We will pause for substitutions

Substituting team members, please check in with the scorekeeper. WE WILL NOW BEGIN 3RD QUARTER TOSS-UP QUESTIONS.

**OSSAA 2023-2024
REGIONAL GAME 1
SECOND QUARTER
60 SECOND QUESTIONS**

SCIENCE - MALE ANIMAL NAMES

Directions: Given the name of an animal, identify the name for a male of that species.

- | | | |
|-----|-----------|------------------------|
| 1. | Elephant | Bull |
| 2. | Donkey | Jack |
| 3. | Cat | Tom |
| 4. | Rabbit | Buck |
| 5. | Ant | Drone |
| 6. | Bear | Boar |
| 7. | Leopard | Leopard |
| 8. | Dragonfly | King (or drake) |
| 9. | Swan | Cob |
| 10. | Mallard | Greenhead |

EXTRA:

- | | | |
|----|------------|-----------------|
| 1. | Zebra | Stallion |
| 2. | Rhinoceros | Bull |
-

**OSSAA 2023-2024
REGIONAL GAME 1
SECOND QUARTER
60 SECOND QUESTIONS**

ENTERTAINMENT - MUSIC OF 1983

Directions: Identify the singer or group that had each of the following hit songs in 1983.

- | | | |
|-----|-----------------------------------|----------------------------|
| 1. | "Sweet Dreams (Are Made of This)" | Eurythmics |
| 2. | "Girls Just Want to Have Fun" | Cyndi <u>Lauper</u> |
| 3. | "Every Breath You Take" | The <u>Police</u> |
| 4. | "Photograph" | <u>Def Leppard</u> |
| 5. | "Lucky Star" | Madonna |
| 6. | "Sunday Bloody Sunday" | U2 |
| 7. | "Total Eclipse of the Heart" | Bonnie <u>Tyler</u> |
| 8. | "Sharp Dressed Man" | <u>ZZ Top</u> |
| 9. | "Tell Her About It" | Billy <u>Joel</u> |
| 10. | "Let's Dance" | David <u>Bowie</u> |

EXTRA:

- | | | |
|----|---------------------------------|--------------------------|
| 1. | "Flashdance ... What a Feeling" | Irene <u>Cara</u> |
| 2. | "Faithfully" | <u>Journey</u> |
-

**OSSAA 2023-2024
REGIONAL GAME 1
SECOND QUARTER
60 SECOND QUESTIONS**

ENTERTAINMENT - TELEVISION SHOWS OF 1983

Directions: Identify the following television shows, all of which aired during prime time in the 1983-1984 season.

- | | | |
|-----|---|----------------------------------|
| 1. | US Army Special Forces unit work as soldiers of fortune while trying to clear their names | <i><u>The A-Team</u></i> |
| 2. | Elderly Thelma Harper lives with son Vinton and his wife Naomi | <i><u>Mama's Family</u></i> |
| 3. | The Ewings own Southfork cattle ranch in Texas | <i><u>Dallas</u></i> |
| 4. | Thomas lives in guesthouse while Higgins manages estate of Robin Masters | <i><u>Magnum, P.I.</u></i> |
| 5. | Two brothers own a private investigator agency in San Diego | <i><u>Simon & Simon</u></i> |
| 6. | Intelligent car, KITT, helps Michael fight crime | <i><u>Knight Rider</u></i> |
| 7. | This family is "movin' on up to the East Side" | <i><u>The Jeffersons</u></i> |
| 8. | Author Bob owns Stratford Inn in Vermont with wife Mary | <i><u>Newhart</u></i> |
| 9. | Edna is a housemother for all-girls boarding school Eastland | <i><u>The Facts of Life</u></i> |
| 10. | Christine and Mary Beth are New York City police detectives | <i><u>Cagney & Lacey</u></i> |

EXTRA:

- | | | |
|----|--|-----------------------|
| 1. | Widow with a young son works at diner in Phoenix, Arizona | <i><u>Alice</u></i> |
| 2. | The Carringtons and Colbys fight for control of money and children | <i><u>Dynasty</u></i> |
-

**OSSAA 2023-2024
REGIONAL GAME 1
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	This economist argued that population growth stimulates societies to innovate and produce more food. Which man may be more famous as the co-author of <i>The Communist Manifesto</i> ?		
	Answer: Friedrich <u>Engels</u>	_____	_____
22.	Spell the name for the process by which material is brought into a cell. Spell endocytosis.		
	Answer: E-N-D-O-C-Y-T-O-S-I-S	_____	_____
23.	This educational institution began as the Oklahoma Territorial Agricultural and Mechanical School. Which educational institution, still in existence in Oklahoma, bills itself as "America's Healthiest Campus"?		
	Answer: <u>Oklahoma State</u> University	_____	_____
24.	This man defeated Casper Ruud to win the 2023 French Open Men's singles title. Name this Serbian tennis player who has now won 24 Grand Slam men's singles titles.		
	Answer: Novak <u>Djokovic</u>	_____	_____
25.	This oblong pastry's name comes from a French word meaning flash of lightning. Which sweet treat consists of a choux pastry filled with pastry cream and often topped with a chocolate glaze?		
	Answer: <u>Éclair</u>	_____	_____
26.	Math Computation: Find all solutions of the quadratic equation: $x^2 + 4x - 104 = 8 - 2x$ [x squared plus 4x minus 104 equals 8 minus 2x].		
	Answer: (x=) -14, 8 {must have both}	_____	_____
27.	In grammar, this name is given to the grammatical structure in the first three words in the quote "To boldly go where no man has gone before." What is the two-word name for this verbal with an added adverb, once considered a grammatical error?		
	Answer: <u>Split Infinitive</u>	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 1
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	This term is defined as the moral principles that govern the behavior of a person or group. Which branch of knowledge deals with morality?		
	Answer: Ethics	_____	_____
29.	Current laws of physics predict that at this instant the universe had infinite temperature and density but zero size. What is the term for this singularity in space and time?		
	Answer: The <u>Big Bang</u>	_____	_____
30.	In Greek mythology, anyone who ate the fruit of this plant forgot friends and home, losing all desire to return to their native lands. Which flower played a role in the length of Odysseus's long journey home?		
	Answer: <u>Lotus</u>	_____	_____
31.	This man starred as Arnold Vinick in <i>The West Wing</i> and as Senator Ralph Owen Brewster on <i>The Aviator</i> . Which actor's first major role was Captain Hawkeye Pierce on <i>M*A*S*H</i> ?		
	Answer: Alan <u>Alda</u>	_____	_____
32.	This Italian diplomat was appointed to the position of Secondary Chancellor of Florence in 1498. Which politician and author wrote <i>Discourses on Livy</i> and <i>The Prince</i> .		
	Answer: Niccolo <u>Machiavelli</u>	_____	_____
33.	Science Computation: How much heat energy, in joules, must be added to 12.00 grams of gold to raise the temperature of the gold by 3.000 degrees Kelvin? Use the specific heat of gold to be 0.1290 joules per gram degree Kelvin. Remember, specific heat is heat energy divided by mass and by change in temperature.		
	Answer: 4.644	_____	_____
34.	Math Computation: What is the circumference, in terms of pi, of a circle that has an area of 2025 pi units squared?		
	Answer: 90 pi	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 1
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
35.	During the Civil War, these two battles were actually fought in territory considered part of the North. Which two battles in Northern territory were fought in Pennsylvania and Maryland?		
	Answer: Gettysburg and Antietam (Sharpsburg) {either order}	_____	_____
36.	A documentary about this judge debuted at the Sundance Film Festival in January 2023. Which Supreme Court Justice was the subject of the film investigating alleged instances of sexual assault by the justice prior to being confirmed in 2018?		
	Answer: Brett <u>Kavanaugh</u>	_____	_____
37.	This woman was the first female artist of the Renaissance to gain international fame. Which artist, who created portraits of the Spanish royal house, served as a lady-in-waiting to Elisabeth of Valois, the consort queen of Spain?		
	Answer: Sofonisba <u>Anguissola</u>	_____	_____
38.	Math Computation: What is the second derivative, with respect to x, of the expression: $12x^4 - 11x^2 + 32x + 15$ [24 x to the fourth minus 11 x squared plus 32x plus 15]?		
	Answer: $144x^2 - 22$ [144 x squared minus 22]	_____	_____
39.	This musical was based on a play by Lynn Riggs set in Indian Territory. Which Rodgers and Hammerstein musical is based on the play <i>Green Grow the Lilacs</i> ?		
	Answer: Oklahoma!	_____	_____
40.	In this cycle of the Earth's atmosphere, bacteria is less important than in the Nitrogen cycle and the weathering of rocks releases it into the water of the soil, where it is absorbed by the roots of plants. What is this cycle in which the base element is usually in ion form such as PO_4^{3-} [P O 4 3 negative].		
	Answer: <u>Phosphorus</u> cycle	_____	_____

Moderator (Check score with chief judge and scorekeeper.)

The score at the end of the third quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Coaches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge (Restate the score if they have changed because of protests.)

4th Quarter – Sixty Second Instructions

Moderator **The fourth quarter of sixty second questions is about to begin. Everyone please be seated.**

The categories for the 4th quarter are: (Brief description)

1. VOCABULARY – DOUBLE C WORDS

2. GEOGRAPHY – ASIAN CAPITALS

3. MATH – NUMBER SEQUENCES

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) chose first in the 2nd quarter, (school name) will have the first choice this quarter.

You will have 10 seconds to choose your category.

(Active team) may move to a position behind the captain. (Other team) put down your pencils.

Captain, all answers will come from you unless you defer to another student.

Moderator (School name) **You will have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your selection.**

The selections are:

1.

2.

Moderator (Check the score with the chief judge and score keeper) **The score at the end of the game is:**

(School name) _____ has _____ points

(School name) _____ has _____ points

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charges time out.

(Restate the score if it has changed)

(If the game is tied, sudden death questions will be asked.)

Because the game is tied, sudden death toss-up questions will be asked. Would either team like to make substitutions? Again, this is not a time for coaches to confer with their team. (Pause for substitutions.)

Moderator **This concludes the game. Congratulations to both teams. Please check your bracket and move to the next round as quickly as possible.**

**OSSAA 2023-2024
REGIONAL GAME 1
FOURTH QUARTER
60 SECOND QUESTIONS**

VOCABULARY - DOUBLE C WORDS

Directions: From the information given, identify each of the following 8-letter words. All answers will contain double Cs.

- | | | |
|-----|---|-----------------|
| 1. | Recognition or award for achievement | Accolade |
| 2. | Short and to the point | Succinct |
| 3. | Green summer squash | Zucchini |
| 4. | Dimpled Italian bread seasoned with herbs and olive oil | Focaccia |
| 5. | Medieval term for western Europe, opposite of Orient | Occident |
| 6. | Hot dust-laden wind from Libyan desert | Scirocco |
| 7. | Playing short, disconnected notes or chords in music | Staccato |
| 8. | Soft hand-sewn leather foot covering | Moccasin |
| 9. | To give official authorization, as in a school's curriculum | Accredit |
| 10. | Card game for James Bond | Baccarat |

EXTRA:

- | | | |
|----|--|-----------------|
| 1. | An event not intentionally planned or caused | Accident |
| 2. | Green vegetable with florets on a central thick stem | Broccoli |

**OSSAA 2023-2024
REGIONAL GAME 1
FOURTH QUARTER
60 SECOND QUESTIONS**

GEOGRAPHY - ASIAN CAPITALS

Directions: Given the capital of an Asian country, name the country:

- | | | |
|-----|------------|--------------------------|
| 1. | Tbilisi | Georgia |
| 2. | Kathmandu | Nepal |
| 3. | Hanoi | Vietnam |
| 4. | Astana | Kazakhstan |
| 5. | Phnom Penh | Cambodia |
| 6. | Pyongyang | North Korea |
| 7. | Bishkek | Kyrgyzstan |
| 8. | Dili | Timor-Leste (East Timor) |
| 9. | Vientiane | Laos |
| 10. | Dhaka | Bangladesh |

EXTRA:

- | | | |
|----|----------|------------|
| 1. | Dushanbe | Tajikistan |
| 2. | Nicosia | Cyprus |
-

**OSSAA 2023-2024
REGIONAL GAME 1
FOURTH QUARTER
60 SECOND QUESTIONS**

MATH - NUMBER SEQUENCES

Directions: Find the next number in each of the following sequences.

- | | | |
|-----|---------------------------|------------------------------------|
| 1. | 4, 12, 36, 108, ... | 324 |
| 2. | -5, 6, 17, 28, ... | 39 |
| 3. | 3, 4, 6, 10, 18, ... | 34 |
| 4. | 45, 15, 5, ... | $\frac{5}{3}$ (or $1\frac{2}{3}$) |
| 5. | 6.25, 12.5, 25, ... | 50 |
| 6. | 4, 5, 7, 10, 14, ... | 19 |
| 7. | 2, 14, 98, 686, ... | 4802 |
| 8. | 32, 19, 8, -1, ... | -8 |
| 9. | -2, -3.3, -4.9, -6.8, ... | -9 |
| 10. | 91, 73, 57, 43, ... | 31 |

EXTRA:

- | | | |
|----|---------------------|----|
| 1. | -6, 5, 20, 39, | 62 |
| 2. | 81, 54, 36, 24, ... | 16 |

**OSSAA 2023-2024
REGIONAL GAME 1
EXTRA QUESTIONS**

Extra:

		Team One	Team Two
E1.	This man succeeded Margaret Thatcher as Prime Minister of Great Britain in 1990. Which leader of the Conservative Party was the youngest British Prime Minister of the 20 th century?		
	Answer: <u>John Major</u>	_____	_____
E2.	What is the IPC cost of an industrial complex in the classic Axis & Allies game?		
	Answer: 15 (credits)	_____	_____
E3.	This Broadway musical is a modern adaptation of Giacomo Puccini's opera <i>La Boheme</i> . Which musical by Jonathan Larson features the song 'Seasons of Love.'		
	Answer: Rent	_____	_____
E4.	Math Computation: Solve the following logarithmic equation for x: $\log_{49} x = 3/2$ [log base 49 of x equals three halves].		
	Answer: (x=) 343	_____	_____
E5.	This Khan, written about by Samuel Taylor Coleridge, ruled much of Asia by the time he died in 1294. Which grandson of Genghis Khan was the subject of Coleridge's poem about Xanadu?		
	Answer: <u>Kublai Khan</u>	_____	_____
E6.	In humans, there is one pair of sex chromosomes and this number of autosome pairs. How many pairs of autosomes control the inheritance of all but the sex-linked characteristics of humans?		
	Answer: 22	_____	_____

2023-2024

**OSSAA
REGIONAL
CHAMPIONSHIP**

High School

GAME 2

(BEGINNING OF GAME)

Welcome to the Oklahoma Secondary School Activities Association Academic Bowl. You have previously been instructed regarding the rules. Please turn off all cell phones, tablets, or any device that can receive or send messages. Coaches, team members, and guests are to sit behind their team. Coaches, your protests need to be at the allowed times.

- Introduce yourself and the chief judge.
- **Give your four count.** – Do this for every match (Game Procedures A – 11)
- Have the chief judge check the buzzers.

Note (do not read):

Official closest to scorekeeper: Make sure that scorekeeper has **full names** of students and check after first few questions that they are fully shading in correct answers, and marking correct answers only.

Official closest to timekeeper: Make sure the timekeeper is starting the clock and clearing for the first few questions.

**OSSAA 2023-2024
REGIONAL GAME 2
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	Math Computation: What is the measure, in degrees, of an inscribed angle of a circle if the intercepted arc has a measure of 155 degrees?		
	Answer: 77.5	_____	_____
2.	This European city is home to the headquarters of the International Red Cross. Which city is also the site of the creation of the World Wide Web by Tim Berners-Lee?		
	Answer: Geneva	_____	_____
3.	This infectious disease of humans and domestic animals, often seen in cattle, was first observed in the Crimean War. Which disease is also known as Bang's disease?		
	Answer: Brucellosis	_____	_____
4.	Destroyed around 226 B.C., this statue was considered one of the Seven Wonders of the Ancient World. Which statue of Helios was created by Chares of Lindos to celebrate a city's survival of a great siege?		
	Answer: <u>Colossus</u> of Rhodes	_____	_____
5.	In 2023, this man announced his retirement from the game show he has hosted for the last 40 years. Name this man who is synonymous with <i>Wheel of Fortune</i> .		
	Answer: Pat <u>Sajak</u>	_____	_____
6.	This literary term is defined as an ironic understatement created by using a negative statement as a positive. Which literary device is exemplified by the statement, "That wasn't half bad?"		
	Answer: Litotes [lie-teh-teez or lie-toe-teez]	_____	_____
7.	Math Computation: Find the limit as x approaches 2 of the function: $f(x) = (x^2 - 14) / (x^2 + 3x)$ [F of x equals the quantity x squared minus 14 end quantity over the quantity x squared plus 3x end quantity].		
	Answer: -1	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 2
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	This Seminole woman was the first female principal chief of a Native American nation. Which woman was appointed by President Warren G. Harding to serve as principal chief of the Seminoles in 1922?		
	Answer: Alice Brown <u>Davis</u>	_____	_____
9.	The combined gravitational pull of the Sun and the Moon during these tides adds to a higher tidal range. What term is used for tides that happen during the new moon and full moon and have nothing to do with the season?		
	Answer: <u>Spring</u> tides	_____	_____
10.	This tall grass used in cooking is usually pulverized and combined with other herbs to make the curry paste integral to Thai dishes. Which grass with a strong citrus smell and taste is also used to make tea?		
	Answer: Lemongrass	_____	_____
11.	In July 2023, officials in this country declared a state of emergency when the Ubinas volcano started to erupt. Name this country where you would find the volcano in the Moquegua region of the Andes, about 1000 kilometers south of Lima.		
	Answer: Peru	_____	_____
12.	This literary technique involves a free-flowing associative pattern of random thoughts and feelings. What is this three-word technique used by James Joyce in <i>Ulysses</i> and William Faulkner in <i>As I Lay Dying</i> ?		
	Answer: Stream of Consciousness	_____	_____
13.	Math Computation: Simplify the following fraction by factoring the two trinomials: $(x^2 + 9x + 14) / (x^2 - 7x - 18)$ [the quantity x squared plus 9x plus 14 end quantity over the quantity x squared minus 7x minus 18 end quantity].		
	Answer: $(x + 7) / (x - 9)$ [(the quantity) x plus 7 over (divided by) (the quantity) x minus 9]	_____	_____
14.	The leadership of the U.S. Senate moves to the holder of this position if the vice-president is not present. Which position is currently held by Washington senator Patty Murray?		
	Answer: <u>President Pro Tempore</u>	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 2
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
15.	Chemistry calculation: Knowing the charge on oxygen is negative 2, what is the oxidation number for phosphorus in the ion, PO_4^{3-} [P O 4 3 negative]?		
	Answer: +5 [positive 5]	_____	_____
16.	This legal body of the Catholic Church has been around since the 13th century. Which organization, now called the Congregation for the Doctrine of the Faith, was a dominant presence in Spain during the reign of Ferdinand and Isabella?		
	Answer: Congregation of <u>The Inquisition</u>	_____	_____
17.	The CEO of this news organization was fired in June 2023 after a tumultuous year with layoffs, sagging ratings, and criticisms of his own staff. At which national news network did Chris Licht fire Don Lemon and push Kaitlyn Collins into an interview with former President Donald Trump?		
	Answer: CNN (Cable News Network)	_____	_____
18.	This French woman wrote "the happiest women, like the happiest nations, have no history." Name this author of 'The Mill on the Floss'.		
	Answer: George <u>Sand</u>	_____	_____
19.	This model is often called the greatest single-selling computer of all time. Which model of computer designed by Commodore sold over 22 million units between 1982 and 1993?		
	Answer: Commodore <u>64</u> (or C64)	_____	_____
20.	This powerful politician was the subject of a Wanted poster offering a \$10,000 reward after he escaped a New York City jail in 1875. Which man was vilified in political cartoons by Thomas Nast?		
	Answer: William Marcy "<u>Boss</u>" <u>Tweed</u>	_____	_____

Moderator: (Check score with chief judge and scorekeeper.)

The score at the end of the first quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Coaches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge: (Restate the score if they have changed because of protests.)

(In case of a tie after the first quarter) Since the score is tied, we will continue with additional toss-up questions until one team scores. (Restate the score if necessary)

2nd Quarter – Sixty Second Instructions

Moderator **The second quarter of sixty second questions is about to begin. Everyone please be seated.**

The categories for the 2nd quarter are: (Brief description)

1. FAMOUS SAYINGS – BENJAMIN FRANKLIN SAYINGS

2. PEOPLE – ANN(E) & ANNIES

3. SCIENCE – GEOLOGY CBAs

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) is ahead at this time, they will have the choice to play or defer until the 4th quarter.

- You will have 10 seconds to make your decision. (School name) do you choose to play or defer?**
- (Address playing team) You will have 10 seconds to choose your category (re-read the above categories)**
- (If the 10 second buzzer goes off, the moderator will ask for an immediate response.)**
- Since (school name) is playing first, they may move to a position behind their captain. (Other team) will put down their pencils until their time to play. Captain, all answers will come from you unless you defer to another student.**

Moderator **(School name) You have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your choice.**

The selections are:

1.

2.

Moderator **(Check the score with the chief judge and score keeper.)**

The score at the end of the first half is:

(School name) _____ has _____ points

(School name) _____ has _____ points.

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out. (Pause briefly for protests.)

This concludes the first half of play. We will pause for substitutions

Substituting team members, please check in with the scorekeeper. WE WILL NOW BEGIN 3RD QUARTER TOSS-UP QUESTIONS.

**OSSAA 2023-2024
REGIONAL GAME 2
SECOND QUARTER
60 SECOND QUESTIONS**

FAMOUS SAYINGS - BENJAMIN FRANKLIN SAYINGS

Directions: Fill in the blanks in each of the following quotes from Benjamin Franklin.

- | | | |
|-----|---|-----------------|
| 1. | Well done is better than well BLANK | Said |
| 2. | When the well's dry, we know the worth of BLANK | Water |
| 3. | Fish and BLANK stink after three days | Visitors |
| 4. | He that lieth down with dogs shall rise up with BLANK | Fleas |
| 5. | Lost BLANK is never found again | Time |
| 6. | A true BLANK is the best possession | Friend |
| 7. | Wish not so much to live long as to live BLANK | Well |
| 8. | Better slip with foot than BLANK | Tongue |
| 9. | There never was a good war or a bad BLANK | Peace |
| 10. | Love your enemies, for they tell you your BLANK | Faults |

EXTRA:

- | | | |
|----|--|--------------|
| 1. | Being ignorant is not so much a shame as being unwilling to BLANK | Learn |
| 2. | The Constitution only guarantees the American people the right to pursue freedom.
You have to BLANK it yourself | Catch |

**OSSAA 2023-2024
REGIONAL GAME 2
SECOND QUARTER
60 SECOND QUESTIONS**

PEOPLE - ANN(E)S & ANNIES

Directions: Given a brief description, identify each of the following people, real or fictional, named Ann(e) or Annie.

- | | | |
|-----|---|-------------------------------|
| 1. | Famed diary writer during the Holocaust | Anne <u>Frank</u> |
| 2. | First poetess of the Americas | Anne <u>Bradstreet</u> |
| 3. | Buffalo Bill's Wild West show sharpshooter | Annie <u>Oakley</u> |
| 4. | Author of the Pern series of books | Anne <u>McCaffrey</u> |
| 5. | Formed The Eurythmics with David Stewart | Annie <u>Lennox</u> |
| 6. | Starred in <i>The Devil Wears Prada</i> and <i>The Princess Diaries</i> | Anne <u>Hathaway</u> |
| 7. | Second wife of Henry the 8th | Anne <u>Boleyn</u> |
| 8. | Teacher to Helen Keller | Anne <u>Sullivan</u> |
| 9. | Woody Allen movie starring Diane Keaton | <u>Annie Hall</u> |
| 10. | Pen name of advice columnist, Eppie Lederer | <u>Ann Landers</u> |

EXTRA:

- | | | |
|----|--|---------------------------|
| 1. | Author of the Vampire Chronicles | Anne <u>Rice</u> |
| 2. | Author of <i>Agnes Grey</i> and <i>The Tenant of Wildfell Hall</i> | Anne <u>Bronte</u> |

**OSSAA 2023-2024
REGIONAL GAME 2
SECOND QUARTER
60 SECOND QUESTIONS**

SCIENCE - GEOLOGY CBAs

Directions: Given a short description, identify each of the following terms from the field of geology. The terms will be in reverse alphabetical order, beginning with W.

- | | | |
|-----|---|--------------------------|
| 1. | Mechanically breaking down larger rocks to smaller ones | Weathering |
| 2. | Mountain that was created from lava | Volcano |
| 3. | High area of Earth's crust formed by crustal movements | Uplift |
| 4. | Giant sea wave | Tsunami |
| 5. | Instrument that measures vibrations of the Earth | Seismograph |
| 6. | Elevated area of sea floor in the middle of the ocean | Ridge |
| 7. | Mineral with a hardness of 7 on Mohs scale | Quartz |
| 8. | Solidified lava that filled a volcano's magma channel | Plug |
| 9. | Crescent shaped lake formed when a river changes course | <u>Oxbow</u> lake |
| 10. | Mineral mass more resistant to weathering than the surrounding rock | Nodule |

EXTRA:

- | | | |
|----|--|----------------|
| 1. | Material deposited from a glacier | Moraine |
| 2. | The hot dry side of a mountain away from the prevailing wind | Leeward |

**OSSAA 2023-2024
REGIONAL GAME 2
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	This common fungal infection typically begins between the toes. It is estimated that at least 70 percent of all people will get which common infection of the feet caused by exposure to warm, moist environments?		
	Answer: <u>Athlete's foot</u>	_____	_____
22.	This art museum, located in Santa Fe, New Mexico, is America's first art museum dedicated solely to a female artist of international stature. Which museum features the works of a 20 th century artist whose later paintings featured the New Mexican landscape near where she lived?		
	Answer: Georgia <u>O'Keeffe</u> Museum	_____	_____
23.	This player was named the 2023 NBA Finals MVP. Name this center for the Denver Nuggets who hails from Serbia.		
	Answer: Nikola <u>Jokic</u>	_____	_____
24.	This type of irony is illustrated in the play <i>Oedipus Rex</i> when Oedipus issues a curse intended for the killer of Laius. Which type of irony occurs when the audience knows that Oedipus himself is the killer he curses?		
	Answer: <u>Dramatic</u> Irony	_____	_____
25.	Math Computation: What is the exact value of the cosine of 5 pi over 4 radians?		
	Answer: $-\sqrt{2}/2$ [negative radical (square root) of 2 over two] (or $-1/2$ radical 2)	_____	_____
26.	This radical group of the French Revolution was at its most powerful during the Reign of Terror. Which group, whose intent was to end the reign of King Louis XVI, fell from power when Robespierre was executed?		
	Answer: <u>Jacobins</u>	_____	_____
27.	These organelles form when vesicles detach from the Golgi apparatus. What are these organelles that digest worn out materials in the cytoplasm and release them outside the cell?		
	Answer: <u>Lysosomes</u>	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 2
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	This submarine-shaped vessel flute has an Italian name meaning little goose. Which musical instrument, beginning with the letter O, has an English pendant version featuring four fingering holes?		
	Answer: Ocarina	_____	_____
29.	In an effort to comply with the laws of this state, a textbook publisher was forced to remove allusions to race in sections about Rosa Parks and the Civil War. Which state passed the Stop Woke Act regulating the content of instruction in schools and workplaces?		
	Answer: Florida	_____	_____
30.	Milton's epic <i>Paradise Lost</i> begins with this type of request for inspiration. What is the four-word phrase for a request for divine inspiration, usually addressed to one of the daughters of Zeus, at the beginning of a Greek epic?		
	Answer: <u>Invocation of the Muse</u>	_____	_____
31.	Math Computation: What is the equation, in slope-intercept form, of the line with a slope of 4/5 [four fifths] and through the point (-55,21) [negative 55 comma 21]?		
	Answer: $y = 4/5 x + 65$	_____	_____
32.	For nine days every July, this Spanish town hosts the San Fermin Fiesta. Which town's fiesta features the signature event known as the running of the bulls?		
	Answer: Pamplona	_____	_____
33.	At the base of this bone is the foramen magnum that has an opening allowing a connection from the spinal cord to the brain. What is this bone that forms the bottom and back of the skull?		
	Answer: Occipital	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 2
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
34.	In metalwork, a heatproof vessel known by this term is used to melt metal before pouring it into a mold. What is the name for this vessel which Arthur Miller referred to in the title of a Tony Award-winning play?		
	Answer: Crucible	_____	_____
35.	These are the first three words of the motto of the student association linked with the colors blue and gold. What are these first words of the FFA motto?		
	Answer: Learning to Do	_____	_____
36.	In literature, this last name belonged to the legendary King Arthur's father Uther. Historically, which title was given to ancient British chieftains who were called to lead other chieftains?		
	Answer: Pendragon	_____	_____
37.	Math Computation: Kenya works at the discount store and gets an employee discount of 25%. She is buying a TV that usually costs \$280, with a tax of 10% at this location. What will be the final price of the TV?		
	Answer: \$231	_____	_____
38.	The Three Forks Harbor is located at the confluence of these three rivers running through Oklahoma. Which three rivers converge near Muskogee?		
	Answer: <u>Arkansas</u>, <u>Verdigris</u>, and <u>Grand</u> Rivers (any order)	_____	_____
39.	Science computation: Two waves, of amplitude 7.6 meters, travel down a rope to a movable end and return. What is the amplitude of the resultant displacement when they are completely merged, in meters?		
	Answer: 15.2	_____	_____
40.	This paste made from sesame seeds is a staple in Mediterranean cuisine. Name this paste essential for making hummus.		
	Answer: Tahini	_____	_____

Moderator (Check score with chief judge and scorekeeper.)

The score at the end of the third quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Coaches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge (Restate the score if they have changed because of protests.)

4th Quarter – Sixty Second Instructions

Moderator **The fourth quarter of sixty second questions is about to begin. Everyone please be seated.**

The categories for the 4th quarter are: (Brief description)

1. MATH – DISTANCE FORMULA

2. MYTHOLOGY – ROMAN GODS AND GODDESSES

3. WORLD HISTORY – IMPORTANT WOMEN IN HISTORY

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) chose first in the 2nd quarter, (school name) will have the first choice this quarter.

You will have 10 seconds to choose your category.

(Active team) may move to a position behind the captain. (Other team) put down your pencils.

Captain, all answers will come from you unless you defer to another student.

Moderator **(School name) You will have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your selection.**

The selections are:

1.

2.

Moderator (Check the score with the chief judge and score keeper) **The score at the end of the game is:**

(School name) _____ has _____ points

(School name) _____ has _____ points

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charges time out.

(Restate the score if it has changed)

(If the game is tied, sudden death questions will be asked.)

Because the game is tied, sudden death toss-up questions will be asked. Would either team like to make substitutions? Again, this is not a time for coaches to confer with their team. (Pause for substitutions.)

Moderator **This concludes the game. Congratulations to both teams. Please check your bracket and move to the next round as quickly as possible.**

**OSSAA 2023-2024
REGIONAL GAME 2
FOURTH QUARTER
60 SECOND QUESTIONS**

MATH - DISTANCE FORMULA

Directions: Find the distance between each pair of given points. If necessary, express your answer as a simplified radical. [Moderator – read (1,2) as one comma two.]

- | | | |
|-----|---|-------------|
| 1. | (8, 3) and (-4, -2) [8 comma 3 and negative 4 comma negative 2] | 13 |
| 2. | (7, 13) and (1, 21) | 10 |
| 3. | (-2, 6) and (5, 30) | 25 |
| 4. | (-8, 3) and (1, 15) | 15 |
| 5. | (-2, 11) and (-10, 26) | 17 |
| 6. | (5, 7) and (-5, 31) | 26 |
| 7. | (-8, 3) and (-4, 7) | $4\sqrt{2}$ |
| 8. | (21, -24) and (9, 11) | 37 |
| 9. | (3, -15) and (12, 25) | 41 |
| 10. | (11, 7) and (19, 23) | $8\sqrt{5}$ |

EXTRA:

- | | | |
|----|-----------------------|-------------|
| 1. | (17, 15) and (9, 23) | $8\sqrt{2}$ |
| 2. | (15, 19) and (-5, 40) | 29 |

**OSSAA 2023-2024
REGIONAL GAME 2
FOURTH QUARTER
60 SECOND QUESTIONS**

MYTHOLOGY - ROMAN GODS AND GODDESSES

Directions: Given a brief description, identify the following gods and goddesses of Roman mythology.

- | | | |
|-----|---------------------------------|--------------------|
| 1. | Goddess of love and beauty | Venus |
| 2. | God of fire and the forge | Vulcan |
| 3. | Goddess of wisdom and war | Minerva |
| 4. | Goddess of the Earth | Terra |
| 5. | Goddess of the hunt | Diana |
| 6. | Goddess of the night | Nox |
| 7. | God of commerce and science | Mercury |
| 8. | God of healing and medicine | Aesculapius |
| 9. | Goddess of magic and witchcraft | Trivia |
| 10. | God of Sleep | Somnus |

EXTRA:

- | | | |
|----|---------------------------|-------------------|
| 1. | Goddess of the Underworld | Proserpina |
| 2. | God of fertility | Bacchus |

**OSSAA 2023-2024
REGIONAL GAME 2
FOURTH QUARTER
60 SECOND QUESTIONS**

WORLD HISTORY - IMPORTANT WOMEN IN HISTORY

Directions: Given a brief description, identify the following important women in the history of the world.

- | | |
|--|-----------------------------------|
| 1. Author of Pride and Prejudice | Jane <u>Austen</u> |
| 2. First lady who chaired U.N. Human Rights Commission | <u>Eleanor Roosevelt</u> |
| 3. First woman appointed to U.S. Supreme Court | Sandra Day <u>O'Connor</u> |
| 4. Britain's longest reigning monarch | Queen <u>Elizabeth II</u> |
| 5. Sparked the Montgomery bus boycott | Rosa <u>Parks</u> |
| 6. First Black female elected to Congress | Shirley <u>Chisholm</u> |
| 7. First Hispanic woman to serve on U.S. Supreme Court | Sonia <u>Sotomayor</u> |
| 8. Singer who created the Imagination Library | Dolly <u>Parton</u> |
| 9. Holds the record with 21 Oscar nominations | Meryl <u>Streep</u> |
| 10. First American woman to travel to space | Sally <u>Ride</u> |

EXTRA:

- | | |
|--|-----------------------------|
| 1. Jewish girl who wrote famous diary during Holocaust | Anne <u>Frank</u> |
| 2. Most decorated figure skater in American history | Michelle <u>Kwan</u> |

**OSSAA 2023-2024
REGIONAL GAME 2
EXTRA QUESTIONS**

Extra:

		Team One	Team Two
E1.	This man consumed 62 hotdogs to win the 2023 Nathan's Hot Dog Eating Contest. Name this competitive eater who has now won Nathan's 16 of the last 17 years.		
	Answer: Joey <u>Chestnut</u>	_____	_____
E2.	This preposition is a synonym for versus. What is this preposition ending with the letters S-T?		
	Answer: Against	_____	_____
E3.	In statistics, this inequality is exemplified by the following statement: for every number A, the fraction of elements in a list that are A standard deviations or more from the mean is at most 1 over A squared.		
	Answer: <u>Chebychev's inequality</u>	_____	_____
E4.	In 2023, this man is the holder of the position of Commander in Chief of the U.S. military. Which man will not be granted veteran status when his term is up because he has never been in active military service?		
	Answer: Joseph R. <u>Biden</u>	_____	_____
E5.	This type of bone fracture is most common in the young. In what type of fracture does the bone bend and only break part of the way?		
	Answer: <u>Greenstick fracture</u>	_____	_____
E6.	These jars are often found in the tombs of ancient Egyptians who had been mummified. What is the name for these containers for organs removed during the mummification process?		
	Answer: <u>Canopic Jars</u>	_____	_____

2023-2024

**OSSAA
REGIONAL
CHAMPIONSHIP**

High School

GAME 3

(BEGINNING OF GAME)

Welcome to the Oklahoma Secondary School Activities Association Academic Bowl. You have previously been instructed regarding the rules. Please turn off all cell phones, tablets, or any device that can receive or send messages. Coaches, team members, and guests are to sit behind their team. Coaches, your protests need to be at the allowed times.

- Introduce yourself and the chief judge.
- **Give your four count.** – Do this for every match (Game Procedures A – 11)
- Have the chief judge check the buzzers.

Note (do not read):

Official closest to scorekeeper: Make sure that scorekeeper has **full names** of students and check after first few questions that they are fully shading in correct answers, and marking correct answers only.

Official closest to timekeeper: Make sure the timekeeper is starting the clock and clearing for the first few questions.

**OSSAA 2023-2024
REGIONAL GAME 3
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	According to C.S. Lewis, this fictional realm was bordered by the Eastern Ocean, the River Shribble, and the Archenland. Which country was ruled by Aslan, the Great Lion?		
	Answer: Narnia	_____	_____
2.	In this type of experiment, neither the participants nor the evaluators know who is in the treatment group and who is in the control group. Identify the name for this type of experiment intended to limit bias by the evaluators.		
	Answer: Double-blind	_____	_____
3.	This Puritan leader was instrumental in the Antinomian controversy in the Massachusetts Bay Colony. Which woman firmly believed that a woman was as capable of interpreting the Bible as a man?		
	Answer: Anne <u>Hutchinson</u>	_____	_____
4.	This sea is located in the center of the North Atlantic Ocean. Which area of the Atlantic is a huge region of calm, warm water named for the brown seaweed that floats on the surface?		
	Answer: <u>Sargasso</u> Sea	_____	_____
5.	This artist of the Vienna Secession was known for using gold leaf in his paintings. Which Austrian painter's works include <i>Portrait of Adele Bloch-Bauer</i> and <i>The Kiss</i> ?		
	Answer: Gustave <u>Klimt</u>	_____	_____
6.	In the summer of 2023, reports of these creatures ramming boats became commonplace. Name these mammals that could be just playing with rudders and not intentionally breaking them, causing boats to sink.		
	Answer: Orcas (or killer whales)	_____	_____
7.	In Shakespeare's <i>Tragedy of Julius Caesar</i> , this character ends his life by falling on his sword. Which character's wife, earlier in the play, stabs herself in the leg to prove her ability to keep secrets?		
	Answer: Marcus <u>Brutus</u>	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 3
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	<p>Math Computation: Use the quotient rule to find the derivative, with respect to x, of the following expression: x^3 / e^x [x cubed over e to the x power].</p> <p>Answer: $(3x^2 - x^3) / e^x$ [the quantity 3 x squared minus x cubed end quantity over e to the x]</p>	_____	_____
9.	<p>This prison, built in 1941 to house Polish prisoners, became the site of the largest mass extermination of Jewish people in history. Which camp was the largest of the Nazi concentration camps of World War II?</p> <p>Answer: <u>Auschwitz-Birkenau</u></p>	_____	_____
10.	<p>For water this measure is 4.186 joules per gram degree Celsius, while it is 2.090 for ice. What is this measure of the amount of heat energy added to one gram of a substance to raise the temperature by one degree Celsius?</p> <p>Answer: <u>Specific heat capacity</u></p>	_____	_____
11.	<p>Movements in this musical suite include Sunrise, Cloudburst, and Painted Desert. Which suite was composed by Ferde Grofe?</p> <p>Answer: <u>Grand Canyon Suite</u></p>	_____	_____
12.	<p>This team won their final 2023 game, 9 to 3, over the Florida Panthers. Name this NHL team that hoisted the Stanley Cup for the first time.</p> <p>Answer: <u>Vegas Golden Knights</u></p>	_____	_____
13.	<p>In poetry scansion, an accent mark is placed over a stressed syllable and this u-shaped mark is placed over unstressed syllables. What is the name, beginning with B, for this marking?</p> <p>Answer: <u>Breve</u></p>	_____	_____
14.	<p>Math Computation: What is the equation of the line through the point (18,- 3) [18 comma negative 3] and parallel to the line with equation: $y = -5/3x + 18$ [y equals negative five thirds x plus 18]? Put your answer in slope-intercept form.</p> <p>Answer: $y = -5/3 x + 27$ [y equals negative five thirds x plus 27]</p>	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 3
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
15.	This unit of land area is slightly smaller than the area of a football field. Which land measurement is equal to 1/640 th of a square mile?		
	Answer: Acre	_____	_____
16.	This form of indigestion often occurs in cattle that have eaten young, lush legumes. What is this condition in the first stomach resulting from gas fermentation?		
	Answer: Bloat	_____	_____
17.	Roman villas typically had patterns or pictures in walls or floors that had been created using this art technique. Which method of creating pictures involves inlaid small bits of colored glass or material in mortar.		
	Answer: Mosaic	_____	_____
18.	His first major movie role was in the 1972 thriller, <i>Deliverance</i> . Who was this mega-star of the 70s and 80s from movies such as <i>The Longest Yard</i> , <i>Cannonball Run</i> , and <i>Smokey and the Bandit</i> ?		
	Answer: Burt <u>Reynolds</u>	_____	_____
19.	According to Greek mythology, this son of a God wrecked the chariot he was driving across the sky, resulting in the dark skin of Ethiopians and the desert in Africa. Which son of Helios died when he was unable to control the horses pulling the chariot?		
	Answer: Phaeton	_____	_____
20.	Math Computation: What is the equation of the line of symmetry for the parabola with equation: $y = -4(x + 9)^2 - 12$ [y equals negative 4 times the quantity x plus 9 end quantity squared minus 12]?		
	Answer: $x = -9$	_____	_____

Moderator: (Check score with chief judge and scorekeeper.)

The score at the end of the first quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Coaches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge: (Restate the score if they have changed because of protests.)

(In case of a tie after the first quarter) Since the score is tied, we will continue with additional toss-up questions until one team scores. (Restate the score if necessary)

2nd Quarter – Sixty Second Instructions

Moderator **The second quarter of sixty second questions is about to begin. Everyone please be seated.**

The categories for the 2nd quarter are: (Brief description)

1. SPORTS – ATHLETES OF 1983

2. ENTERTAINMENT – MOVIES OF 1983

3. POTPOURRI – THINGS IN COMMON

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) is ahead at this time, they will have the choice to play or defer until the 4th quarter.

- You will have 10 seconds to make your decision. (School name) do you choose to play or defer?**
- (Address playing team) You will have 10 seconds to choose your category (re-read the above categories)**
- (If the 10 second buzzer goes off, the moderator will ask for an immediate response.)**
- Since (school name) is playing first, they may move to a position behind their captain. (Other team) will put down their pencils until their time to play. Captain, all answers will come from you unless you defer to another student.**

Moderator **(School name) You have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your choice.**

The selections are:

1.

2.

Moderator **(Check the score with the chief judge and score keeper.)**

The score at the end of the first half is:

(School name) _____ has _____ points

(School name) _____ has _____ points.

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out. (Pause briefly for protests.)

This concludes the first half of play. We will pause for substitutions

Substituting team members, please check in with the scorekeeper. WE WILL NOW BEGIN 3RD QUARTER TOSS-UP QUESTIONS.

**OSSAA 2023-2024
REGIONAL GAME 3
SECOND QUARTER
60 SECOND QUESTIONS**

SPORTS - ATHLETES OF 1983

Directions: From the information given, identify each of the following Hall of Fame athletes that were competing at the top of their sport in 1983.

- | | | |
|-----|--|------------------------------------|
| 1. | Quarterbacked the 49ers to 4 Super Bowl wins | Joe <u>Montana</u> |
| 2. | Golfer with 18 major tournament wins | Jack <u>Nicklaus</u> |
| 3. | Celtic forward with three consecutive NBA MVP awards | Larry <u>Bird</u> |
| 4. | Confrontational tennis player with 77 singles titles and 77 doubles titles | John <u>McEnroe</u> |
| 5. | Showtime point guard with 5 NBA titles with the Lakers | Earvin <u>Magic</u> Johnson |
| 6. | Red Sox third baseman with 12 consecutive all-star appearances | Wade <u>Boggs</u> |
| 7. | Tennis player with 59 major titles, including 18 women's singles titles | Martina <u>Navratilova</u> |
| 8. | Winner of 9 track and field Olympic gold medals, including long jump 4 times | Carl <u>Lewis</u> |
| 9. | Phillies third baseman with 548 career home runs | Mike <u>Schmidt</u> |
| 10. | Won Indy 500 four times in addition to having his son win it | <u>Al Unser Sr.</u> |

EXTRA:

- | | | |
|----|---|----------------------------|
| 1. | Cowboy running back with 77 touchdowns, including a 99-yarder | Tony <u>Dorsett</u> |
| 2. | Australian golfer nicknamed "The Great White Shark" | Greg <u>Norman</u> |

**OSSAA 2023-2024
REGIONAL GAME 3
SECOND QUARTER
60 SECOND QUESTIONS**

ENTERTAINMENT - MOVIES OF 1983

Directions: Identify each of the following movies that were released between January and December 1983.

1. The Dukes replace Louis Winthorpe III with street hustler Billy Ray Valentine Trading Places
2. 1958 Plymouth Fury starts killing Buddy and his friends Christine
3. Ponyboy and Johnny get into a brawl and both gangs go into hiding The Outsiders
4. Clark and Ellen take their kids to Walley World National Lampoon's Vacation
5. Ralphie dreams of getting a "Red Ryder air rifle" for a gift A Christmas Story
6. St. Bernard gets bit by a bat and starts attacking people Cujo
7. Luke, Leia, and Ewoks team up to destroy the new Death Star
Star Wars Episode 6: Return of the Jedi
8. Star football player is blacklisted from college recruiters by his coach All the Right Moves
9. Automotive engineer is fired and becomes stay at home Dad Mr. Mom
10. Julie has to decide between popular Tommy or Hollywood punk Randy Valley Girl

EXTRA:

1. Hacker inadvertently starts a game/not game of Global Thermonuclear War War Games
2. Joel hires Lana but finds himself at odds with her handler Risky Business

**OSSAA 2023-2024
REGIONAL GAME 3
SECOND QUARTER
60 SECOND QUESTIONS**

POTPOURRI - THINGS IN COMMON

Directions: Given a list of three things, identify what those things have in common.

- | | | |
|-----|--------------------------------|---------------------------------------|
| 1. | Iota, gamma, beta | Greek letters |
| 2. | Cancer, Scorpio, Libra | Zodiac Signs or Constellations |
| 3. | Carrie, Misery, The Green Mile | <u>Stephen King</u> books |
| 4. | RBI, ERA, OBP | <u>Baseball</u> stats |
| 5. | Yangtze, Volga, Arkansas | Rivers |
| 6. | Athos, Porthos, Aramis | Musketeers |
| 7. | Lug, wing, square | Nuts |
| 8. | Prime, irrational, odd | Numbers |
| 9. | Radio, brain, tidal | Waves |
| 10. | Reaper, Ghost, Anaheim | Peppers |

EXTRA:

- | | | |
|----|--------------------------|---------------|
| 1. | Hurricane, tiger, Sauron | Eye |
| 2. | Butter, brittle, oil | Peanut |

**OSSAA 2023-2024
REGIONAL GAME 3
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	This Negro spiritual was first sung in Indian Territory near what is now McCurtain County. Which song, written by Wallis Willis, became Oklahoma's State Gospel Song in 2011?		
	Answer: <u>Swing Low, Sweet Chariot</u>	_____	_____
22.	This passageway extends from the internal nares down to the esophagus. What is the scientific term for this part of the throat?		
	Answer: Pharynx	_____	_____
23.	This ancient Andean grain was a staple food in the Incan culture. Which grain, first exported to the U.S. in 1984, is considered a healthier alternative to rice because it helps lower cholesterol and control blood sugar levels?		
	Answer: Quinoa [kee-noh]	_____	_____
24.	In July 2023, this country ran a major raid on a refugee camp in the city of Jenin, killing at least 12 Palestinians. Name this country that has had numerous clashes with militants in the West Bank since 2022.		
	Answer: Israel	_____	_____
25.	This method of writing out the different forms of a verb is often used to learn a foreign language. Which process, beginning with the letter C, usually starts with the infinitive form of the verb?		
	Answer: Conjugation	_____	_____
26.	Math Computation: Two chords intersect inside a circle. If the intercepted arcs from these chords measure 77 and 121 degrees, what is the measure, in degrees, of the angle formed by these chords?		
	Answer: 99	_____	_____
27.	In 1733, this man was arrested by the governor of New York for printing an article criticizing that governor. Which man's subsequent trial led to a strengthening of freedom of the press?		
	Answer: John Peter <u>Zenger</u>	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 3
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	In this part of an eclipse, an observer encounters only a partial eclipse. Which term, starting with "P," names the area of an eclipse's shadow in which only a portion of the light from the sun is blocked?		
	Answer: Penumbra	_____	_____
29.	This Biblical warrior from Gath stood just under 7 feet tall. Which warrior was killed during the Philistine war against Saul after daring members of Saul's army to fight him in single combat?		
	Answer: Goliath	_____	_____
30.	On June 6 2023, this former Governor announced his candidacy for U.S. president. Name this former leader of New Jersey running as a republican.		
	Answer: Chris <u>Christie</u>	_____	_____
31.	This William Faulkner novel takes its title from a famous soliloquy in Shakespeare's play <i>Macbeth</i> . Which novel is, by definition, a tale told by an idiot?		
	Answer: The <u>Sound and the Fury</u>	_____	_____
32.	Math Computation: Simplify $64^{-1/3}$ [64 to the negative one third power].		
	Answer: 1/4 (or 0.25)	_____	_____
33.	In 1842, this woman appealed to the Massachusetts legislature for the separation of criminals from the mentally ill. Which activist was also instrumental in founding the first public mental hospital in Pennsylvania?		
	Answer: Dorothea <u>Dix</u>	_____	_____
34.	Science computation: What are the next two frequencies, in hertz, produced in a pipe open at one end if the fundamental frequency of the pipe is 150 hertz?		
	Answer: 450, 750	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 3
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
35.	Around 1482, this man became a court artist for Ludovico Sforza, the Duke of Milan. Identify this Renaissance painter and inventor whose paintings include <i>The Virgin of the Rocks</i> and <i>Salvator Mundi</i> ?		
	Answer: Leonardo <u>Da Vinci</u>	_____	_____
36.	This man is the only one to win the Indianapolis 500, Daytona 500, 24 Hours of Daytona, and the 24 Hours of Le Mans. Which American won the Indianapolis 500 four times as a driver and once as owner of Kenny Brack's car?		
	Answer: Anthony Joseph (A.J.) <u>Foyt, Jr.</u>	_____	_____
37.	The title of this famous play by Molière includes a word for a person who dislikes humankind and avoids society. In which play does the title character, Alceste, hate everyone?		
	Answer: The <u>Misanthrope</u>	_____	_____
38.	Math Computation: Angle theta is in quadrant three and the cosine of angle theta equals negative 15 over 17. What is the sine of angle theta?		
	Answer: <u>-8/17</u>	_____	_____
39.	This man followed Winston Churchill as prime minister of the United Kingdom. Name this man who presided over the granting of independence to India.		
	Answer: Clement <u>Attlee</u>	_____	_____
40.	These substances are similar to triglycerides, but a phosphorus compound has replaced one of the fatty acids. Which class of substances are essential components of biological membranes?		
	Answer: <u>Phospholipids</u>	_____	_____

Moderator (Check score with chief judge and scorekeeper.)
The score at the end of the third quarter is:
(school name) _____ has _____ points
(school name) _____ has _____ points
Coaches you may approach your team for 30 seconds to assist in any questions.
This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge (Restate the score if they have changed because of protests.)

4th Quarter – Sixty Second Instructions

Moderator **The fourth quarter of sixty second questions is about to begin. Everyone please be seated.**
The categories for the 4th quarter are: (Brief description)
1. GEOGRAPHY – ALL ABOUT AFRICA
2. CULINARY ARTS – CULINARY VOCABULARY ABCs
3. MATH – DETERMINANTS OF MATRICES
Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.
Because (school name) chose first in the 2nd quarter, (school name) will have the first choice this quarter.

You will have 10 seconds to choose your category.
(Active team) may move to a position behind the captain. (Other team) put down your pencils.
Captain, all answers will come from you unless you defer to another student.

Moderator (School name) **You will have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your selection.**

The selections are:

- 1.
- 2.

Moderator (Check the score with the chief judge and score keeper) **The score at the end of the game is:**
(School name) _____ has _____ points
(School name) _____ has _____ points

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charges time out.
(Restate the score if it has changed)

(If the game is tied, sudden death questions will be asked.)
Because the game is tied, sudden death toss-up questions will be asked. Would either team like to make substitutions? Again, this is not a time for cooches to confer with their team. (Pause for substitutions.)

Moderator **This concludes the game. Congratulations to both teams. Please check your bracket and move to the next round as quickly as possible.**

**OSSAA 2023-2024
REGIONAL GAME 3
FOURTH QUARTER
60 SECOND QUESTIONS**

GEOGRAPHY - ALL ABOUT AFRICA

Directions: Given the information, identify the following concerning the continent of Africa.

- | | | |
|-----|--|---------------------------------|
| 1. | Most common language spoken on African continent | Arabic |
| 2. | Highest mountain | Mount <u>Kilimanjaro</u> |
| 3. | Largest river by volume | Congo |
| 4. | Southernmost city | Cape Town |
| 5. | Largest island | Madagascar |
| 6. | Largest city, located in Nigeria | Lagos |
| 7. | Biggest lake | Lake <u>Victoria</u> |
| 8. | Number of independent countries | 54 |
| 9. | Largest country | Algeria |
| 10. | Smallest country | Seychelles |

EXTRA:

- | | | |
|----|----------------------------|------------------------------|
| 1. | Largest waterfall by width | <u>Victoria Falls</u> |
| 2. | Largest desert | Sahara |

**OSSAA 2023-2024
REGIONAL GAME 3
FOURTH QUARTER
60 SECOND QUESTIONS**

CULINARY ARTS - CULINARY VOCABULARY ABCs

Directions: Given a brief description, identify the following terms from the culinary world. All answers will be in alphabetical order, beginning with A.

- | | | |
|-----|---|-----------------------------|
| 1. | Another name for yellow fin tuna | <u>Ahi Tuna</u> |
| 2. | Long, skinny French bread | Baguette |
| 3. | Appetizer salad of tomatoes, mozzarella, basil, and olive oil | <u>Caprese Salad</u> |
| 4. | To lightly coat food to be fried in breadcrumbs or flour | Dredge |
| 5. | The main course of a meal | Entree |
| 6. | Deep-fried chickpea fritters | Falafel |
| 7. | Clarified Butter | Ghee |
| 8. | Southern dish made of black eyed peas and rice | <u>Hoppin' John</u> |
| 9. | Synonym for frosting | Icing |
| 10. | Pepper called a chipotle when in dried form | Jalapeno |

EXTRA:

- | | | |
|----|--|------------------------|
| 1. | Yellow-green citrus fruit native to Southern Florida | <u>Key lime</u> |
| 2. | Crustacean considered king of the crustacean family | Lobster |

**OSSAA 2023-2024
REGIONAL GAME 3
FOURTH QUARTER
60 SECOND QUESTIONS**

MATH - DETERMINANTS OF MATRICES

Directions: Find the determinant of each 2 by 2 matrix. All matrices will be read first row left to right, then second row left to right. For example, a matrix which has top numbers 2 and 1 left to right and bottom numbers 3 and 2 left to right would be read as two one and three two {Moderator – read 2,1 and 3,2 as: two one and three two}

- | | | |
|-----|---|-----|
| 1. | 8, 2 and 4, 9 [eight two and four nine] | 64 |
| 2. | 7, 5 and 6, 4 | -2 |
| 3. | 10, 5 and 8, 7 | 30 |
| 4. | 11, 6 and 5, 3 | 3 |
| 5. | 15, 5 and 7, 4 | 25 |
| 6. | 6, -9 and 5, 3 | 63 |
| 7. | 13, 5 and 12, 4 | -8 |
| 8. | 15, -5 and -7, 5 | 40 |
| 9. | 18, -6 and 7, 4 | 114 |
| 10. | 21, 8 and -6, 7 | 195 |

EXTRA:

- | | | |
|----|-----------------|-----|
| 1. | 14, 6 and 8, 4 | 8 |
| 2. | 11, 7 and -3, 8 | 109 |

**OSSAA 2023-2024
REGIONAL GAME 3
EXTRA QUESTIONS**

Extra:

		Team One	Team Two
E1.	This small high-pitched instrument is usually played with drums in military marches. Which woodwind is featured in the Archibald Willard painting <i>Spirit of '76</i> ?		
	Answer: Fife	_____	_____
E2.	This Netflix documentary followed cycling teams as they competed at the 2023 TDF. Name this series where viewers saw the cyclists compete in the three-week long race that took them from Copenhagen, Denmark to the final stage in Paris.		
	Answer: <i>Tour de France: Unchained</i>	_____	_____
E3.	This abolitionist and Fireside poet was a regular contributor to the <i>Free Press</i> newspaper. Which Quaker poet wrote the poem <i>Snow-Bound</i> ?		
	Answer: John Greenleaf <u>Whittier</u>	_____	_____
E4.	Math Computation: Warren's checkbook starts with a balance of \$450. He has debits of \$54, \$9 and \$43, as well as a deposit of \$154. What is the final balance?		
	Answer: \$498	_____	_____
E5.	This collective noun, which includes knives, forks, and spoons, is a synonym for silverware. Which term is also applied to knives used for cutting food?		
	Answer: Cutlery	_____	_____
E6.	Growing corn, then beans, then letting a field lay fallow. In which farming technique does the farmer change the type of plants grown on a field every year in order to minimize soil erosion and maximize soil fertility?		
	Answer: <u>Crop rotation</u>	_____	_____

2023-2024

**OSSAA
REGIONAL
CHAMPIONSHIP**

High School

GAME 4

(BEGINNING OF GAME)

Welcome to the Oklahoma Secondary School Activities Association Academic Bowl. You have previously been instructed regarding the rules. Please turn off all cell phones, tablets, or any device that can receive or send messages. Coaches, team members, and guests are to sit behind their team. Coaches, your protests need to be at the allowed times.

- Introduce yourself and the chief judge.
- **Give your four count.** – Do this for *every* match (Game Procedures A – 11)
- Have the chief judge check the buzzers.

Note (do not read):

Official closest to scorekeeper: Make sure that scorekeeper has **full names** of students and check after first few questions that they are fully shading in correct answers, and marking correct answers only.

Official closest to timekeeper: Make sure the timekeeper is starting the clock and clearing for the first few questions.

**OSSAA 2023-2024
REGIONAL GAME 4
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	The Himalayan Mountain system is classified as these type of mountains. Which type of mountains are created at or near convergent plate boundaries known as continental collision zones?		
	Answer: <u>Fold Mountains</u>	_____	_____
2.	Math Computation: What is the exact value of the cosecant of 300 degrees?		
	Answer: $-2\sqrt{3}/3$ [negative 2 radical (square root of) 3 over 3] (or $-2/3$ radical 3)	_____	_____
3.	The measurement for this weather condition at a given temperature is usually given as a percentage. What is the meteorological two-word phrase for the amount of water vapor in a specific mass of air compared to the total amount possible at that temperature?		
	Answer: <u>Relative Humidity</u>	_____	_____
4.	Sculptures in this Washington D.C. memorial include 5 men in a bread line and a man listening to a radio. Which presidential memorial was created by sculptor George Segal?		
	Answer: <u>Franklin D. Roosevelt Memorial</u>	_____	_____
5.	In July 2023, the parliament in this European country collapsed after severe disagreements about how to handle immigration. Name this country where Prime Minister Mark Rutte announced he would be stepping down as well.		
	Answer: <u>The Netherlands</u>	_____	_____
6.	This Latin phrase refers to the largest and best achievement of an author. Which two-word phrase translates as "great work?"		
	Answer: <u>Magnum Opus</u>	_____	_____
7.	Math Computation: In how many different ways can 6 people be seated around a circular table?		
	Answer: <u>120</u>	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 4
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	This Oklahoma town was once America's largest all-black city. Which town is also the home to the only historically black college or university in Oklahoma?		
	Answer: Langston	_____	_____
9.	This layer of the mantle of the Earth is cold and brittle. What is this uppermost layer of the mantle?		
	Answer: Lithosphere	_____	_____
10.	This cooking technique for vegetables is designed to help keep their flavor, color, and texture intact. Which method involves cooking vegetables in boiling water for 2 to 5 minutes before moving them to an ice bath to stop the cooking process?		
	Answer: Blanching	_____	_____
11.	In June 2023, a merger was announced between the PGA and this organization. Name this upstart golf tour financed by Saudi Arabia that was siphoning players away from the PGA.		
	Answer: LIV Golf	_____	_____
12.	This type of written publication has a minimum of 5 pages and a maximum of 48. Originally stitched together with thread, which type of publication did Thomas Paine use for his writings in support of the American Revolution?		
	Answer: Pamphlet	_____	_____
13.	Math Computation: Add the following 2 matrices: Matrix A has elements 13 and negative 35 top row left to right, and elements 19 and negative 16 bottom row left to right. Matrix B has elements negative 12 and negative 15 top row left to right and elements 32 and 41 bottom row left to right.		
	Answer: 1 and negative 50 top row left to right, 51 and 25 bottom row left to right	_____	_____
14.	In ancient Sparta, men were required to participate in this type of service until the age of 60. In the U.S., which type of service is only required in times of war through a selective lottery for men between the ages of 18 and 26?		
	Answer: Military service	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 4
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
15.	Science Computation: A metal absorbs 1290 joules of energy to raise 5.00 kilograms of that metal by 2.00 degrees Celsius. What is the specific heat capacity of the metal, in joules per kilogram degree Celsius?		
	Answer: 129	_____	_____
16.	According to Hindu mythology, this poison was created by the churning of the ocean. Which poison was given to Shiva, causing his neck and throat to turn blue?		
	Answer: Halahala (or Kalakuta) [hah-lay-hah-lah, or Kay-lah-cue-tah]	_____	_____
17.	In 2023, this woman became the first female solo percussionist to be given a star on Hollywood's Walk of Fame. Name this drummer who backed up Prince before going solo with "The Glamorous Life."		
	Answer: Sheila E. (Sheila Escovedo)	_____	_____
18.	This author's autobiography, <i>A Moveable Feast</i> , was based on notebooks he kept while living in Paris in the 1920s. Which American author committed suicide in 1961?		
	Answer: Ernest <u>Hemingway</u>	_____	_____
19.	Math Computation: Solve the following proportion to find x: $16/24 = 26/x$ [16 over 24 equals 26 over x].		
	Answer: (x=) 39	_____	_____
20.	During the Revolutionary War, this schoolteacher volunteered to go behind enemy lines as a spy. Which American patriot was hanged by the British after being captured in New York?		
	Answer: Nathan <u>Hale</u>	_____	_____

Moderator: (Check score with chief judge and scorekeeper.)

The score at the end of the first quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Coaches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge: (Restate the score if they have changed because of protests.)

(In case of a tie after the first quarter) Since the score is tied, we will continue with additional toss-up questions until one team scores. (Restate the score if necessary)

2nd Quarter – Sixty Second Instructions

Moderator The second quarter of sixty second questions is about to begin. Everyone please be seated.

The categories for the 2nd quarter are: (Brief description)

- 1. SCIENCE – CHEMICAL ELEMENTS**
- 2. VOCABULARY – LAST NAMES THAT CAME FROM OCCUPATIONS**
- 3. MATH – PROBABILITY WITH MARBLES**

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) is ahead at this time, they will have the choice to play or defer until the 4th quarter.

- **You will have 10 seconds to make your decision. (School name) do you choose to play or defer?**
- **(Address playing team) You will have 10 seconds to choose your category (re-read the above categories)**
- **(If the 10 second buzzer goes off, the moderator will ask for an immediate response.)**
- **Since (school name) is playing first, they may move to a position behind their captain. (Other team) will put down their pencils until their time to play. Captain, all answers will come from you unless you defer to another student.**

Moderator (School name) You have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your choice.

The selections are:

- 1.**
- 2.**

Moderator (Check the score with the chief judge and score keeper.)

The score at the end of the first half is:

(School name) _____ has _____ points

(School name) _____ has _____ points.

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out. (Pause briefly for protests.)

This concludes the first half of play. We will pause for substitutions

Substituting team members, please check in with the scorekeeper. WE WILL NOW BEGIN 3RD QUARTER TOSS-UP QUESTIONS.

**OSSAA 2023-2024
REGIONAL GAME 4
SECOND QUARTER
60 SECOND QUESTIONS**

SCIENCE - CHEMICAL ELEMENTS

Directions: From the symbol used on the periodic table of elements, give the name of the chemical element.

- | | | |
|-----|----|--------------|
| 1. | Ca | Calcium |
| 2. | Fe | Iron |
| 3. | K | Potassium |
| 4. | Sn | Tin |
| 5. | Pb | Lead |
| 6. | Ta | Tantalum |
| 7. | Ge | Germanium |
| 8. | Hs | Hassium |
| 9. | Nh | Nihonium |
| 10. | Pa | Protactinium |

EXTRA:

- | | | |
|----|----|-----------|
| 1. | Tl | Thallium |
| 2. | Mc | Moscovium |

**OSSAA 2023-2024
REGIONAL GAME 4
SECOND QUARTER
60 SECOND QUESTIONS**

VOCABULARY - LAST NAMES THAT CAME FROM OCCUPATIONS

Directions: From the given description, identify the common last name that came from the occupation.

- | | | |
|-----|--|--------------------|
| 1. | S- One who works with metal | Smith |
| 2. | C- Barrel maker | Cooper |
| 3. | F- Maker of arrows | Fletcher |
| 4. | C- Servant who guarded a king's bedrooms | Chamberlain |
| 5. | W- Guard or watchman | Ward |
| 6. | H- Makes hoops for barrels | Hooper |
| 7. | C- Coal Miner | Collier |
| 8. | C- Sawyer | Carpenter |
| 9. | W- Maker of wheels | Wainwright |
| 10. | P- Door man | Porter |

EXTRA:

- | | | |
|----|---------------|----------------|
| 1. | C- Shoemaker | Cobbler |
| 2. | M- Bricklayer | Mason |

**OSSAA 2023-2024
REGIONAL GAME 4
SECOND QUARTER
60 SECOND QUESTIONS**

MATH - PROBABILITY WITH MARBLES

Directions: You have an opaque bag containing the following numbers of identical marbles: 15 red, 20 white, 25 yellow, 30 black, and 60 orange. Find the probability of each of the following marbles being drawn. Make sure to express each answer as a reduced fraction.

- | | | |
|-----|--|---------------|
| 1. | Probability of drawing a yellow | 1/6 |
| 2. | Probability of drawing an orange | 2/5 |
| 3. | Drawing a red | 1/10 |
| 4. | Drawing a white | 2/15 |
| 5. | A white or black | 1/3 |
| 6. | A yellow or red | 4/15 |
| 7. | Not a red | 9/10 |
| 8. | Not red nor black | 7/10 |
| 9. | A black, then white with replacement | 2/75 |
| 10. | A white, then a yellow without replacement | 10/447 |

EXTRA:

- | | | |
|----|--|-------------|
| 1. | A white, yellow, or orange | 7/10 |
| 2. | An orange, then a yellow, with replacement | 1/15 |

**OSSAA 2023-2024
REGIONAL GAME 4
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	This measurement, beginning with “P”, is used by astronomers to calculate celestial distances. What is this perceived displacement of an object caused by the change of an observer's location when viewing?		
	Answer: Parallax	_____	_____
22.	Sandro Botticelli’s painting <i>La Primavera</i> features these three women from Greek mythology. What is the collective name for these three daughters of Zeus who bestowed the gifts of brightness, good cheer, youth, and beauty on humanity?		
	Answer: Graces	_____	_____
23.	In June 2023, a tanker truck driver lost control on this interstate highway, causing his tanker to crash and explode and a bridge collapse. Name this interstate highway running through downtown Philadelphia.		
	Answer: I-95	_____	_____
24.	This literary term is defined as the struggle between opposing forces, ideas, or interests in a play or story. Which literary element is classified as either internal or external?		
	Answer: Conflict	_____	_____
25.	Math Computation: Find the limit as x approaches zero of the function: $f(x) = (45x^5 - 12x + 36) / (15x^5 + 6x + 52)$ [F of x equals the quantity 45 x to the fifth minus 12x plus 36 end quantity over the quantity 15 x to the fifth plus 6x plus 52 end quantity].		
	Answer: 9/13	_____	_____
26.	This English explorer was the sponsor of the first English colony in the Americas. Which explorer fell from grace and was imprisoned when he failed to ask Queen Elizabeth I for permission to marry?		
	Answer: Sir Walter <u>Raleigh</u>	_____	_____
27.	Science computation: What is the kinetic energy of a ball that is moving at 5.00 meters per second if the mass of the ball is 9.20 kilograms? Express your answer in joules with the correct number of significant digits.		
	Answer: 115	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 4
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	In a one-man band, this musical instrument is usually suspended in front of the player's mouth by a neck-rack. Which instrument is sometimes referred to as a mouth organ?		
	Answer: Harmonica	_____	_____
29.	In regulation play, only this number of players per team can be on the field during a high school soccer match. How many players, including the goalkeeper, can participate for the same team at the same time?		
	Answer: 11	_____	_____
30.	According to this poem, the world will end "not with a bang, but a whimper." Which 1925 poem by T. S. Eliot begins with an image of "stuffed men leaning together, headpiece filled with straw?"		
	Answer: The <u>Hollow Men</u>	_____	_____
31.	Math Computation: A recipe calls for 2 teaspoons of vanilla. If a chef needs to increase the recipe 24-fold, how many <u>tablespoons</u> of vanilla will she need?		
	Answer: 16	_____	_____
32.	This structure, one of the seven wonders of the natural world, is the largest structure in the world built by living creatures. Which World Heritage site, the only living thing on Earth visible from space, is Australia's number one tourist destination?		
	Answer: The <u>Great Barrier Reef</u>	_____	_____
33.	This sterol is synthesized by the liver and is the forerunner for testosterone and bile. Which sterol is absorbed from fatty foods and can clog a person's arteries if too much is digested?		
	Answer: Cholesterol	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 4
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
34.	In Roman times, this architectural feature was an open central court in a house and usually the location of the hearth. Which feature, in modern times, is an open, skylight-covered space surrounded by a building?		
	Answer: Atrium		
35.	In May 2023, this man announced his campaign for U.S. president by saying “I chose the Constitution and I always will.” Name this Republican who served Indiana as a representative and governor before serving as Vice President of the U.S.		
	Answer: Mike Pence		
36.	A firsthand record of a historical event created by an eyewitness who actually experienced the event is known as this type of source. What type of source can also include photographs and artifacts?		
	Answer: Primary Source		
37.	Math Computation: A trapezoid has bases that measure 15 and 49 and an altitude of 5. What is the area of this trapezoid in square units?		
	Answer: 160		
38.	This Oklahoma oil magnate, one of the Phillips brothers, established Woolaroc Ranch southeast of Bartlesville in 1925. Which Phillips brother also helped establish the Western History collection at the University of Oklahoma?		
	Answer: Frank Phillips		
39.	After the food in the stomach has been partially digested it is given this name. What is this semifluid mass that escapes the stomach through the pyloric sphincter into the duodenum?		
	Answer: Chyme [kiim]		
40.	By definition, an Italian carbonara sauce contains this meat. Which cured meat is made from pork belly?		
	Answer: Bacon		

Moderator (Check score with chief judge and scorekeeper.)

The score at the end of the third quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Coaches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge (Restate the score if they have changed because of protests.)

4th Quarter – Sixty Second Instructions

Moderator **The fourth quarter of sixty second questions is about to begin. Everyone please be seated.**

The categories for the 4th quarter are: (Brief description)

1. LITERATURE – LINES FROM NOVELS

2. U.S. HISTORY – PRESIDENTIAL MIDDLE NAMES

3. SCIENCE – BIOLOGY TERMS

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) chose first in the 2nd quarter, (school name) will have the first choice this quarter.

You will have 10 seconds to choose your category.

(Active team) may move to a position behind the captain. (Other team) put down your pencils.

Captain, all answers will come from you unless you defer to another student.

Moderator (School name) **You will have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your selection.**

The selections are:

1.

2.

Moderator (Check the score with the chief judge and score keeper) **The score at the end of the game is:**

(School name) _____ has _____ points

(School name) _____ has _____ points

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out.

(Restate the score if it has changed)

(If the game is tied, sudden death questions will be asked.)

Because the game is tied, sudden death toss-up questions will be asked. Would either team like to make substitutions? Again, this is not a time for coaches to confer with their team. (Pause for substitutions.)

Moderator **This concludes the game. Congratulations to both teams. Please check your bracket and move to the next round as quickly as possible.**

**OSSAA 2023-2024
REGIONAL GAME 4
FOURTH QUARTER
60 SECOND QUESTIONS**

LITERATURE - LINES FROM NOVELS

Directions: Given a line from a novel, identify the author of that novel.

- | | | |
|-----|--|-----------------------------------|
| 1. | It was the best of times, it was the worst of times | Charles <u>Dickens</u> |
| 2. | Love is or it ain't. Thin love ain't love at all | Toni <u>Morrison</u> |
| 3. | Last night, I dreamt I went to Manderley again | Daphne <u>du Maurier</u> |
| 4. | Each unhappy family is unhappy in its own way | Leo <u>Tolstoy</u> |
| 5. | Tomorrow, I'll think of some way to get him back | Margaret <u>Mitchell</u> |
| 6. | I am not afraid of storms, for I am learning how to sail my ship | Louisa May <u>Alcott</u> |
| 7. | Why, sometimes I've believed as many as six impossible things before breakfast | Lewis <u>Carroll</u> |
| 8. | It does not do to dwell on dreams and forget to live | J. K. <u>Rowling</u> |
| 9. | When you play the game of thrones, you win or you die | George R. R. <u>Martin</u> |
| 10. | It was a pleasure to burn | Ray <u>Bradbury</u> |

EXTRA:

- | | | |
|----|---|-----------------------------|
| 1. | The answer to the ultimate question of life, the universe, and everything is 42 | Douglas <u>Adams</u> |
| 2. | Stay gold, Ponyboy, stay gold | S.E. <u>Hinton</u> |

**OSSAA 2023-2024
REGIONAL GAME 4
FOURTH QUARTER
60 SECOND QUESTIONS**

U.S. HISTORY - PRESIDENTIAL MIDDLE NAMES

Directions: Given the name of a U.S. president, including the middle initial, give the middle name of that president.

- | | | |
|-----|----------------------|----------|
| 1. | Chester A. Arthur | Alan |
| 2. | Rutherford B. Hayes | Birchard |
| 3. | John C. Coolidge | Calvin |
| 4. | Herbert C. Hoover | Clark |
| 5. | Dwight D. Eisenhower | David |
| 6. | Warren G. Harding | Gamaliel |
| 7. | William H. Harrison | Henry |
| 8. | George W. Bush | Walker |
| 9. | Barack H. Obama | Hussein |
| 10. | Franklin K. Pierce | Kendrick |

EXTRA:

- | | | |
|----|------------------|---------|
| 1. | James K. Polk | Knox |
| 2. | Richard M. Nixon | Milhaus |

**OSSAA 2023-2024
REGIONAL GAME 4
FOURTH QUARTER
60 SECOND QUESTIONS**

SCIENCE - BIOLOGY TERMS

Directions: Given the first letter and a brief description, identify the following biology terms.

- | | | |
|-----|---|-----------------------------|
| 1. | D- organism that feeds on dead plant and animal material | Detrivore |
| 2. | Z- diploid cell from the fusion of two gametes | Zygote |
| 3. | R- scientific class that includes alligators and crocodiles | Reptilia |
| 4. | C- symbiotic relationship where one organism is not harmed | Commensalism |
| 5. | A- fetal membrane tissue | Amnion |
| 6. | P- process where a plant grows toward the light | Phototropism |
| 7. | S- leaf that protects the bud of a flower | Sepal |
| 8. | B - the A's, T's, G's, and C's of DNA | Base (or base pairs) |
| 9. | V- lipid bilayer compartments | Vesicle |
| 10. | E- organism that lives inside another organism | Endophyte |

EXTRA:

- | | | |
|----|--|------------------|
| 1. | D- movement of ions from higher to lower concentration areas | Diffusion |
| 2. | M- cancerous cells that are growing dangerously | Malignant |

**OSSAA 2023-2024
REGIONAL GAME 4
EXTRA QUESTIONS**

Extra:

		Team One	Team Two
E1.	In the summer of 2023, this player was traded from the Suns to the Wizards, then from the Wizards to the Golden State Warriors. Name this point guard who was subsequently traded from the Warriors to the Raptors for Pascal Siakam.		
	Answer: Chris Paul	_____	_____
E2.	This set of punctuation marks is usually placed around incidental, explanatory information that is not critical to the sentence. Which marks are also used to set off citations for quoted material?		
	Answer: Parentheses	_____	_____
E3.	Math Computation: Angle theta is in quadrant four and the sine of angle theta equals negative 5 over 13. What is the cosine of angle theta?		
	Answer: 12/13	_____	_____
E4.	This civics term is defined as the body of persons entitled to vote. What is the collective name, beginning with E, for the group made up of Americans aged 18 years or older?		
	Answer: Electorate	_____	_____
E5.	This scientist used a magnet to bend the cathode ray he created when applying an electric current to gas in a glass tube. Name this scientist who discovered the electron.		
	Answer: Sir Joseph John <u>Thomson</u>	_____	_____
E6.	Idun, the Norse god of Spring, used these items to bestow immortality to those who ate them. What magic items did Idun carry in a basket?		
	Answer: Apples	_____	_____

2023-2024

**OSSAA
REGIONAL
CHAMPIONSHIP**

High School

GAME 5

(BEGINNING OF GAME)

Welcome to the Oklahoma Secondary School Activities Association Academic Bowl. You have previously been instructed regarding the rules. Please turn off all cell phones, tablets, or any device that can receive or send messages. Coaches, team members, and guests are to sit behind their team. Coaches, your protests need to be at the allowed times.

- Introduce yourself and the chief judge.
- **Give your four count.** – Do this for every match (Game Procedures A – 11)
- Have the chief judge check the buzzers.

Note (do not read):

Official closest to scorekeeper: Make sure that scorekeeper has **full names** of students and check after first few questions that they are fully shading in correct answers, and marking correct answers only.

Official closest to timekeeper: Make sure the timekeeper is starting the clock and clearing for the first few questions.

**OSSAA 2023-2024
REGIONAL GAME 5
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	This Dutch humanist was the first to annotate and edit the Greek New Testament. Which Renaissance theologist wrote <i>In Praise of Folly</i> in 1509?		
	Answer: Desidarius <u>Erasmus</u>	_____	_____
2.	Math Computation: Two tangent lines intersect outside a circle. If the major arc formed from the intersection measures 200 degrees, what is the measure, in degrees, of the angle formed by these tangents?		
	Answer: 20	_____	_____
3.	In 1980, this woman ran for vice president of the U.S. on the Communist party ticket. Which African American educator and political activist wrote the book <i>Women, Race, and Class</i> ?		
	Answer: Angela <u>Davis</u>	_____	_____
4.	The plicae circulares [pli'se ser-ku-la'res] are most developed in this part of the small intestine. Identify this middle part of the intestine between the duodenum [du'o-de'num] and ileum [il'e-um].		
	Answer: Jejunum [jee-joo'num]	_____	_____
5.	This art term is defined as the arrangement of visual elements in a work of art. What is this term beginning with the letter C?		
	Answer: Composition	_____	_____
6.	In June 2023, four people at this university were indicted with stealing body parts from the medical school and selling them online. Name this prestigious Ivy League school located in Massachusetts.		
	Answer: Harvard	_____	_____
7.	The most famous line in this play is "Hell is other people." What is the title of this existentialist work written by John Paul Sartre (SART)?		
	Answer: No Exit	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 5
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	Math Computation: What is the exact value of the tangent of 11π over 6 radians?		
	Answer: $-\sqrt{3}/3$ [radical (negative square root of) 3 over 3] (or $-1/3$ radical 3)	_____	_____
9.	This general served as the leader of the Macedonian cavalry at the Battle of Issus in 333 B.C. Which king of Macedon was appointed the leader of the Corinthian League for the invasion of Asia in 336 B.C.?		
	Answer: <u>Alexander the Great</u>	_____	_____
10.	This angle can change depending upon where someone is on the globe, as well as changing fairly quickly over time. What is the two-word phrase for the angle between true north and the direction in which a compass needle points?		
	Answer: <u>Magnetic declination</u>	_____	_____
11.	This type of medieval music is monophonic and lacks meter. Which form of unaccompanied Latin church music emerged around 100 A.D.?		
	Answer: <u>Plainchant (or Gregorian chant)</u>	_____	_____
12.	In 2023, this man won the lawsuit filed against him that claimed he had copied parts of the song "Let's Get It On" by Ed Townsend and Marvin Gaye. Name this pop superstar whose song, "Thinking Out Loud," had chords similar to the Marvin Gaye song.		
	Answer: <u>Ed Sheeran</u>	_____	_____
13.	The Walt Whitman poem <i>When Lilacs Last in the Dooryard Bloom'd</i> is one of two he penned on the death of Abraham Lincoln. What is the title of the other poem?		
	Answer: <i>O Captain! My Captain</i>	_____	_____
14.	Math Computation: How much simple interest is earned on \$800 at 5.5% interest for 4 years?		
	Answer: \$176	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 5
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
15.	According to the 2020 census, this state has the largest Native American population, followed by Oklahoma, New Mexico, and South Dakota. Which state has 22% of its population identified as Native American or indigenous peoples?		
	Answer: Alaska	_____	_____
16.	For neon, this is equal to 20, but for oxygen it could be 16, 17, or 18. What is this measurement of the total number of particles in the nucleus of an atom?		
	Answer: Mass number	_____	_____
17.	This type of scarf, made of white linen or silk, was worn by women in the Middle Ages to cover the neck. What name, beginning with W, was given to this scarf that fit under the chin and was fastened above the ear?		
	Answer: Wimple	_____	_____
18.	In July 2023, an airstrike in the city of Omdurman, in this country, killed at least 22 people. Name this war-torn African country where rival generals were fighting for control of the country.		
	Answer: Sudan	_____	_____
19.	This literary period encompasses the years between 1603 and 1625, during the rule of King James I. During which period did Shakespeare write <i>Macbeth</i> and Ben Jonson and Inigo Jones introduce the masque?		
	Answer: <u>Jacobean</u> Period	_____	_____
20.	Math Computation: Solve the following inequality for Z: $(4Z - 9) / 5 > 11$ [the quantity 4Z minus 9 end quantity over 5 is greater than 11].		
	Answer: $Z > 16$ [Z is greater than 16] (or $16 < Z$ [16 is less than Z])	_____	_____

Moderator: (Check score with chief judge and scorekeeper.)

The score at the end of the first quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Coaches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge: (Restate the score if they have changed because of protests.)

(In case of a tie after the first quarter) Since the score is tied, we will continue with additional toss-up questions until one team scores. (Restate the score if necessary)

2nd Quarter – Sixty Second Instructions

Moderator The second quarter of sixty second questions is about to begin. Everyone please be seated.

The categories for the 2nd quarter are: (Brief description)

1. SPORTS – NFL MVPs

2. SCIENCE – ANIMAL BABY NAMES

3. FINE ARTS – ART TERMS BEGINNING WITH S

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) is ahead at this time, they will have the choice to play or defer until the 4th quarter.

- You will have 10 seconds to make your decision. (School name) do you choose to play or defer?**
- (Address playing team) You will have 10 seconds to choose your category (re-read the above categories)**
- (If the 10 second buzzer goes off, the moderator will ask for an immediate response.)**
- Since (school name) is playing first, they may move to a position behind their captain. (Other team) will put down their pencils until their time to play. Captain, all answers will come from you unless you defer to another student.**

Moderator (School name) You have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your choice.

The selections are:

1.

2.

Moderator (Check the score with the chief judge and score keeper.)

The score at the end of the first half is:

(School name) _____ has _____ points

(School name) _____ has _____ points.

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out. (Pause briefly for protests.)

This concludes the first half of play. We will pause for substitutions

Substituting team members, please check in with the scorekeeper. WE WILL NOW BEGIN

3RD QUARTER TOSS-UP QUESTIONS.

**OSSAA 2023-2024
REGIONAL GAME 5
SECOND QUARTER
60 SECOND QUESTIONS**

SPORTS - NFL MVPS

Directions: Given the MVP of NFL and the year in which they were MVP, identify what team they played on.
{Moderator – unless otherwise noted, they may say the city/state or the team nickname.}

- | | | |
|-----|-----------------------|-----------------------------------|
| 1. | 2022, Patrick Mahomes | Kansas City Chiefs |
| 2. | 2021, Aaron Rodgers | Green Bay Packers |
| 3. | 2019, Lamar Jackson | Baltimore Ravens |
| 4. | 1977, Walter Payton | Chicago Bears |
| 5. | 2009, Peyton Manning | Indianapolis Colts |
| 6. | 2000, Marshall Faulk | St. Louis Rams |
| 7. | 1985, Marcus Allen | Los Angeles <u>Raiders</u> |
| 8. | 1975, Fran Tarkenton | Minnesota Vikings |
| 9. | 1974, Ken Stabler | Oakland <u>Raiders</u> |
| 10. | 1981, Ken Anderson | Cincinnati Bengals |

EXTRA:

- | | | |
|----|-----------------------|-----------------------------|
| 1. | 2005, Shaun Alexander | Seattle Seahawks |
| 2. | 2018, Tom Brady | New England Patriots |

**OSSAA 2023-2024
REGIONAL GAME 5
SECOND QUARTER
60 SECOND QUESTIONS**

SCIENCE - ANIMAL BABY NAMES

Directions: Identify the name used for the infant or baby of each of the following types of animals.

- | | | |
|-----|------------|-----------------|
| 1. | Bear | Cub |
| 2. | Cattle | Calf |
| 3. | Deer | Fawn |
| 4. | Seal | Pup |
| 5. | Rhinoceros | Calf |
| 6. | Baboon | Infant |
| 7. | Peafowl | Poult |
| 8. | Armadillo | Pup |
| 9. | Alpaca | Cria |
| 10. | Hawk | Eays (or eyess) |

EXTRA:

- | | | |
|----|----------|------|
| 1. | Zebra | Colt |
| 2. | Red deer | Fawn |

**OSSAA 2023-2024
REGIONAL GAME 5
SECOND QUARTER
60 SECOND QUESTIONS**

FINE ARTS - ART TERMS BEGINNING WITH S

Directions: Given a brief definition, identify the following art terms beginning with the letter S.

- | | | |
|-----|---|--------------------------|
| 1. | Quick spontaneous drawing | Sketch |
| 2. | Painting depicting arrangement of inanimate objects | <u>Still life</u> |
| 3. | Type of color created when only black has been added to increase darkness | Shade |
| 4. | Art movement associated with Salvador Dali | Surrealism |
| 5. | Type of balance when both sides of a work have identical forms | Symmetrical |
| 6. | Element of art that can be positive or negative | Space |
| 7. | Using fine tonal modulations to blur contours in painting | Sfumato |
| 8. | Dark brown pigment made from ink of cuttlefish | Sepia |
| 9. | Sharp stick used for engraving | Stylus |
| 10. | Art form created by whittling on ivory or wood | Scrimshaw |

EXTRA:

- | | | |
|----|--|----------------|
| 1. | Use opaque glaze to soften or dull areas of a painting | Scumble |
| 2. | Term for any large mixed art exhibition | Salon |

**OSSAA 2023-2024
REGIONAL GAME 5
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	During World War I, future president Harry Truman trained at this Oklahoma military base. Which base is known as the “West Point of the Field Artillery?”		
	Answer: <u>Fort Sill</u>	_____	_____
22.	About 200 B.C., this Greek calculated the circumference of the Earth to within 1% of the actual value. Which man used the differing lengths of shadows in Egypt to find the distance around the Earth?		
	Answer: Eratosthenes	_____	_____
23.	Smoked herring that have been slit open and salted or brined are known by this name beginning with K. What is the name for these smoked fish that are a common British breakfast food?		
	Answer: Kippers	_____	_____
24.	At the end of the SCOTUS term in the summer of 2023, they upended affirmative action in higher ed with the overruling of this decision. Name this court case that was upended by SFFA v Harvard and SFFA v the University of North Carolina.		
	Answer: Grutter v Bollinger	_____	_____
25.	This designation is given to any form of literature that is not poetry. Which classification is applied to both fiction and nonfiction writings?		
	Answer: Prose	_____	_____
26.	Math Computation: What is the indefinite integral of the function: $8x^3 + 9x^2 - 7$ [8 x cubed plus 9 x squared minus 7]?		
	Answer: $2x^4 + 3x^3 - 7x + c$ [2 x to the fourth plus 3 x cubed minus 7x plus c] {must say + c}	_____	_____
27.	This type of crime is more serious than an infraction, but not as serious as a felony. Which type of crime includes offenses such as simple assault, harassment, and public intoxication?		
	Answer: Misdemeanor	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 5
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	This isomer of glucose is the most water-soluble simple sugar and is found in flowers. Which isomer is also found in vegetables and fruits?		
	Answer: Fructose	_____	_____
29.	In this economic system, the mother country controls the trade of its colonies in order to build a wealthy and powerful state. Which system, identified by Adam Smith, dominated Western European economics during the 18 th century?		
	Answer: Mercantilism	_____	_____
30.	This player caught "The Immaculate Reception" and raced to the end zone to win a 1972 playoff game with no time remaining. Which 4-time Super Bowl winning running back wore number 32 for the Pittsburgh Steelers?		
	Answer: Franco <u>Harris</u>	_____	_____
31.	<i>The Mystery of the Yellow Room</i> by this French author is one of the first to fall into the locked room mystery genre. Which author's greatest claim to fame is his novel <i>The Phantom of the Opera</i> ?		
	Answer: Gaston <u>Leroux</u>	_____	_____
32.	Math Computation: What is the sample standard deviation in a normally distributed range of data, if the sample variance is 961?		
	Answer: 31	_____	_____
33.	A sermon by this man inspired the framework for the government of the Connecticut colony from 1639 to 1662. Which minister drafted the Fundamental Orders of Connecticut?		
	Answer: Thomas <u>Hooker</u>	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 5
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
34.	This type of birth occurs when a baby is in position to leave the birth canal feet first. What is the name for this type of birth which is more likely to take place when babies are born early or there are twins or triplets?		
	Answer: <u>Breech</u>	_____	_____
35.	This artist is generally considered to be the first Modernist painter. Which French painter's works include <i>The Large Bathers</i> and <i>A Modern Olympia</i> ?		
	Answer: <u>Paul Cézanne</u>	_____	_____
36.	In June 2023, the Supreme Court ruled in the case of <i>Allen v Milligan</i> that this state violated the Voting Rights Act when they drew the congressional maps from the 2020 census. Name this state led by Governor Kay Ivey.		
	Answer: <u>Alabama</u>	_____	_____
37.	This term indicates the printed text of a play containing dialogue, stage directions, and character descriptions. Which term also applies to the printed text for movies?		
	Answer: <u>Script</u>	_____	_____
38.	Math Computation: What is $125^{2/3}$ [125 to the two thirds power]?		
	Answer: <u>25</u>	_____	_____
39.	Greek and Roman soldiers wore these protectors of shaped leather or metal around their shins for protection. What is the name, beginning with G, for these pieces of armor also worn by gladiators?		
	Answer: <u>Greaves</u>	_____	_____
40.	Science computation: What is the focal length of a lens if an object 12 centimeters in front of a converging lens produces a real image 18 centimeters behind the lens? Express your answer with the correct number of significant digits.		
	Answer: <u>7.2</u>	_____	_____

Moderator (Check score with chief judge and scorekeeper.)
The score at the end of the third quarter is:
(school name) _____ has _____ points
(school name) _____ has _____ points
Coaches you may approach your team for 30 seconds to assist in any questions.
This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge (Restate the score if they have changed because of protests.)

4th Quarter – Sixty Second Instructions

Moderator The fourth quarter of sixty second questions is about to begin. Everyone please be seated.
The categories for the 4th quarter are: (Brief description)

1. U.S. HISTORY – THE 1920s
2. MATH – NUMBER OF DIAGONALS
3. LITERATURE – MAIN CHARACTERS IN NOVELS

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) chose first in the 2nd quarter, (school name) will have the first choice this quarter.

You will have 10 seconds to choose your category.

(Active team) may move to a position behind the captain. (Other team) put down your pencils.
Captain, all answers will come from you unless you defer to another student.

Moderator (School name) You will have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your selection.

The selections are:

- 1.
- 2.

Moderator (Check the score with the chief judge and score keeper) The score at the end of the game is:
(School name) _____ has _____ points
(School name) _____ has _____ points

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charges time out.
(Restate the score if it has changed)

(If the game is tied, sudden death questions will be asked.)

Because the game is tied, sudden death toss-up questions will be asked. Would either team like to make substitutions? Again, this is not a time for coaches to confer with their team. (Pause for substitutions.)

Moderator This concludes the game. Congratulations to both teams. Please check your bracket and move to the next round as quickly as possible.

**OSSAA 2023-2024
REGIONAL GAME 5
FOURTH QUARTER
60 SECOND QUESTIONS**

U.S. HISTORY - THE 1920s

Directions: Given a brief description, identify the following about the 1920s

- | | | |
|-----|---|-----------------------------|
| 1. | U.S. refused to join this group established by ratification of Treaty of Versailles | <u>League of Nations</u> |
| 2. | 19th amendment passes, establishing this | Women's right to vote |
| 3. | Proposal put forward for this trail, stretching from Georgia to Maine | <u>Appalachian Trail</u> |
| 4. | This scandal over oil reserves is uncovered | <u>Tea Pot Dome Scandal</u> |
| 5. | Construction begins on this House that Ruth built | <u>Yankees Stadium</u> |
| 6. | This president dies in office following a trip to Alaska | Warren G. <u>Harding</u> |
| 7. | This man is appointed to lead FBI | J. Edgar <u>Hoover</u> |
| 8. | Famous trial over evolution | <u>Scopes</u> Monkey Trial |
| 9. | This weekly music show has its first radio broadcast | <u>Grand Ole Opry</u> |
| 10. | Stock market crashes in October of this year | 1929 |

EXTRA:

- | | | |
|----|--|-----------------------|
| 1. | Pilot who becomes first woman to fly over the Atlantic Ocean | Amelia <u>Earhart</u> |
| 2. | Work on this gigantic outdoor sculpture begins in South Dakota | <u>Mt. Rushmore</u> |

**OSSAA 2023-2024
REGIONAL GAME 5
FOURTH QUARTER
60 SECOND QUESTIONS**

MATH - NUMBER OF DIAGONALS

Directions: Identify how many distinct diagonals each of the following convex polygons has.

1.	Pentagon	5
2.	Octagon	20
3.	Heptagon	14
4.	Undecagon	44
5.	Decagon	35
6.	Icosagon	170
7.	23-agon	230
8.	Triskaidecagon	65
9.	33-agon	495
10.	28-agon	350

EXTRA:

1.	Dodecagon	54
2.	18-agon	135

**OSSAA 2023-2024
REGIONAL GAME 5
FOURTH QUARTER
60 SECOND QUESTIONS**

LITERATURE - MAIN CHARACTERS IN NOVELS

Directions: Given the name of a main character in a novel, name the novel.

- | | | |
|-----|---------------|---|
| 1. | James Gatz | <u>The Great Gatsby</u> |
| 2. | Sydney Carton | <u>A Tale of Two Cities</u> |
| 3. | Ichabod Crane | <u>The Legend of Sleepy Hollow</u> |
| 4. | Jean Valjean | <u>Les Miserables</u> |
| 5. | Jim Hawkins | <u>Treasure Island</u> |
| 6. | Tom Joad | <u>The Grapes of Wrath</u> |
| 7. | Mowgli | <u>The Jungle Book</u> |
| 8. | Santiago | <u>The Old Man and the Sea</u> |
| 9. | Gregor Samsa | <u>The Metamorphosis</u> |
| 10. | Philip Pirrip | <u>Great Expectations</u> |

EXTRA:

- | | | |
|----|-------------|----------------------------------|
| 1. | Becky Sharp | <u>Vanity Fair</u> |
| 2. | Sam Spade | <u>The Maltese Falcon</u> |

**OSSAA 2023-2024
REGIONAL GAME 5
EXTRA QUESTIONS**

Extra:

		Team One	Team Two
E1.	This musical term describes a work that has added musical color. What term is used for a work that contains many extra notes not found in the scale or key of the composition?		
	Answer: Chromatic	_____	_____
E2.	After failing to find a team to trade for this man, the Minnesota Vikings released this running back in June 2023. Name this four-time Pro Bowler who is now suiting up for the New York Jets.		
	Answer: Dalvin <u>Cook</u>	_____	_____
E3.	This eight-word refrain is repeated four times in Dylan Thomas's poem <i>Do Not Go Gentle Into That Good Night</i> . Which refrain exhorts a dying man to fight against death?		
	Answer: <u>Rage, Rage against the dying of the light</u>	_____	_____
E4.	Math Computation: Convert the binary number 101110 [one zero one one one zero] into a base 10 number.		
	Answer: 46	_____	_____
E5.	In 1955, this city became the capital of Wales. What is the name of this former Roman fort located on the Severn River?		
	Answer: Cardiff	_____	_____
E6.	This skin defect forms when friction causes an upper skin layer to rub against an underlying skin layer. What is the common name for this rounded elevation of the skin containing clear fluid?		
	Answer: Blister	_____	_____

2023-2024

**OSSAA
REGIONAL
CHAMPIONSHIP**

High School

GAME 6

(BEGINNING OF GAME)

Welcome to the Oklahoma Secondary School Activities Association Academic Bowl. You have previously been instructed regarding the rules. Please turn off all cell phones, tablets, or any device that can receive or send messages. Coaches, team members, and guests are to sit behind their team. Coaches, your protests need to be at the allowed times.

- Introduce yourself and the chief judge.
- **Give your four count.** – Do this for every match (Game Procedures A – 11)
- Have the chief judge check the buzzers.

Note (do not read):

Official closest to scorekeeper: Make sure that scorekeeper has **full names** of students and check after first few questions that they are fully shading in correct answers, and marking correct answers only.

Official closest to timekeeper: Make sure the timekeeper is starting the clock and clearing for the first few questions.

**OSSAA 2023-2024
REGIONAL GAME 6
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	Math Computation: What is the volume, in cubic inches, of a sphere that has a radius of 6 inches? Put your answer in terms of pi.		
	Answer: 288 pi	_____	_____
2.	This art term refers to an underlying support, usually of wood or metal, in a sculpture. What is the framework around which a sculpture is built?		
	Answer: Armature	_____	_____
3.	Science computation: Find the potential difference when a charged particle moves 3.5 meters in a uniform electric field of strength 550 Newtons per coulomb. Put your answer in volts with the correct number of significant digits.		
	Answer: 1900 (or 1.9×10^3 [1 point 9 times ten to the third])	_____	_____
4.	According to Anglo-Saxon law, this price was paid in gold to compensate a family for a death. What fine, beginning with the letter W, does the author of <i>Beowulf</i> indicate Grendel will never pay for the deaths of the men he killed?		
	Answer: Wergild	_____	_____
5.	On the eve of the NATO summit in July 2023, this country dropped their opposition to Sweden joining NATO in the near future. Which country was looking for NATO help fighting terrorism from the Kurdistan Workers' Party?		
	Answer: Turkey	_____	_____
6.	To be eligible to run for governor of Oklahoma, a person must have lived in the state for at least ten years and be at least this age. What is the minimum age to hold an executive office in Oklahoma?		
	Answer: 31	_____	_____
7.	Math Computation: Convert into a binary number, the base ten number 31.		
	Answer: 11111 [one one one one one]	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 6
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	This natural sugar substitute is at least 100 times sweeter than sugar. What substitute, made from the leaves of a plant of the same name, has no carbs, calories, or artificial ingredients?		
	Answer: Stevia	_____	_____
9.	This substance is the only component of the skeletons of lamprey eels and sharks. Which connective tissue is present in mammalian embryos before bone formation begins?		
	Answer: Cartilage	_____	_____
10.	This 9-letter adjective, beginning with P, describes primary or secondary schools supported by a religious group. Which word is taken from the Latin for parish?		
	Answer: Parochial	_____	_____
11.	In July 2023, a song by this artist caused backlash from some. Name this country music singer of "Try That in a Small Town."		
	Answer: Jason Aldean	_____	_____
12.	This type of tax is charged on profits made from the sale of a non-inventory asset. Which category of tax includes profits from the sale of property, stocks, or precious metals?		
	Answer: Capital Gains	_____	_____
13.	Math Computation: Angle theta is in quadrant two and the cosine of angle theta equals negative 8 over 17. What is the tangent of angle theta?		
	Answer: -15/8	_____	_____
14.	War, Famine, Pestilence, and Death are collectively known as this ominous group. Which group is featured in the Bible book of Revelation?		
	Answer: Four Horsemen of the Apocalypse	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 6
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
15.	This curvature of the spine contains 5 vertebrae fused together. Which section of the spine is directly above the coccyx?		
	Answer: Sacrum	_____	_____
16.	Copenhagen's Little Mermaid sculpture is a tribute to this author of fairy tales. Which author gave us the stories <i>The Emperor's New Clothes</i> and <i>The Princess and the Pea</i> ?		
	Answer: Hans Christian <u>Andersen</u>	_____	_____
17.	In June 2023, a submersible that was attempting to reach this ship went missing. Which shipwreck was the Titan attempting to explore when it suffered a fatal implosion, killing all five on board?		
	Answer: Titanic	_____	_____
18.	In 1754, this university was founded as King's College by royal charter of King George II. Which university is the oldest educational institution in New York?		
	Answer: <u>Columbia</u> University	_____	_____
19.	Math Computation: A 45-foot electric pole casts a shadow that is 8 feet long. How tall, in feet, is a tree that casts a 20-foot shadow?		
	Answer: 112.5 (or 112 & 1/2 or 224/2)	_____	_____
20.	Rembrandt painted this mythological woman chained to a rock. Which woman was saved from a sea monster by Perseus?		
	Answer: Andromeda	_____	_____

Moderator: (Check score with chief judge and scorekeeper.)

The score at the end of the first quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Coaches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge: (Restate the score if they have changed because of protests.)

(In case of a tie after the first quarter) Since the score is tied, we will continue with additional toss-up questions until one team scores. (Restate the score if necessary)

2nd Quarter – Sixty Second Instructions

Moderator The second quarter of sixty second questions is about to begin. Everyone please be seated.

The categories for the 2nd quarter are: (Brief description)

1. TRANSPORTATION – AUTOMOTIVE TERMS

2. SCIENCE – FORENSICS TERMS

3. MUSIC – FAMOUS OKLAHOMA MUSICIANS

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) is ahead at this time, they will have the choice to play or defer until the 4th quarter.

- You will have 10 seconds to make your decision. (School name) do you choose to play or defer?
- (Address playing team) You will have 10 seconds to choose your category (re-read the above categories)
- (If the 10 second buzzer goes off, the moderator will ask for an immediate response.)
- Since (school name) is playing first, they may move to a position behind their captain. (Other team) will put down their pencils until their time to play. Captain, all answers will come from you unless you defer to another student.

Moderator (School name) You have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your choice.

The selections are:

1.

2.

Moderator (Check the score with the chief judge and score keeper.)

The score at the end of the first half is:

(School name) _____ has _____ points

(School name) _____ has _____ points.

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out. (Pause briefly for protests.)

This concludes the first half of play. We will pause for substitutions

Substituting team members, please check in with the scorekeeper. WE WILL NOW BEGIN

3RD QUARTER TOSS-UP QUESTIONS.

**OSSAA 2023-2024
REGIONAL GAME 6
SECOND QUARTER
60 SECOND QUESTIONS**

TRANSPORTATION - AUTOMOTIVE TERMS

Directions: Given a first letter and a brief description, identify each of the following automotive terms.

- | | | |
|-----|---|---------------------|
| 1. | A- foot pedal that controls the flow of fuel to the engine | Accelerator |
| 2. | F- chassis of the vehicle | Frame |
| 3. | D- oil level indicator | Dipstick |
| 4. | R- heat exchanger on the engine block | Radiator |
| 5. | S- system including tires, shocks, springs, and linkages between | Suspension |
| 6. | D- also called a spare tire | Donut |
| 7. | W- distance between front and rear axles of a vehicle | Wheelbase |
| 8. | D- system of gears to split the torque between wheels that turn at varying speeds | Differential |
| 9. | B- explosion of partially burned fuel in the exhaust system | Backfire |
| 10. | K- vertical shaft about which the wheel assembly rotates | Kingpin |

EXTRA:

- | | | |
|----|---|----------------------|
| 1. | C- valve restricting air into the engine to increase starting ability | Choke |
| 2. | IC- transformer from the battery to the spark plugs | Ignition Coil |

**OSSAA 2023-2024
REGIONAL GAME 6
SECOND QUARTER
60 SECOND QUESTIONS**

SCIENCE - FORENSICS TERMS

Directions: Given a first letter or letters and a brief description, identify each of the following terms used in forensics. Some answer may be multiple words.

- | | | |
|-----|--|------------------------------|
| 1. | F- weapon firing a projectile using small explosives | Firearm |
| 2. | COD- reason a person is deceased | Cause of Death |
| 3. | M- end of the gun barrel where projectile exits | Muzzle |
| 4. | T- degree to which something is poisonous | Toxicity |
| 5. | GSR- tiny particles left when a gun is fired | Gun Shot Residue |
| 6. | RP- fingerprint design with lines and whorls | Ridge Pattern |
| 7. | C- tough outer covering of hair | Cuticle |
| 8. | SP- cross section of ground where you can see the different properties | Soil Profile |
| 9. | SI- keeping a crime area free of discriminants | Scene Integrity |
| 10. | FA- study of human skeletal remains in a crime scene | Forensic Anthropology |

EXTRA:

- | | | |
|----|--|-----------------------------|
| 1. | CS- drug or other chemical regulated by the legal system | Controlled Substance |
| 2. | P- drug usage equipment | Paraphernalia |

**OSSAA 2023-2024
REGIONAL GAME 6
SECOND QUARTER
60 SECOND QUESTIONS**

MUSIC - FAMOUS OKLAHOMA MUSICIANS

Directions: Given a song written or recorded by an Oklahoma musician, name the musician or group.

- | | | |
|-----|---|-----------------------------|
| 1. | Songwriter/Singer of <i>Go Rest High on That Mountain</i> | Vince <u>Gill</u> |
| 2. | Songwriter of <i>This Land is Your Land</i> | Woody <u>Guthrie</u> |
| 3. | Singer of <i>Rudolph, the Red-Nosed Reindeer</i> | Gene <u>Autry</u> |
| 4. | Songwriter/Singer of <i>Okie From Muskogee</i> | Merle <u>Haggard</u> |
| 5. | Singer of <i>Is There Life Out There</i> | Reba <u>McEntire</u> |
| 6. | Songwriter of <i>After Midnight</i> | J. J. <u>Cale</u> |
| 7. | Band- <i>Do You Realize??</i> | <u>Flaming Lips</u> |
| 8. | Band- <i>Use Somebody</i> | <u>Kings of Leon</u> |
| 9. | Songwriter/Singer of <i>King of the Road</i> | Roger <u>Miller</u> |
| 10. | Singer of <i>How Much is That Doggie in the Window?</i> | Patti <u>Page</u> |

EXTRA:

- | | | |
|----|---|-------------------------------|
| 1. | Songwriter/Singer of <i>Should've Been a Cowboy</i> | Toby <u>Keith</u> |
| 2. | Songwriter/Singer of <i>You Are My All in All</i> | Dennis <u>Jernigan</u> |

**OSSAA 2023-2024
REGIONAL GAME 6
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	Give the full name of the pesticide banned in 1972 for the harm it was doing to eggs of bald eagles. What is the full name for the pesticide DDT?		
	Answer: Dichloro-diphenyl-trichlorethane [dy-kloro-dy-fee-nahl-try-klo-roh-eh-thayn]	_____	_____
22.	In the Shakespeare play <i>Macbeth</i> , both Duncan and Macbeth have this title given to medieval landowners. Which five-letter title indicates the landowner owes loyalty to his king for a gift of land?		
	Answer: Thane	_____	_____
23.	This player scored on a free kick in stoppage time against Cruz Azul in his U.S. debut. Name this soccer great who was signed by Inter Miami in the summer of 2023.		
	Answer: Lionel (Leo) <u>Messi</u>	_____	_____
24.	This powerful French cardinal of the 17th century was known as the “Red Eminence.” Which man, Louis XIII’s [13 th] chief minister, is cast as a villain in the Alexandre Dumas novel <i>The Three Musketeers</i> ?		
	Answer: Cardinal <u>Richelieu</u>	_____	_____
25.	Math Computation: The equation for finding the displacement of an object is: $d = -12t^3 + 24t^2 + 30t + 150$ [d equals negative 12 t cubed plus 24 t squared plus 30t plus 150]. What is the equation for finding the acceleration of that object at any given time?		
	Answer: (a=) $-72t + 48$	_____	_____
26.	This trumpet player’s autobiography is titled <i>To be or Not to Bop</i> . Which musician co-founded the Bebop movement with saxophonist Charlie Parker?		
	Answer: Dizzy <u>Gillespie</u>	_____	_____
27.	This type of map shows lines connecting areas of equal elevation. Which kind of map indicates the elevation of areas?		
	Answer: Topographic	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 6
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	This Roman epic includes the story of the Trojan horse and the fall of Troy. Which long poem was written by the Roman poet Virgil?		
	Answer: The <u>Aeneid</u>	_____	_____
29.	This 1974 Supreme Court case directly limited the president's power of executive privilege. Which case was a direct result of the Watergate scandal?		
	Answer: United States v Nixon		
30.	This small town in Georgia is home to the National Prisoner of War Museum. Which town was the site of the Confederacy's most infamous military prison during the Civil War?	_____	_____
	Answer: Andersonville		
31.	Math Computation: Simplify radical 448.	_____	_____
	Answer: 8 radical 7 (or 8 times the square root of 7)		
32.	In Classical architecture, this continuous horizontal base supports a row of columns. What is the name, beginning with S, for this top step of a platform supporting a colonnade?	_____	_____
	Answer: Stylobate		
33.	Science Computation: How many neutrons are present in one atom of lead 208? Recall that the atomic number of lead is 82.	_____	_____
	Answer: 126		
34.	This type of rhyming occurs when the vowels or consonants of stressed syllables are identical. What type of rhyme, beginning with S, is sometimes called a half-rhyme?	_____	_____
	Answer: <u>Slant Rhyme</u>	_____	_____

**OSSAA 2023-2024
REGIONAL GAME 6
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
35.	This film followed the exploits of spy Harry Tasker who suspects his wife of cheating with a used car salesman. Which 1994 film starred Jamie Lee Curtis, Tom Arnold, and Arnold Schwarzenegger?		
	Answer: True Lies	_____	_____
36.	The Oklahoma River is actually a seven-mile stretch of this river running through Oklahoma City. Which river got the new name in 2004 when the downtown area of OKC was renovated to encourage tourism?		
	Answer: <u>North Canadian</u> River	_____	_____
37.	Math Computation: How many different combinations of letters can be made from the letters in the word: lassos?		
	Answer: 120	_____	_____
38.	This melting and cooling technique is essential for making chocolate candy. What is the term for this technique that gives chocolate a smooth, surface that does not easily melt?		
	Answer: Tempering	_____	_____
39.	Science Computation: Convert 12.3 hectograms into grams.		
	Answer: 1230 grams	_____	_____
40.	This period in Greek history falls between the death of Alexander the Great and the rise of Augustus in Rome. Which period is identified by an adjective, beginning with the letter H, that comes from a word meaning to speak Greek?		
	Answer: Hellenistic	_____	_____

Moderator (Check score with chief judge and scorekeeper.)

The score at the end of the third quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Coaches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge (Restate the score if they have changed because of protests.)

4th Quarter – Sixty Second Instructions

Moderator **The fourth quarter of sixty second questions is about to begin. Everyone please be seated.**

The categories for the 4th quarter are: (Brief description)

1. LITERATURE - BESTSELLING AUTOBIOGRAPHIES

2. FINE ARTS – SIGNIFICANT FIGURES IN PAINTINGS

3. MATH – LIMITS AS X APPROACHES A NUMBER

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) chose first in the 2nd quarter, (school name) will have the first choice this quarter.

You will have 10 seconds to choose your category.

(Active team) may move to a position behind the captain. (Other team) put down your pencils.

Captain, all answers will come from you unless you defer to another student.

Moderator (School name) **You will have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your selection.**

The selections are:

1.

2.

Moderator (Check the score with the chief judge and score keeper) **The score at the end of the game is:**

(School name) _____ has _____ points

(School name) _____ has _____ points

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out.

(Restate the score if it has changed)

(If the game is tied, sudden death questions will be asked.)

Because the game is tied, sudden death toss-up questions will be asked. Would either team like to make substitutions? Again, this is not a time for coaches to confer with their team. (Pause for substitutions.)

Moderator **This concludes the game. Congratulations to both teams. Please check your bracket and move to the next round as quickly as possible.**

**OSSAA 2023-2024
REGIONAL GAME 6
FOURTH QUARTER
60 SECOND QUESTIONS**

LITERATURE - BESTSELLING AUTOBIOGRAPHIES

Directions: Given the title of a bestselling autobiography, name the person who is the subject of that book.

- | | | |
|-----|---|------------------------------|
| 1. | I Know Why the Caged Bird Sings | Maya <u>Angelou</u> |
| 2. | Long Walk to Freedom | Nelson <u>Mandela</u> |
| 3. | Up From Slavery | Booker T. <u>Washington</u> |
| 4. | Born a Crime | Trevor <u>Noah</u> |
| 5. | Bossypants | Tina <u>Fey</u> |
| 6. | American Sniper | Chris <u>Kyle</u> |
| 7. | The Storyteller, Tales of Life and Music | Dave <u>Grohl</u> |
| 8. | Becoming | Michelle <u>Obama</u> |
| 9. | Total Recall | Arnold <u>Schwarzenegger</u> |
| 10. | Into Thin Air, A Personal Account of the Mount Everest Disaster | Jon <u>Krakauer</u> |

EXTRA:

- | | | |
|----|---------------------------------|------------------------|
| 1. | The Pursuit of Happyness | Chris <u>Gardner</u> |
| 2. | Where Tomorrows Aren't Promised | Carmelo <u>Anthony</u> |

**OSSAA 2023-2024
REGIONAL GAME 6
FOURTH QUARTER
60 SECOND QUESTIONS**

FINE ARTS - SIGNIFICANT FIGURES IN PAINTINGS

Directions: Given a famous painting and the artist, identify the number of people depicted in that painting. All answers will fall between 0 and 14.

- | | | |
|-----|--|----|
| 1. | <i>The Last Supper</i> - Leonardo da Vinci | 13 |
| 2. | <i>The Scream</i> - Edvard Munch | 3 |
| 3. | <i>Napoleon Crossing the Alps</i> -Jacques Louis David | 1 |
| 4. | <i>The Birth of Venus</i> - Sandro Botticelli | 4 |
| 5. | <i>The Luncheon on the Grass</i> - Edouard Manet | 4 |
| 6. | <i>Las Meninas</i> - Diego Velazquez | 8 |
| 7. | <i>The Gleaners</i> - Jean Francois Millet | 3 |
| 8. | <i>American Gothic</i> - Grant Wood | 2 |
| 9. | <i>The Arnolfini Portrait</i> - Jan van Eyck | 2 |
| 10. | <i>Olympia</i> - Edouard Manet | 2 |

EXTRA:

- | | | |
|----|---|---|
| 1. | <i>The Laughing Cavalier</i> - Frans Hals | 1 |
| 2. | <i>Nighthawks</i> - Edward Hopper | 4 |
-

**OSSAA 2023-2024
REGIONAL GAME 6
FOURTH QUARTER
60 SECOND QUESTIONS**

MATH - LIMITS AS X APPROACHES A NUMBER

Directions: Find the limits of each of the following expressions as x approaches two.

1. $x^3 - 3x^2$ [x cubed minus 3 x squared] -4
2. $x^4 - 5$ [x to the fourth minus 5] 11
3. $2x^3 - 4$ [2 x cubed minus 4] 12
4. $x^2 - 2x + 3$ [x squared minus 2x plus 3] 3
5. $(x^3 - 2x + 2)/(x + 1)$ [the quantity x cubed minus 2x plus 2 over the quantity x plus 1] 2
6. $(x^2 - 3x + 2)/(x^2 + 5x + 6)$ [the quantity x squared minus 3x minus 2 over the quantity x squared plus 5x plus 6] 0
7. $(x^2 - 4x + 3)/(x^2 + x - 12)$ [the quantity x squared minus 4x plus 3 over the quantity x squared plus x minus 12] 1/6
8. $(x^2 - 3)/(x^2 + 3x - 18)$ [the quantity x squared minus 3x over the quantity x squared plus 3x minus 18] -1/8 (or -0.125)
9. $(x^2 - 5x + 8)/(x^2 - x - 6)$ [the quantity x squared minus 5x plus 8 over the quantity x squared minus x minus 6] -1/2 (or -0.5)
10. $(x^2 - 9)/(x^2 + 2x - 15)$ [the quantity x squared minus 9 over the quantity x squared plus 2x minus 15] 5/7

EXTRA:

1. $(2x^4 - x^2)/(x^2 + 3)$ [the quantity 2 x to the fourth minus x squared quantity over the quantity x squared plus 3] 4
2. $(x^2 - 6)/(x^2 + 4x - 20)$ [the quantity x squared minus 6 over the quantity x squared plus 4x minus 20] 1/4 (or 0.25)

**OSSAA 2023-2024
REGIONAL GAME 6
EXTRA QUESTIONS**

Extra:

		Team One	Team Two
E1.	This man's first Grand Slam title was at the US Open in 1990. Which American tennis Hall-of-Famer won 14 Grand Slam titles and 64 singles titles overall?		
	Answer: Pete <u>Sampras</u>	_____	_____
E2.	This U.S. representative commented on a U.S. Air Force tweet celebrating Pride Month saying "We salute one flag and one flag only in the United States of America." Name this Republican from Colorado's 3 rd district.		
	Answer: Lauren <u>Boebert</u>	_____	_____
E3.	Math Computation: What is the radius and center of the circle with the following equation: $(x + 3)^2 + (y + 14)^2 = 900$ [the quantity x plus 3 end quantity squared plus the quantity y plus 14 end quantity squared equals 900]?		
	Answer: radius: 30; center: (-3, -14)	_____	_____
E4.	This lively Spanish-American dance is mentioned in the Queen hit <i>Bohemian Rhapsody</i> . Which dance is traditionally accompanied by guitar and castanets?		
	Answer: Fandango	_____	_____
E5.	Examples of these include Valine [vah-leen], Glutamine [gloo-tah-meen], and Lysine [ly-seen]. Which monomers make the building blocks of the proteins of all living things?		
	Answer: Amino acids	_____	_____
E6.	In 1930, this man became the first American to win the Nobel Prize for Literature. Which author's works include <i>Main Street</i> and <i>Babbitt</i> ?		
	Answer: Sinclair <u>Lewis</u>	_____	_____

2023-2024

**OSSAA
AREA
CHAMPIONSHIP**

High School

GAME 1

Welcome to the Oklahoma Secondary School Activities Association Academic Bowl. Audience, please remember this competition is between the two teams here. Do not whisper or say aloud the answer to the question. Please turn off all cell phones, tablets, or any device that can receive or send messages. If these go off, even silently, they could interfere with the wireless system used in our competition. Even if this room is not wireless, an adjoining room could be using a wireless system. Coaches, team members, and guests are to sit behind their team. As in all contests, sportsmanship is important. Coaches, your protests need to be at the allowed times. Team members, you will remain quiet while the opposing team is answering during both the toss-up and sixty second quarters.

Respect for the opponent, spectators, coaches, and officials is necessary at all levels of athletics and activity programs. At today's game, everyone's behavior should be characterized by generosity and genuine concern for others. Sportsmanship is everyone's responsibility, do the right thing.

- Introduce yourself and the chief judge.
- **Give your four count.** – Do this for every match (Game Procedures A – 11)
- Have the chief judge check the buzzers.

Note (do not read):

Official closest to scorekeeper: Make sure that scorekeeper has **full names** of students and check after first few questions that they are fully shading in correct answers, and marking correct answers only.

Official closest to timekeeper: Make sure the timekeeper is starting the clock and clearing for the first few questions.

As a reminder, during the September 2022 advisory board meeting a change to Section VI. B. 3 regarding the 2nd and 4th quarters was adopted. The full description for each category is given and *then* there are 20 seconds to substitute. We **no** longer do short name before and longer description after substitution. This is reflected in the script that the officials are given to read. The moderator should be reading the entire prompt as it is provided from the OSSAA.

**OSSAA 2023-2024
AREA GAME 1
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	This painting technique uses pigment mixed into hot wax. In which technique can artists change the paint's consistency by adding resin or oil to the wax?		
	Answer: Encaustic	_____	_____
2.	Math Computation: Find all values of x between 0 and 2π radians, such that: $\sin x = \text{negative } 1/2$ [sine of x equals negative one half]. Express your answer in radians.		
	Answer: ($x=$) $7\pi/6$, $11\pi/6$ (or $7/6 \pi$ and $11/6 \pi$)	_____	_____
3.	This author published a fictional account of the plague that swept London in 1665 titled <i>A Journal of the Plague Year</i> . Which English author's novels include <i>Moll Flanders</i> and <i>Robinson Crusoe</i> ?		
	Answer: Daniel Defoe	_____	_____
4.	Science Computation: How many grams are present in 1.500 moles of Silicon? Use the molar mass of silicon to be 28.10.		
	Answer: 42.15	_____	_____
5.	When Sparta was defeated by Thebes, this loose confederation of Greek city-states dissolved. What was the name of this oldest and longest-lasting political association in the ancient Greek world?		
	Answer: Peloponnesian League (also accept Lacedaemonians and their allies)	_____	_____
6.	In 2023, the FDA approved Leqembi, the first drug meant to slow the progression of this disease. What neurodegenerative disease is the cause of most cases of dementia?		
	Answer: Alzheimer's	_____	_____
7.	In 2017, this Chinese-born composer won the Pulitzer Prize for Music for her opera <i>Angel's Bone</i> . Which composer won the 2023 Vilcek Prize in Music?		
	Answer: Du Yun	_____	_____

**OSSAA 2023-2024
AREA GAME 1
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	Math Computation: Triangle ABC is similar to Triangle DEF. If angle A is 46 degrees and angle F is 82 degrees, what is the measure of angle E in degrees?		
	Answer: 52	_____	_____
9.	Walt Whitman's poem, <i>O Captain! My Captain!</i> , and W.H. Auden's <i>Funeral Blues</i> are both classified as this type of poem. What is the name for a poem lamenting the death of a specific person?		
	Answer: Elegy	_____	_____
10.	This part of the tooth is heavily mineralized, making it very brittle. What is the name for the part of the tooth that is the hardest substance in the human body?		
	Answer: Enamel	_____	_____
11.	This ancient burial ground in Egypt was the necropolis for the city of Memphis. In which necropolis is the the Step Pyramid of Djoser located?		
	Answer: Saqqara	_____	_____
12.	This woman defeated Karolina Muchova to win the 2023 French Open Women's singles title. Name this Polish tennis player who has now won the French Open title 3 of the last 4 years.		
	Answer: Iga <u>Swiatek</u>	_____	_____
13.	The First Continental Congress did not meet in Independence Hall, but in this building which housed the First and Second Banks of the United States. Which building also housed Franklin's Library Company?		
	Answer: Carpenters' Hall	_____	_____
14.	Math Computation: What is the Z-score in a normally distributed data set, if the score is 1250, with a mean of 1000 and a standard deviation of 50? Remember the z-score equals the difference between x and mu divided by s.		
	Answer: 5	_____	_____

**OSSAA 2023-2024
AREA GAME 1
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
15.	In Greek mythology, this hunter was killed by Scorpius. According to the Greeks, which hunter was immortalized, along with his killer, in the night sky?		
	Answer: Orion	_____	_____
16.	This mineral is the most common silicate mineral on Earth. Which mineral is recognized by the presence of aluminum, oxygen, and silicon?		
	Answer: Feldspar	_____	_____
17.	This grain is Oklahoma's largest cash crop, bringing in over one-half of the total receipts for crops. Which type of grain is usually planted from September to November for harvest in the spring?		
	Answer: <u>Winter Wheat</u> {prompt on wheat}	_____	_____
18.	In July 2023, a Philadelphia priest brokered a peace deal between rival gangs in this Caribbean country. Name this country where the gangs have fought for control of the Cite Soleil slum in Port-au-Prince.		
	Answer: Haiti	_____	_____
19.	In 1813, the Spanish advisor to King Kamehameha [Kuh-may-uh-may-uh] introduced this fruit to Hawaii. Which fruit is now one of Hawaii's main agricultural products?		
	Answer: Pineapple	_____	_____
20.	Math Computation: Solve the following equation to find H: $62 - 6H = 183$ [62 minus 6H equals 183].		
	Answer: (H=) -20&1/6 (or -121/6)	_____	_____

Moderator: (Check score with chief judge and scorekeeper.)

The score at the end of the first quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Coaches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge: (Restate the score if they have changed because of protests.)

(In case of a tie after the first quarter) Since the score is tied, we will continue with additional toss-up questions until one team scores. (Restate the score if necessary)

2nd Quarter – Sixty Second Instructions

Moderator **The second quarter of sixty second questions is about to begin. Everyone please be seated.**

The categories for the 2nd quarter are: (Brief description)

- 1. ENTERTAINMENT – TV SHOWS FROM 3 CHARACTERS**
- 2. SPORTS – NBA COACHES**
- 3. CURRENT EVENTS – 2023 GRAMMY WINNERS**

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) is ahead at this time, they will have the choice to play or defer until the 4th quarter.

- You will have 10 seconds to make your decision. (School name) do you choose to play or defer?**
- (Address playing team) You will have 10 seconds to choose your category (re-read the above categories)**
- (If the 10 second buzzer goes off, the moderator will ask for an immediate response.)**
- Since (school name) is playing first, they may move to a position behind their captain. (Other team) will put down their pencils until their time to play. Captain, all answers will come from you unless you defer to another student.**

Moderator (School name) **You have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your choice.**

The selections are:

- 1.**
- 2.**

Moderator (Check the score with the chief judge and score keeper.)

The score at the end of the first half is:

(School name) _____ has _____ points

(School name) _____ has _____ points.

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out. (Pause briefly for protests.)

This concludes the first half of play. We will pause for substitutions

Substituting team members, please check in with the scorekeeper. WE WILL NOW BEGIN 3RD QUARTER TOSS-UP QUESTIONS.

**OSSAA 2023-2024
AREA GAME 1
SECOND QUARTER
60 SECOND QUESTIONS**

ENTERTAINMENT - TV SHOWS FROM 3 CHARACTERS

Directions: Given three characters on a TV show from the past or present, name that television show.

- | | | |
|-----|--|------------------------|
| 1. | Ross Geller, Phoebe Buffay, Chandler Bing | <i>Friends</i> |
| 2. | Tyrion Lancaster, Jon Snow, Sansa Stark | <i>Game of Thrones</i> |
| 3. | Captain Kirk, Spock, Dr. McCoy | <i>Star Trek</i> |
| 4. | Michael Scott, Dwight Schrute, Pam Beesly | <i>The Office</i> |
| 5. | Peter, Lois, and Meg Griffin | <i>Family Guy</i> |
| 6. | Ned Flanders, Seymour Skinner, Krusty the Clown | <i>The Simpsons</i> |
| 7. | Fox Mulder, Dana Scully, Walter Skinner | <i>The X-Files</i> |
| 8. | Leroy Jethro Gibbs, Dr. Ducky Mallard, Abby Sciuto | <i>NCIS</i> |
| 9. | Din Djarin, Greef Karga, Grogu | <i>The Mandalorian</i> |
| 10. | Aaron Horchner, Derek Morgan, Dr. Spencer Reid | <i>Criminal Minds</i> |

EXTRA:

- | | | |
|----|-------------------------------------|-----------------------|
| 1. | Charlie, Alan, and Jake Harper | <i>Two and a Half</i> |
| 2. | Niles and Martin Crane, Daphne Moon | <i>Frasier</i> |

**OSSAA 2023-2024
AREA GAME 1
SECOND QUARTER
60 SECOND QUESTIONS**

SPORTS - NBA COACHES

Directions: Identify the team in the National Basketball Association for which each of the following men were head coaches as of November 1, 2023. {Moderator – unless otherwise noted, they may say the city/state or the team nickname.}

- | | | |
|-----|------------------|------------------------------------|
| 1. | Steve Kerr | Golden State Warriors |
| 2. | Gregg Popovich | San Antonio Spurs |
| 3. | Jason Kidd | Dallas Mavericks |
| 4. | Tyronn Lue | Los Angeles <u>Clippers</u> |
| 5. | Mark Daigneault | Oklahoma City Thunder |
| 6. | Mike Brown | Sacramento Kings |
| 7. | Erik Spoelstra | Miami Heat |
| 8. | Taylor Jenkins | Memphis Grizzlies |
| 9. | Wes Unseld Jr. | Washington Wizards |
| 10. | Chauncey Billups | Portland Trail Blazers |

EXTRA:

- | | | |
|----|------------------|----------------------------|
| 1. | J.B. Bickerstaff | Cleveland Cavaliers |
| 2. | Billy Donovan | Chicago Bulls |

**OSSAA 2023-2024
AREA GAME 1
SECOND QUARTER
60 SECOND QUESTIONS**

CURRENT EVENTS - 2023 GRAMMY WINNERS

Directions: Name the singer, duo, or group that won each of the following awards at the 65th Grammy Awards in March 2023. You will be given the category name and the name of the winning piece – you name the winner.

- | | | |
|-----|---|--|
| 1. | Album of the Year for “Harry’s House” | Harry Styles |
| 2. | Song of the Year for “Just Like That” | Bonnie Raitt |
| 3. | Best Dance/Electric Recording, “Break My Soul” | Beyonce |
| 4. | Best Rap Album, “Mr. Morale & the Big Steppers” | Kendrick Lamar |
| 5. | Best Pop Solo Performance, “Easy on Me” | Adele |
| 6. | Best Country Solo Performance, “Live Forever” | Willie Nelson |
| 7. | Best Traditional R&B Performance, “Plastic Off the Sofa” | Beyonce |
| 8. | Best Country Duo or Group Performance, “Never Wanted to Be That Girl” | Carly Pearce & Ashley McBride |
| 9. | Best Rock Performance, “Broken Horses” | Brandi Carlile |
| 10. | Best Musica Urbana Album, “Un Verano Sin Ti” | Bad Bunny |

EXTRA:

- | | | |
|----|---|---------------------------------|
| 1. | Best Pop Duo or Group Performance, “Unholy” | Sam Smith and Kim Petras |
| 2. | Best Rap Performance, “The Heart Part 5” | Kendrick Lamar |

**OSSAA 2023-2024
AREA GAME 1
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	This poem, the earliest surviving Old English poem, is recorded in Bede's <i>Ecclesiastical History of the English People</i> . Which poem was written in the 7 th century by an English cowherd?		
	Answer: <u>Caedmon's Hymn</u>	_____	_____
22.	A scientist of this type might be exploring parakeet populations in the rainforest or ptarmigans in the tundra. What name is given to a scientist who specifically studies birds?		
	Answer: <u>Ornithologist</u>	_____	_____
23.	This financial term indicates the total amount paid to an employee during a pay period. Which term identifies the amount of income earned before any deductions or expenses are taken out?		
	Answer: <u>Gross income</u>	_____	_____
24.	In July 2023, Joe Manganiello filed for divorce from this actress. Name this Colombian/American actress who starred in the TV show <i>Modern Family</i> and is a judge on <i>America's Got Talent</i> .		
	Answer: <u>Sofia Vergara</u>	_____	_____
25.	Gabriel and this angel are the only non-fallen angels specifically named in the Bible. Which angel battles the great dragon in the book of Revelation?		
	Answer: <u>Michael</u>	_____	_____
26.	Math Computation: Divide the following binomials by rationalizing the denominator: $(2 - 5i) / (4 - 3i)$ [the quantity 2 minus 5i over the quantity 4 minus 3i]. Make sure to simplify your answer and put it in A plus B-I form.		
	Answer: <u>23/25 – 14/25 i</u> [23 over 25 minus 14 over 25 i]	_____	_____
27.	This 1861 novel is subtitled <i>The Weaver of Raveloe</i> . Which novel by George Eliot features a lonely man who adopts an orphan girl?		
	Answer: <u>Silas Marner</u>	_____	_____

**OSSAA 2023-2024
AREA GAME 1
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	During this cellular process, pyruvate is torn apart, freeing carbon dioxide as a waste product. What is this series of reactions in which most of the electron carriers used in cellular respiration are produced?		
	Answer: Krebs cycle (or citric acid cycle or tricarboxylic acid cycle)	_____	_____
29.	Proposed by Henry Clay in 1824, this system was intended to expand the domestic market and lessen U.S. dependence on overseas sources. Which system included a protective tariff, a national bank, and federal support for improvements in transportation?		
	Answer: The <u>American System</u>	_____	_____
30.	Reminiscent of a position in the military, this position on a football team is an important part of the punting unit. What name is used for the players that line up near the sideline on the punt and race downfield in an attempt to tackle the returner?		
	Answer: Gunners	_____	_____
31.	In 2021, a work by this Mexican artist set the record for the most expensive Latin American work purchased at auction. Which artist's \$34.9 million work is a self-portrait titled <i>Diego and I</i> ?		
	Answer: Frida <u>Kahlo</u>	_____	_____
32.	What is the meaning of the acronym BIOS [by-ohs] as used in computer science?		
	Answer: Basic Input Output System	_____	_____
33.	This play by George Bernard Shaw was written after he was asked to create a play following the Don Juan theme. Which play's long third act is sometimes performed as a separate play known as Don Juan in Hell?		
	Answer: <u>Man and Superman</u>	_____	_____

**OSSAA 2023-2024
AREA GAME 1
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
34.	Science computation: A wave, of wavelength 2.8 meters, oscillates at 15 hertz. What is the speed of the wave in meters per second?		
	Answer: 42	_____	_____
35.	In 1916, this self-styled Russian holy man was reportedly poisoned, shot, and finally drowned. Which man, known as the Mad Monk, was feared for his power over the wife of Czar Nicholas II?		
	Answer: Grigori <u>Rasputin</u>	_____	_____
36.	In June 2023, this Republican presidential candidate tweeted “It is time to give up hope that Trump will ever grow up. We need a leader, not a child.” Name this New Jersey native sharply critical of former President Trump’s attempt to change the 2020 election.		
	Answer: Chris <u>Christie</u>	_____	_____
37.	In a sonata, this section follows the exposition and development sections. What is the name of this third section that repeats musical themes from the exposition?		
	Answer: Recapitulation	_____	_____
38.	Math Computation: What is the indefinite integral of the function: $32x^3 + 11x^2 - 8$ [32 x to the third plus 11 x squared minus 8]?		
	Answer: $8x^4 + 11/3 x^3 - 8x + c$ [8 x to the fourth plus 11 over 3 x cubed minus 8x plus c] {must say + c}	_____	_____
39.	This Chilean poet was an outspoken supporter of the Loyalists during the Spanish American War. Which poet won the 1971 Nobel Prize for Literature?		
	Answer: Pablo <u>Neruda</u>	_____	_____
40.	This two-word psychology phrase means any biological process that has a frequency of about 24 hours. What is the “CR” phrase for processes that are self-sustained, entrenched, and largely dependent on light and dark cues?		
	Answer: Circadian rhythm	_____	_____

Moderator (Check score with chief judge and scorekeeper.)
The score at the end of the third quarter is:
(school name) _____ has _____ points
(school name) _____ has _____ points
Coaches you may approach your team for 30 seconds to assist in any questions.
This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge (Restate the score if they have changed because of protests.)

4th Quarter – Sixty Second Instructions

Moderator **The fourth quarter of sixty second questions is about to begin. Everyone please be seated.**
The categories for the 4th quarter are: (Brief description)
1. MATH- SLOPES FROM TWO POINTS
2. LITERATURE – AUTHORS OF BOOKS WITH COLORFUL TITLES
3. SCIENCE – PLANETS
Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.
Because (school name) chose first in the 2nd quarter, (school name) will have the first choice this quarter.

You will have 10 seconds to choose your category.
(Active team) may move to a position behind the captain. (Other team) put down your pencils.
Captain, all answers will come from you unless you defer to another student.

Moderator (School name) **You will have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your selection.**

The selections are:

- 1.**
- 2.**

Moderator (Check the score with the chief judge and score keeper) **The score at the end of the game is:**
(School name) _____ has _____ points
(School name) _____ has _____ points

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out.

(Restate the score if it has changed)

(If the game is tied, sudden death questions will be asked.)

Because the game is tied, sudden death toss-up questions will be asked. Would either team like to make substitutions? Again, this is not a time for coaches to confer with their team. (Pause for substitutions.)

Moderator **This concludes the game. Congratulations to both teams. Please check your bracket and move to the next round as quickly as possible.**

**OSSAA 2023-2024
AREA GAME 1
FOURTH QUARTER
60 SECOND QUESTIONS**

MATH - SLOPES FROM TWO POINTS

Directions: Find the slope of the line between the two given points. Make sure to reduce any fractions if possible but do not change to a mixed number. [Moderator- read (2,-3) as two comma negative 3.]

- | | | |
|-----|------------------------|-------------------|
| 1. | (3,9) and (7,17) | 2 (or 2/1) |
| 2. | (8,2) and (14,-6) | -4/3 |
| 3. | (-5,7) and (13,11) | 2/9 |
| 4. | (14,10) and (6,-4) | 7/4 |
| 5. | (5,-12) and (23,-2) | 5/9 |
| 6. | (27,19) and (11,-15) | 17/8 |
| 7. | (-4,-34) and (-18,-16) | -9/7 |
| 8. | (23,35) and (14,-13) | 16/3 |
| 9. | (-5,13) and (16,-1) | -2/3 |
| 10. | (21,33) and (-23,51) | -9/22 |

EXTRA:

- | | | |
|----|-----------------------|--------------|
| 1. | (-6,-15) and (-22,11) | -13/8 |
| 2. | (26,-21) and (-8,30) | -3/2 |

**OSSAA 2023-2024
AREA GAME 1
FOURTH QUARTER
60 SECOND QUESTIONS**

LITERATURE - AUTHORS OF BOOKS WITH COLORFUL TITLES

Directions: Given a book with a color in the title, name the author.

- | | | |
|-----|----------------------------|---------------------------|
| 1. | The Picture of Dorian Gray | Oscar <u>Wilde</u> |
| 2. | The Color Purple | Alice <u>Walker</u> |
| 3. | The Silver Chair | C. S. <u>Lewis</u> |
| 4. | The Golden Compass | Phillip <u>Pullman</u> |
| 5. | A Study in Scarlet | Arthur Conan <u>Doyle</u> |
| 6. | Where the Red Fern Grows | Wilson <u>Rawls</u> |
| 7. | White Fang | Jack <u>London</u> |
| 8. | The Green Mile | Stephen <u>King</u> |
| 9. | Orange is the New Black | Piper <u>Kerman</u> |
| 10. | Gathering Blue | Lois <u>Lowry</u> |

EXTRA:

- | | | |
|----|------------------------------|-----------------------------|
| 1. | By the Shores of Silver Lake | Laura Ingalls <u>Wilder</u> |
| 2. | The Scarlet Letter | Nathaniel <u>Hawthorne</u> |

**OSSAA 2023-2024
AREA GAME 1
FOURTH QUARTER
60 SECOND QUESTIONS**

SCIENCE - PLANETS

Directions: From the given information, identify each of the following planets or dwarf planets in our Solar System.

- | | | |
|-----|---|----------------|
| 1. | Temperatures here range from -280 to 800 degrees Fahrenheit | Mercury |
| 2. | Its tallest volcano is Olympus Mons | Mars |
| 3. | Largest of the four inner planets | Earth |
| 4. | Hottest planet due to greenhouse effect | Venus |
| 5. | This planet is less dense than water | Saturn |
| 6. | Dwarf planet has orbital resonance with Neptune | Pluto |
| 7. | Fastest rotation, one day is only 10 hours long | Jupiter |
| 8. | Coldest planet | Uranus |
| 9. | Largest dwarf planet by volume | Eris |
| 10. | Winds on this planet have reached 1200 miles per hour | Neptune |

EXTRA:

- | | | |
|----|--|----------------|
| 1. | Asteroid belt dwarf planet | Ceres |
| 2. | Has the largest moon in the Solar System | Jupiter |

**OSSAA 2023-2024
AREA GAME 1
EXTRA QUESTIONS**

Extra:

		Team One	Team Two
E1.	This body of water is located between Ontario and Quebec. Which bay is named for the explorer whose crew abandoned him on its shores in 1611?		
	Answer: <u>Hudson Bay</u>	_____	_____
E2.	This woman starred as Laura Petrie on the <i>Dick Van Dyke Show</i> and as Mary Richards on her self-titled show. Which actress won an Academy Award for Best Supporting Actress for her role in <i>Ordinary People</i> ?		
	Answer: Mary Tyler <u>Moore</u>	_____	_____
E3.	Over 350 sculptures of this Egyptian pharaoh were erected in the area stretching from the Mediterranean to Nubia. Which pharaoh, who lived 92 years, was Egypt's most prolific builder?		
	Answer: Ramses II (accept Ramses the Great)	_____	_____
E4.	Math Computation: What is the slope of the tangent line to the equation: $y = 7x^3 - 11x - 2$ [y equals 7 x cubed minus 11x minus 2] at the point $x = 2$?		
	Answer: 73	_____	_____
E5.	In contrast to the Proper, the sections of the Roman Catholic Mass that remain the same from day to day throughout the year are known by this collective term. What term is defined as something that is routine or not unusual?		
	Answer: Ordinary	_____	_____
E6.	This group of elements on the periodic table are so soft they can be cut with a knife but must be kept in oil to keep them from reacting with the oxygen and water in the air. Which group of elements contains cesium, rubidium, and potassium?		
	Answer: Alkali metals (group one)	_____	_____

2023-2024

**OSSAA
AREA
CHAMPIONSHIP**

High School

GAME 2

(BEGINNING OF GAME)

Welcome to the Oklahoma Secondary School Activities Association Academic Bowl. You have previously been instructed regarding the rules. Please turn off all cell phones, tablets, or any device that can receive or send messages. Coaches, team members, and guests are to sit behind their team. Coaches, your protests need to be at the allowed times.

- Introduce yourself and the chief judge.
- **Give your four count.** – Do this for *every* match (Game Procedures A -- 11)
- Have the chief judge check the buzzers.

Note (do not read):

Official closest to scorekeeper: Make sure that scorekeeper has **full names** of students and check after first few questions that they are fully shading in correct answers, and marking correct answers only.

Official closest to timekeeper: Make sure the timekeeper is starting the clock and clearing for the first few questions.

**OSSAA 2023-2024
AREA GAME 2
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	<p>Math Computation: Add the following binary numbers and put your answer in binary form: 11101 plus 11010 [one one one zero one plus one one zero one zero]</p> <p>Answer: 110111 [one one zero one one one]</p>	_____	_____
2.	<p>This Native American nation was the only one of the Five Civilized Tribes to free their slaves before the end of the Civil War. Which nation's current principal chief is Chuck Hoskin, Jr.?</p> <p>Answer: Cherokee</p>	_____	_____
3.	<p>This section of the corn plant is comprised of a mass of small male flowers. What term do farmers use for the yellow furry piece at the end of the leaves surrounding the corn cob?</p> <p>Answer: Tassel</p>	_____	_____
4.	<p>This French cooking term refers to the natural juices of cooked meats. What is the two-word name for the dipping liquid traditionally served with a roast beef sandwich?</p> <p>Answer: Au Jus [Ah- szhew]</p>	_____	_____
5.	<p>In July 2023, a suicide bomber struck a political rally in the Bajur region of this country. Which country was led by Prime Minister Shehbaz Sharif and President Arif Alvi?</p> <p>Answer: Pakistan</p>	_____	_____
6.	<p>The original meaning of this 10-letter French word was an admirer or lover of the arts. Which word, beginning with D, has evolved to a more derogatory word for someone who is an amateur or dabbler rather than a connoisseur?</p> <p>Answer: Dilettante</p>	_____	_____
7.	<p>Math Computation: Simplify the following fraction by factoring the two trinomials: $(x^2 + 4x - 21) / (x^2 + 5x - 24)$ [the quantity x squared plus 4x minus 21 end quantity over the quantity x squared plus 5x minus 24 end quantity].</p> <p>Answer: $(x + 7) / (x + 8)$ [(the quantity) x plus 7 over (divided by) (the quantity) x plus 8]</p>	_____	_____

**OSSAA 2023-2024
AREA GAME 2
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	This 1790 Act resulted in the selection of a site along the Potomac River for the permanent capital of the U.S. Which legislation provided for the establishment of a permanent seat of government in the United States?		
	Answer: The <u>Residence Act</u>	_____	_____
9.	This element has the highest strength to density ratio of any metal. What is this metal with chemical symbol Ti?		
	Answer: Titanium	_____	_____
10.	This daughter of Zeus is the Greek muse of choral song and dance. Which woman is usually depicted with a plectrum and lyre?		
	Answer: Terpsichore	_____	_____
11.	This singer passed away on July 21, 2023, following a battle with Alzheimer's. Name this legendary singer with 20 Grammys who toured with and made albums with Lady Gaga, including <i>Love for Sale</i> .		
	Answer: Tony Bennett (Anthony Benedetto)	_____	_____
12.	This Chinese American author's books include <i>The Kitchen God's Wife</i> and <i>The Bonesetter's Daughter</i> . Which woman's first novel was <i>The Joy Luck Club</i> ?		
	Answer: Amy <u>Tan</u>	_____	_____
13.	Math Computation: In degrees, what is the measure of each of the interior angles in a regular dodecagon?		
	Answer: 150	_____	_____
14.	In 1932, this group of World War I veterans marched on Washington over a pay issue. What name was given to this group attacked by forces led by Army Chief of Staff Douglas MacArthur?		
	Answer: The <u>Bonus Army</u> (or <u>Bonus Expeditionary Force</u>)	_____	_____

**OSSAA 2023-2024
AREA GAME 2
FIRST QUARTER
TOSS UP QUESTIONS**

Team One Team Two

15. In astronomy, these five points around a planet's orbit identify where smaller objects can maintain a stable position relative to the planet. What name, taken from the 18th century astronomer who proved their existence, is given to these five points?

Answer: Lagrange (or Lagrangian)

16. This process is used to turn greenware to bisqueware. What is this term for heating pottery in an oven or kiln?

Answer: Firing

17. On July 10 and 11, 2023, catastrophic flash flooding occurred in this eastern state. In which state did 4 to 8 inches of rain fall along the entire spine of the Green Mountains?

Answer: Vermont

18. This blind prophet of Greek mythology appears in plays by Sophocles, Euripides, Pindar, and Ovid. Which prophet was blinded when he observed the goddess Athena while she was bathing and she splashed water in his eyes?

Answer: Tiresias

19. This two-word phrase is used in calculus when one is trying to find the derivative of F of G of x. What is this method of calculating F prime of x by finding F prime of G of x times G prime of x?

Answer: Chain Rule

20. In 1066, this man declared himself King of England following the death of Alfred the Great. Which king's short reign ended when he was killed in the Battle of Hastings by the forces of William the Conqueror?

Answer: Harold II (accept Harold Godwinson)

Moderator: (Check score with chief judge and scorekeeper.)

The score at the end of the first quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Coaches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge: (Restate the score if they have changed because of protests.)

(In case of a tie after the first quarter) Since the score is tied, we will continue with additional toss-up questions until one team scores. (Restate the score if necessary)

2nd Quarter – Sixty Second Instructions

Moderator **The second quarter of sixty second questions is about to begin. Everyone please be seated.**

The categories for the 2nd quarter are: (Brief description)

1. COMPUTER SCIENCE – COMPUTER ACRONYMS

2. GEOGRAPHY – CAPITALS OF THE AMERICAS

3. LITERARY VOCABULARY – LITERARY TERMS ABCs

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) is ahead at this time, they will have the choice to play or defer until the 4th quarter.

- You will have 10 seconds to make your decision. (School name) do you choose to play or defer?**
- (Address playing team) You will have 10 seconds to choose your category (re-read the above categories)**
- (If the 10 second buzzer goes off, the moderator will ask for an immediate response.)**
- Since (school name) is playing first, they may move to a position behind their captain. (Other team) will put down their pencils until their time to play. Captain, all answers will come from you unless you defer to another student.**

Moderator **(School name) You have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your choice.**

The selections are:

1.

2.

Moderator **(Check the score with the chief judge and score keeper.)**

The score at the end of the first half is:

(School name) _____ has _____ points

(School name) _____ has _____ points.

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out. (Pause briefly for protests.)

This concludes the first half of play. We will pause for substitutions

Substituting team members, please check in with the scorekeeper. WE WILL NOW BEGIN 3RD QUARTER TOSS-UP QUESTIONS.

**OSSAA 2023-2024
AREA GAME 2
SECOND QUARTER
60 SECOND QUESTIONS**

COMPUTER SCIENCE - COMPUTER ACRONYMS

Directions: Identify the full meanings of each of the following acronyms used in computer science.

- | | | |
|-----|--------------------------|--|
| 1. | AI | Artificial Intelligence |
| 2. | HTML | Hyper Text Markup Language |
| 3. | TCP | Transfer Control Protocol |
| 4. | LCD | Liquid Crystal Display |
| 5. | SIMM [as word: sim] | Single Inline Memory Module |
| 6. | BIOS [as word: by-ohs] | Basic Input Output System |
| 7. | CD-ROM [cee dee rohm] | Compact Disk Read Only Memory |
| 8. | VAN | Value Added Network |
| 9. | DDS | Digital Data Storage |
| 10. | EDVAC [as word: ed- vak] | Electronic Discrete Variable Automatic Calculator |

EXTRA:

- | | | |
|----|-----|-----------------------------|
| 1. | VGA | Video Graphics Array |
| 2. | OMR | Optical Mark Reader |

**OSSAA 2023-2024
AREA GAME 2
SECOND QUARTER
60 SECOND QUESTIONS**

GEOGRAPHY - CAPITALS OF THE AMERICAS

Directions: Given the capital of a country considered part of the Americas, name the country.

- | | | |
|-----|---------------|--------------------|
| 1. | Managua | Nicaragua |
| 2. | La Paz | Bolivia |
| 3. | Ottawa | Canada |
| 4. | Asunción | Paraguay |
| 5. | Belmopan | Belize |
| 6. | Santo Domingo | Dominican Republic |
| 7. | Quito | Ecuador |
| 8. | Buenos Aires | Argentina |
| 9. | San José | Costa Rica |
| 10. | Havana | Cuba |

EXTRA:

- | | | |
|----|-------------|--------|
| 1. | Mexico City | Mexico |
| 2. | Brasilia | Brazil |

**OSSAA 2023-2024
AREA GAME 2
SECOND QUARTER
60 SECOND QUESTIONS**

LITERARY VOCABULARY - LITERARY TERMS ABCs

Directions: Given a brief definition, identify the following literary terms. Answers will be in alphabetical order beginning with A.

- | | | |
|-----|--|--------------------------|
| 1. | Logical fallacy that an argument is incorrect because of a personal flaw | <u>Ad Hominem</u> |
| 2. | Text that suddenly changes from serious to silly | Bathos |
| 3. | Break or pause in the middle of a line of poetry | Caesura |
| 4. | Direct conversation in a written work | Dialogue |
| 5. | An Aha! moment | Epiphany |
| 6. | Short fictional story with a moral | Fable |
| 7. | Category of literature defined by form, content, and style | Genre |
| 8. | Extreme exaggeration | Hyperbole |
| 9. | Language used to create pictures in a reader's mind | Imagery |
| 10. | Placement of two or more things side by side to bring out differences | Juxtaposition |

EXTRA:

- | | | |
|----|--|-----------------|
| 1. | Two-word phrase in Old English poetry used to rename a person or thing | Kenning |
| 2. | Five-line humorous poem with rhyme scheme AABBA | Limerick |

**OSSAA 2023-2024
AREA GAME 2
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	Science computation: What is the total resistance flowing through a parallel circuit of 2 resistors if the resistances through them are 9.0 and 15 ohms? Put your answer in ohms with the correct number of significant digits.		
	Answer: 5.6	_____	_____
22.	This German composer moved to Austria and then Switzerland during World War II to protect his Jewish daughter-in-law and her two sons. Which composer's works include the opera <i>Salome</i> and the tone poem <i>Also Sprach Zarathustra</i> ?		
	Answer: Richard <u>Strauss</u>	_____	_____
23.	This driver won the Daytona 500 a record 7 times during his stock car career to go along with his 7 Cup Series championships and 200 total races. Who is this man who drove car number 43?		
	Answer: <u>Richard Petty</u>	_____	_____
24.	This Mexican poet's works include <i>The Labyrinth of Solitude</i> and <i>The Monkey Grammarian</i> . Which poet received the Nobel Prize for Literature in 1990?		
	Answer: <u>Octavio Paz</u>	_____	_____
25.	Math Computation: Solve the following equation to find m: $16m + 91 = 205 - 3m$		
	Answer: (m=) 6	_____	_____
26.	This two-word alliterative phrase refers to the use of words that carry strong emotional overtones, often used in propaganda. The use of what type of rhetoric has become increasingly common in political ads and arguments meant to convince an audience that the opposition is the enemy?		
	Answer: <u>Loaded Language</u>	_____	_____
27.	This mineral has a specific gravity of 2.72 and chemical formula of CaCO_3 [C – A – C – O – 3]. Which mineral, with a hardness of 3 on the Mohs scale, is a chief component of limestone?		
	Answer: <u>Calcite</u>	_____	_____

**OSSAA 2023-2024
AREA GAME 2
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	This ancient Roman structure features a rotunda capped by a solid dome and eight Corinthian columns dedicated to 7 deities. Which building was designed as a temple to honor all the Roman gods?		
	Answer: Pantheon	_____	_____
29.	In a vehicle, this system increases the force a driver exerts on the steering wheel to make it easier to turn the wheels. Which system, when malfunctioning, makes it very difficult to make the car turn?		
	Answer: Power steering	_____	_____
30.	This literary term is defined as a short piece of nonfiction that expresses the writer's opinion or shares information about a subject. What type of short written work can be persuasive or expository?		
	Answer: Essay	_____	_____
31.	Math Computation: What are the coordinates for the two focal points for an ellipse with equation: $x^2/64 + y^2/36 = 1$ [x squared over 64 plus y squared over 36 equals 1]?		
	Answer: (2√7, 0) and (-2√7, 0) {must have both; may also say plus or minus 2 radical 7 comma zero}	_____	_____
32.	This small Oklahoma town is the county seat of Custer County. Which town, located halfway between El Reno and Cheyenne, has a name that comes from a word meaning blue sky or blue cloud men?		
	Answer: Arapaho	_____	_____
33.	This organ hangs from the diaphragm by the falciform [fal'si-form] ligament. Which organ lies on top of the stomach and produces bile for the gall bladder to store?		
	Answer: Liver	_____	_____
34.	This vegetable stew made of tomatoes, zucchini, bell peppers, and eggplant is considered the national dish of France. Which dish inspired an animated movie of the same name?		
	Answer: Ratatouille	_____	_____

**OSSAA 2023-2024
AREA GAME 2
THIRD QUARTER
TOSS UP QUESTIONS**

Team One Team Two

35. This woman was ousted from the House Freedom Caucus in July 2023. Name this Republican representative from Georgia.

Answer: Marjorie Taylor Greene

36. In the Bible book of Romans, the Apostle Paul states he is a member of this tribe of Israel. Which tribe is descended from the youngest son of Jacob and Rachel?

Answer: Benjamin

37. **Math Computation:** Two fair 6-sided dice are rolled. What are the reduced odds that the sum of the two dice will be equal to 4?

Answer: 1 to 11

38. This two-word Latin term refers to a type of tax generally taken in the form of a sales tax or value-added tax at the time of a purchase. What type of tax is based on the value of a transaction or property?

Answer: Ad Valorem

39. This set of chemical reactions is named for two biochemists who worked at the University of Berkeley, California, in the 1950s and 60s. What is the name of the complete path carbon travels through in a plant undergoing photosynthesis?

Answer: Calvin-Benson cycle (or Calvin cycle)

40. These seven mythological sisters were the daughters of Atlas and served the goddess Artemis. What is the collective name for these sisters transformed into stars by Zeus to help them escape Orion?

Answer: Pleiades

**OSSAA 2023-2024
AREA GAME 2
FOURTH QUARTER
60 SECOND QUESTIONS**

FINE ARTS - COMPOSERS AND WORKS

Directions: Given a famous musical work, name the composer.

- | | | |
|-----|-----------------------------|---------------------------------------|
| 1. | 1812 Overture | Pyotr <u>Tchaikovsky</u> |
| 2. | La Traviata | Giuseppe <u>Verdi</u> |
| 3. | Lohengrin | Richard <u>Wagner</u> |
| 4. | The Four Seasons | Antonio <u>Vivaldi</u> |
| 5. | The Firebird | Igor <u>Stravinsky</u> |
| 6. | Don Quixote | Richard <u>Strauss</u> |
| 7. | Ave Maria | Franz <u>Schubert</u> |
| 8. | The Barber of Seville | Gioacchino <u>Rossini</u> |
| 9. | The Flight of the Bumblebee | Nikolai <u>Rimsky-Korsakov</u> |
| 10. | Peter and the Wolf | Sergei <u>Prokofiev</u> |

EXTRA:

- | | | |
|----|-----------------------------|---------------------------------------|
| 1. | The Marriage of Figaro | Wolfgang Amadeus <u>Mozart</u> |
| 2. | Three Places in New England | Charles <u>Ives</u> |

Moderator (Check score with chief judge and scorekeeper.)
The score at the end of the third quarter is:
(school name) _____ **has** _____ **points**
(school name) _____ **has** _____ **points**
Coaches you may approach your team for 30 seconds to assist in any questions.
This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge (Restate the score if they have changed because of protests.)

4th Quarter – Sixty Second Instructions

Moderator **The fourth quarter of sixty second questions is about to begin. Everyone please be seated.**
The categories for the 4th quarter are: (Brief description)
1. FINE ARTS – COMPOSERS AND WORKS
2. PHYSICS – CALCULATOR NET FORCE
3. U.S. HISTORY – ANSWERS BEGINNING WITH A
Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.
Because (school name) chose first in the 2nd quarter, (school name) will have the first choice this quarter.

You will have 10 seconds to choose your category.
(Active team) may move to a position behind the captain. (Other team) put down your pencils.
Captain, all answers will come from you unless you defer to another student.

Moderator **(School name) You will have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your selection.**

The selections are:

- 1.**
- 2.**

Moderator (Check the score with the chief judge and score keeper) **The score at the end of the game is:**
(School name) _____ **has** _____ **points**
(School name) _____ **has** _____ **points**

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charges time out.
(Restate the score if it has changed)

(If the game is tied, sudden death questions will be asked.)
Because the game is tied, sudden death toss-up questions will be asked. Would either team like to make substitutions? Again, this is not a time for coaches to confer with their team. (Pause for substitutions.)

Moderator **This concludes the game. Congratulations to both teams. Please check your bracket and move to the next round as quickly as possible.**

**OSSAA 2023-2024
AREA GAME 2
FOURTH QUARTER
60 SECOND QUESTIONS**

PHYSICS - CALCULATE NET FORCE

Directions: Calculate the magnitude of the net force acting on an object given the following individual forces acting on the object. You do not need to state direction or units in your answers. Round all answers, as necessary, to the nearest whole number.

1.	3 units up, 4 units left	5
2.	5 units left, 12 units forward	13
3.	24 units west, 7 units south	25
4.	12 units right, 9 units down	15
5.	15 units left, 8 units up	17
6.	16 units north, 30 units west	34
7.	20 units left, 21 units up	29
8.	12 units left, 35 units down	37
9.	18 units forward, 80 units sideways	82
10.	21 units north, 72 units east	75

EXTRA:

1.	120 units right, 22 units forward	122
2.	24 forward, 70 right	74

**OSSAA 2023-2024
AREA GAME 2
FOURTH QUARTER
60 SECOND QUESTIONS**

U.S. HISTORY – ANSWERS BEGINNING WITH A

Directions: From a brief description, identify the following things you might find in a glossary of American history. All answers will begin with A.

- | | | |
|-----|--|--|
| 1. | General who defected to the British in 1780 | <u>Benedict Arnold</u> |
| 2. | 1869 George Westinghouse invention for railroad cars | <u>Air Brake</u> |
| 3. | 1930s isolationist organization led by Charles Lindbergh | <u>America First Committee</u> |
| 4. | Eugene Debs led union that supported the Pullman strike | <u>American Railway Union</u> |
| 5. | 1940 statement by Roosevelt and Churchill of common principles and war aims | <u>Atlantic Charter</u> |
| 6. | Vice president who resigned in 1973 after pleading no contest to tax evasion | <u>Spiro Agnew</u> |
| 7. | Historic Franciscan mission at San Antonio, Texas | <u>Alamo</u> |
| 8. | U.S. troops in Europe under command of John J. Pershing during World War I | <u>American Expeditionary Force (AEF)</u> |
| 9. | General pardon granted to Confederates by President Johnson in 1865 | <u>Amnesty</u> |
| 10. | First constitution of the United States | <u>Articles of Confederation</u> |

EXTRA:

- | | | |
|----|---|-------------------------------------|
| 1. | Virginia site where Lee surrendered to Grant in 1865 | <u>Appomattox Courthouse</u> |
| 2. | Man who defeated Jefferson for the presidency of the U.S. in 1796 | <u>John Adams</u> |

**OSSAA 2023-2024
AREA GAME 2
EXTRA QUESTIONS**

Extras:

Team One Team Two

- E1. In 2023, this NBA team won their first NBA Championship in the 47 years the franchise has existed. Which NBA team beat the Miami Heat 4 games to 1 to win the 2023 trophy?

Answer: Denver Nuggets

- E2. This little old lady was the star of a dozen mysteries by Agatha Christie. Which literary character solved mysteries in the village of St. Mary's Mead?

Answer: Miss Marple

- E3. **Math Computation:** Convert a weight of 53 pounds into ounces.

Answer: 848

- E4. This civil rights activist of the early 20th century was declared Jamaica's first national hero. Which man founded the Universal Negro Improvement Association?

Answer: Marcus Garvey

- E5. In biology, this mechanism allows cells to self-destruct when stimulated by an appropriate trigger. What is this process also called programmed cell death?

Answer: Apoptosis

- E6. This French artist was commissioned to paint the 1804 imperial coronation of Napoleon Bonaparte. Which artist attended the coronation where Napoleon crowned himself and then painted a picture showing Napoleon crowning Josephine instead?

Answer: Jacques Louis David [Dah-veed]

2023-2024

**OSSAA
AREA
CHAMPIONSHIP**

High School

GAME 3

(BEGINNING OF GAME)

Welcome to the Oklahoma Secondary School Activities Association Academic Bowl. You have previously been instructed regarding the rules. Please turn off all cell phones, tablets, or any device that can receive or send messages. Coaches, team members, and guests are to sit behind their team. Coaches, your protests need to be at the allowed times.

- Introduce yourself and the chief judge.
- **Give your four count.** – Do this for every match (Game Procedures A – 11)
- Have the chief judge check the buzzers.

Note (do not read):

Official closest to scorekeeper: Make sure that scorekeeper has **full names** of students and check after first few questions that they are fully shading in correct answers, and marking correct answers only.

Official closest to timekeeper: Make sure the timekeeper is starting the clock and clearing for the first few questions.

**OSSAA 2023-2024
AREA GAME 3
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	This spinoff of a Shakespeare play was written by Tom Stoppard. Which play features two characters who are attempting to discover the cause of Hamlet's madness and their own purpose in the world?		
	Answer: <u>Rosencrantz and Guildenstern Are Dead</u>	_____	_____
2.	Math Computation: Angle theta is in quadrant two and the sine of angle theta equals 12 over 13. Find the secant of angle theta.		
	Answer: -13/5	_____	_____
3.	In 1939, Russia invaded this country, resulting in a conflict named The Winter War. Which Scandinavian country later saw the signing of a 1975 Act meant to ease and improve Cold War relations between the Communist Bloc and the West?		
	Answer: Finland	_____	_____
4.	Science computation: What is the molecular formula for Sodium Sulfate?		
	Answer: Na₂SO₄ [N A 2 S O 4]	_____	_____
5.	The lyrics for this Broadway musical were written by Stephen Sondheim for music composed by Leonard Bernstein. Which musical features a conflict between the Jets and the Sharks?		
	Answer: <u>West Side Story</u>	_____	_____
6.	In 2023, a visitor at an amusement park in this state noticed a large crack on a roller coaster while the ride was in operation. In what state did Jeremy Wagner notify officials of the crack on Carowinds' Fury 325 roller coaster ride?		
	Answer: North Carolina	_____	_____
7.	The development of the Italian sonnet, which does not end in a rhyming couplet, is widely attributed to this poet. Which Italian poet centered his 366-sonnet sequence around his love for a woman named Laura?		
	Answer: Petrarch	_____	_____

**OSSAA 2023-2024
AREA GAME 3
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	Math Computation: Find all values of G that satisfy the following equation: $ 2G + 19 = 75$ [the absolute value of the quantity 2G plus 19 equals 75].		
	Answer: (G=) 28, -47 [must have both answers]	_____	_____
9.	In 439 A.D., this Phoenician city was overrun by the Vandals. Which ancient city, the site of a Roman siege during the Third Punic War, is now a suburb of the city Tunis in Tunisia?		
	Answer: Carthage	_____	_____
10.	The Mojave Desert in California and the Gobi Desert in Asia are both caused by this effect. What is the two-word geology term for this notably drier area on the leeward side of a mountain chain?		
	Answer: Rain shadow	_____	_____
11.	This Greek sculptor is credited with the rules for perfect proportion of the human body. Which sculptor based his work on the idea that each part of the body should be a common fraction of the figure's total height?		
	Answer: Polykleitos	_____	_____
12.	This 2023 movie was written and directed by Christopher Nolan and based on the book <i>American Prometheus</i> . Which movie stars Cillian Murphy as the leader of the Manhattan Project?		
	Answer: Oppenheimer	_____	_____
13.	The first essay in this collection opens with the line "These are the times that try men's souls." Which famous series of essays was published by Thomas Paine during the Revolutionary War?		
	Answer: The <u>American Crisis</u> {must have American}	_____	_____
14.	Math Computation: Two complementary angles have measures of $(2x + 17)$ and $(2x + 1)$ degrees. What are the measures of the 2 angles in degrees?		
	Answer: 37, 53	_____	_____

**OSSAA 2023-2024
AREA GAME 3
FIRST QUARTER
TOSS UP QUESTIONS**

Team One Team Two

15. The collective name for these mesas and buttes in northwestern Oklahoma comes from the layer of gypsum that covers them. What is the name for these “mountains” that reflect sunlight as a result of the selenite in gypsum?

Answer: Glass (or Gloss) Mountains

16. The third pair of appendages on a crustacean is this masticating structure. Name this structure that in humans is the bone of the lower jaw?

Answer: Mandible

17. This cooking technique involves vacuum-sealed food submerged in a water bath. Which technique slow-cooks the food at a constant, precise temperature?

Answer: Sous-vide [soo-veed]

18. In 2023, this former prime minister was arrested and sentenced to three years in prison for illegally selling state gifts. Name this former Prime Minister of Pakistan who supposedly sold more than \$450,000 worth of Pakistani state treasures for his own benefit.

Answer: Imran Khan

19. This literary device features the use of abstract ideas as characters in a story with multiple meanings. Which device is exemplified in the novels *Animal Farm* and *The Pilgrim's Progress*?

Answer: Allegory

20. **Math Computation:** Four couples are lining up to eat at a buffet line. How many different ways can they line up if all 4 couples insist on standing with their partners?

Answer: 192

Moderator: (Check score with chief judge and scorekeeper.)

The score at the end of the first quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Coaches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge: (Restate the score if they have changed because of protests.)

(In case of a tie after the first quarter) Since the score is tied, we will continue with additional toss-up questions until one team scores. (Restate the score if necessary)

2nd Quarter – Sixty Second Instructions

Moderator **The second quarter of sixty second questions is about to begin. Everyone please be seated.**

The categories for the 2nd quarter are: (Brief description)

1. SCIENCE – ELEMENTAL WORDS

2. U.S. GEOGRAPHY - THE STATE DUE EAST

3 HUMANITIES - MOST WELL-KNOWN BIBLE VERSES

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) is ahead at this time, they will have the choice to play or defer until the 4th quarter.

- **You will have 10 seconds to make your decision. (School name) do you choose to play or defer?**
- **(Address playing team) You will have 10 seconds to choose your category (re-read the above categories)**
- **(If the 10 second buzzer goes off, the moderator will ask for an immediate response.)**
- **Since (school name) is playing first, they may move to a position behind their captain. (Other team) will put down their pencils until their time to play. Captain, all answers will come from you unless you defer to another student.**

Moderator **(School name) You have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your choice.**

The selections are:

1.

2.

Moderator **(Check the score with the chief judge and score keeper.)**

The score at the end of the first half is:

(School name) _____ has _____ points

(School name) _____ has _____ points.

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out. (Pause briefly for protests.)

This concludes the first half of play. We will pause for substitutions

Substituting team members, please check in with the scorekeeper. WE WILL NOW BEGIN 3RD QUARTER TOSS-UP QUESTIONS.

**OSSAA 2023-2024
AREA GAME 3
SECOND QUARTER
60 SECOND QUESTIONS**

SCIENCE - ELEMENTAL WORDS

Directions: Use the chemical symbols for each of the following elements, in the order they are given, to spell out a common English word.

- | | | |
|-----|---|---------------|
| 1. | Chlorine, Oxygen, Carbon, Potassium | Clock |
| 2. | Copper, Tellurium | Cute |
| 3. | Silicon, Nitrogen, Potassium | Sink |
| 4. | Hydrogen, Oxygen, Nitrogen, Einsteinium | Hones |
| 5. | Fluorine, Oxygen, Rhenium | Fore |
| 6. | Bromine, Arsenic, Hydrogen | Brash |
| 7. | Protactinium, Neon | Pane |
| 8. | Boron, Astatine, Hydrogen, Erbium | Bather |
| 9. | Molybdenum, Oxygen, Nitrogen, Sulfur | Moons |
| 10. | Boron, Rhenium, Actinium, Hydrogen | Breach |

EXTRA:

- | | | |
|----|--|----------------|
| 1. | Phosphorus, Argon, Potassium | Park |
| 2. | Chlorine, Oxygen, Thorium, Einsteinium | Clothes |

**OSSAA 2023-2024
AREA GAME 3
SECOND QUARTER
60 SECOND QUESTIONS**

U.S. GEOGRAPHY - THE STATE DUE EAST

Directions: Given a U.S. capital and state, name the state that is due east of that city.

- | | | |
|-----|--------------------------|----------------------|
| 1. | Montgomery, Alabama | Georgia |
| 2. | Frankfort, Kentucky | West Virginia |
| 3. | Montpelier, Vermont | New Hampshire |
| 4. | Olympia, Washington | Idaho |
| 5. | Carson City, Nevada | Utah |
| 6. | Santa Fe, New Mexico | Texas |
| 7. | Baton Rouge, Louisiana | Mississippi |
| 8. | Harrisburg, Pennsylvania | New Jersey |
| 9. | Annapolis, Maryland | Delaware |
| 10. | Lincoln, Nebraska | Iowa |

EXTRA:

- | | | |
|----|-----------------------|---------------------|
| 1. | Springfield, Illinois | Indiana |
| 2. | Hartford, Connecticut | Rhode Island |

**OSSAA 2023-2024
AREA GAME 3
SECOND QUARTER
60 SECOND QUESTIONS**

HUMANITIES - MOST WELL-KNOWN BIBLE VERSES

Directions: Given a full verse or the start of a well-known verse from the King James version of the Bible, name the book in which that verse is found.

- | | | |
|-----|---|--------------------|
| 1. | For God so loved the world that he gave his only begotten son | John |
| 2. | Trust in the Lord with all thine heart | Proverbs |
| 3. | Go ye therefore and teach all nations, baptizing them | Matthew |
| 4. | For all have sinned and come short of the glory of God | Romans |
| 5. | In the beginning, God created the heaven and the earth | Genesis |
| 6. | Jesus wept. | John |
| 7. | They shall mount up with wings as eagles, they shall run and not be weary | Isaiah |
| 8. | The Lord is my Shepherd; I shall not want | Psalms |
| 9. | Rejoice in the Lord alway: and again I say, Rejoice | Philippians |
| 10. | Blessed are the meek, for they shall inherit the earth | Matthew |

EXTRA:

- | | | |
|----|---|--------------------|
| 1. | All things work together for good to them that love God | Romans |
| 2. | I can do all things through Christ which strengtheneth me | Philippians |

**OSSAA 2023-2024
AREA GAME 3
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	This 10-letter legal term is defined as a formal statement made under oath before trial by a witness who will not appear at the trial. What is this 10-letter term beginning with D?		
	Answer: Deposition	_____	_____
22.	This compound is the CO ₂ [C O 2] acceptor in the Calvin-Benson cycle. What is this five-carbon sugar that combines with CO ₂ to yield two molecules of 3PG?		
	Answer: Ribulose biphosphate (or RuBP)	_____	_____
23.	In 1936, this American dancer/choreographer refused an invitation from Adolf Hitler to perform at the Olympics in Berlin. Which woman, Time Magazine's Dancer of the Century in 1998, was the first dancer to perform at the White House?		
	Answer: Martha <u>Graham</u>	_____	_____
24.	This horse, trained by Jena Antonucci and ridden by Javier Castellano, won the 2023 Belmont Stakes. Name this horse that also won the Travers Stakes in 2023 but skipped the Preakness and the Kentucky Derby.		
	Answer: Arcangelo	_____	_____
25.	The adjective gargantuan is derived from the name of a character in this French author's novels. Which author wrote the pentalogy <i>The Life of Gargantua and Pantagruel</i> ?		
	Answer: Francois <u>Rabelais</u> [rab-uh-lay]	_____	_____
26.	Math Computation: What is the determinant of the matrix which has elements 12 and negative 6 top row left to right and elements 7 and 8 bottom row left to right?		
	Answer: 138	_____	_____
27.	The Bull Moose party was founded to oppose this U.S. president's re-election. Which president was known for trade policies labeled "Dollar Diplomacy?"		
	Answer: William Howard <u>Taft</u>	_____	_____

**OSSAA 2023-2024
AREA GAME 3
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	In humans, stratum basale [stra-tum ba-sah'le] cells destroy this pigment, creating a protective layer between the nuclei of cells and UV rays. What is this pigment that triggers tanning on the top layers of the skin?		
	Answer: Melanin	_____	_____
29.	This Impressionist artist's works include several series concentrating on one subject at different times of day. Which French painter created one series featuring Rouen Cathedral and another featuring haystacks?		
	Answer: Claude <u>Monet</u>	_____	_____
30.	This TV show centered around roommates Janet, Chrissy, and Jack and their landlords, the Ropers. Which TV show of the late 70s and early 80s starred Joyce Dewitt, Suzanne Somers, and John Ritter?		
	Answer: Three's Company	_____	_____
31.	In Samuel Beckett's famous play <i>Waiting for Godot</i> , these two characters engage in conversation and encounter three other characters while waiting. What is the name of the two characters who are waiting for Godot?		
	Answer: <u>Vladimir and Estragon</u>	_____	_____
32.	Math Computation: What is the geometric mean between the numbers 64 and 289?		
	Answer: 136	_____	_____
33.	In 337 A.D., this ruler abolished crucifixion as a form of execution in the Roman Empire. Which man was the first Christian emperor of Rome?		
	Answer: Constantine	_____	_____
34.	Science computation: 19.2 coulombs of charge pass through a filament of a light bulb in 4.0 seconds. What is the current, in amperes, passing through the bulb?		
	Answer: 4.8	_____	_____

**OSSAA 2023-2024
AREA GAME 3
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
35.	In this type of vocal exercise, runs and scales are sung to the same syllable or syllables. What is the Italian term for this exercise like the do-re-mi scale from <i>The Sound of Music</i> ?		
	Answer: Solfeggio	_____	_____
36.	In July 2023, it was announced the headquarters for this agency would remain in Colorado instead of moving to Alabama as previously planned. Which agency of the Department of Defense is responsible for military operations more than 100 kilometers above sea level?		
	Answer: United States <u>Space Command</u>	_____	_____
37.	This literary term, popular during the time of the metaphysical poets, is applied to an extended metaphor governing an entire passage or poem. What is the name, beginning with C, for this type of extended metaphor?		
	Answer: Conceit	_____	_____
38.	Math Computation: Find the first derivative of the expression: $6x^{-4} - 5x^{-2}$ [6 x to the negative fourth power minus 5 x to the negative second power]. Leave your answer with negative powers.		
	Answer: $-24x^{-5} + 10x^{-3}$ [negative 24 x to the negative fifth (power) plus 10 x to the negative third (power)] {may be in either order}	_____	_____
39.	This country is the only one with coasts on both the Atlantic and Indian Oceans. Which country is home to 90% of the Earth's platinum?		
	Answer: South Africa	_____	_____
40.	This collection of icy bodies is located beyond Neptune's orbit. What name is given to this region of asteroids in the Solar System?		
	Answer: Kuiper Belt	_____	_____

Moderator (Check score with chief judge and scorekeeper.)
The score at the end of the third quarter is:
(school name) _____ has _____ points
(school name) _____ has _____ points
Coaches you may approach your team for 30 seconds to assist in any questions.
This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge (Restate the score if they have changed because of protests.)

4th Quarter – Sixty Second Instructions

Moderator **The fourth quarter of sixty second questions is about to begin. Everyone please be seated.**
The categories for the 4th quarter are: (Brief description)
1. MATH- TRIGONOMETRY ABCs
2. CURRENT EVENTS – US SENATORS
3. LITERATURE – WELL KNOWN LITERARY CHARACTERS
Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.
Because (school name) chose first in the 2nd quarter, (school name) will have the first choice this quarter.

You will have 10 seconds to choose your category.
(Active team) may move to a position behind the captain. (Other team) put down your pencils.
Captain, all answers will come from you unless you defer to another student.

Moderator **(School name) You will have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your selection.**

The selections are:

- 1.**
- 2.**

Moderator **(Check the score with the chief judge and score keeper) The score at the end of the game is:**
(School name) _____ has _____ points
(School name) _____ has _____ points

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charges time out.
(Restate the score if it has changed)

(If the game is tied, sudden death questions will be asked.)
Because the game is tied, sudden death toss-up questions will be asked. Would either team like to make substitutions? Again, this is not a time for coaches to confer with their team. (Pause for substitutions.)

Moderator **This concludes the game. Congratulations to both teams. Please check your bracket and move to the next round as quickly as possible.**

**OSSAA 2023-2024
AREA GAME 3
FOURTH QUARTER
60 SECOND QUESTIONS**

MATH - TRIGONOMETRY ABCs

Directions: From the given clue, identify each of the following terms found in trig or pre-calc. Answers will be alphabetical, beginning with A, but skipping K.

- | | | |
|-----|--|-------------------------------|
| 1. | Line to a curve where distance between line and curve approaches zero as x does to infinity | Asymptote |
| 2. | Polynomial with only two terms | Binomial |
| 3. | Circle, ellipse, hyperbola, parabola | Conic |
| 4. | b squared minus 4ac part of a quadratic function | Discriminant |
| 5. | Measure of how much an ellipse varies from a circle | Eccentricity |
| 6. | A parabola is the locus of points that is equidistant from the directrix and this | Focus |
| 7. | A sequence where each succeeding term is multiplied by a given ratio | Geometric |
| 8. | One example is sine of A over 2 equals plus or minus square root of 1 minus cosine A all over 2 | Half-angle formula |
| 9. | Square matrix with all terms zero except for those going diagonally down from top left to bottom right | <u>Identity Matrix</u> |
| 10. | How z is related to x and y in: z equals kxy, if k is a coefficient | Jointly proportional |

EXTRA:

- | | | |
|----|---|-----------------------|
| 1. | $a^2 = b^2 + c^2 - 2bc \cos a$ [a squared equals b squared plus c squared minus 2bc cosine a] | Law of Cosines |
| 2. | The number of times a factor of a polynomial occurs | Multiplicity |

**OSSAA 2023-2024
AREA GAME 3
FOURTH QUARTER
60 SECOND QUESTIONS**

CURRENT EVENTS - US SENATORS

Directions: Identify the state for which each of the following people were serving as U.S. senator as of November 1, 2023.

- | | | |
|-----|------------------|-----------------------|
| 1. | James Lankford | Oklahoma |
| 2. | Chuck Schumer | New York |
| 3. | Elizabeth Warren | Massachusetts |
| 4. | Susan Collins | Maine |
| 5. | Rand Paul | Kentucky |
| 6. | Marco Rubio | Florida |
| 7. | Kyrsten Sinema | Arizona |
| 8. | Dick Durbin | Illinois |
| 9. | Raphael Warnock | Georgia |
| 10. | Tim Scott | South Carolina |

EXTRA:

- | | | |
|----|-----------------|-----------------|
| 1. | Mitch McConnell | Kentucky |
| 2. | Ted Cruz | Texas |

**OSSAA 2023-2024
AREA GAME 3
FOURTH QUARTER
60 SECOND QUESTIONS**

LITERATURE - WELL-KNOWN LITERARY CHARACTERS

Directions: Given the name of a well-known literary character and the author who created that character, name the work in which that character appears.

- | | | |
|-----|-----------------------------------|--------------------------------|
| 1. | Jay Gatsby, F. Scott Fitzgerald | The <u>Great Gatsby</u> |
| 2. | Lennie Small, John Steinbeck | <u>Of Mice and Men</u> |
| 3. | Celie, Alice Walker | The <u>Color Purple</u> |
| 4. | Quentin Compson, William Faulkner | The <u>Sound and the Fury</u> |
| 5. | Newland Archer, Edith Wharton | The <u>Age of Innocence</u> |
| 6. | Arthur "Boo" Radley, Harper Lee | <u>To Kill a Mockingbird</u> |
| 7. | Dean Moriarty, Jack Kerouac | <u>On the Road</u> |
| 8. | Big Brother, George Orwell | <u>1984</u> |
| 9. | Santiago, Ernest Hemingway | The <u>Old Man and the Sea</u> |
| 10. | Willie Stark, Robert Penn Warren | <u>All the King's Men</u> |

EXTRA:

- | | | |
|----|-------------------------------|------------------------|
| 1. | Eeyore, A.A. Milne | <u>Winnie the Pooh</u> |
| 2. | Yuri Zhivago, Boris Pasternak | <u>Dr. Zhivago</u> |

**OSSAA 2023-2024
AREA GAME 3
EXTRA QUESTIONS**

Extras:

Team One Team Two

- E1. Eugene Delacroix's painting *Liberty Leading the People* is a depiction of this revolution. Which revolution began in 1830 and lasted only three days?

Answer: July Revolution or Second French Revolution

- E2. In a tennis match, the server scored two points while his opponent has not scored during the first game. How would the score be announced?

Answer: Thirty-Love

- E3. This woman, known to be a recluse, is considered one of the founders of modern American poetry. Which poet wrote 1,775 poems, of which only 7 were published during her lifetime?

Answer: Emily Dickinson

- E4. **Math Computation:** Find all roots of the cubic equation:
 $x^3 + 9x^2 + 14x = 0$ [x cubed plus 9 x squared plus 14x equals zero]

Answer: (x=) 0, -2, -7 [must have all 3]

- E5. This town is the only one in Oklahoma on Mountain Standard Time. What is the name of this small town near the Black Mesa Nature Preserve?

Answer: Kenton

- E6. This condition happens when a person experiences quick east-west travel that throws off the body's circadian rhythms. What is the phrase for this condition causing a person difficulty in adjusting to the sunset and sunrise times at a new location?

Answer: Jet lag (or desynchronosis)

2023-2024

**OSSAA
AREA
CHAMPIONSHIP**

High School

GAME 4

(BEGINNING OF GAME)

Welcome to the Oklahoma Secondary School Activities Association Academic Bowl. You have previously been instructed regarding the rules. Please turn off all cell phones, tablets, or any device that can receive or send messages. Coaches, team members, and guests are to sit behind their team. Coaches, your protests need to be at the allowed times.

- Introduce yourself and the chief judge.
- **Give your four count.** – Do this for every match (Game Procedures A – 11)
- Have the chief judge check the buzzers.

Note (do not read):

Official closest to scorekeeper: Make sure that scorekeeper has **full names** of students and check after first few questions that they are fully shading in correct answers, and marking correct answers only.

Official closest to timekeeper: Make sure the timekeeper is starting the clock and clearing for the first few questions.

**OSSAA 2023-2024
AREA GAME 4
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	This substitute for chocolate comes from the pods of a locust tree found in the Mediterranean region. Which chocolate substitute, known as St. John's or poor man's bread, is referred to in the Biblical parable of the prodigal son?		
	Answer: Carob	_____	_____
2.	Math Computation: Convert into a base 2 number, the base ten number 58.		
	Answer: 111010 [one one one zero one zero]	_____	_____
3.	This step is the pinnacle of Maslow's hierarchy of human needs. In which step does a person demonstrate ideals like morality, creativity, and autonomy?		
	Answer: Self-actualization (or meta-needs)	_____	_____
4.	This 11-letter word, beginning with H, is an old-fashioned term for a seller of men's clothing. What is the term for a person you would visit to buy a suit and hat?		
	Answer: Haberdasher	_____	_____
5.	This game, first released in 1993 by Wizards of the Coast, is often described as the best card-trading game. In which game is each player allotted 60 cards while playing the role of a Planeswalker?		
	Answer: Magic: The Gathering	_____	_____
6.	This U.S. Secretary of State was stabbed on the same night Abraham Lincoln was assassinated. Which man's biggest claim to fame is the purchase of Alaska?		
	Answer: William Henry <u>Seward</u>	_____	_____
7.	Math Computation: Convert an angle of 168 degrees into radians and reduce completely, leaving pi in the answer.		
	Answer: 14/15 pi (or 14 pi over 15)	_____	_____

**OSSAA 2023-2024
AREA GAME 4
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	Aquaprints, etchings, and engravings are all forms of this type of printmaking. In which type of print are the lines incised into the surface of the printing plate?		
	Answer: Intaglio	_____	_____
9.	Chemist Linus Pauling invented this scale to reflect how easy it is for an atom to bond electrons. What is this measure of the capacity of an atom in a chemical compound to attract electrons?		
	Answer: Electronegativity	_____	_____
10.	In J.R.R. Tolkien's <i>Lord of the Rings</i> trilogy, this Hobbit is the designated ringbearer. Which character is second cousin once removed of Bilbo Baggins, the Hobbit who found the ring?		
	Answer: <u>Frodo</u> Baggins	_____	_____
11.	In July 2023, this woman announced she would be returning to competitive gymnastics in an effort to compete at the 2024 Olympics. Name this American gymnast who won the gold medal in the all-around at the 2012 Olympics.		
	Answer: Gabby <u>Douglas</u>	_____	_____
12.	In 1985, the Tower Commission was appointed to investigate this scandal involving a U.S. president. Which scandal of the Reagan administration dealt with the sale of American arms to a foreign country to fund Nicaraguan rebels?		
	Answer: <u>Iran-Contra</u> Affair	_____	_____
13.	Math Computation: A right triangle has a leg of length 60 and a hypotenuse of 61. What is the length of the other leg?		
	Answer: 11	_____	_____
14.	Artworks that are made up of more than one type of material are known by this term. What two-word term describes artworks that include diverse materials such as cloth, paint, and metal objects?		
	Answer: Mixed Media	_____	_____

**OSSAA 2023-2024
AREA GAME 4
FIRST QUARTER
TOSS UP QUESTIONS**

Team One Team Two

15. This man invented a rotating multi-barrel gun operated by a hand crank. Which American is considered to be the inventor of the machine gun?

Answer: Richard Gatling

16. This literary device is defined as a speech by one person or a long, one-sided conversation causing boredom in the listeners. What is the term, beginning with M, for a solo speech meant to reveal a speaker's personality, views, and values?

Answer: Monologue

17. In August 2023, the lieutenant governor of this state suddenly passed away. In which state was Sheila Oliver serving as acting governor while Governor Phil Murphy was on an overseas trip?

Answer: New Jersey

18. This conflict between the English House of Plantagenet and the French House of Valois began in the 14th century. What name was given to this series of wars that began with the Battle of Crecy in 1346?

Answer: The Hundred Years' War

19. **Math Computation:** Take matrix A and multiply by matrix B: Matrix A has elements 2 and negative 6 top row left to right, and elements 8 and 5 bottom row left to right. Matrix B has elements 4 and negative 3 top row left to right and elements 2 and 7 bottom row left to right. Remember to multiply each row by each column to find the elements in the answer.

Answer: -4 and -48 top row left to right, 42 and 11 bottom row left to right

20. Flutes, whistles, accordions, bagpipes, and horns all fall into this category of musical instrument. Which category of instruments produce sound using air?

Answer: Aerophones

Moderator: (Check score with chief judge and scorekeeper.)
The score at the end of the first quarter is:
(school name) _____ has _____ points
(school name) _____ has _____ points
Coaches you may approach your team for 30 seconds to assist in any questions.
This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge: (Restate the score if they have changed because of protests.)

(In case of a tie after the first quarter) **Since the score is tied, we will continue with additional toss-up questions until one team scores. (Restate the score if necessary)**

2nd Quarter – Sixty Second Instructions

Moderator **The second quarter of sixty second questions is about to begin. Everyone please be seated.**
The categories for the 2nd quarter are: (Brief description)
1. **MYTHOLOGY – ROMAN GODS AND GODESSES**
2. **SCIENCE – MEASURING INSTRUMENTS**
3. **BUSINESS – DOW JONES STOCK EXCHANGE SYMBOLS**
Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.
Because (school name) is ahead at this time, they will have the choice to play or defer until the 4th quarter.

- **You will have 10 seconds to make your decision. (School name) do you choose to play or defer?**
- **(Address playing team) You will have 10 seconds to choose your category (re-read the above categories)**
- **(If the 10 second buzzer goes off, the moderator will ask for an immediate response.)**
- **Since (school name) is playing first, they may move to a position behind their captain. (Other team) will put down their pencils until their time to play. Captain, all answers will come from you unless you defer to another student.**

Moderator **(School name) You have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your choice.**
The selections are:
1.
2.

Moderator **(Check the score with the chief judge and score keeper.)**
The score at the end of the first half is:
(School name) _____ has _____ points
(School name) _____ has _____ points.

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out. (Pause briefly for protests.)

This concludes the first half of play. We will pause for substitutions
Substituting team members, please check in with the scorekeeper. WE WILL NOW BEGIN
3RD QUARTER TOSS-UP QUESTIONS.

**OSSAA 2023-2024
AREA GAME 4
SECOND QUARTER
60 SECOND QUESTIONS**

MYTHOLOGY - ROMAN GODS AND GODDESSES

Directions: Given a brief description, identify the following Roman gods and goddesses.

- | | | |
|-----|---------------------------------------|------------------|
| 1. | God of Wine | Bacchus |
| 2. | God of the Sea | Neptune |
| 3. | God of agriculture | Saturn |
| 4. | God of the sun | Sol |
| 5. | Goddess of marriage | Juno |
| 6. | God of the sky | Uranus |
| 7. | Goddess of strife | Discordia |
| 8. | Goddess of victory | Victoria |
| 9. | Goddess of War | Bellona |
| 10. | God of the forest, fields, and plains | Faunus |

EXTRA:

- | | | |
|----|----------------------|--------------|
| 1. | Goddess of the Earth | Terra |
| 2. | Goddess of health | Salus |

**OSSAA 2023-2024
AREA GAME 4
SECOND QUARTER
60 SECOND QUESTIONS**

SCIENCE - MEASURING INSTRUMENTS

Directions: Given what is measured, identify the name for each of the following scientific measuring devices. All answers will end in “meter”.

- | | | |
|-----|--------------------------------------|----------------------|
| 1. | Height in the air, as in an airplane | Altimeter |
| 2. | Acceleration of an object | Accelerometer |
| 3. | Wind speed | Anemometer |
| 4. | Speed, as in a car | Speedometer |
| 5. | Potential differences | Voltmeter |
| 6. | Atmospheric pressure | Barometer |
| 7. | Color hues and brightness | Colorimeter |
| 8. | Magnetic forces | Magnetometer |
| 9. | Time | Chronometer |
| 10. | Small electric currents | Galvanometer |

EXTRA:

- | | | |
|----|-----------------------|------------------|
| 1. | Electric power | Wattmeter |
| 2. | Very low temperatures | Cryometer |

**OSSAA 2023-2024
AREA GAME 4
SECOND QUARTER
60 SECOND QUESTIONS**

BUSINESS - DOW JONES STOCK EXCHANGE SYMBOLS

Directions: Given the symbol used on the New York Stock Exchange, identify each of the following major companies that are listed in the Dow Jones Industrial Average of 30 prominent companies.

- | | | |
|-----|------|----------------|
| 1. | DIS | Disney |
| 2. | MCD | McDonalds |
| 3. | GM | General Motors |
| 4. | AAPL | Apple |
| 5. | BA | Boeing |
| 6. | CVX | Chevron |
| 7. | MSFT | Microsoft |
| 8. | KO | Coca-Cola |
| 9. | V | Visa |
| 10. | T | AT&T |

EXTRA:

- | | | |
|----|-----|------------------|
| 1. | WMT | Walmart |
| 2. | PG | Procter & Gamble |

**OSSAA 2023-2024
AREA GAME 4
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	Science computation: Two children are sitting on a balanced teeter-totter, with one child, of 45 kilos, sitting 6 feet from the fulcrum. How far must the other child sit, in feet, if they weigh 30 kilos and the teeter-totter isn't moving?		
	Answer: 9	_____	_____
22.	In this poetic form, the second line of each stanza rhymes with the first and third line of the next stanza. What two-word Italian term identifies this form in which each stanza contains only three lines?		
	Answer: Terza Rima [tur-tsa ree-mah]	_____	_____
23.	In October, 2023, this singer, who had battled aphasia for the past ten years, was honored in a tribute concert in Alabama. Name this country music legend with the songs "If I Didn't Have You", "Forever and Ever, Amen", and "Three Wooden Crosses".		
	Answer: Randy Travis	_____	_____
24.	Dutch artist Jan Vermeer spent his entire life in this city renowned for its pottery. Which city in the Netherlands did William of Orange make the seat of his government in 1572?		
	Answer: Delft	_____	_____
25.	Math Computation: Find the limit as x approaches zero of the function: $f(x) = (8x^3 + 11x - 32) / (2x^3 - 5x - 12)$ [F of x equals the quantity 8 x cubed plus 11x minus 32 end quantity over the quantity 2 x cubed minus 5x minus 12 end quantity].		
	Answer: 8/3 (or 2&2/3)	_____	_____
26.	In 2023, this building was the tallest completed building in the world. Which building also has the highest outdoor observation deck in the world?		
	Answer: <u>Burj Khalifa</u>	_____	_____
27.	Collectively, the DNA, RNA, and protein in eukaryotic chromosomes are known by this name. What term is used for this structure of 147 base pairs of DNA bound around the eight core histones?		
	Answer: Chromatin	_____	_____

**OSSAA 2023-2024
AREA GAME 4
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	This literary device consists of an interrogative sentence that does not require an answer. Which literary device appears in Juliet's famous soliloquy about Romeo's name in Shakespeare's <i>Romeo and Juliet</i> ?		
	Answer: <u>Rhetorical Question</u>	_____	_____
29.	This transportation company declared bankruptcy in August 2023. Name this Nashville, Tennessee trucking company whose logo is, ironically, orange and black.		
	Answer: <u>Yellow Freight</u>	_____	_____
30.	In 1902, this man was appointed postmaster at Enid by President Theodore Roosevelt, and in 1904 became the Osage agent at Pawhuska. Which man served as the last territorial governor of Oklahoma, losing the election for state governor to Charles Haskell?		
	Answer: <u>Frank Frantz</u>	_____	_____
31.	Math Computation: What is the sample variance in a normally distributed range of data, if the sample standard deviation is 25?		
	Answer: <u>625</u>	_____	_____
32.	This popular aromatic cooking ingredient is nicknamed "the stinking rose." Which pungent ingredient can, according to popular lore, ward off a vampire?		
	Answer: <u>Garlic</u>	_____	_____
33.	Spell the name of the type of intrusion formed when magma presses upward between rock layers and forms a dome of rock. Spell laccolith [lah keh lith]		
	Answer: <u>L-A-C-C-O-L-I-T-H</u>	_____	_____
34.	This word is the shortest word that contains all five vowels and y in alphabetical order. Which adverb, beginning with F, means to make a remark in way meant to be funny or not serious?		
	Answer: <u>Facetiously</u>	_____	_____

**OSSAA 2023-2024
AREA GAME 4
THIRD QUARTER
TOSS UP QUESTIONS**

Team One Team Two

35. In 2023, a former saleswoman in a military store was arrested for a plot to kill this leader of an Eastern European country. Who did the Ukrainian Security Service say was the intended victim of this attack by a Russian subversive?

Answer: President Volodymyr Zelensky

36. The Federal Insurance Contributions Act is the funding mechanism for these two government programs. Which programs are funded by this federal payroll tax collected from the earnings of U.S. employees and businesses?

Answer: Social Security and Medicare

37. **Math Computation:** Two trains leave the station at the same time, one traveling east at 36 miles per hour, while the other travels west at 45 miles per hour. How many miles apart will the two trains be after 3.5 hours?

Answer: 283.5

38. This jewelry making term comes from the Latin for thread and indicates ornamental work made from twisting fine wires of silver or gold into tracery. What is this eight-letter term beginning with F?

Answer: Filigree

39. One end of this bone extends into the shallow glenoid process, while the other end has the capitulum [kah-pit'u-lum] and trochlea [trok'le-ah] pieces. Which bone also includes a raised area, called the deltoid tuberosity, where the inferior section of the deltoid muscle attaches?

Answer: Humerus

40. This author's sweeping historical novels served as the basis for a musical, movies, and a TV mini-series. . Which author's works were adapted for the musical *South Pacific*, the movie *Hawaii*, and the TV mini-series *Centennial*?

Answer: James Michener

Moderator (Check score with chief judge and scorekeeper.)
The score at the end of the third quarter is:
(school name) _____ has _____ points
(school name) _____ has _____ points
Coaches you may approach your team for 30 seconds to assist in any questions.
This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge (Restate the score if they have changed because of protests.)

4th Quarter – Sixty Second Instructions

Moderator **The fourth quarter of sixty second questions is about to begin. Everyone please be seated.**
The categories for the 4th quarter are: (Brief description)
1. MATH – AREAS OF SIMPLE FIGURES
2. WORLD HISTORY – MAJOR EVENTS IN HISTORY
3. AMERICAN LITERATURE – POEMS AND POETS
Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.
Because (school name) chose first in the 2nd quarter, (school name) will have the first choice this quarter.

You will have 10 seconds to choose your category.
(Active team) may move to a position behind the captain. (Other team) put down your pencils.
Captain, all answers will come from you unless you defer to another student.

Moderator (School name) **You will have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your selection.**

The selections are:

- 1.**
- 2.**

Moderator (Check the score with the chief judge and score keeper) **The score at the end of the game is:**
(School name) _____ has _____ points
(School name) _____ has _____ points

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charges time out.
(Restate the score if it has changed)

(If the game is tied, sudden death questions will be asked.)
Because the game is tied, sudden death toss-up questions will be asked. Would either team like to make substitutions? Again, this is not a time for coaches to confer with their team. (Pause for substitutions.)

Moderator **This concludes the game. Congratulations to both teams. Please check your bracket and move to the next round as quickly as possible.**

**OSSAA 2023-2024
AREA GAME 4
FOURTH QUARTER
60 SECOND QUESTIONS**

MATH - AREAS OF SIMPLE FIGURES

Directions: Find the areas of each of the following simple figures in square units. If necessary, express your answer as a radical or in terms of pi.

- | | | |
|-----|---|---------------|
| 1. | Rectangle, height 5, width 13 | 65 |
| 2. | Square, sides of 15 | 225 |
| 3. | Triangle, height 9, base 14 | 63 |
| 4. | Circle, radius 16 | 256pi |
| 5. | Trapezoid, bases of 15 and 19, height of 8 | 136 |
| 6. | Parallelogram, base of 11, height of 13 | 143 |
| 7. | Kite, diagonals of 24 and 15 | 180 |
| 8. | Rhombus, perimeter of 100, one diagonal of 30 | 600 |
| 9. | Equilateral triangle, sides of 8 | $16\sqrt{3}$ |
| 10. | Regular hexagon, sides of 20 | $600\sqrt{3}$ |

EXTRA:

- | | | |
|----|------------------------------|-----|
| 1. | Rhombus, diagonals 16 and 21 | 168 |
| 2. | Square, diagonals of 12 | 72 |

**OSSAA 2023-2024
AREA GAME 4
FOURTH QUARTER
60 SECOND QUESTIONS**

WORLD HISTORY - MAJOR EVENTS IN HISTORY

Directions: Given a brief description, identify the following concerning major events in world history.

- | | | |
|-----|--|----------------------------------|
| 1. | Muhammad's departure from this city marked founding of Islam | Mecca |
| 2. | This man established Carolingian Empire | Charlemagne |
| 3. | The fall of this barrier signified reunification of Germany | <u>Berlin Wall</u> |
| 4. | War nicknamed "The war to end all wars" | <u>World War I</u> |
| 5. | These manuscripts include oldest manuscript of Hebrew Bible | <u>Dead Sea Scrolls</u> |
| 6. | Signing of this document guaranteed rights of English nobles | <u>Magna Carta</u> |
| 7. | This Englishman explored Orinoco River in 1595 | Sir Walter <u>Raleigh</u> |
| 8. | Founder of Communist Party in Russia | Vladimir <u>Lenin</u> |
| 9. | Chinese leader who overthrew last Chinese emperor | Sun Yat-sen |
| 10. | The Reign of Terror was a part of this conflict | French Revolution |

EXTRA:

- | | | |
|----|--|-------------------|
| 1. | Greek scientist who determined how buoyancy works | Archimedes |
| 2. | Italian astronomer who first used telescope to study the stars | Galileo |

**OSSAA 2023-2024
AREA GAME 4
FOURTH QUARTER
60 SECOND QUESTIONS**

AMERICAN LITERATURE - POEMS AND POETS

Directions: Given the title of a famous American poem, name the poet.

- | | | |
|-----|---------------------|--------------------------------|
| 1. | Song of Myself | Walt <u>Whitman</u> |
| 2. | Howl | Allen <u>Ginsberg</u> |
| 3. | The Waste Land | T.S. <u>Eliot</u> |
| 4. | The Raven | Edgar Allan <u>Poe</u> |
| 5. | Daddy | Sylvia <u>Plath</u> |
| 6. | Still I Rise | Maya <u>Angelou</u> |
| 7. | The Red Wheelbarrow | William Carlos <u>Williams</u> |
| 8. | We Wear the Mask | Paul Laurence <u>Dunbar</u> |
| 9. | Harlem | Langston <u>Hughes</u> |
| 10. | The New Colossus | Emma <u>Lazarus</u> |

EXTRA:

- | | | |
|----|--------------------------------|-------------------------|
| 1. | I Heard a Fly Buzz When I Died | Emily <u>Dickinson</u> |
| 2. | We Real Cool | Gwendolyn <u>Brooks</u> |

**OSSAA 2023-2024
AREA GAME 4
EXTRA QUESTIONS**

Extras:

Team One Team Two

- E1. On July 31, 2023, this actor passed away after battling cancer. Which actor starred as Pee Wee Herman in movies and on TV, where his show earned 15 Emmy awards in the 1980s?

Answer: Paul Reubens

- E2. This man was the first American to receive a Nobel Prize of any kind. Which man won the 1906 Nobel Peace Prize for his role in peace negotiations for the Russo-Japanese War?

Answer: Theodore Roosevelt

- E3. **Math Computation:** How much is in an account that earns 5% interest for 2 years, if interest is compounded annually and the account starts with \$4000?

Answer: \$4410

- E4. This artist's series of paintings titled *Woman* became a symbol for the American feminist movement of the 20th century. Which Dutch American artist was a leader of Abstract Expressionism?

Answer: Willem de Kooning

- E5. This muscle is vital to jumping high. Which muscle, the largest in the human body, keeps the thigh straight with the pelvis?

Answer: Gluteus maximus

- E6. Nora, Torvald, and Krogstad are all characters in this famous play by Henrik Ibsen. What is the name of this three-act play which begins on Christmas Eve?

Answer: A Doll's House

2023-2024

**OSSAA
AREA
CHAMPIONSHIP**

High School

GAME 5

(BEGINNING OF GAME)

Welcome to the Oklahoma Secondary School Activities Association Academic Bowl. You have previously been instructed regarding the rules. Please turn off all cell phones, tablets, or any device that can receive or send messages. Coaches, team members, and guests are to sit behind their team. Coaches, your protests need to be at the allowed times.

- Introduce yourself and the chief judge.
- **Give your four count.** – Do this for every match (Game Procedures A – 11)
- Have the chief judge check the buzzers.

Note (do not read):

Official closest to scorekeeper: Make sure that scorekeeper has **full names** of students and check after first few questions that they are fully shading in correct answers, and marking correct answers only.

Official closest to timekeeper: Make sure the timekeeper is starting the clock and clearing for the first few questions.

**OSSAA 2023-2024
AREA GAME 5
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	In 1535, this man's opposition to England's separation from the Roman Catholic Church resulted in his execution. Which statesman and author of <i>Utopia</i> refused to acknowledge Henry VIII as head of the church in England?		
	Answer: Sir Thomas <u>More</u>	_____	_____
2.	Math Computation: Marty's insurance has a deductible of \$1500 before her insurance will pay 80% of the remaining cost. If Marty's total doctor bill is \$2400, how much will she have to pay altogether?		
	Answer: \$1680	_____	_____
3.	If you visit New Orleans to see an NFL game, chances are you will hear this popular jazz standard. Which gospel song did Louis Armstrong record in 1938 that is used by the football team?		
	Answer: <u>When the Saints Go Marching In</u> (or <u>The Saints</u>)	_____	_____
4.	Science computation: A wave, of wavelength 4.60 meters, oscillates at 0.250 hertz. What is the speed of the wave in meters per second?		
	Answer: 1.15	_____	_____
5.	These three poets are considered the greatest poets of literature written in Latin. Which poets are responsible for <i>The Aeneid</i> , <i>The Odyssey</i> , and <i>Metamorphoses</i> ?		
	Answer: <u>Virgil</u>, <u>Homer</u>, and <u>Ovid</u>	_____	_____
6.	In the summer of 2023, work began on the dismantling of four dams along this river in northern California and southern Oregon. Along what river are the J.C. Boyle, Iron Gate, and Copco Dams 1 & 2 being removed in the largest dam removal project in U.S. history?		
	Answer: <u>Klamath River</u>	_____	_____
7.	This park in Michigan, was America's second national park. Which Michigan state park, located on an island, lost its national park designation after the U.S. Army fort there was decommissioned in 1895?		
	Answer: <u>Mackinac Island</u> [Mack-in-aw]	_____	_____

**OSSAA 2023-2024
AREA GAME 5
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	Math Computation: Find the solution to the following system of equations: $2x + y + z = 6$; $3x - y + z = 2$; and $2x + y + 3z = 4$. Start by using elimination on the first two equations, then elimination on the last 2 equations. Put your answer as coordinates in the form (x, y, z) [x comma y comma z]. Answer: (2, 3, -1)	_____	_____
9.	Rene Magritte is considered one of the key figures of this 20th century art movement. Which art movement is most associated with Salvador Dali? Answer: Surrealism	_____	_____
10.	This class of the Myriapoda [mir'e-a-pod'ah] subphylum has two pairs of legs per body section. Identify this class where you would find millipedes classified. Answer: Diplopoda [dip'lah-pod'ah]	_____	_____
11.	In Greek mythology, this daughter of Agenor and sister of Cadmus had a spear that never missed its target. Which woman became the mother of the Minotaur? Answer: Europa	_____	_____
12.	This team knocked the U.S. soccer team out of the Women's World Cup with a 5-4 penalty kick shootout. Name this team that ended up getting third place in the 2023 World Cup tournament. Answer: Sweden	_____	_____
13.	The Confederacy of the United States knew the Civil War battle at Honey Springs by this name. What name did Confederate soldiers give to this largest conflict between Confederate and Union forces in Indian Territory? Answer: The <u>Affair at Elk Creek</u>	_____	_____
14.	Math Computation: Use the product rule to find the derivative, with respect to x, of the following expression: $x^3 \sin x$ [x cubed times sine x] and leave your answer as two separate terms. Answer: $3x^2 \sin x + x^3 \cos x$ [3 x squared sine x plus x cubed cosine x]	_____	_____

**OSSAA 2023-2024
AREA GAME 5
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
15.	According to the United Nations Food and Agriculture Organization, this meat is the most widely eaten meat in the world. Which meat is traditionally used for Mexican carnitas?		
	Answer: Pork	_____	_____
16.	Salts are formed from this type of bond. Name the type of bond in which anions and cations are electrostatically drawn to each other.		
	Answer: <u>Ionic</u> bond	_____	_____
17.	<i>The Outcasts of Poker Flat</i> and <i>The Luck of Roaring Camp</i> are two short stories by this author who set his works during the California Gold Rush. Which American author was an originator of the local color movement?		
	Answer: Bret <u>Harte</u>	_____	_____
18.	In August 2023, this entertainer told an interviewer with People magazine that he was pansexual. Which regular on <i>Whose Line Is It Anyway?</i> has also hosted <i>Let's Make a Deal</i> since 2009?		
	Answer: Wayne Brady	_____	_____
19.	In 1794, this treaty granted the U.S. most favored nation status with Great Britain. Which unpopular treaty was intended to settle outstanding issues between America and Great Britain after the Revolutionary War?		
	Answer: <u>Jay's</u> Treaty	_____	_____
20.	Math Computation: In chemistry, a student has scored an 82, 84, and 96 on tests. If she wants to end up with a 90.0 average, what does she need to score on her last test?		
	Answer: 98	_____	_____

Moderator: (Check score with chief judge and scorekeeper.)

The score at the end of the first quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Coaches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge: (Restate the score if they have changed because of protests.)

(In case of a tie after the first quarter) Since the score is tied, we will continue with additional toss-up questions until one team scores. (Restate the score if necessary)

2nd Quarter – Sixty Second Instructions

Moderator The second quarter of sixty second questions is about to begin. Everyone please be seated.

The categories for the 2nd quarter are: (Brief description)

1. SCIENTIST TYPES – “OLOGISTS”

2. WORLD HISTORY – IMPORTANT WOMEN IN HISTORY

3. CULINARY VOCABULARY – CULINARY ABCs

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) is ahead at this time, they will have the choice to play or defer until the 4th quarter.

- You will have 10 seconds to make your decision. (School name) do you choose to play or defer?
- (Address playing team) You will have 10 seconds to choose your category (re-read the above categories)
- (If the 10 second buzzer goes off, the moderator will ask for an immediate response.)
- Since (school name) is playing first, they may move to a position behind their captain. (Other team) will put down their pencils until their time to play. Captain, all answers will come from you unless you defer to another student.

Moderator (School name) You have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your choice.

The selections are:

1.

2.

Moderator (Check the score with the chief judge and score keeper.)

The score at the end of the first half is:

(School name) _____ has _____ points

(School name) _____ has _____ points.

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charged time out. (Pause briefly for protests.)

This concludes the first half of play. We will pause for substitutions

Substituting team members, please check in with the scorekeeper. WE WILL NOW BEGIN 3RD QUARTER TOSS-UP QUESTIONS.

**OSSAA 2023-2024
AREA GAME 5
SECOND QUARTER
60 SECOND QUESTIONS**

SCIENTIST TYPES - “OLOGISTS”

Directions: Identify the name given to a scientist who studies each of the following subjects. Each answer will end with “ologist”.

- | | | |
|-----|--|------------------------------|
| 1. | Studies the climate | Climatologist |
| 2. | Studies nerves | Neurologist |
| 3. | Studies past cultures | Anthropologist |
| 4. | Studies the origin and spread of disease | Epidemiologist |
| 5. | Studies the ear, nose, and throat | Otorhinolaryngologist |
| 6. | Studies fruits | Pomologist |
| 7. | Studies the Sun | Heliologist |
| 8. | Studies trees | Dendrologist |
| 9. | Studies machines at the molecular level | Nanotechnologist |
| 10. | Studies algae | Phycologist |

EXTRA:

- | | | |
|----|---|---------------------|
| 1. | Studies the functions of living organisms | Physiologist |
| 2. | Studies bones | Osteologist |

**OSSAA 2023-2024
AREA GAME 5
SECOND QUARTER
60 SECOND QUESTIONS**

WORLD HISTORY - IMPORTANT WOMEN IN HISTORY

Directions: Given a brief description, identify the following important women in the history of the world.

- | | | |
|-----|---|------------------------------------|
| 1. | First computer programmer | Ada <u>Lovelace</u> |
| 2. | Founder of modern-day nursing | Florence <u>Nightingale</u> |
| 3. | Investigative journalist who went undercover at Blackwell's insane asylum | Nellie <u>Bly</u> |
| 4. | Discovered polonium and radium | Marie <u>Curie</u> |
| 5. | Woman who coined the term "birth control" | Margaret <u>Sanger</u> |
| 6. | First 20th century Mexican artist featured at the Louvre | Frida <u>Kahlo</u> |
| 7. | Became third prime minister of India | Indira <u>Ghandi</u> |
| 8. | First African American woman to win a Grammy | Ella <u>Fitzgerald</u> |
| 9. | Author of first non-fiction bestseller by an African American woman | Maya <u>Angelou</u> |
| 10. | Only Latino to be an EGOT winner | Rita <u>Moreno</u> |

EXTRA:

- | | | |
|----|--|----------------------------------|
| 1. | First female U.S. Secretary of State | Madeleine <u>Albright</u> |
| 2. | First woman inducted into Rock and Roll Hall of Fame | Aretha <u>Franklin</u> |

**OSSAA 2023-2024
AREA GAME 5
SECOND QUARTER
60 SECOND QUESTIONS**

CULINARY VOCABULARY - CULINARY ABCs

Directions: Given a brief definition, identify the following terms and foods encountered in the world of fine food. Answers will be in alphabetical order, beginning with A.

- | | | |
|-----|---|----------------------------|
| 1. | Shellfish with one shell that resembles a large scallop | Abalone |
| 2. | Hyphenated French term for water bath used to cook custards in oven | <u>Bain-Marie</u> |
| 3. | Romaine lettuce salad with garlic vinaigrette dressing | <u>Caesar</u> salad |
| 4. | Term for mushroom filling used in Beef Wellington | Duxelle |
| 5. | Liquid used to create a golden sheen on baked goods | <u>Egg Wash</u> |
| 6. | Classic Greek cheese made from goat's milk | Feta |
| 7. | Italian mixed pickled vegetable assortment used as a condiment | Giardiniera |
| 8. | French term for green string beans | Haricot vert |
| 9. | Italian word for salad | Insalata |
| 10. | Root vegetable nicknamed the Mexican potato | Jicama |

EXTRA:

- | | | |
|----|---|-------------------|
| 1. | Jewish mashed potato fried pie | Knish |
| 2. | Stiff tropical grass with a lemony flavor | Lemongrass |

**OSSAA 2023-2024
AREA GAME 5
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	This man established the first printing press on English soil. Which man was responsible for the printing of Chaucer's <i>Canterbury Tales</i> and Malory's <i>Le Morte d'Arthur</i> ?		
	Answer: William <u>Caxton</u>	_____	_____
22.	This bone is the second largest bone in the wrist. Which bone lies immediately below the radius and connects with the trapezium, capitate, and lunate bones of the wrist?		
	Answer: Scaphoid [Skah-foyd]	_____	_____
23.	The on again, off again romance of Catherine and Heathcliff is the subject of this famous novel. Which novel was published in December 1847 under the authorship of Ellis Bell?		
	Answer: Wuthering Heights	_____	_____
24.	In August it was announced that Dr. Jeanne Marrazzo would succeed this man in office. Who will she be replacing as the director of the National Institute of Allergy and Infectious Diseases?		
	Answer: Dr. Anthony <u>Fauci</u>	_____	_____
25.	In 1800, this American engineer and inventor attempted to develop a submarine that could dive down 25 feet. Which man had more success with the development of the steamboat?		
	Answer: Robert <u>Fulton</u>	_____	_____
26.	Math Computation: Find both zeros of the following quadratic equation: $r^2 + 20r + 96 = 0$ [r squared plus 20r plus 96 equals zero].		
	Answer: (r =) -12 and -8 {either order but must have both}	_____	_____
27.	This two-word term refers to inexpensive mass-produced accessories meant to mimic actual gems. Which term originated in the theater for accessories containing artificial gems for use in plays or musicals?		
	Answer: <u>Costume Jewelry</u>	_____	_____

**OSSAA 2023-2024
AREA GAME 5
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	This science can include the study of plant physiology, plant genetics, and soil science. What is this term for the science of land cultivation?		
	Answer: Agronomy	_____	_____
29.	This play by T. S. Eliot made its debut in Canterbury Cathedral in 1935. Which play is based on the assassination of the Archbishop of Canterbury in 1170 A.D.?		
	Answer: <u>Murder in the Cathedral</u>	_____	_____
30.	This man homered in the bottom of the 11 th inning in Game 6 of the 1991 World Series against the Atlanta Braves to send that series to a game 7. Name this Hall of Fame baseball player for the Minnesota Twins who played center field during his 12-year career.		
	Answer: Kirby <u>Puckett</u>	_____	_____
31.	Marc Antony, Lepidus, and this man made up the Second Triumvirate of Rome. Which future emperor later defeated Marc Antony in battle at Actium?		
	Answer: Octavian (accept Caesar <u>Augustus</u> or Gaius <u>Octavius</u> Thurinus)	_____	_____
32.	Math Computation: What is the converse of the following conditional statement? If it is a rhombus, then it has perpendicular diagonals.		
	Answer: If it has perpendicular diagonals, then it is a rhombus.	_____	_____
33.	This English rock band released their first album in 1962 and their latest album in 2023. Which band's first album was self-titled, while their latest release is titled <i>Hackney Diamonds</i> ?		
	Answer: <u>Rolling Stones</u>	_____	_____

**OSSAA 2023-2024
AREA GAME 5
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
34.	This class of organic sedimentary rock forms from the dead remains of the shells of marine animals. Which class of rock, in which flowing water easily forms caves and caverns, is composed of calcite and aragonite cemented together?		
	Answer: Limestone	_____	_____
35.	In Homer's epic <i>The Iliad</i> , this man's refusal to fight during the Trojan War results in the death of Patroclus. Which man later joins the battle to kill Hector?		
	Answer: Achilles	_____	_____
36.	In August 2023, a western state in this country overturned its own cultural heritage protection laws. In which southern country were the Juukun Gorge Aboriginal rock shelters destroyed in 2020?		
	Answer: Australia	_____	_____
37.	This state is the only one in the U.S. without a straight line border. Which state is also the one whose native language has only 12-letters in its alphabet?		
	Answer: Hawaii	_____	_____
38.	Math Computation: What are the equations of the 2 slant asymptotes to the hyperbola with the following equation: $y^2/25 - x^2/121 = 1$ [y squared over 25 minus x squared over 121 equals 1].		
	Answer: $y = \pm 5/11 x$ [y equals plus or minus 5/11 x] (or $y = 5/11 x$ & $y = -5/11 x$) or (y = plus or minus 5x over 11)	_____	_____
39.	According to Ludwig Mies van der Rohe, architecture begins when you put two of these items together. To which building materials, first made from sun-dried mud and straw, was he referring?		
	Answer: Bricks	_____	_____
40.	During the final stage of the citric acid cycle this four-carbon molecule is recreated. Which carbon compound is recreated by the oxidation of malate and then combines with acetyl CoA on a restart of step one of the cycle?		
	Answer: Oxaloacetate [ahks-a-loh-a-seh-tayt] (also accept <u>oxaloacetic acid</u>)	_____	_____

Moderator (Check score with chief judge and scorekeeper.)

The score at the end of the third quarter is:

(school name) _____ has _____ points

(school name) _____ has _____ points

Coaches you may approach your team for 30 seconds to assist in any questions.

This is not a charged time out. (Pause briefly for protests.) Are there any questions?

Chief Judge (Restate the score if they have changed because of protests.)

4th Quarter – Sixty Second Instructions

Moderator **The fourth quarter of sixty second questions is about to begin. Everyone please be seated.**

The categories for the 4th quarter are: (Brief description)

1. MATH – CALCULUS DERIVATIVES

2. FINE ARTS – LOCATIONS OF FAMOUS PAINTINGS

3. LITERATURE – STATE SETTINGS FOR FAMOUS NOVELS

Teams, you may briefly make substitutions without conferring. (You have 20 seconds to announce your substitutions). Your 20 seconds begins now.

Because (school name) chose first in the 2nd quarter, (school name) will have the first choice this quarter.

You will have 10 seconds to choose your category.

(Active team) may move to a position behind the captain. (Other team) put down your pencils.

Captain, all answers will come from you unless you defer to another student.

Moderator (School name) **You will have your choice of the two remaining categories. (Other team) put down your pencils. (Active school) may move to a position behind your captain. You will have 10 seconds to make your selection.**

The selections are:

1.

2.

Moderator (Check the score with the chief judge and score keeper) **The score at the end of the game is:**

(School name) _____ has _____ points

(School name) _____ has _____ points

Are there any questions? Coaches you may approach your team for 30 seconds to assist in any questions. This is not a charges time out.

(Restate the score if it has changed)

(If the game is tied, sudden death questions will be asked.)

Because the game is tied, sudden death toss-up questions will be asked. Would either team like to make substitutions? Again, this is not a time for coaches to confer with their team. (Pause for substitutions.)

Moderator **This concludes the game. Congratulations to both teams. Please check your bracket and move to the next round as quickly as possible.**

**OSSAA 2023-2024
AREA GAME 5
FOURTH QUARTER
60 SECOND QUESTIONS**

MATH - CALCULUS DERIVATIVES

Directions: Find the first derivative of each of the following expressions.

- | | |
|---|-------------------------------|
| 1. $9x^5 - 11x^2$ [9 x to the fifth minus 11 x squared] | $45x^4 - 22x$ |
| 2. $12x^4 + 8x^3$ [12 x to the fourth plus 8 x cubed] | $48x^3 + 24x^2$ |
| 3. $17x^3 - 12x^2$ | $51x^2 - 24x$ |
| 4. $8x^6 + 15x^4$ | $48x^5 + 60x^3$ |
| 5. $13x^6 - 19x^3$ | $78x^5 - 57x^2$ |
| 6. $21x^7 + 16x^4$ | $147x^6 + 64x^3$ |
| 7. tangent x | secant squared x |
| 8. $e^x - \sin x$ [e to the x minus sine x] | $e^x - \cosine x$ |
| 9. $\ln(3x)$ [L N 3x] | $1/x$ [1 over x] |
| 10. sec x [secant x] | secxtanx [secant x tangent x] |

EXTRA:

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|--|------------------|
| 1. $31x^6 + 9x^4$ | $186x^5 + 36x^3$ |
| 2. $\tan(2x^2)$ [tangent of the quantity 2 x squared end quantity]
$4x \sec^2(2x^2)$ [4x secant squared (the quantity) 2 x squared] | |

**OSSAA 2023-2024
AREA GAME 5
FOURTH QUARTER
60 SECOND QUESTIONS**

FINE ARTS - LOCATIONS OF FAMOUS PAINTINGS

Directions: Given the title of a famous painting housed in a museum and the artist, name the country in which that artwork can be viewed.

- | | | |
|-----|---|----------------------|
| 1. | The Mona Lisa- Leonardo da Vinci | France |
| 2. | The Last Supper- Leonardo da Vinci | Italy |
| 3. | The Starry Night- Vincent van Gogh | United States |
| 4. | Guernica- Pablo Picasso | Spain |
| 5. | Impression, Sunrise- Claude Monet | France |
| 6. | Girl with a Pearl Earring- Johannes Vermeer | Netherlands |
| 7. | Nighthawks- Edward Hopper | United States |
| 8. | The Night Watch- Rembrandt | Netherlands |
| 9. | The Scream- Edvard Munch | Norway |
| 10. | The Arnolfini Portrait- Jan van Eyck | England |

EXTRA:

- | | | |
|----|------------------------------|----------------|
| 1. | The Kiss- Gustav Klimt | Austria |
| 2. | Las Meninas- Diego Velazquez | Spain |

**OSSAA 2023-2024
AREA GAME 5
FOURTH QUARTER
60 SECOND QUESTIONS**

LITERATURE - STATE SETTINGS FOR FAMOUS NOVELS

Directions: Given the title and author of a famous novel, identify the U.S. state in which the novel is set.

- | | | |
|-----|--|-----------------------|
| 1. | A Painted House, John Grisham | Arkansas |
| 2. | Carrie, Stephen King | Maine |
| 3. | The Brief Wondrous Life of Oscar Wao, Junot Diaz | New Jersey |
| 4. | Hidden Figures, Margot Lee Shetterly | Virginia |
| 5. | Fight Club, Chuck Palahniuk | Delaware |
| 6. | Where the Crawdads Sing, Delia Owens | North Carolina |
| 7. | Killers of the Flower Moon, David Grann | Oklahoma |
| 8. | One Flew Over the Cuckoo's Nest, Ken Kesey | Oregon |
| 9. | The Killer Angels, Michael Shaara | Pennsylvania |
| 10. | The Witches of Eastwick, John Updike | Rhode Island |

EXTRA:

- | | | |
|----|---|----------------|
| 1. | The Bridges of Madison County, Robert James | Iowa |
| 2. | The Fault in Our Stars, John Green | Indiana |

**OSSAA 2023-2024
AREA GAME 5
EXTRA QUESTIONS**

Extras:

Team One Team Two

- E1. This literary character, the son of King Ban of Benoit, was considered the perfect knight until his adulterous love affair and his failure in the search for the Holy Grail. Which knight was replaced by his son, Sir Galahad?

Answer: Launcelot du Lac

- E2. This actress was awarded the Presidential Medal of Freedom in 1982 for her work with UNICEF. Which actress of the 1960s and 1970s starred in the films *Charade*, *Breakfast at Tiffany's*, and *My Fair Lady*?

Answer: Audrey Hepburn

- E3. When Carrie Underwood recorded her song about this Oklahoma town, it only had one stoplight. Which hometown of Underwood, in McIntosh County, now boasts four stoplights?

Answer: Checotah

- E4. **Math Computation:** Find the inverse function of the equation: $y = 4x - 24$ and express your answer in slope-intercept form.

Answer: $y = \frac{1}{4}x + 6$

- E5. This cheese is a main ingredient in tiramisu. Which type of cheese is often sweetened for use in desserts?

Answer: Mascarpone

- E6. This planet has the least amount of tilt to its axis of any planets in the Solar System. Which planet rotates only once every two years?

Answer: Mercury

**OSSAA 2023-2024
STATE GAME 1
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	In this short story by Edgar Allan Poe, a group of wealthy people is isolated in a castle where each room is a different color in order to escape a plague. What is the title of this short story about the inevitability of death?		
	Answer: The <u>Masque of the Red Death</u>	_____	_____
2.	Math Computation: A card is drawn at random from a standard 52 card deck. What are the reduced odds that it will be a number card?		
	Answer: 9 to 4	_____	_____
3.	In the U.S. presidential election of 1800, these two men tied for electoral votes. A vote in the House of Representatives determined which two men would be the third president and his vice president of the United States?		
	Answer: Thomas <u>Jefferson</u> and Aaron <u>Burr</u>	_____	_____
4.	Science computation: What is the molecular formula for the ionic compound: iron(III) [iron 3] oxide?		
	Answer: Fe₂O₃ [F E 2 O 3]	_____	_____
5.	This man was the first president of the American Association of Inventors and Manufacturers. Which man invented the first machine gun?		
	Answer: Richard <u>Gatling</u>	_____	_____
6.	In July 2023, it was announced that scientists may have finally discovered the origins of a “gravity hole” in this large body of water. In which gigantic body of water is the 1 million square mile region of low gravity with reduced sea level known as the IOGL?		
	Answer: Indian Ocean	_____	_____
7.	This 17 th century allegory ends with the line “So I awoke, and behold it was a dream.” Which work by John Bunyan features a main character named Christian?		
	Answer: The <u>Pilgrim’s Progress</u>	_____	_____

**OSSAA 2023-2024
STATE GAME 1
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	Math Computation: What is the exact value of the cosine of 8pi over 3 radians?		
	Answer: -1/2 (or -0.5)	_____	_____
9.	The port of Ouidah, in present-day Benin, was the largest port along this three-legged trade route. What route was used from the early 16th to the mid-19th centuries to bring African slaves to America?		
	Answer: <u>Triangular trade</u> route (do not accept Middle Passage)	_____	_____
10.	This geology term is used for chunks of rock inside a sedimentary deposit. What is the term for lumps with a different composition from the rest of the sediments formed when minerals precipitate from fluids and accumulate around a nucleus rock?		
	Answer: Concretion	_____	_____
11.	In this painting style, large areas of color are more dominant than any particular shape. Which style was pioneered by Clyfford Still and Mark Rothko?		
	Answer: <u>Color-Field</u> Painting	_____	_____
12.	On July 27, 2023, the Board of Regents for this university approved a move to the Big 12. Which school became the first of four to apply for membership in the new Big 12 for the 2024 season?		
	Answer: University of <u>Colorado</u>	_____	_____
13.	In the theater, this arched opening creates a picture frame through which the audience views the action of the play. Which arched structure serves as part of the stage?		
	Answer: Proscenium	_____	_____
14.	Math Computation: What is the equation of the directrix for the parabola with equation: $y = 1/8 (x - 4)^2 + 10$ [y equals one eighth times the quantity x minus 4 end quantity squared plus 10]? Remember, the directrix of a parabola is: $y = k - 1/(4a)$ [y equals k minus one over 4a].		
	Answer: $y = 8$	_____	_____

**OSSAA 2023-2024
STATE GAME 1
FIRST QUARTER
TOSS UP QUESTIONS**

Team One Team Two

15. In 1955, this collective defense treaty was created between the Soviet Union and seven other Soviet satellites. Which treaty was officially dissolved with a formal declaration by Czech president Vaclav Havel in 1991?

Answer: Warsaw Pact

16. This type of grassland is native to North America, ruling the more humid eastern half of the North American prairie. Named for the height of the grasses that grow there, what is the term for this grassland that you can find in northern Oklahoma?

Answer: Tallgrass prairie

17. Works by this 18th century composer include the Russian Quartets, the Sun Quartets, and the Clock Symphony. Which composer is known as the Father of the String Quartet?

Answer: Joseph Hayden

18. In July 2023, this Democratic presidential candidate claimed that Covid was engineered to spare Jews and Chinese. Name this founder of the anti-vaccine group Children's Health Defense.

Answer: Robert F. Kennedy Jr.

19. The most famous of the Lake District Poets active during the 19th century were these two poets known for ushering in the Romantic era. Which poets collaborated on the book which contained *The Rime of the Ancient Mariner* and *Lines Written a Few Miles Above Tintern Abbey*?

Answer: Samuel Taylor Coleridge and William Wordsworth

20. **Math Computation:** A transversal cuts across two parallel lines. If the measures of two corresponding angles are $(7x + 37)$ and $(13x - 77)$ degrees, what are the measures of the two angles?

Answer: 170

**OSSAA 2023-2024
STATE GAME 1
SECOND QUARTER
60 SECOND QUESTIONS**

ENTERTAINMENT - MOVIES FROM 3 CHARACTERS

Directions: Given three characters from a movie in the 2000s, name that movie. If there were sequels, name the original movie.

- | | | |
|-----|--|---------------------------------|
| 1. | Jo, Meg, and Beth March | Little Women |
| 2. | Sam Witwicky, Mikaela Banes, Captain William Lennox | Transformers |
| 3. | Po, Tigress, Grand Master Oogway | Kung Fu Panda |
| 4. | Manny, Sid, Diego | Ice Age |
| 5. | General Groves, Lewis Strauss, Ernest Lawrence | Oppenheimer |
| 6. | Bruce Nolan, Susan Ortega, Grace Connelly | Bruce Almighty |
| 7. | Dom Toretto, Brian O'Conner, Letty Ortiz | The Fast and the Furious |
| 8. | Memphis Raines, "Sway", Raymond Calitri | Gone in 60 Seconds |
| 9. | Doug Madsen, Woody Stevens, Bobby Davis | Wild Hogs |
| 10. | Major William Cage, Sergeant Rita Vrataski, Master Sergeant Farell | Edge of Tomorrow |

EXTRA:

- | | | |
|----|--|------------------------------|
| 1. | Vince Papale, Dick Vermeil, Janet Cantrell | Invincible |
| 2. | Andy Sachs, Miranda Priestly, Emily Charlton | The Devil Wears Prada |

**OSSAA 2023-2024
STATE GAME 1
SECOND QUARTER
60 SECOND QUESTIONS**

TRIVIA - BILLBOARD HOT 100 NOVEMBER

Directions: Identify the singer or singers that had each of the following hit songs on the Billboard Hot 100 list in November 2023.

- | | | |
|-----|----------------------|---|
| 1. | “Cruel Summer” | Taylor Swift |
| 2. | “Lovin’ On Me” | Jack Harlow |
| 3. | “Paint the Town Red” | Doja Cat |
| 4. | “Greedy” | Tate McRae |
| 5. | “Last Night” | Morgan Wallen |
| 6. | “Houdini” | Dua Lipa |
| 7. | “Water” | Tyla |
| 8. | “Good Good” | Usher, Summer Walker & 21 Savage |
| 9. | “Northern Attitude” | Noah Kahan with Hozier |
| 10. | “Harley Quinn” | Fuerza Regida & Marshmello |

EXTRA:

- | | | |
|----|-----------------|--------------------|
| 1. | “World on Fire” | Nate Smith |
| 2. | “Strangers” | Kenya Grace |

**OSSAA 2023-2024
STATE GAME 1
SECOND QUARTER
60 SECOND QUESTIONS**

TRIVIA - NFL DIVISIONS

Directions: Identify the conference and division for each of the following National Football League teams. You may abbreviate the name of the conference, like in the answer: AFC East.

- | | | |
|-----|-----------------------|------------------|
| 1. | Kansas City Chiefs | AFC West |
| 2. | New Orleans Saints | NFC South |
| 3. | Minnesota Vikings | NFC North |
| 4. | Tennessee Titans | AFC South |
| 5. | San Francisco 49ers | NFC West |
| 6. | Jacksonville Jaguars | AFC South |
| 7. | Cincinnati Bengals | AFC North |
| 8. | Washington Commanders | NFC East |
| 9. | Seattle Seahawks | NFC West |
| 10. | New York Jets | AFC East |

EXTRA:

- | | | |
|----|------------------|------------------|
| 1. | Denver Broncos | AFC West |
| 2. | Cleveland Browns | AFC North |

**OSSAA 2023-2024
STATE GAME 1
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	In 1497, this European explorer claimed Newfoundland for England and Venice. Which explorer mistakenly believed he had reached the northeast coast of Asia?		
	Answer: John <u>Cabot</u>	_____	_____
22.	During the alpha process in the evolution of stars, this element is the result at the end. Name this element that has the highest nuclear binding energy out of all elements.		
	Answer: Iron	_____	_____
23.	The art term repoussé refers to using the reverse side of this medium to create a raised image. What general medium provides the working surface for the process of repoussé?		
	Answer: Metal	_____	_____
24.	How many total pieces does each player start with in a game of Backgammon?		
	Answer: 15	_____	_____
25.	Mark Twain's famous short story about a celebrated jumping frog is set in a fictional mining town in this California county. In which county did Jim Smiley lose to a stranger after his frog was filled with quail-shot?		
	Answer: <u>Calaveras County</u>	_____	_____
26.	Math Computation: Find the limit as x approaches 3 of the function: $f(x) = (12x - 9) / (2x^2 - 3)$ [F of x equals the quantity 12x minus 9 end quantity over the quantity 2 x squared minus 3 end quantity].		
	Answer: 9/5 (or 1 & 4/5 or 1.8)	_____	_____
27.	In 2020, the Supreme Court issued a decision in this case, stating lands belonging to the Creek Nation remained an Indian reservation for purposes of federal criminal law. Which case prevented Oklahoma from prosecuting crimes committed on the reservation in state courts?		
	Answer: <u>McGirt v Oklahoma</u>	_____	_____

**OSSAA 2023-2024
STATE GAME 1
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	This short chain of two or more amino acids is bonded when an amino group of one is joined with a carboxyl group of another. What is the name for this combination of less than 50 amino acids bonded together?		
	Answer: Peptide(s)	_____	_____
29.	On a menu, items that can be ordered separately are often indicated by this French phrase. Which three-word phrase means "on the card?"		
	Answer: <u>A la carte</u>	_____	_____
30.	In 2023, national elections in this European country resulted in no clear winner from the two major parties. Name this country where neither the Conservative People's Party nor the Socialists behind Pedro Sanchez secured a majority.		
	Answer: Spain	_____	_____
31.	When people argue over the significance or meaning of specific words or phrases, they are said to be arguing over this branch of linguistics. Which branch is specifically concerned with the meaning of words?		
	Answer: Semantics	_____	_____
32.	Math Computation: What is the equation of the line through the point (14,6) [14 comma 6] and perpendicular to the line with the equation $y = \frac{2}{5}x - 5$ [y equals two fifths x minus 5]. Put your answer in slope-intercept form.		
	Answer: $y = -\frac{5}{2}x + 41$	_____	_____
33.	By 1883, excise taxes known as sin taxes had been repealed on all but these two products. Which two products are still debated as sin taxes in the U.S.?		
	Answer: Tobacco and Liquor (accept cigarettes and alcohol)	_____	_____
34.	Science computation: Two answers required. Describe the number of significant figures in both of the following numbers: 18.0 and 0.4005		
	Answer: 3 and 4 {must be in that order}	_____	_____

**OSSAA 2023-2024
STATE GAME 1
THIRD QUARTER
TOSS UP QUESTIONS**

Team One Team Two

35. This type of men's hat featured three pointed corners with the points equidistant from each other. Which type of hat was popular with men of standing in the American colonies?

Answer: Tricorn Hat

36. In September 2023, this man was arrested in Vinita, Oklahoma when he refused a request to get back in his car following a traffic stop. Name this country music singer who released the song "I Remember Everything."

Answer: Zach Bryan

37. This novel follows the Dashwood sisters and their struggle to find happiness in a society where money and status govern the rules of love. What is the title of this first novel by Jane Austen?

Answer: Sense and Sensibility

38. **Math Computation:** Convert the rectangular coordinates (9, 9) [9 comma 9] into polar coordinates. Express your answer as (r, Θ) [r comma theta], with theta in radians and in terms of pi.

Answer: ($9\sqrt{2}$, $\pi/4$) [9 radical (square root) 2 comma pi over 4 (or 1/4 pi)]

39. The spoils system was instituted by the administration of this U.S. president. Which president removed employees from over 900 political offices and appointed friends and supporters to over 400 positions in the postal service alone?

Answer: Andrew Jackson

40. This muscle extends from the anterior iliac crest obliquely across the thigh to the inner part of the tibia. What is this thin muscle that is the most superficial of the thigh muscles?

Answer: Sartorius

**OSSAA 2023-2024
STATE GAME 1
FOURTH QUARTER
60 SECOND QUESTIONS**

VOCABULARY - LITERARY TERMS ABCs

Directions: Given a brief definition, identify the following literary terms. Answers will be in alphabetical order beginning with M.

- | | | |
|-----|---|---------------------|
| 1. | Use of incorrect words in place of correct words to create humor | Malapropism |
| 2. | A character's enemy, often a villain | Nemesis |
| 3. | Words that imitate the sounds they describe | Onomatopoeia |
| 4. | A word or phrase that is spelled the same forward and backward | Palindrome |
| 5. | A journey someone takes to accomplish a task | Quest |
| 6. | Conclusion of a story's plot, last part of plot diagram | Resolution |
| 7. | Form of verbal irony that mocks, ridicules, or expresses contempt | Sarcasm |
| 8. | Main argument of an essay | Thesis |
| 9. | Type of literature that presents a perfect society | Utopian |
| 10. | Character who comes up with plot to cause harm or ruin in a story | Villain |

EXTRA:

- | | | |
|----|---|------------|
| 1. | Three-letter term for sharp comebacks and clever banter | Wit |
|----|---|------------|

**OSSAA 2023-2024
STATE GAME 1
FOURTH QUARTER
60 SECOND QUESTIONS**

OKLAHOMA HISTORY - OKLAHOMA OFFICIAL SYMBOLS

Directions: Given a category, name the official symbol of Oklahoma for that category.

- | | | |
|-----|---------------------|--|
| 1. | Official Tree | Redbud |
| 2. | Official Folk Dance | <u>Square Dance</u> |
| 3. | Musical Instrument | Fiddle |
| 4. | Poem | <u>"Howdy Folks"</u> |
| 5. | Amphibian | Bullfrog |
| 6. | Monument | <u>Golden Driller</u> |
| 7. | Cartoon Character | Gusty |
| 8. | Astronomical Object | <u>Rosette Nebula</u> |
| 9. | Gospel Song | <u>Swing Low, Sweet Chariot</u> |
| 10. | Fiber | Cotton |

EXTRA:

- | | | |
|----|-------|------------------------------|
| 1. | Soil | <u>Port Silt Loam</u> |
| 2. | Steak | Ribeye |

**OSSAA 2023-2024
STATE GAME 1
FOURTH QUARTER
60 SECOND QUESTIONS**

SCIENCE - PHYSICS ABCs

Directions: From the information given, identify each of the following terms. The answers will be alphabetical, beginning with A.

- | | | |
|-----|--|--|
| 1. | Change in velocity over time | Acceleration |
| 2. | Field of mechanics dealing with projectile motion | Ballistics |
| 3. | Force keeping a body moving in a circular path | Centripetal {do not accept centrifugal} |
| 4. | Logarithmic measure of the loudness of a sound | Decibel |
| 5. | Magnet produced by the movement of current | Electromagnet |
| 6. | Nuclear reaction where two atomic nuclei are forced together | Fusion |
| 7. | EM radiation with very high frequency | Gamma Ray |
| 8. | Energy transfer due to temperature difference | Heat |
| 9. | Tendency of an object to resist a change in motion | Inertia |
| 10. | SI unit of energy or work | Joule |

EXTRA:

- | | | |
|----|--|---------------------|
| 1. | Energy due to motion | Kinetic |
| 2. | Waves where displacement is parallel to wave direction | Longitudinal |

**OSSAA 2023-2024
STATE GAME 1
EXTRA QUESTIONS**

Extra:

Team One Team Two

- E1. This 20th century artist was a member of the Fauves and a pioneer in the art of pasted paper collage. Which man is better known as the co-creator of Cubism with Pablo Picasso?

Answer: Georges Braque

- E2. The study of the Carnot [car-noh] engine occurs in this subset of chemistry. Which branch of science is concerned with energy deviations that come with changes in temperature and heat?

Answer: Thermodynamics

- E3. In Greek tragedy, this term indicates the disastrous finish of the drama. What term was extended in the 1700s to refer to any sudden disaster?

Answer: Catastrophe

- E4. **Math Computation:** Convert 78.5 feet into inches.

Answer: 942

- E5. In the Roman military unit known as a Century, 100 soldiers were under the command of an officer with this rank. Which rank of officer carried a vine staff used to punish soldiers who were not performing appropriately?

Answer: Centurion

- E6. Just a few weeks after Colorado announced their departure from the Pac 12 and hours after Washington and Oregon disclosed they were going to the Big 10, these three schools announced their decision regarding the future of the Pac 12. What 3 schools decided to join Colorado in the new Big 12?

Answer: Utah, Arizona State, Arizona

**OSSAA 2023-2024
STATE GAME 2
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	Math Computation: Use the distance formula to find the length of a segment with endpoints at (-8, -9) [negative 8 comma negative 9] and (-24, 11) [negative 24 comma 11].		
	Answer: 25	_____	_____
2.	This Mozart opera is set in the city of Heliopolis. In which opera is a garden of ferocious beasts tamed using a musical instrument?		
	Answer: The <u>Magic Flute</u>	_____	_____
3.	When taking a lie-detector test, the administrator of the test may refer to a GSR. In psychology, for what does the acronym GSR stand, in relation to a polygraph test?		
	Answer: <u>Galvanic skin response</u>	_____	_____
4.	This 19 th century playboy left England when his wife filed for a separation and rumors about his love life became public gossip. Which Romantic poet wrote <i>She Walks in Beauty</i> and <i>The Corsair</i> ?		
	Answer: George Gordon, Lord <u>Byron</u>	_____	_____
5.	In automotive classes, this term identifies the canister that usually sits in front of the muffler. Which part of the exhaust system reacts chemically with the exhaust gases to reduce harmful emissions?		
	Answer: Catalytic converter	_____	_____
6.	Once known as the Island of Tears, this location became the principal U.S. immigration station during the late 19 th and early 20 th centuries. Which island is home to the National Immigration Museum?		
	Answer: <u>Ellis Island</u>	_____	_____
7.	Math Computation: What are the critical points of the function: $f(x) = x^3 + 3x^2 - 24x$ [F of x equals x cubed plus 3 x squared minus 24x].		
	Answer: (x=) 2, -4 {must have both}	_____	_____

**OSSAA 2023-2024
STATE GAME 2
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	The Franklin C. Robie House is the most famous example of this school of architecture. Which school of architecture is associated with Frank Lloyd Wright?		
	Answer: <u>Prairie School</u>	_____	_____
9.	This part of the peripheral nervous system includes the nerve fibers that activate the glands and muscles of the human body. What is this division that transfers nerve impulses from the central nervous system to effector organs?		
	Answer: <u>Motor (or efferent)</u>	_____	_____
10.	In his work <i>The Social Contract</i> , this philosopher argued that laws are only binding when supported by the general will of the people. Which philosopher's ideas served as an inspiration for the French Revolution?		
	Answer: <u>Jean Jacques Rousseau</u>	_____	_____
11.	In 2023, the National Institutes of Health announced that this woman would be succeeding Dr. Fauci as the new director of the National Institute of Allergy and Infectious Diseases. Name this research scientist from the University of Alabama at Birmingham.		
	Answer: <u>Dr. Jeanne Marrazzo</u>	_____	_____
12.	This famous Cherokee entertainer was born on the Dog Iron Ranch in Oologah, Oklahoma. Which humorist and film star died in a plane crash in Alaska in 1935?		
	Answer: <u>Will Rogers</u>	_____	_____
13.	Math Computation: Solve the following system of equations using elimination: $3x - 2y = 9$ and $x + 4y = 17$. Express your answer as coordinates, (x, y) [x comma y].		
	Answer: <u>(5, 3)</u>	_____	_____
14.	This outdated culinary term refers to a thick stew of vegetables and grains. For what type of stew did Esau sell his birthright in the biblical story of Jacob and Esau?		
	Answer: <u>Pottage</u>	_____	_____

**OSSAA 2023-2024
STATE GAME 2
FIRST QUARTER
TOSS UP QUESTIONS**

Team One Team Two

15. This class of asteroid is the least reflective. What name is given to this class, indicating it is made of carbonaceous material?

Answer: C-type

16. In feudal times, a law by this name effectively prevented a second son from inheriting a family's property if an older son was still living. Which Latin term indicated this right of a firstborn male to inherit?

Answer: Primogeniture

17. On October 29th, 2023, this man drowned in the hot tub at his home in California. Which iconic star was famous for his portrayal of Chandler Bing on the TV show *Friends*?

Answer: Matthew Perry

18. This code of law, written around 621 BC, prescribed death as the penalty for both trivial and serious crimes. Which lawmaker was responsible for the code now associated with repressive legal measures?

Answer: Draco

19. This component could be 30 years in the case of a home loan or 6 years for a car loan. What is the financial term for the amount of time designated for a loan repayment program?

Answer: Period

20. The cross of this Roman Catholic saint is featured on the flag of Scotland. Who is the patron saint of fishermen and singers?

Answer: Saint Andrew

**OSSAA 2023-2024
STATE GAME 2
SECOND QUARTER
60 SECOND QUESTIONS**

SCIENCE - BIOLOGY “M” WORDS

Directions: Identify the following biology terms which all start with “M” as in mule.

- | | | |
|-----|--|------------------------------------|
| 1. | Relationship where both species benefit | Mutualism |
| 2. | Organism’s chemical processes | Metabolism |
| 3. | Second stage of mitosis | Metaphase |
| 4. | Cell division that produces gametes with half the chromosomes | Meiosis |
| 5. | Shedding an exoskeleton in arthropods | Molting |
| 6. | Mammal who’s young begin inside a maternal pouch | Marsupial |
| 7. | Order including platypus and echidna | Monotremata (or monotremes) |
| 8. | Amoeboid cell that passes through tissue fibers | Macrophage |
| 9. | Protein filament that causes cell contraction with actin filaments | Myosin |
| 10. | Cnidarian with downward mouth | Medusa |

EXTRA:

- | | | |
|----|---|-----------------|
| 1. | Type of quick growing fungus | Mold |
| 2. | Scientific name for the vertebrate class that produces milk | Mammalia |

**OSSAA 2023-2024
STATE GAME 2
SECOND QUARTER
60 SECOND QUESTIONS**

LITERATURE - WELL-KNOWN LITERARY CHARACTERS

Directions: Given the name of a well-known literary character and the author who created that character, name the work in which that character appears.

- | | | |
|-----|--|---|
| 1. | Holden Caulfield, J.D. Salinger | <u>The Catcher in the Rye</u> |
| 2. | Yossarian, Joseph Heller | <u>Catch-22</u> |
| 3. | Leopold Bloom, James Joyce | <u>Ulysses</u> |
| 4. | Holly Golightly, Truman Capote | <u>Breakfast at Tiffany's</u> |
| 5. | Gregor Samsa, Franz Kafka | <u>The Metamorphosis</u> |
| 6. | Bigger Thomas, Richard Wright | <u>Native Son</u> |
| 7. | Kurtz, Joseph Conrad | <u>Heart of Darkness</u> |
| 8. | Mr. Biswas, V. S. Naipaul | <u>A House for Mr. Biswas</u> |
| 9. | Florentino Ariza, Gabriel Garcia Marquez | <u>Love in the Time of Cholera</u> |
| 10. | Jake Barnes, Ernest Hemingway | <u>The Sun Also Rises</u> |

EXTRA:

- | | | |
|----|-----------------------------------|-----------------------------|
| 1. | Augustus Macrae, Larry McMurtry | <u>Lonesome Dove</u> |
| 2. | Humbert Humbert, Vladimir Nabokov | <u>Lolita</u> |

**OSSAA 2023-2024
STATE GAME 2
SECOND QUARTER
60 SECOND QUESTIONS**

WORLD HISTORY - IMPORTANT PEOPLE IN HISTORY ABCs

Directions: Given a brief description, identify the following important people in history. Answers will be in alphabetical order, beginning with A.

- | | |
|--|--------------------------------------|
| 1. Macedonian king and empire builder | <u>Alexander the Great</u> |
| 2. First chancellor of a united Germany in the 19th century | Otto von <u>Bismarck</u> |
| 3. Last 20th century U.S. president | William "Bill" <u>Clinton</u> |
| 4. Naturalist who proposed natural selection | Charles <u>Darwin</u> |
| 5. Dutch humanist and author during the Renaissance | Erasmus |
| 6. Physician who discovered penicillin | Alexander <u>Fleming</u> |
| 7. 20th century leader of India's independence movement | Mohandas <u>Ghandi</u> |
| 8. Author of <i>The Odyssey</i> and <i>The Iliad</i> | Homer |
| 9. Egyptian architect of first known pyramid | Imhotep |
| 10. 18th century compiler of <i>Dictionary of the English Language</i> | Samuel <u>Johnson</u> |

EXTRA:

- | | |
|---|-----------------------------------|
| 1. Influential 20th century economist | John Maynard <u>Keynes</u> |
| 2. Theologian who inspired Protestant Reformation | Martin <u>Luther</u> |

**OSSAA 2023-2024
STATE GAME 2
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	Science Computation: If the force due to kinetic friction between two objects is 15 Newtons and the normal force is 75 Newtons, what is the coefficient of kinetic friction between the two objects?		
	Answer: 0.20	_____	_____
22.	This novel is the only one by Charles Dickens with the word mystery in the title. What is the title of the only mystery novel Dickens wrote?		
	Answer: <u>The Mystery of Edwin Drood</u>	_____	_____
23.	This MMA star crossed over into boxing to fight Jake Paul in August 2023. Name this fighter who competed in the UFC for 15 years after winning <i>The Ultimate Fighter 5</i> .		
	Answer: <u>Nate Diaz</u>	_____	_____
24.	This field crop is the second-most planted crop in the U.S.. Which legume is fed to livestock and used in margarines, cosmetics, soaps, and biofuel?		
	Answer: Soybeans	_____	_____
25.	Math Computation: Angle theta is in quadrant two and the tangent of angle theta equals negative 15 over 8. Find the sine of angle theta.		
	Answer: 15/17	_____	_____
26.	In art, a mirror image is a representation of this type of balance. In which type of balance are two objects or elements exactly the same?		
	Answer: <u>Symmetrical</u> Balance	_____	_____
27.	This element has more stable isotopes than any other. Which element has atomic number 50 and chemical symbol Sn?		
	Answer: Tin	_____	_____

**OSSAA 2023-2024
STATE GAME 2
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	In 1990, this play based on a 1939 novel by John Steinbeck won the Tony Award for Best Play. Which adaptation by Frank Galati starred Gary Sinise as Tom Joad?		
	Answer: <u>The Grapes of Wrath</u>	_____	_____
29.	In July 2023 a coup d’etat occurred in this country when the presidential guard detained President Mohamed Bazoum. In which African country did General Abdourahamane Tchiani declare himself the leader of the military junta?		
	Answer: Niger	_____	_____
30.	After World War I, this man founded the nationalist movement in Turkey. Which man served as the first president of Turkey after the fall of the Ottoman Sultanate?		
	Answer: <u>Kamal Atatürk</u>	_____	_____
31.	Math Computation: Ben can paint a wall in 6 hours, while Jerry can paint the same wall in 8 hours. At those same rates, how long in hours would it take them to paint the wall together?		
	Answer: 24/7 (or 3 & 3/7)	_____	_____
32.	<i>Summertime</i> and <i>Roll Dem Bones</i> are two of the songs featured in this American opera. Which Gershwin opera is set in Catfish Row and features the characters Sportin’ Life and Strawberry Woman?		
	Answer: <u>Porgy and Bess</u>	_____	_____
33.	This type of metamorphic rock is created when enormous amounts of heat and pressure are exerted on slate. What is the term for this course-grained metamorphic rock?		
	Answer: Schist [shist]	_____	_____
34.	John Donne’s Holy Sonnet 10 is more commonly known by this informal four word title. What is this title taken from the literary apostrophe that begins the poem?		
	Answer: <u>Death, Be Not Proud</u>	_____	_____

**OSSAA 2023-2024
STATE GAME 2
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
35.	Although this 1952 movie didn't do very well at the box office, some consider it to be the best movie musical ever made. Which movie starred Gene Kelly and included the songs "All I Do is Dream of You" and "Make 'Em Laugh?"		
	Answer: Singin' In the Rain	_____	_____
36.	This desert, created entirely by man-made disturbances, is the world's newest desert. What is the name of this desert formed by the disappearance of the Aral Sea?		
	Answer: <u>Aralkum</u> Desert	_____	_____
37.	Math Computation: What is the Z-score in a normally distributed data set, if the score is 92, with a mean of 68 and a standard deviation of 6? Remember the z-score equals the difference between x and mu divided by s.		
	Answer: 4	_____	_____
38.	In Greek sculpture, this pose was meant to represent freedom of movement. In which sculptural pose do the hips and legs of the subject twist in one direction and the chest and shoulders in another?		
	Answer: Contrapposto	_____	_____
39.	Amphibians that live in water expel their nitrogen-based waste products in this form. Which end product of an amphibian's metabolism is also a component of many household cleaning products?		
	Answer: Ammonia	_____	_____
40.	In Islamic tradition, this title is given to the person who calls the faithful to prayer. Which person generally stands in the minaret, at a door, or to the side of the mosque to summon worshippers?		
	Answer: Muezzin	_____	_____

**OSSAA 2023-2024
STATE GAME 2
FOURTH QUARTER
60 SECOND QUESTIONS**

MATH - ODDS WITH MARBLES

Directions: You have an opaque bag containing the following numbers of identical marbles: 12 red, 16 yellow, 18 black, and 24 orange. Find the **odds** of each of the following marbles being drawn. Make sure to express each answer as a reduced ratio.

- | | | |
|-----|------------------------------------|-----------------|
| 1. | Odds of drawing a yellow marble | 8 to 27 |
| 2. | Odds of drawing a black | 9 to 26 |
| 3. | Odds of a red | 6 to 29 |
| 4. | Odds of orange | 12 to 23 |
| 5. | orange or yellow | 4 to 3 |
| 6. | black or yellow | 17 to 18 |
| 7. | red, yellow, or black | 23 to 12 |
| 8. | not black | 26 to 9 |
| 9. | not black nor red | 4 to 3 |
| 10. | a primary color on the color wheel | 2 to 3 |

EXTRA:

- | | | |
|----|--------------------------|----------------|
| 1. | red or black | 3 to 4 |
| 2. | black, orange, or yellow | 29 to 6 |

**OSSAA 2023-2024
STATE GAME 2
FOURTH QUARTER
60 SECOND QUESTIONS**

RELIGION - IMPORTANT MEN IN THE BIBLE

Directions: Given a brief description, identify these men mentioned in the Bible.

- | | | |
|-----|--|-----------------|
| 1. | Spent one night in the lions' den | Daniel |
| 2. | Youngest son of Jacob | Benjamin |
| 3. | Killed 1000 Philistines with jawbone of an ass | Samson |
| 4. | Led Israelites into the Promised Land | Joshua |
| 5. | First King of Israel | Saul |
| 6. | Spends three days and nights in belly of a very large fish | Jonah |
| 7. | Israel's first high priest | Aaron |
| 8. | Son of David killed by Joab | Absalom |
| 9. | Prophet who beat his donkey | Balaam |
| 10. | Man whose wife became a pillar of salt | Lot |

EXTRA:

- | | | |
|----|--|----------------|
| 1. | Syrian military leader who had leprosy | Naaman |
| 2. | King who built temple in Jerusalem | Solomon |

**OSSAA 2023-2024
STATE GAME 2
FOURTH QUARTER
60 SECOND QUESTIONS**

MUSIC - 20TH CENTURY COMPOSERS

Directions: Given the title of a musical work by a 20th century composer, name the composer.

- | | | |
|-----|---------------------------------------|---------------------------------|
| 1. | Porgy and Bess | George <u>Gershwin</u> |
| 2. | West Side Story | Leonard <u>Bernstein</u> |
| 3. | La Mer | Claude <u>Debussy</u> |
| 4. | Rite of Spring | Igor <u>Stravinsky</u> |
| 5. | Young Person's Guide to the Orchestra | Benjamin <u>Britten</u> |
| 6. | Fanfare for the Common Man | Aaron <u>Copland</u> |
| 7. | The Planets | Gustav <u>Holst</u> |
| 8. | Give My Regards to Broadway | George M. <u>Cohan</u> |
| 9. | Mood Indigo | Duke <u>Ellington</u> |
| 10. | Adagio for Strings | Samuel <u>Barber</u> |

EXTRA:

- | | | |
|----|--------------------------|-----------------------------|
| 1. | God Bless America | Irving <u>Berlin</u> |
| 2. | Foggy Mountain Breakdown | Earl <u>Scruggs</u> |

**OSSAA 2023-2024
STATE GAME 2
EXTRA QUESTIONS**

Extra:

		Team One	Team Two
E1.	In July 2023 it was announced that this artificial sweetener has been linked to an increased risk of cancer. Name this non-saccharide sweetener that goes by the brand names NutraSweet and Equal.		
	Answer: Aspartame	_____	_____
E2.	In 1832, this American author took a month-long journey through Indian Territory. Which author of <i>Rip Van Winkle</i> chronicled his trip in the book <i>A Tour on the Prairies</i> ?		
	Answer: Washington <u>Irving</u>	_____	_____
E3.	What two-word phrase is used in computer science for the aluminum or copper device attached to the CPU to dissipate excess thermal energy?		
	Answer: Heat Sink	_____	_____
E4.	This British chef is the third richest chef in the world, behind Alan Wong and Kimbal Musk. Which chef is the star of the TV show <i>The Naked Chef</i> ?		
	Answer: Jamie <u>Oliver</u>	_____	_____
E5.	This fear leads many hotels to change the numbering of their floors and some people to circle a Friday on the calendar. What is this fear of the number 13?		
	Answer: Triskaidekaphobia	_____	_____
E6.	This six-letter term is an old-fashioned word for an unmarried girl. Which term, in the sports world, refers to a racehorse that has never won a race?		
	Answer: Maiden	_____	_____

**OSSAA 2023-2024
STATE GAME 3
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	In 1828, this restrictive tariff triggered the nullification crisis in the U.S. What name did Southerners give this tariff that inflated the cost of imported goods by as much as 50 percent?		
	Answer: <u>Tariff of Abominations</u>	_____	_____
2.	Math Computation: Convert the binary number 111010 [one one one zero one zero] into a base 10 number.		
	Answer: 58	_____	_____
3.	Artisans of the Zuni tribe use this stone when making silver squash blossom necklaces. What is this blue-green gemstone said to contain healing powers?		
	Answer: Turquoise	_____	_____
4.	Masses of neuron cell bodies located externally to the central nervous system in the peripheral nervous system are given this name. What is this place where the cell bodies of sensory and motor nerves are situated?		
	Answer: Ganglion	_____	_____
5.	This author was famous for his western novels and articles on the sport of fishing. Which man had a novel on the top ten bestseller list every year during the 1920s and 30s, including his best known novel, <i>Riders of the Purple Sage</i> ?		
	Answer: Zane <u>Grey</u>	_____	_____
6.	On July 14, 2023, this union announced its members would be joining the strike by the Writers Guild of America. Which union represents more than 160,000 entertainers concerned with reduced pay and use of AI in the increased digital environment?		
	Answer: Screen Actors Guild (or SAG)	_____	_____
7.	Before becoming president of the Confederate States of America, Jefferson Davis represented this state in Congress. Which state was the site of the siege of Vicksburg during the Civil War?		
	Answer: Mississippi	_____	_____

**OSSAA 2023-2024
STATE GAME 3
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	Math Computation: Use change of base to rewrite the following logarithmic fraction as a single log term: $\log 15 / \log 5$ [log of 15 over log of 5].		
	Answer: $\log_5 15$ [log base 5 of 15]	_____	_____
9.	This Japanese artist's most famous work is titled <i>The Great Wave off Kanagawa</i> . Which artist created a series of woodblock prints titled <i>36 Views of Mt. Fuji</i> ?		
	Answer: Katsushiko <u>Hokusai</u>	_____	_____
10.	Hemimetabolous development of some bugs results in 3 distinct life stages: egg, adult, and this immature stage of development. What is this second of the three life stages that involves multiple molts?		
	Answer: Nymph	_____	_____
11.	On December 3, 1947, this play by Tennessee Williams, starring Marlon Brando and Kim Hunter, debuted on Broadway. Which play was adapted for a movie in 1951, starring the same two actors?		
	Answer: A <u>Streetcar Named Desire</u>	_____	_____
12.	This Spaniard won his second major title by defeating Novak Djokovic at Wimbledon in July 2023. Name this man who claimed the men's singles title to go along with his 2022 U.S. Open title.		
	Answer: Carlos Garfia <u>Alcaraz</u>	_____	_____
13.	In 2016, this 1979 Nobel Peace Prize winner was elevated to sainthood by Pope Francis. Which woman received the Nobel for her work with the poor?		
	Answer: <u>Mother Teresa</u>	_____	_____
14.	Math Computation: A transversal cuts across two parallel lines. If the measure of one interior angle is 51.7 degrees, what is the measure, in degrees, of its consecutive interior angle?		
	Answer: 128.3	_____	_____

**OSSAA 2023-2024
STATE GAME 3
FIRST QUARTER
TOSS UP QUESTIONS**

Team One Team Two

15. This series of four operas is collectively known as the Ring cycle. Which full series of works based on Norse mythology includes The Rhine Gold, The Valkyrie, Siegfried, and Twilight of the Gods?

Answer: The Ring of the Nibelung (Der Ring des Nibelungen)

16. In a thin tube, surface tension and adhesion can cause a liquid to go above the level of the liquid outside the tube. What is this capability of a liquid to move in small spaces without the help of external forces?

Answer: Capillary action

17. This poetic form contains 19 lines in five tercets and one quatrain. Which format is used in Sylvia Plath's *Mad Girl's Love Song* and Dylan Thomas's *Do Not Go Gentle Into That Goodnight*?

Answer: Villanelle

18. In August 2023, devastating floods in this European country caused the deaths of at least six people. Name this country where the worst flooding occurred northeast of Ljubljana.

Answer: Slovenia

19. The highest point of this range is Aneto Peak. Which mountain range stretches 270 miles from the shores of the Mediterranean Sea to the Bay of Biscay?

Answers: Pyrenees Mountains

20. **Math Computation:** Two cards are drawn at random from a standard 52-card deck. What is the probability that both cards will be a 6, 7, or 8, when the first card is not replaced before drawing the second card? Make sure to reduce your fractional answer.

Answer: 11/221

**OSSAA 2023-2024
STATE GAME 3
SECOND QUARTER
60 SECOND QUESTIONS**

CURRENT EVENTS - FAMOUS PEOPLE WHO DIED IN 2023

Directions: Identify the following famous people who died in the year 2023.

- | | | |
|-----|--|--------------------------------|
| 1. | Starred on <i>Friends</i> | Matthew <u>Perry</u> |
| 2. | Former First Lady from 1977 to 1981 | Rosalyn <u>Carter</u> |
| 3. | Overbearing basketball coach from University of Indiana and Texas Tech | Bobby <u>Knight</u> |
| 4. | “Queen of Rock ‘n Roll” and singer of “Private Dancer” | Tina <u>Turner</u> |
| 5. | U.S. senator for California for 30 plus years | Dianne <u>Feinstein</u> |
| 6. | Hall-of-Fame linebacker for Chicago Bears | Dick <u>Butkus</u> |
| 7. | Long-time host of <i>The Price is Right</i> | Bob <u>Barker</u> |
| 8. | Songwriter of “Margaritaville” | Jimmy <u>Buffett</u> |
| 9. | Actress from <i>Three’s Company</i> | Suzanne <u>Somers</u> |
| 10. | Televangelist and founder of CBN | Pat <u>Robertson</u> |

EXTRA:

- | | | |
|----|---|-------------------------|
| 1. | Hall-of-Fame running back for Cleveland Browns | Jim <u>Brown</u> |
| 2. | Guitarist/singer of “Dirty Mind” and “Hammerhead” | Jeff <u>Beck</u> |

**OSSAA 2023-2024
STATE GAME 3
SECOND QUARTER
60 SECOND QUESTIONS**

US HISTORICAL PEOPLE - STATUARY HALL

Directions: Given a statue of a person added to Statuary Hall at the U.S. Capitol Building, name the state that statue represents.

- | | | |
|-----|----------------------------------|----------------|
| 1. | Sequoyah | Oklahoma |
| 2. | Kamehameha I [Kah-may-ah-may-ah] | Hawaii |
| 3. | John Calhoun | South Carolina |
| 4. | Henry Clay | Kentucky |
| 5. | Ethan Allen | Vermont |
| 6. | Sam Houston | Texas |
| 7. | Brigham Young | Utah |
| 8. | Junipero Serra | California |
| 9. | Roger Williams | Rhode Island |
| 10. | Andrew Jackson | Tennessee |

EXTRA:

- | | | |
|----|------------------------|-----------|
| 1. | William Jennings Bryan | Nebraska |
| 2. | Huey P. Long Jr. | Louisiana |

**OSSAA 2023-2024
STATE GAME 3
SECOND QUARTER
60 SECOND QUESTIONS**

MYTHOLOGY - GREEK MYTHOLOGICAL CHARACTERS

Directions: Given a brief description, identify the following from Greek mythology

- | | | |
|-----|--|-------------------|
| 1. | Titan depicted in art as the carrier of the celestial globe | Atlas |
| 2. | Water monster that grew two heads for every one cut off | Hydra |
| 3. | Daughter of Zeus and Demeter kidnapped by Hades | Persephone |
| 4. | Daughter of King Minos who helped Perseus escape the Labyrinth | Ariadne |
| 5. | Lyre player who couldn't resist looking back and lost his wife as a result | Orpheus |
| 6. | Cyclops blinded by Odysseus | Polyphemus |
| 7. | Second consort of Zeus, the personification of justice | Themis |
| 8. | Monster who was half woman, half serpent | Echidna |
| 9. | King of Sparta who was married to Helen | Menelaus |
| 10. | Hunter said to have been killed by a giant scorpion | Orion |

EXTRA:

- | | | |
|----|---|---------------|
| 1. | Daughter of Tantalus whose children were killed by Apollo and Artemis | Niobe |
| 2. | Centaur Hercules accidentally shot with a poisoned arrow | Chiron |

**OSSAA 2023-2024
STATE GAME 3
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	This Brazilian architect was known for his curvaceous glass-and-white concrete buildings. Which architect designed the majority of those buildings for Brazil's capital city Brasilia?		
	Answer: Oscar <u>Niemeyer</u>	_____	_____
22.	This group is the largest of the vascular plant groups. What is the term used by botanists for all flowering plants?		
	Answer: Angiosperms	_____	_____
23.	In the Anglo-Saxon epic <i>Beowulf</i> , this man is the only one who stays when Beowulf fights the dragon. Which thane helps kill the dragon when Beowulf is mortally wounded?		
	Answer: Wiglaf	_____	_____
24.	In 2023, this actress released the book of poetry, "Pretty Boys are Poisonous." Which actress is more famous for her roles in <i>Jennifer's Body</i> , <i>Transformers</i> , and <i>Teenage Mutant Ninja Turtles</i> ?		
	Answer: Megan Fox	_____	_____
25.	The 1917 Green Corn Rebellion by Oklahoma tenant farmers was intended to end this event. Farmers who opposed which event planned to march to Washington, surviving on the way by eating barbecued beef and roasted green corn?		
	Answer: Federal Conscription Act (World War I Draft)	_____	_____
26.	Math Computation: Solve the following inequality to find V: $4V + 61 > 173$ [4V plus 61 is greater than 173].		
	Answer: $V > 28$ [V is greater than 28] (or 28 is less than V)	_____	_____
27.	In 2023, this Oklahoma chef won the James Beard Award for Best Chef Southwest. Which chef creates his culinary experience at Grey Sweater in Oklahoma City?		
	Answer: Andrew <u>Black</u>	_____	_____

**OSSAA 2023-2024
STATE GAME 3
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	When a mineral deposit is extracted from the rock by water and carried downstream, the sinking ore forms one of these accumulations. What is the two word geology term for the accumulation of gold or other precious ores at a bend of a river?		
	Answer: <u>Placer deposit</u>	_____	_____
29.	This 9-letter verb means to divide something into two branches or parts. What is this word beginning with the letter B?		
	Answer: Bifurcate	_____	_____
30.	This player is the third leading scorer in NBA history, trailing only Kareem Abdul Jabbar and LeBron James. Which former give-and-go Utah Jazz partner of John Stockton was nicknamed "The Mailman"?		
	Answer: <u>Karl Malone</u>	_____	_____
31.	In 1832, President Andrew Jackson was in opposition to the decision in the Supreme Court case Worcester v. Georgia recognizing this Native American group as a sovereign nation. Which Native American nation was the subject of this landmark case?		
	Answer: <u>Cherokee Nation</u>	_____	_____
32.	Math Computation: What is the second derivative, with respect to x, of the expression: $4x^6 + 12x^3 + 31$ [4 x to the sixth plus 12 x cubed plus 31]?		
	Answer: $120x^4 + 72x$ [120 x to the fourth plus 72x]	_____	_____
33.	In 1799, this famous stele was unearthed by a French officer during Napoleon's campaign in Egypt. Which Ancient Egyptian text, fully translated by 1824, paved the way for deciphering Egyptian hieroglyphics?		
	Answer: <u>Rosetta Stone</u>	_____	_____
34.	This type of scientist celebrates the discovery of tree fronds in a fossil bed. What name is used for a scientist who studies fossilized plants?		
	Answer: Paleobotanist	_____	_____

**OSSAA 2023-2024
STATE GAME 3
THIRD QUARTER
TOSS UP QUESTIONS**

Team One Team Two

35. In 1885, this Mark Twain novel about a runaway boy was published in the U.S. Which book became controversial for its realism about life in the pre-Civil War South?

Answer: The Adventures of Huckleberry Finn

36. In June 2023, the Supreme Court upheld this 1978 federal law covering the adoption and guardianship of Native American children. Which act was challenged in several states because it prioritized the placement of Native American children with members of their own tribe?

Answer: Indian Child Welfare Act

37. In December 1818, this 21st state was admitted to the United States. Which state is nicknamed the Prairie State?

Answer: Illinois

38. **Math Computation:** Subtract matrix B from matrix A: Matrix A has elements 15 and negative 8 top row left to right, and elements negative 5 and 12 bottom row left to right. Matrix B has elements 32 and negative 14 top row left to right and elements 15 and negative 8 bottom row left to right.

Answer: -17 and 6 top row left to right, negative 20 and 20 bottom row left to right

39. This painter's first masterpiece was *The Sick Child*, which captured the illness of his sister who died of tuberculosis. Which Norwegian artist greatly influenced Expressionism with his work *The Scream*?

Answer: Edvard Munch

40. **Science Computation:** A hydraulic lift has an area of 0.12 square meters. This small piston is connected in a closed circuit to a piston of 1.0 square meters that can support a weight of 1500 pounds. How much weight, in pounds, must be put on the smaller piston to maintain equilibrium?

Answer: 180

**OSSAA 2023-2024
STATE GAME 3
FOURTH QUARTER
60 SECOND QUESTIONS**

LITERATURE - NOVELS BY THEIR INITIALS

Directions: Given the first letter of each word in a novel's title and the last name of the author of that novel, name the novel. Remember articles such as "the" are not omitted in the answers.

- | | | |
|-----|--|---|
| 1. | Charles Dickens, D. C. | <u>David Copperfield</u> |
| 2. | Nathaniel Hawthorne, T. S. L. | <u>The Scarlet Letter</u> |
| 3. | Lewis Carroll, A. A. I. W. | <u>Alice's Adventures in Wonderland</u> |
| 4. | Alexander Dumas, T. C. O. M. C. | <u>The Count of Monte Cristo</u> |
| 5. | Johnathon Swift, G. T. | <u>Gulliver's Travels</u> |
| 6. | Leo Tolstoy, A. K. | <u>Anna Karenina</u> |
| 7. | Toni Morrison, S. O. S. | <u>Song of Solomon</u> |
| 8. | Gabriel Garcia Marquez, O. H. Y. O. S. | <u>One Hundred Years of Solitude</u> |
| 9. | V. S. Naipaul, A. B. I. T. R. | <u>A Bend in the River</u> |
| 10. | Robert Louis Stevenson, T. S. C. O. D. J. A. M. H. | <u>The Strange Case of Dr. Jekyll and Mr. Hyde</u> |

EXTRA:

- | | | |
|----|-------------------------------|--------------------------------------|
| 1. | Fyodor Dostoevsky, T. B. K., | <u>The Brothers Karamazov</u> |
| 2. | William Faulkner, A. I. L. D. | <u>As I Lay Dying</u> |

**OSSAA 2023-2024
STATE GAME 3
FOURTH QUARTER
60 SECOND QUESTIONS**

CHEMISTRY COMPUTATION - ELECTRON CONFIGURATIONS

Directions: Given the name and atomic number, calculate the electron configuration for each of the following elements. Do not, however, use the shortened form from the nearest inert gas. {Moderator – read 1s² 2s² 2p⁶ 3s¹ as: 1-s-2 2-s-2 2-p-6 3-s-1}

- | | | |
|-----|----------------|--|
| 1. | Carbon, 6 | $1s^2 2s^2 2p^2$ |
| 2. | Sodium, 11 | $1s^2 2s^2 2p^6 3s^1$ |
| 3. | Silicon, 14 | $1s^2 2s^2 2p^6 3s^2 3p^2$ |
| 4. | Calcium, 20 | $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2$ |
| 5. | Phosphorus, 15 | $1s^2 2s^2 2p^6 3s^2 3p^3$ |
| 6. | Scandium, 21 | $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^1$ |
| 7. | Nickel, 28 | $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^8$ |
| 8. | Zinc, 30 | $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10}$ |
| 9. | Arsenic, 33 | $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^3$ |
| 10. | Cobalt, 27 | $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^7$ |

EXTRA:

- | | | |
|----|--------------|--------------------------------------|
| 1. | Vanadium, 23 | $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^3$ |
| 2. | Chlorine, 17 | $1s^2 2s^2 2p^6 3s^2 3p^5$ |

**OSSAA 2023-2024
STATE GAME 3
FOURTH QUARTER
60 SECOND QUESTIONS**

MATH - SIMPLE TRIG RATIOS

Directions: Evaluate each of the following trigonometric ratios, simplifying your answer. Express your answers as radicals if needed. {Moderator: $\sqrt{3}$ is expressed as radical 3}

- | | | |
|-----|---|---|
| 1. | sin $5\pi/6$ [sine of 5pi over 6] | 1/2 |
| 2. | cos $4\pi/3$ [cosine of 4 pi over 3] | -1/2 |
| 3. | Tan 240° [tangent of 240 degrees] | $\sqrt{3}$ [radical 3] |
| 4. | Sec $5\pi/4$ [secant of 5pi over 4] | $-\sqrt{2}$ [negative radical 2] |
| 5. | Sin 240° [sine of 240 degrees] | $-\sqrt{3}/2$ [negative radical 3 over 2] (or -1/2 radical 3) |
| 6. | tan $5\pi/4$ [tangent of 5 pi over 4] | 1 |
| 7. | Cos 270° [cosine of 270 degrees] | 0 |
| 8. | Csc $11\pi/6$ [cosecant of 11 pi over 6] | -2 |
| 9. | Sec $7\pi/4$ [secant of 7 pi over 4] | $\sqrt{2}$ [radical 2] |
| 10. | Csc 510° [cosecant of 510 degrees] | 2 |

EXTRA:

- | | | |
|----|---|--|
| 1. | Cos 330° [cosine of 330 degrees] | $\sqrt{3}/2$ [radical 3 over 2] (or 1/2 radical 3) |
| 2. | Cot $3\pi/4$ [cotangent of 3 pi over 4] | -1 |

**OSSAA 2023-2024
STATE GAME 3
EXTRA QUESTIONS**

Extra:

		Team One	Team Two
E1.	In 1936, this American playwright won the Nobel Prize for literature. Which playwright's works include <i>Beyond the Horizon</i> and <i>Anna Christie</i> ?		
	Answer: Eugene <u>O'Neill</u>	_____	_____
E2.	This pop band began in 1981 in Los Angeles with members Michelle Steele, Debbi and Vicki Peterson, and Susanna Hoffs. Name this band with hits such as "Hazy Shade of Winter" and "Walk Like an Egyptian".		
	Answer: The <u>Bangles</u>	_____	_____
E3.	In 1975, this man led a brutal military takeover of Cambodia. Which leader of the Khmer Rouge was responsible for the deaths of more than one million Cambodians between 1975 and 1979?		
	Answer: Pol Pot	_____	_____
E4.	Math Computation: What is the complement, in degrees, of a 37.4 degree angle?		
	Answer: 52.6	_____	_____
E5.	This Broadway musical opens with the song <i>Chim Chim Cher-ee</i> . Which musical became a hit movie starring Julie Andrews and Dick Van Dyke?		
	Answer: <u>Mary Poppins</u>	_____	_____
E6.	The Trematoda [trem'ah-to'dah] class contains two types of parasitic flatworms, both given this name. What is this term beginning with an "F"?		
	Answer: Fluke	_____	_____

**OSSAA 2023-2024
STATE GAME 4
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	<p>Math Computation: Use the quadratic formula to find both solutions to the following equation: $x^2 + 12x + 5 = 0$ [x squared plus 12x plus 5 equals zero]. Reduce your answers but leave your answers in radical form.</p> <p>Answer: $-6 \pm \sqrt{31}$ [negative 6 plus or minus radical (square root of) 31 (or -6 plus radical 31 and -6 minus radical 31)]</p>	_____	_____
2.	<p>A line in a poem by this Irish poet gives the movie <i>No Country For Old Men</i> its title. Which poet wrote <i>Sailing to Byzantium</i>?</p> <p>Answer: <u>W.B. Yeats</u></p>	_____	_____
3.	<p>Only four species of this animal of the Merostomata [mer'o-sto'mah-tah] class are alive today. Name this marine animal that has a hard, U-shaped shell, four pairs of legs, and a long, unsegmented rear telson.</p> <p>Answer: <u>Horseshoe crab</u></p>	_____	_____
4.	<p>One-fifth of the world's petroleum passes through this strait on a daily basis. Which strait connects the Persian Gulf to the Gulf of Oman?</p> <p>Answer: <u>Strait of Hormuz</u></p>	_____	_____
5.	<p>In July 2023, five wild burros were shot and killed in this national park. Name this park where the burros were shot near the Lower Wildrose area, one of the few spots in this arid park where water can be found.</p> <p>Answer: <u>Death Valley</u></p>	_____	_____
6.	<p>This sculptor's masterpiece monumental project is his <i>Lion of Belfort</i>, carved out of a red sandstone hill in southern France. Which sculptor's best-known work is titled <i>Liberty Enlightening the World</i>?</p> <p>Answer: <u>Frederic-Auguste Bartholdi</u></p>	_____	_____
7.	<p>Math Computation: Angle theta is in quadrant one and the sine of angle A equals 12 over 13. Find the sine of 2A by using the double angle identity for sine, $\sin 2A = 2 \sin A \cos A$ [sine 2 A equals 2 sine A cosine A].</p> <p>Answer: <u>120/169</u></p>	_____	_____

**OSSAA 2023-2024
STATE GAME 4
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	This 11-letter plural noun is defined as small pieces or bits. What is this term one might use to indicate what something has been smashed into?		
	Answer: Smithereens	_____	_____
9.	Science computation: What is the spring constant of a spring that, when compressed a distance of 4 meters, produces elastic potential energy of 320 Joules? Recall the formula: $PE_{\text{elastic}} = 1/2 k x^2$ [P E elastic equals one half k x squared] and express your answer in Joules per meter squared.		
	Answer: 40	_____	_____
10.	This woman's books include <i>The Rise and Fall of the Choctaw Republic</i> , and <i>The Road to Disappearance: A History of the Creek Indians</i> . Which Oklahoma historian was renowned for her research on Oklahoma's treatment of the Five Civilized Tribes?		
	Answer: Angie Elbertha Debo	_____	_____
11.	In October 2023, this group led a series of attacks into Israel from Gaza. Name this militant Palestinian Islamic organization that has been governing the Gaza Strip since 2007.		
	Answer: Hamas (or Islamic Resistance Movement)	_____	_____
12.	In 1990, Campbell's Soup introduced a new cream soup featuring this green vegetable. Which vegetable starred in this soup which became their most successful new soup in 55 years?		
	Answer: Broccoli	_____	_____
13.	Math Computation: An equilateral triangle has a perimeter of 24 feet. What is the exact area of the triangle in square feet?		
	Answer: $16\sqrt{3}$ [16 radical (square root) 3]	_____	_____
14.	In this type of economic system, private owners control a country's trade and industry for profit. Which economic system is most prevalent in the United States?		
	Answer: Capitalism	_____	_____

**OSSAA 2023-2024
STATE GAME 4
FIRST QUARTER
TOSS UP QUESTIONS**

Team One Team Two

15. This man was awarded a patent in 1906 for his “apparatus for treating air”. Who is credited as the inventor of the modern air conditioner?

Answer: Willis Carrier

16. According to this Renaissance philosopher, truth requires evidence from the real world. Which man published his ideas in his 1620 work *Novum Organum*?

Answer: Sir Francis Bacon

17. In the 2023 Tour de France, this rider ended up more than seven minutes ahead of the second-place rider, Tadej Pogacar [tah-day poh-got-cha]. Name this Danish cyclist who won the Tour de France for the second consecutive year.

Answer: Jonas Vingegaard [vin-geh-go]

18. This fictional character appears as the protagonist in a series of five novels written by James Fenimore Cooper. What is the name of the frontiersman and guide featured in The Leatherstocking Tales?

Answer: Natty Bumppo

19. **Math Computation:** What is the sample standard deviation in a normally distributed range of data, if the sample variance is 12.25?

Answer: 3.5

20. This leader of the American Railway Union once ran for president of the United States while in prison. Which man ran for president a total of five times on the Socialist Party of America ticket?

Answer: Eugene V. Debs

**OSSAA 2023-2024
STATE GAME 4
SECOND QUARTER
60 SECOND QUESTIONS**

FOREIGN LANGUAGE - LATIN PHRASES

Directions: Identify the English meaning of each of the following common Latin phrases.

- | | | |
|-----|--|------------------------------------|
| 1. | Carpe Diem [car-pay dee-um] | Seize the day |
| 2. | Cogito, ergo, sum [koh-gee-toh ayr-goh soom] | I think therefore I am |
| 3. | Terra firma | Solid ground |
| 4. | Alter ego | Other self |
| 5. | Quid pro quo | This for that |
| 6. | Caveat emptor [kah-vee-aht emp-tohr] | Let the buyer beware |
| 7. | Mea culpa [me-ah kul-pah] | My fault (I am responsible) |
| 8. | Vox populi | Voice of the people |
| 9. | Modus operandi [moh-duss ah-per-ahn-dy] | Method of operating |
| 10. | Ex post facto | After the fact |

EXTRA:

- | | | |
|----|-------------------------------|----------------------|
| 1. | Ad infinitum [in-fee-nee-tum] | To infinity |
| 2. | In situ [sih-too] | In that place |

**OSSAA 2023-2024
STATE GAME 4
SECOND QUARTER
60 SECOND QUESTIONS**

MATH - BINARY TO BASE 10

Directions: Convert each of the following binary numbers into base 10 numbers. {Moderator: read 1010 as one zero one zero}

1.	1100	12
2.	10101	21
3.	11111	31
4.	111101	61
5.	110011	51
6.	101101	45
7.	1100111	103
8.	1011011	91
9.	1000110	70
10.	1111010	122

EXTRA:

1.	1110111	119
2.	110100	52

**OSSAA 2023-2024
STATE GAME 4
SECOND QUARTER
60 SECOND QUESTIONS**

SCIENCE - PHOBIAS

Directions: Given the fear someone has, identify the scientific name for that phobia.

- | | | |
|-----|----------------------------|-------------------------------------|
| 1. | Fear of strangers | Xenophobia |
| 2. | Sleep | Hypnophobia (or somniphobia) |
| 3. | Technology | Technophobia |
| 4. | Blood | Hemophobia |
| 5. | Fish | Ichthyophobia |
| 6. | The elderly or getting old | Gerontophobia |
| 7. | Flying | Aviophobia (or aviatophobia) |
| 8. | Bad breath | Halitophobia |
| 9. | Computers | Cyberphobia |
| 10. | Bees | Melissophobia |

EXTRA:

- | | | |
|----|-------------|--|
| 1. | Loud sounds | Phonophobia |
| 2. | Dolls | Pediophobia (or automatonophobia) |

**OSSAA 2023-2024
STATE GAME 4
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	In 2004, this spacecraft became the first to collect physical samples from a comet as it approached the nucleus of a comet. Which spacecraft collected particles from comet P/Wild 2 [P vilt 2]?		
	Answer: Stardust	_____	_____
22.	In 1913, this painting by Marcel Duchamp caused a scandal at the Armory Show in New York City. Which painting represented a dynamic version of facet Cubism, where the image depicts successive movements of a body?		
	Answer: <u>Nude Descending a Staircase, No. 2</u>	_____	_____
23.	This 1962 to 1971 CBS sitcom starred actors Buddy Ebsen, Irene Ryan, and Donna Douglas. Which TV show's theme song begins "Come and listen to my story 'bout a man named Jed"?		
	Answer: <u>The Beverly Hillbillies</u>	_____	_____
24.	This play, which begins with a story told by Egeon, was the first of Shakespeare's comedies. Which play is about two sets of twin brothers separated at birth who have the same names?		
	Answer: <u>The Comedy of Errors</u>	_____	_____
25.	Math Computation: Solve the following system of equations using elimination: $3x + 4y = -6$ and $5x - 2y = 16$. Express your answer as coordinates, (x, y) [x comma y].		
	Answer: (2, -3)	_____	_____
26.	The Red Crescent Society is one half of the international relief organization known as the IFRC. Which other organization, created in 1881, joined with the Red Crescent to create the world's largest humanitarian network?		
	Answer: <u>Red Cross</u>	_____	_____
27.	Science computation: Using Charles's Law, a gas with a volume of 600 milliliters at 540 Kelvin will have a volume of 800 milliliters at what temperature? Put your answer in Kelvin.		
	Answer: 720	_____	_____

**OSSAA 2023-2024
STATE GAME 4
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	This Biblical book is the source of the words that became the title of the famous Steinbeck novel about Oklahomans fleeing the Dust Bowl. Which book talks of the grapes of god's wrath gathered by an angel?		
	Answer: Revelation	_____	_____
29.	This section of the kidney transports the urine from the medullary [med'u-lar-ee] pyramids to the renal pelvis, passing into the ureter. Which chamber of the kidney collects and transports the urine?		
	Answer: Renal <u>calyx</u> [kal'ukx]	_____	_____
30.	This Sanskrit epic of India was written between 1000 and 700 BC. Which poem about a war within a family is the longest single poem in existence?		
	Answer: The <u>Mahabharata</u>	_____	_____
31.	In July 2023, while speaking at a leadership conference, this senator stopped talking and stood in silence for about 20 seconds before being led away by another senator. Name this legislative leader who fell, suffering a concussion, in March.		
	Answer: Mitch <u>McConnell</u>	_____	_____
32.	The geography term polder is most often used to refer to reclaimed land in this country. Which country originally used windmills to pump seawater out of low-lying land enclosed by dikes?		
	Answer: Netherlands	_____	_____
33.	Math Computation: Find the limit as x approaches infinity of the expression $(12x^5 - 2x^2 + 48)/(8x^3 + 16x + 8)$ [the quantity 12 x to the fifth minus 2 x squared plus 48 end quantity over the quantity 8 x cubed plus 16x plus 8 end quantity]		
	Answer: Infinity	_____	_____
34.	This sculpture is the only artwork Michelangelo signed. Which sculpture can be seen in St. Paul's Basilica in the Vatican?		
	Answer: The <u>Pietà</u>	_____	_____

**OSSAA 2023-2024
STATE GAME 4
THIRD QUARTER
TOSS UP QUESTIONS**

Team One Team Two

35. This kind of lake is formed when a large river has a wide meander separated when the river cuts through an S-bend to create a shortcut. What is the name for these C-shaped lakes left behind by the river?

Answer: Oxbow lake

36. Published in January 1974, this Peter Benchley novel spent 44 weeks on the New York Times bestseller list and spawned a famous film by Stephen Spielberg. Which novel did Benchley later believe contributed to the endangerment of some shark species?

Answer: Jaws

37. During a regulation high school basketball game, each quarter is set at this number of minutes. How long is each of the regular quarters of a game?

Answer: 8

38. This famous explorer was sent to locate the headwaters of the Arkansas and Red Rivers in the early 1800s. Which man's name is on a landmark peak in Colorado?

Answer: Zebulon Pike

39. **Math Computation:** Convert into a binary number, the base ten number 84.

Answer: 1010100 [one zero one zero one zero zero]

40. In 1932, a radio show sponsored by this canned milk company debuted nationally on NBC radio. Which company, still in business today, touted its evaporated milk as "milk from contented cows?"

Answer: Carnation

**OSSAA 2023-2024
STATE GAME 4
FOURTH QUARTER
60 SECOND QUESTIONS**

MATH - GEOMETRIC MEAN

Directions: Find the geometric mean between the two given numbers. As necessary, express your answer in radical form.

- | | | |
|-----|-------------|--|
| 1. | 25 and 49 | 35 |
| 2. | 16 and 100 | 40 |
| 3. | 81 and 225 | 135 |
| 4. | 400 and 144 | 240 |
| 5. | 8 and 32 | 16 |
| 6. | 12 and 27 | 18 |
| 7. | 20 and 45 | 30 |
| 8. | 28 and 112 | 56 |
| 9. | 60 and 80 | $40\sqrt{3}$ [40 radical 3 or 40 times the square root of 3] |
| 10. | 75 and 64 | $40\sqrt{3}$ [40 radical 3 or 40 times the square root of 3] |

EXTRA:

- | | | |
|----|-------------|------------|
| 1. | 169 and 441 | 273 |
| 2. | 44 and 275 | 110 |

**OSSAA 2023-2024
STATE GAME 4
FOURTH QUARTER
60 SECOND QUESTIONS**

AMERICAN LITERATURE - POEMS AND POETS

Directions: Given the title of a well-known American poem, name the poet.

- | | | |
|-----|---------------------------------------|---------------------------------|
| 1. | Because I Could Not Stop for Death | Emily <u>Dickinson</u> |
| 2. | O Captain! My Captain! | Walt <u>Whitman</u> |
| 3. | Chicago | Carl <u>Sandburg</u> |
| 4. | The Love Song of J. Alfred Prufrock | T. S. <u>Eliot</u> |
| 5. | All the Tired Horses in the Sun | Joy <u>Harjo</u> |
| 6. | A New National Anthem | Ada <u>Limón</u> |
| 7. | The Powwow at the End of the World | Sherman <u>Alexie</u> |
| 8. | To His Excellency, General Washington | Phyllis <u>Wheatley</u> |
| 9. | Richard Cory | Edwin Arlington <u>Robinson</u> |
| 10. | The Hill We Climb | Amanda <u>Gorman</u> |

EXTRA:

- | | | |
|----|-------------------------------------|-------------------------|
| 1. | One Art | Elizabeth <u>Bishop</u> |
| 2. | The Death of the Ball Turret Gunner | Randall <u>Jarrell</u> |

**OSSAA 2023-2024
STATE GAME 4
FOURTH QUARTER
60 SECOND QUESTIONS**

MUSIC THEORY - MINOR KEY SIGNATURES

Directions: Given the number of sharps or flats, identify the minor key signature. You do not have to say minor in your answer.

- | | | |
|-----|--------------------|----------------|
| 1. | 7 sharps | A-sharp |
| 2. | 3 flats | C |
| 3. | 4 sharps | C-sharp |
| 4. | 6 flats | E-flat |
| 5. | 4 flats | F |
| 6. | 2 sharps | B |
| 7. | 6 sharps | D-sharp |
| 8. | No flats or sharps | A |
| 9. | 1 sharp | E |
| 10. | 5 sharps | G-sharp |

EXTRA:

- | | | |
|----|---------|---------------|
| 1. | 2 flats | D |
| 2. | 5 flats | B-flat |

**OSSAA 2023-2024
STATE GAME 4
EXTRA QUESTIONS**

Extra:

Team One Team Two

- E1. In 2023, this woman was dropped as host of the National Book Awards Ceremony after she resumed production of her talk show during the writers' strike. Which actress began her career as the little girl on *E.T. the Extra Terrestrial*?

Answer: Drew Barrymore

- E2. In Virgil's poem *The Aeneid*, this woman kills herself when Aeneas leaves her. Which woman was the mythical founder and first queen of ancient Carthage?

Answer: Dido

- E3. **Math Computation:** When using cooking measurements, how many teaspoons are in 18 tablespoons?

Answer: 54

- E4. The regimes of Benito Mussolini, Adolf Hitler, Francisco Franco, and Juan Perón have all been labeled this type of political ideology. Which term is loosely defined as a regime that exalts ethno-nationalism above the individual and is ruled by an autocratic dictator?

Answer: Fascism

- E5. **Science computation:** What is the net work done on a wagon if the wagon has a weight of 380.0 Newtons and is moved 9.00 meters? Express your answer in joules with the correct number of significant digits.

Answer: 3420 (or 3.42 times 10 to the third)

- E6. According to the Bible, this man introduced Baal worship to the kingdom of Israel. Which king's marriage to Jezebel was the catalyst for this religious upheaval?

Answer: Ahab

**OSSAA 2023-2024
STATE GAME 5
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	<i>The Ecclesiastical History of England</i> , written by this man, was the first work of history in which the AD system of dating is used. Who was this Anglo-Saxon monk and scholar?		
	Answer: The Venerable <u>Bede</u>	_____	_____
2.	Math Computation: There are 20 dimes, 25 nickels, and 35 pennies in a bag. What is the reduced fractional probability that a dime, then a penny will be drawn forth, after replacing the dime? Reduce your fractional answer.		
	Answer: 7/64	_____	_____
3.	This man served as the first U.S. Secretary of State under the administration of George Washington. Which influential politician had previously succeeded Benjamin Franklin as Minister to France in 1795?		
	Answer: Thomas <u>Jefferson</u>	_____	_____
4.	In this process, biological populations genetically drift apart to become separate species. In which process do two different subspecies evolve from an original because of changes in environmental conditions when the populations are separated from each other?		
	Answer: Speciation	_____	_____
5.	This art technique is usually done in two parts, a charcoal and sinopia sketch directly on a wet plaster layer and then pigment quickly added to the sketch to create vivid colors. What is the name for this technique used by Leonardo da Vinci for <i>The Last Supper</i> ?		
	Answer: Fresco	_____	_____
6.	In August 2023, wildfires raced through Lahaina [lah-high-nah] and Ka'anapali [kah-ah-nah-pah-lee] on this island, killing at least 100 people. Name this second-largest of the Hawaiian islands.		
	Answer: Maui	_____	_____
7.	This American playwright's first successful play was <i>The Zoo Story</i> . Which man is better known for his work <i>Who's Afraid of Virginia Wolf?</i>		
	Answer: Edward <u>Albee</u>	_____	_____

**OSSAA 2023-2024
STATE GAME 5
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	Math Computation: What is the 13 th term in an arithmetic sequence that begins with 5 and has a common difference of 7?		
	Answer: 89	_____	_____
9.	On Shrove Tuesday in 1497, this public destruction of cosmetics, art, and books took place in the public square of Florence, Italy. What three-word name was given to this event called for by Dominican friar Savonarola to obliterate objects that distracted from religious duties?		
	Answer: The <u>Bonfire of the Vanities</u>	_____	_____
10.	Science computation: What is the molecular formula for Sodium Nitrate?		
	Answer: NaNO₃ [N A N O 3]	_____	_____
11.	This 1913 ballet, subtitled <i>Pictures From Pagan Russia</i> , opens with a bassoon solo. Which Igor Stravinsky work sparked a riot at its premiere in Paris?		
	Answer: The <u>Rite of Spring</u>	_____	_____
12.	The 2023 CMAs started with a performance by Wynona Judd and this singer. Name this singer who performed "Need a Favor" with Judd.		
	Answer: Jelly Roll	_____	_____
13.	This woman holds the distinction of being the first published poet in America. Which woman's first book of poetry was titled <i>The Tenth Muse Lately Sprung Up in America</i> ?		
	Answer: Anne <u>Bradstreet</u>	_____	_____
14.	Math Computation: On what intervals is the function: $f(x) = x^3 - 5x^2 + 9x - 13$ [F of x equals x cubed minus 5 x squared plus 9x minus 13] concave up? Express your answer in the form: $x > a$ [x is greater than a].		
	Answer: $x > 5/3$ [x is greater than five thirds (or 5 over 3 or 1 & 2/3)]	_____	_____

**OSSAA 2023-2024
STATE GAME 5
FIRST QUARTER
TOSS UP QUESTIONS**

Team One Team Two

15. This temple in Cambodia is the largest religious monument in the world. Which landmark appears on the Cambodian flag?

Answer: Angkor Wat

16. In 1821, this physicist experimented with light passing through different types of media. Which physicist, for whom the law is named, developed the law for the angles of refraction when light passes between two media?

Answer: Willebrord Snell

17. This French woman escaped the guillotine by accepting a commission to make wax death masks and body casts of those executed, including Louis XVI and Marie Antoinette. Which woman became famous for her wax museums?

Answer: Madame Marie Tussaud

18. In July 2023, this agency raised the key interest rate to the highest it has been in 22 years. Name this governmental agency charged with maximizing employment, stabilizing prices, and moderating long-term interest rates.

Answer: Federal Reserve System

19. Plagued with eye problems, this author wrote his last novel while contending with 25 episodes of blindness. Which Irish novelist's last work, *Finnegan's Wake*, was partially written with crayon on pieces of cardboard?

Answer: James Joyce

20. **Math Computation:** What are the coordinates of the foci of a hyperbola with the following equation: $x^2/36 - y^2/64 = 1$ [x squared over 36 minus y squared over 64 equals 1]?

Answer: (10, 0) and (-10, 0) [may say plus or minus 10 comma 0]

**OSSAA 2023-2024
STATE GAME 5
SECOND QUARTER
60 SECOND QUESTIONS**

MOTOR SPORTS - NASCAR DRIVERS BY CAR NUMBERS

Directions: Given the major sponsor and car number, identify the driver of each of the following cars in the NASCAR Cup series.

- | | | |
|-----|-----------------------------------|-----------------------------------|
| 1. | Hendrick Cars.com, #5 | Kyle <u>Larson</u> |
| 2. | Bass Pro Shops, #3 | Austin <u>Dillon</u> |
| 3. | Kohler Power Reserve, #6 | Brad <u>Keselowski</u> |
| 4. | Netspend, #8 | <u>Kyle Busch</u> |
| 5. | AdventHealth, #1 | Ross <u>Chastain</u> |
| 6. | Smithfield, #77 | Ty <u>Dillon</u> |
| 7. | Kroger, #47 | Ricky <u>Stenhouse Jr.</u> |
| 8. | LeafFilter Gutter Protection, #31 | Justin <u>Haley</u> |
| 9. | Focus Factor, #43 | Erik <u>Jones</u> |
| 10. | Fastenal, #17 | Chris <u>Buescher</u> |

EXTRA:

- | | | |
|----|----------------|-----------------------------|
| 1. | Axalta, #24 | William <u>Bryon</u> |
| 2. | GEARWRENCH, #4 | Kevin <u>Harvick</u> |

**OSSAA 2023-2024
STATE GAME 5
SECOND QUARTER
60 SECOND QUESTIONS**

SCIENCE - FATHERS OF SCIENCE FIELDS

Directions: Given a scientific field, identify each of the following people who are considered to be the fathers of that field.

- | | | |
|-----|---------------------------|-----------------------------------|
| 1. | Father of modern rocketry | Robert <u>Goddard</u> |
| 2. | Father of history | Herodotus |
| 3. | Computing | Charles <u>Babbage</u> |
| 4. | Radio | Nikola <u>Tesla</u> |
| 5. | Hydrogen bomb | Edward <u>Teller</u> |
| 6. | Air conditioning | Willis <u>Carrier</u> |
| 7. | Analytic geometry | Rene <u>Descartes</u> |
| 8. | The laser | Charles Hard <u>Townes</u> |
| 9. | Trigonometry | Hipparchus |
| 10. | Mobile phone | Martin <u>Cooper</u> |

EXTRA:

- | | | |
|----|---------------------|-------------------------------|
| 1. | Modern science | <u>Galileo Galilei</u> |
| 2. | Modern aerodynamics | Ludwig <u>Prandtl</u> |

**OSSAA 2023-2024
STATE GAME 5
SECOND QUARTER
60 SECOND QUESTIONS**

GOVERNMENT - LEADERS OF WORLD COUNTRIES

Directions: Identify the country to which each of the following people were leaders, as of October 2023.

- | | | |
|-----|---|------------------|
| 1. | President Vladimir Putin | Russia |
| 2. | President Luiz Inacio Lula da Silva | Brazil |
| 3. | Prime Minister Narendra Modi | India |
| 4. | Prime Minister Kyriakos Mitsotakis | Greece |
| 5. | President Bashar al-Assad | Syria |
| 6. | Prime Minister – Giorgia Meloni | Italy |
| 7. | Prime Minister – Mohammed Shia' Al Sudani | Iraq |
| 8. | Chancellor Olaf Scholz | Germany |
| 9. | President William Ruto | Kenya |
| 10. | President Joko Widodo | Indonesia |

EXTRA:

- | | | |
|----|------------------------------|--------------------|
| 1. | President Yoon Suk-yeol | South Korea |
| 2. | Prime Minister Pedro Sanchez | Spain |

**OSSAA 2023-2024
STATE GAME 5
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	The Guardian statue on Oklahoma's capitol dome was designed by this Seminole-Creek artist. Which man served as the principal chief of the Seminole Nation of Oklahoma from 2005 until 2009?		
	Answer: Enoch Kelly Haney	_____	_____
22.	This member of the carotenoid family causes plants to demonstrate phototropism. Which most common carotenoid can be broken down to two vitamin A molecules in humans?		
	Answer: Beta-carotene	_____	_____
23.	In 2019, a Japanese sushi tycoon shelled out a staggering 3.1 million dollars for one of these fish that weighed in at 612 pounds. Which variety of fish is the most expensive fish in the world?		
	Answer: Bluefin Tuna	_____	_____
24.	This man finished his tennis career with 77 singles and 78 doubles titles, the most of any player in the modern era. Which highly confrontational American player questioned officials' decisions, saying "You cannot be serious!"?		
	Answer: John McEnroe	_____	_____
25.	These sisters of Greek mythology were said to be the result of an affair between Zeus and Mnemosyne. What collective name was given to these women who were the inspiration for artists and scientists?		
	Answer: Muses	_____	_____
26.	Math Computation: Company B has a market share of 25 points. If the total number of units sold per year in this market is 45,000 units, how many did Company B produce?		
	Answer: 11,250	_____	_____
27.	This type of map projection depicts the meridians as equally spaced parallel vertical lines, creating a distortion at the poles. What type of projection allows navigators on ships to plot a straight line course?		
	Answer: <u>Mercator</u> projection	_____	_____

**OSSAA 2023-2024
STATE GAME 5
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	This wave is the first that appears on an Electrocardiogram of a normal human heartbeat. Which alphabet letter designates this wave representing atrial depolarization?		
	Answer: <u>P</u> wave	_____	_____
29.	This religious text contains fifteen sections and includes the books Nephi, Moroni, and Ether. Which text is described as a sacred record of peoples in ancient America compiled from original engravings on metal plates?		
	Answer: <u>Book of Mormon</u>	_____	_____
30.	A November 2023 election in this African country saw President George Weah lose to challenger Joseph Boakai. In which country, whose largest city is Monrovia, had Weah's administration become synonymous with corruption?		
	Answer: <u>Liberia</u>	_____	_____
31.	In this novel, a governess marries her employer after his wife, who is being kept in the attic, dies in a fire. What famous novel was published under the pen name Currer Bell in 1847?		
	Answer: <u>Jane Eyre</u>	_____	_____
32.	Math Computation: Divide $(x^3 + 3x^2 + 6x + 4) / (x + 1)$ [the quantity x cubed plus 3 x squared plus 6x plus 4 end quantity by the quantity x plus 1 end quantity].		
	Answer: $x^2 + 2x + 4$ [x squared plus 2x plus 4]	_____	_____
33.	On September 2, 1945, this battleship became the site of the signing of the Japanese Instrument of Surrender ending World War II. Which battleship now serves as a museum ship stationed in Pearl Harbor?		
	Answer: <u>USS Missouri</u>	_____	_____
34.	Along with Pluto and Makemake, this dwarf planet is one of three in the Kuiper belt. Which ringed object is named for the Hawaiian goddess of birth and fertility?		
	Answer: <u>Haumea</u>	_____	_____

**OSSAA 2023-2024
STATE GAME 5
THIRD QUARTER
TOSS UP QUESTIONS**

Team One Team Two

35. This French artist has two of the top 5 most expensive paintings sold at auction. Which artist's top sellers are *When Will You Marry?* and *The Card Players*?

Answer: Paul Gauguin

36. This actor won Oscars for his roles in *The Godfather* and *Raging Bull*. Which actor also received Academy Award nominations for *Taxi Driver*, *The Deer Hunter*, *Cape Fear*, *Silver Linings Playbook*, and *Awakenings*?

Answer: Robert De Niro

37. This final play by Anton Chekhov debuted in Moscow in 1904. Which play is arguably Chekov's best known work?

Answer: The Cherry Orchard

38. **Math Computation:** What is the volume, in cubic yards, of a cone that has a base radius of 4 yards and a height of 6 yards? Put your answer in terms of pi.

Answer: 32 pi

39. In 1912, this quadruple alliance was formed by Bulgaria, Serbia, Greece, and Montenegro. Which league was directed against the Ottoman Empire?

Answer: The Balkan League

40. **Science computation:** What is the average velocity of an ant that travels from the 34 centimeter mark on a ruler to the 76 centimeter meter mark in 5.0 seconds? Put your answer in centimeters per second, with the correct number of significant digits.

Answer: 8.4

**OSSAA 2023-2024
STATE GAME 5
FOURTH QUARTER
60 SECOND QUESTIONS**

LITERATURE - 18TH CENTURY AUTHORS

Directions: Given a work by an 18th century author, name the author.

- | | | |
|-----|---|---------------------------|
| 1. | Mansfield Park | Jane <u>Austen</u> |
| 2. | I Wandered Lonely as a Cloud | William <u>Wordsworth</u> |
| 3. | A Modest Proposal | Jonathan <u>Swift</u> |
| 4. | The Devil and Tom Walker | Washington <u>Irving</u> |
| 5. | Ivanhoe | Sir Walter <u>Scott</u> |
| 6. | The Rape of the Lock | Alexander <u>Pope</u> |
| 7. | Poems, Chiefly in the Scottish Dialect | Robert <u>Burns</u> |
| 8. | Robinson Crusoe | Daniel <u>Defoe</u> |
| 9. | On Being Brought from Africa to America | Phyllis <u>Wheatley</u> |
| 10. | Pamela | Samuel <u>Richardson</u> |

EXTRA:

- | | | |
|----|------------------------|--------------------------|
| 1. | Candide | Voltaire |
| 2. | Poor Richard's Almanac | Benjamin <u>Franklin</u> |

**OSSAA 2023-2024
STATE GAME 5
FOURTH QUARTER
60 SECOND QUESTIONS**

FINE ARTS - FAMOUS LANDSCAPE PAINTINGS

Directions: Given the title of a painting classified as a landscape, name the artist.

- | | | |
|-----|--|-----------------------------|
| 1. | The Starry Night | Vincent <u>van Gogh</u> |
| 2. | View of Toledo | <u>El Greco</u> |
| 3. | Water Lilies | Claude <u>Monet</u> |
| 4. | The Hay Wain | John <u>Constable</u> |
| 5. | Christina's World | Andrew <u>Wyeth</u> |
| 6. | The Gleaners | Jean-Francois <u>Millet</u> |
| 7. | Rain, Steam and Speed- The Great Western Railway | J. M. W. <u>Turner</u> |
| 8. | The Oxbow | Thomas <u>Cole</u> |
| 9. | Ploughing in the Nivernais | Rosa <u>Bonheur</u> |
| 10. | Mont Sainte-Victoire | Paul <u>Cezanne</u> |

EXTRA:

- | | | |
|----|-------------------------------|-------------------------------|
| 1. | Impression: Sunrise | Claude <u>Monet</u> |
| 2. | Wanderer above the Sea of Fog | Caspar David <u>Friedrich</u> |

**OSSAA 2023-2024
STATE GAME 5
FOURTH QUARTER
60 SECOND QUESTIONS**

GEOMETRY - SIDES OF SPECIAL RIGHT TRIANGLES

Directions: You will be given the length of one side of a 30-60-90 or 45-45-90 triangle. Your task is to find the exact lengths of the other two sides of the triangle. Say radical as needed in your answer. [Moderator – read $4\sqrt{3}$ as 4 radical 3; the two answers can be in either order]

- | | | |
|-----|--|---|
| 1. | 30-60-90, longer side is $7\sqrt{3}$ [7 radical 3] | 7, 14 |
| 2. | 30-60-90, hypotenuse is 18 | 9, $9\sqrt{3}$ |
| 3. | 45-45-90, smallest side is 5 | 5, $5\sqrt{2}$ |
| 4. | 30-60-90, smallest side is 11 | $11\sqrt{3}$, 22 |
| 5. | 45-45-90, hypotenuse is $15\sqrt{2}$ | 15, 15 |
| 6. | 30-60-90, smallest side is $8\sqrt{3}$ | 24, $16\sqrt{3}$ |
| 7. | 30-60-90, longer side is 33 | $11\sqrt{3}$, $22\sqrt{3}$ |
| 8. | 45-45-90, hypotenuse is 26 | $13\sqrt{2}$, $13\sqrt{2}$ |
| 9. | 30-60-90, smallest side is $6\sqrt{2}$ | $12\sqrt{2}$, $6\sqrt{6}$ |
| 10. | 45-45-90, smallest side is $9\sqrt{6}$ | $9\sqrt{6}$, $18\sqrt{3}$ |

EXTRA:

- | | | |
|----|--|---|
| 1. | 30-60-90, smallest side is 12 | $12\sqrt{3}$, 24 |
| 2. | 45-45-90, smallest side is $9\sqrt{3}$ | $9\sqrt{3}$, $9\sqrt{6}$ |

**OSSAA 2023-2024
STATE GAME 5
EXTRA QUESTIONS**

Extra:

		Team One	Team Two
E1.	In a symphony, this instrument family has the greatest number of different instruments. Which family includes the piano, celesta, and gong?		
	Answer: Percussion	_____	_____
E2.	This former NFL player was killed in a murder-suicide in July 2023. Name this quarterback who played for the Houston Oilers/Tennessee Titans for 13 years and led them to the playoffs 4 times.		
	Answer: Steve <u>McNair</u>	_____	_____
E3.	In 1993, this woman became the first woman and first African American to recite at a U.S. presidential inauguration. Which poet recited her poem "On the Pulse of Morning?"		
	Answer: Maya <u>Angelou</u>	_____	_____
E4.	Math Computation: Simplify: $e^{\ln 24} - \ln e^{21}$ [e to the power natural log of 24 minus natural log of e to the twenty-first power].		
	Answer: 3	_____	_____
E5.	This city was the first capital of ancient Egypt. Which city was established by Menes following his unification of the country?		
	Answer: Memphis	_____	_____
E6.	This structure of a flower is usually comprised of four microsporangia. In which section of the stamen are pollen grains formed through mitosis?		
	Answer: Anther	_____	_____

**OSSAA 2023-2024
STATE GAME 6
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	Math Computation: Find the summation from I equals 1 to I equals 8 of the expression: 6 I. Answer: 216	_____	_____
2.	This hyphenated sculpture term refers to any 3D image created on a 2D plane that can be viewed from all sides with little distortion. What is the name of this type of relief used to create images on coins? Answer: Bas-relief [bah-ree-leef]	_____	_____
3.	The names of the three key layers of a blood vessel all begin with this word. Which word comes before intima, media, and externa when referencing the layers of arteries and veins? Answer: Tunica [tu'ni-kah]	_____	_____
4.	This ten-letter word refers to a period of paid leave for study or travel. Which word is commonly used in reference to leave taken by college professors? Answer: Sabbatical	_____	_____
5.	This longtime U.S. senator passed away in September of 2023. Name this woman who served as mayor of San Francisco prior to serving as a U.S. senator from California for 31 years. Answer: Dianne <u>Feinstein</u>	_____	_____
6.	In 1819, the land that is now Oklahoma became a part of this territory. Which territory was established following Missouri's petition for statehood? Answer: <u>Arkansas</u> Territory	_____	_____
7.	Math Computation: The curve x equals the square root of y is rotated around the y-axis from zero to one. What is the volume of this resulting figure in cubic units and in terms of pi? Answer: 1/2 pi (or pi/2 or 0.5pi)	_____	_____

**OSSAA 2023-2024
STATE GAME 6
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	In 2022, this country became not only the world's biggest sugar consumer, but also its number one producer of sugar. Which Asian country surpassed Brazil in regards to production?		
	Answer: India	_____	_____
9.	Science Computation: How many grams are present in 3.000 moles of cobalt? Use the molar mass of cobalt to be 58.90.		
	Answer: 176.7	_____	_____
10.	This five-letter verb means to hit someone or something very hard. Which outdated word, beginning with S, is used often in the Old Testament when Israel is instructed to take action against other countries?		
	Answer: Smite	_____	_____
11.	In August 2023, the Guinness Book of World Records recorded that this pepper passed the Carolina Reaper on the Scoville scale. Identify the name of the new world's hottest pepper.		
	Answer: Pepper X	_____	_____
12.	This socio-economic theory formed the basis for those who promoted a laissez-faire style of economy in the late 19th century. Which theory proposed that a person's socio-economic status was a result of natural selection?		
	Answer: <u>Social Darwinism</u>	_____	_____
13.	Math Computation: What is the sample standard deviation among the data points: 4, 6, 8, 10, and 12? Remember, the standard deviation squared is equal to the summation of the squares of the difference between each term and the mean, divided by one less than the number of terms. Leave your answer as a reduced radical.		
	Answer: $\sqrt{10}$ [radical (square root) 10]	_____	_____
14.	This prophet's teachings concentrated on the conflict between Ahura Mazda and Angra Mainyu. Which prophet is considered the founder of Persia's pre-classical religion?		
	Answer: Zarathustra (accept Zoroaster)	_____	_____

**OSSAA 2023-2024
STATE GAME 6
FIRST QUARTER
TOSS UP QUESTIONS**

Team One Team Two

15. This psychological defense mechanism is seen when a young child starts acting like a baby when a new sibling arrives at the home. Which defense mechanism triggers a slip back to a less demanding stage of psychological development when challenged by a confusing situation?

Answer: Regression

16. This illuminated manuscript, a masterpiece of Celtic design, currently resides at Trinity College in Dublin, Ireland. Which famous manuscript contains the four gospels of the New Testament?

Answer: Book of Kells

17. This player defeated Aryna Sabalenka in 3 sets to win the 2023 U.S. Open Women's Singles title. Name this 19-year-old American tennis player from Delray Beach, Florida.

Answer: Cori "Coco" Gauff

18. This Civil War battle was the first to include the participation of Native American forces. Which battle took place near Fayetteville in northwest Arkansas?

Answer: Battle of Pea Ridge

19. **Math Computation:** How many liters of a 10% salt solution must be added to 20 liters of a 40% salt solution in order to obtain a 25% salt solution? Put your answer in liters.

Answer: 20

20. After her death in 1954, this artist's home country declared her paintings to be a part of its national heritage, prohibiting their export from the country. Which Mexican artist was known for her self-portraits?

Answer: Frida Kahlo

**OSSAA 2023-2024
STATE GAME 6
SECOND QUARTER
60 SECOND QUESTIONS**

U.S. GEOGRAPHY - THE STATE DUE WEST

Directions: Given a U.S. capital and state, name the state that is due west of that city.

- | | | |
|-----|-------------------------|---------------------|
| 1. | Madison, Wisconsin | Iowa |
| 2. | Topeka, Kansas | Colorado |
| 3. | Phoenix, Arizona | California |
| 4. | Raleigh, North Carolina | Tennessee |
| 5. | Montgomery, Alabama | Mississippi |
| 6. | Trenton, New Jersey | Pennsylvania |
| 7. | Pierre, South Dakota | Wyoming |
| 8. | Boise, Idaho | Oregon |
| 9. | Salt Lake City, Utah | Nevada |
| 10. | St. Paul, Minnesota | South Dakota |

EXTRA:

- | | | |
|----|----------------------|-----------------|
| 1. | Nashville, Tennessee | Missouri |
| 2. | Frankfurt, Kentucky | Indiana |

**OSSAA 2023-2024
STATE GAME 6
SECOND QUARTER
60 SECOND QUESTIONS**

SCIENCE - CHEMISTRY IONIC FORMULAS

Directions: What is the correct name for each of the following ionic compounds given their molecular formula? [Moderator: O is the letter not the number zero.]

- | | | |
|-----|--|---|
| 1. | NaOH [N A O H] | Sodium Hydroxide |
| 2. | AgNO ₃ [A G N O 3] | Silver Nitrate |
| 3. | K ₂ SO ₄ [K 2 S O 4] | Potassium Sulfate |
| 4. | MgCO ₃ [M G C O 3] | Magnesium Carbonate |
| 5. | Ba(IO ₃) ₂ [B A I O 3 2] | Barium Iodate |
| 6. | Fe(HCO ₃) ₂ [F E H C O 3 2] | Iron Bicarbonate |
| 7. | Cu(MnO ₄) ₂ [C U M N O 4 2] | Cuprous (or Copper 2) Permanganate |
| 8. | PbSO ₃ [P B S O 3] | Plumbous (or Lead 2) Sulfite |
| 9. | Sn ₃ (PO ₄) ₂ [S N 3 P O 4 2] | Stannous (or Tin 2) Phosphate |
| 10. | As ₂ (Cr ₂ O ₇) ₃ [A S 2 C R 2 O 7 3] | Arsenic Dichromate |

EXTRA:

- | | | |
|----|--|---|
| 1. | Co(HSO ₄) ₂ [C O H S O 4 2] | Cobalt (2) Bisulfate |
| 2. | Cr ₃ (AsO ₄) ₂ [C R 3 A S O 4 2] | Chromic (or Chromium 3) Arsenate |

**OSSAA 2023-2024
STATE GAME 6
SECOND QUARTER
60 SECOND QUESTIONS**

LITERATURE - PULITZER PRIZE WINNERS FOR FICTION

Directions: Given the year and the author, name the book that won the Pulitzer Prize for Fiction.

- | | | |
|-----|--------------------------|---------------------------------------|
| 1. | 1953- Ernest Hemingway | The <u>Old Man and the Sea</u> |
| 2. | 1961- Harper Lee | <u>To Kill a Mockingbird</u> |
| 3. | 1988- Toni Morrison | Beloved |
| 4. | 1986- Larry McMurtry | <u>Lonesome Dove</u> |
| 5. | 1980- Norman Mailer | The <u>Executioner's Song</u> |
| 6. | 2021- Louise Erdrich | The <u>Night Watchman</u> |
| 7. | 2007- Cormac McCarthy | The <u>Road</u> |
| 8. | 1969- N. Scott Momaday | <u>House Made of Dawn</u> |
| 9. | 2023- Barbara Kingsolver | <u>Demon Copperhead</u> |
| 10. | 2020- Colson Whitehead | The <u>Nickel Boys</u> |

EXTRA:

- | | | |
|----|---------------------|--|
| 1. | 2015- Anthony Doerr | <u>All the Light We Cannot See</u> |
| 2. | 2008- Junot Diaz | The <u>Brief Wondrous Life of Oscar Wao</u> |

**OSSAA 2023-2024
STATE GAME 6
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	The term for this phobia comes from the Greek word meaning “horse.” What is the scientific term for an irrational fear of horses?		
	Answer: Hippophobia	_____	_____
22.	In 2024, a revival of this 1899 play by Anton Chekhov is scheduled to open in April. Which play will feature Alfred Molina and Steve Carell in his Broadway debut?		
	Answer: Uncle Vanya	_____	_____
23.	The object of this board game is to create train routes that match the destination cards each player was dealt at the beginning of the game. In which game do players pick up two train cards from the table or stack, play a train route with the cards in their hand, or pick up three more train routes?		
	Answer: <u>Ticket to Ride</u>	_____	_____
24.	This elite French military unit, established in 1622, wore a blue tabard featuring a cross and a fleur-de-lis. Which personal guard to the king fought in almost every French campaign of the 17th and 18th centuries?		
	Answer: The <u>Musketeers</u> of the Guard	_____	_____
25.	Math Computation: Convert into a binary number, the base ten number 128.		
	Answer: 10000000 [one zero zero zero zero zero zero zero]	_____	_____
26.	This Baroque composer used musical notes to include his own name in his work <i>The Art of Fugue</i> . Which man composed <i>The Goldberg Variations</i> ?		
	Answer: Johann Sebastian <u>Bach</u>	_____	_____
27.	This transitional substance is created when plant material is buried in a swamp and begins the transformation into coal. What partly decayed vegetation is used in some portions of the world as a source of fossil fuel?		
	Answer: Peat	_____	_____

**OSSAA 2023-2024
STATE GAME 6
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	This Oscar Wilde poem was inspired by the hanging of Charles Thomas Wooldridge. Which poem did Wilde write during his two years in prison for public indecency?		
	Answer: The <u>Ballad of Reading Gaol</u> [Red-ding Jayl]	_____	_____
29.	In September 2023, catastrophic flooding from Storm Daniel hit this African country, killing more than 4000 people. Which fourth-largest country in Africa is bordered by Egypt to the east and Algeria to the west?		
	Answer: Libya	_____	_____
30.	This parallel can be found at 66.5 degrees south latitude. What is the common name for this latitude that includes the South Pole?		
	Answer: <u>Antarctic Circle</u>	_____	_____
31.	Math Computation: What is the area, in square feet, of a sector of a circle with a central angle of 30 degrees, if the radius of the circle is 18 feet? Put your answer in terms of pi.		
	Answer: 27 pi	_____	_____
32.	These architectural features, often seen in Roman buildings, are designed to turn tensile stresses into compressive stresses. What is the name for these curved supports over an open space that feature a keystone ?		
	Answer: Arches	_____	_____
33.	What type of charge transfer is being performed when someone brings a charged object near a grounded conductor and then, when the charges have left the conductor, removes the ground, leaving the conductor with a net charge?		
	Answer: Induction	_____	_____
34.	This literary term is used by critics to indicate verses that are badly written or expressed, usually for comic effect. What is this 8-letter D word for bad poetry that is irregular in rhythm?		
	Answer: Doggerel	_____	_____

**OSSAA 2023-2024
STATE GAME 6
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
35.	This song was named “Single of the Year” and “Song of the Year” at the 2023 CMA Awards. Name this song written by Tracy Chapman and sung by Luke Combs.		
	Answer: “Fast Car”	_____	_____
36.	In 1915, the Ohoyohoma Circle, a group formed by the wives of members of the Fifth legislature, proposed these two colors as the state colors of Oklahoma. Which two colors are Oklahoma's officially adopted state colors?		
	Answer: <u>Green and White</u>	_____	_____
37.	Math Computation: Simplify i^{63} [i to the 63 rd power].		
	Answer: -i	_____	_____
38.	In 2006, the last cannery for this fruit in Hawaii closed its doors. Which fruit is now only exported fresh at a fraction of the volume that was once produced there?		
	Answer: Pineapple	_____	_____
39.	Spell the type of cell that has a membrane-enclosed nucleus, a nucleolus, and mitochondrion, unlike prokaryotic cells. Spell Eukaryotic.		
	Answer: E-U-K-A-R-Y-O-T-I-C	_____	_____
40.	This word is the most used word in English conversation. Which pronoun appears often when a speaker is talking in first person?		
	Answer: I	_____	_____

**OSSAA 2023-2024
STATE GAME 6
FOURTH QUARTER
60 SECOND QUESTIONS**

FINE ARTS - FAMOUS FEMALE ARTISTS

Directions: Given the century, a representative work, and a nationality, name the following female artists.

- | | | |
|-----|---|-------------------------------------|
| 1. | 20th, <i>Black Iris</i> , American | Georgia <u>O'Keeffe</u> |
| 2. | 17th, <i>Self-Portrait as the Allegory of Painting</i> , Italian | Artemisia <u>Gentileschi</u> |
| 3. | 19th, <i>The Horse Fair</i> , French | Rosa <u>Bonheur</u> |
| 4. | 19th, <i>Woman at Her Toilette</i> , French | Berthe <u>Morisot</u> |
| 5. | 19th, <i>The Child's Bath</i> , American | Mary <u>Cassatt</u> |
| 6. | 20th, <i>No. 7 Adulthood</i> , Swedish | Hilma af <u>Klint</u> |
| 7. | 20th, <i>Self-Portrait with Thorn Necklace and Hummingbird</i> , Mexico | Frida <u>Kahlo</u> |
| 8. | 20th- <i>Maman</i> , French | Louise <u>Bourgeois</u> |
| 9. | 20th, <i>Mountains and Sea</i> , American | Helen <u>Frankenthaler</u> |
| 10. | 20th, <i>The Dinner Party</i> , American | Judy <u>Chicago</u> |

EXTRA:

- | | | |
|----|--|------------------------------|
| 1. | 20th, <i>Infinity Mirrored Room</i> , Japanese | YaYoi <u>Kusama</u> |
| 2. | 20th, <i>The Harp</i> , African American | Augusta <u>Savage</u> |

**OSSAA 2023-2024
STATE GAME 6
FOURTH QUARTER
60 SECOND QUESTIONS**

U. S. HISTORY - U. S. PRESIDENTS AND HISTORIC EVENTS

Directions: Given an event in U.S. history, name the president in office at the time.

- | | | |
|-----|-------------------------------------|-------------------------------------|
| 1. | Bay of Pigs | John F. <u>Kennedy</u> |
| 2. | Bombing of Hiroshima | Harry S. <u>Truman</u> |
| 3. | British capture of Washington D. C. | James <u>Madison</u> |
| 4. | Haymarket Square Riot | Grover <u>Cleveland</u> |
| 5. | Teapot Dome Scandal | Warren <u>Harding</u> |
| 6. | Beginning of Pony Express | James <u>Buchanan</u> |
| 7. | Passage of Social Security Act | <u>Franklin D. Roosevelt</u> |
| 8. | End of Korean War | Dwight D. <u>Eisenhower</u> |
| 9. | Wright brother's first flight | <u>Theodore Roosevelt</u> |
| 10. | American hostages taken in Iran | Jimmy <u>Carter</u> |

EXTRA:

- | | | |
|----|------------------------------------|-------------------------------|
| 1. | Completion of the Gadsden Purchase | Franklin <u>Pierce</u> |
| 2. | Opening of Panama Canal | Woodrow <u>Wilson</u> |

**OSSAA 2023-2024
STATE GAME 6
FOURTH QUARTER
60 SECOND QUESTIONS**

MATH - LIMITS AS X APPROACHES INFINITY

Directions: Find the limits of each of the following expressions as x approaches positive infinity.

1. $x^2 - 3x^2$ [x squared minus 3 x squared] **Infinity**
2. $1/x$ [one over x] **0**
3. $(12x^3 + 10)/(4x^3 + 2)$ [the quantity 12 x cubed plus 10 end quantity over the quantity 4 x cubed plus 2] **3**
4. $(27x^2 + 15)/(9x^2 + 3)$ [the quantity 27 x squared plus 15 end quantity over the quantity 9 x squared plus 3] **3**
5. $(42x^4 - 26)/(3x^4 - 13)$ [the quantity 42 x to the fourth minus 26 end quantity over the quantity 3 x to the fourth minus 13] **14**
6. $(48x^5 + 45)/(16x^5 - 9)$ [the quantity 48 x to the fifth plus 45 end quantity over the quantity 16 x to the fifth minus 9] **3**
7. $(25x^4 + 35)/(15x^4 - 7)$ [the quantity 25 x to the fourth plus 35 end quantity over the quantity 15 x to the fourth minus 7] **5/3 (or 1&2/3)**
8. $(14x^6 + 20)/(9x^5 - 4)$ [the quantity 14 x to the sixth plus 20 end quantity over the quantity 9 x to the fifth minus 4] **Infinity**
9. $(40x^3 + 9)/(8x^4 - 6)$ [the quantity 40 x cubed plus 9 end quantity over the quantity 8 x to the fourth minus 6] **Zero**
10. $(21x^2 + 12)/(14x^3 - 2)$ [the quantity 21 x squared plus 12 end quantity over the quantity 14 x cubed minus 2] **3/2 (or 1&1/2 or 1.5)**

EXTRA:

1. $(30x^3 - 18)/(25x^3 + 6)$ [the quantity 30 x cubed minus 18 end quantity over the quantity 25 x cubed plus 6] **6/5 (or 1&1/5 or 1.2)**
2. $(40x^4 + 21)/(15x^2 + 7)$ [the quantity 40 x to the fourth plus 21 end quantity over the quantity 15 x squared plus 7] **Infinity**

**OSSAA 2023-2024
STATE GAME 6
EXTRA QUESTIONS**

Extra:

		Team One	Team Two
E1.	This singer's first top-10 hit was “Ain’t That a Shame” in 1955. Which Rock and Roll pioneer's greatest hit was “Blueberry Hill” in 1956?		
	Answer: Antoine “Fats” <u>Domino</u>	_____	_____
E2.	This amendment to the U.S. Constitution was ratified in 1913 and took six years to fully implement. Which amendment established popular election of U.S. senators by the residents of the state represented?		
	Answer: <u>17th</u> Amendment	_____	_____
E3.	This calculus term indicates an infinite sequence of numbers with a sequence of partial sums that has a specific limit. What is this series in which the difference between the partial sum, S_n minus L is less than or equal to epsilon?		
	Answer: Convergent (or converging)	_____	_____
E4.	This Senate procedure requires the votes of three-fifths of the full Senate in order to pass. Which procedure is specifically used to end a filibuster?		
	Answer: Cloture	_____	_____
E5.	This metal has the second largest liquid range behind Mercury, becoming liquid at 86 degrees, just above room temperature. What is this element with atomic number of 31, lying just below aluminum on the periodic table?		
	Answer: Gallium	_____	_____
E6.	The Napoleonic Wars are the general setting for this extensive novel by Leo Tolstoy. Which novel's primary setting revolves around the French invasion of Russia in 1812?		
	Answer: War and Peace	_____	_____

**OSSAA 2023-2024
STATE GAME 7
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
1.	This Dutch artist's works include <i>Ascending and Descending</i> and <i>Sky and Water</i> . Which artist is known for his visual paradoxes and optical illusions?		
	Answer: M. C. <u>Escher</u>	_____	_____
2.	Math Computation: Solve the following equation to find G: $6 + \sqrt{3G - 17} = 14$ [6 plus the square root of the quantity 3G minus 17 equals 14].		
	Answer: (G=) 27	_____	_____
3.	Plays by this Greek author were translated by Percy Bysshe Shelley and Countee Cullen. Which playwright penned the plays <i>Cyclops</i> and <i>Medea</i> ?		
	Answer: Euripides	_____	_____
4.	This quantity is defined as the rate of charge movement in a conductor. Which quantity can be found by dividing the amount of charge passing through a given area by time?		
	Answer: Electric <u>current</u>	_____	_____
5.	The capital of this ancient empire, mentioned in the Bible, was located where the modern town of Boğazkale [Bahz-kahl-ay], Turkey now stands. Which empire's capital, destroyed in 1190 BC, was called Hattusa?		
	Answer: <u>Hittite</u> Empire	_____	_____
6.	This woman passed away on November 19, 2023, following a fight with dementia. Which woman worked alongside her husband expanding the nonprofit, Habitat for Humanity, after leaving the White House in 1981?		
	Answer: <u>Rosalyn Carter</u>	_____	_____
7.	The musical <i>Come From Away</i> tells the story of 7000 passengers stranded in Newfoundland after this historical event. Which 21st century event caused the shutdown of U.S. airspace and the diversion of all incoming European flights to Canada?		
	Answer: 9/11 (accept equivalent answers)	_____	_____

**OSSAA 2023-2024
STATE GAME 7
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
8.	Math Computation: What is the reduced fractional probability that two hearts will be drawn from a standard deck of cards if the first card is not replaced prior to drawing the second?		
	Answer: 1/17	_____	_____
9.	The Australian poet Andrew Barton "Banjo" Paterson is best remembered for this poem. Which poem is known as Australia's unofficial national anthem?		
	Answer: <u>Waltzing Matilda</u>	_____	_____
10.	This short stage of mitosis happens when all the chromatids have aligned at the equatorial plate of the cell and the centromeres split. What is this stage that occurs immediately before anaphase?		
	Answer: Metaphase	_____	_____
11.	This tiny landlocked kingdom, located between Tibet and India, is the only country in the world with the Tantric form of Mahayana Buddhism as its official religion. Which country is also the only nation where tobacco is banned?		
	Answer: Bhutan	_____	_____
12.	This woman was named FIFA [fee-fah] World Player of the Year in 2001 and 2002. Which American soccer player helped lead the US team to the 1991 and 1999 World Cup titles as well as the 1996 and 2004 Olympic gold medals?		
	Answer: Mariel Margaret (Mia) <u>Hamm</u>-Garcia	_____	_____
13.	This horizontal beam forms the base of the entablature on a building such as the Parthenon. What is the name for this architectural feature supported by the capitals of the columns?		
	Answer: Architrave	_____	_____
14.	Math Computation: The equation for finding the displacement of an object is: $D = -6T^2 + 13T - 11$ [D equals negative 6 T squared plus 13T minus 11]. What is the velocity of the object at time $T = 5$?		
	Answer: (v=) -47	_____	_____

**OSSAA 2023-2024
STATE GAME 7
FIRST QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
15.	The non-fiction work, <i>All the President's Men</i> , details the events behind this U.S. presidential scandal. Which scandal was the focus of this book by Bob Woodward and Carl Bernstein?		
	Answer: Watergate	_____	_____
16.	This order of insects has over 300,000 separate species, making up about 25% of all organisms. Which order has hard exoskeletons and hardened forewings, and includes all beetles?		
	Answer: Coleoptera [ko-le-op'ter-ah]	_____	_____
17.	In 1902, the land for this former national park was purchased from the Chickasaw Nation of Oklahoma. Which park was reclassified as a national recreational in 1976 and renamed for the Chickasaws?		
	Answer: <u>Platt</u> National Park	_____	_____
18.	In October 2023, the U.S. bombed military facilities and weapons-making facilities in Syria and Iraq that were allegedly backed by militia from this country. What country is the home for the Asaib Ahl al-Haq, the Badr Brigades, and the Kataeb Hezbollah, as well as the Islamic Revolutionary Guard Corps?		
	Answer: Iran	_____	_____
19.	In 1923, Frank C. Mars of Minnesota introduced this candy bar, which soon became the best selling candy bar in the U.S. Which candy bar preceded both the Snickers and Three Musketeers bars in the Mars company lineup?		
	Answer: Milky Way	_____	_____
20.	Math Computation: A regular hexagon has sides that measure 30 feet. What is the exact area of the hexagon in square feet?		
	Answer: $1350\sqrt{3}$ [1350 radical (square root) 3]	_____	_____

**OSSAA 2023-2024
STATE GAME 7
SECOND QUARTER
60 SECOND QUESTIONS**

CULINARY ARTS - NATIONAL DISH ABCs

Directions: Given a dish that is considered a national dish, name the country. All answers will be in alphabetical order beginning with A.

- | | | |
|-----|--------------------------------------|--------------------|
| 1. | Wiener Schnitzel [Vee-ner shnit-zel] | Austria |
| 2. | Feijoada [fay-jow-ah-duh] | Brazil |
| 3. | Poutine [pooh-teen] | Canada |
| 4. | Smørrebrød [smor-eh-broad] | Denmark |
| 5. | Pupusa [pooh-pooh-suh] | El Salvador |
| 6. | Beef Bourguignon [boar-gee-nyon] | France |
| 7. | Bratwurst | Germany |
| 8. | Griot [Gree-oh] | Haiti |
| 9. | Falafel | Israel |
| 10. | Ackee and Saltfish | Jamaica |

EXTRA:

- | | | |
|----|------------|-------------------|
| 1. | Beshbarmak | Kyrgyzstan |
| 2. | Larb | Laos |

**OSSAA 2023-2024
STATE GAME 7
SECOND QUARTER
60 SECOND QUESTIONS**

LITERATURE - FICTIONAL DETECTIVES

Directions: Given the title of the first book or short story in which a fictional detective appears and the author, name the detective.

- | | | |
|-----|--|-------------------------|
| 1. | <i>The Secret of the Old Clock</i> , Carolyn Keene | Nancy Drew |
| 2. | <i>The Murder at the Vicarage</i> , Agatha Christie | Miss Marple |
| 3. | <i>The Big Sleep</i> , Raymond Chandler | Philip Marlowe |
| 4. | <i>The Blue Cross</i> , G. K. Chesterton | Father Brown |
| 5. | <i>Murder, She Wrote</i> , Donald Bain | Jessica Fletcher |
| 6. | <i>A is for Alibi</i> , Sue Grafton | Kinsey Milhone |
| 7. | <i>The Murders in the Rue Morgue</i> , Edgar Allan Poe | Auguste Dupin |
| 8. | <i>The Mysterious Affair at Styles</i> , Agatha Christie | Hercule Poirot |
| 9. | <i>Along Came a Spider</i> , James Patterson | Alex Cross |
| 10. | <i>The Maltese Falcon</i> , Dashiell Hammett | Sam Spade |

EXTRA:

- | | | |
|----|--|------------------------|
| 1. | <i>A Study in Scarlet</i> , Arthur Conan Doyle | Sherlock Holmes |
| 2. | <i>Cover Her Face</i> , P.D. James | Adam Dalgliesh |

**OSSAA 2023-2024
STATE GAME 7
SECOND QUARTER
60 SECOND QUESTIONS**

U. S. HISTORY - FAMOUS BATTLE LOCATIONS

Directions: Given a famous battle on American soil, identify the state in which that battle took place.

- | | | |
|-----|-----------------------|----------------------|
| 1. | Lexington and Concord | Massachusetts |
| 2. | Yorktown | Virginia |
| 3. | Tippecanoe | Indiana |
| 4. | Gettysburg | Pennsylvania |
| 5. | Saratoga | New York |
| 6. | Little Bighorn | Montana |
| 7. | Antietam | Maryland |
| 8. | Vicksburg | Mississippi |
| 9. | Bunker Hill | Massachusetts |
| 10. | San Jacinto | Texas |

EXTRA:

- | | | |
|----|-------------|-----------------------|
| 1. | Pea Ridge | Arkansas |
| 2. | Fort Sumter | South Carolina |

**OSSAA 2023-2024
STATE GAME 7
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
21.	In English grammar, these four pronouns are used to point out specific people or things. What are the four demonstrative pronouns?		
	Answer: <u>This, that, these, those</u>	_____	_____
22.	This woman helped lead the group of scientists who first discovered nuclear fission of uranium but was not awarded a share of the 1944 Nobel prize in Chemistry with Otto Hahn. Which Austrian-Swedish physicist discovered protactinium and has element 109 named for her?		
	Answer: Lise <u>Meitner</u>	_____	_____
23.	This amendment to the U.S. Constitution provides citizenship status to the children of immigrants. Which Reconstruction amendment also provides equal protection under the law to former slaves?		
	Answer: <u>14th</u> Amendment	_____	_____
24.	The primary purpose of this automobile part is to route current from the ignition coil to the spark plugs at the correct intervals. Which spinning shaft in internal combustion engines uses spark ignition?		
	Answer: Distributor	_____	_____
25.	In Greek mythology, this god used water and earth to create Pandora. Which Greek god also crafted the armor used by Achilles in the Trojan War?		
	Answer: Hephaestus	_____	_____
26.	This set of standards for connecting computer hardware where voltage difference occurs between wires allows for data transfer is mostly discontinued. Which standard uses cables which can be identified by the 50 or 68 pin connectors at each end?		
	Answer: SCSI [scuzzy] (or small computer system interface)	_____	_____
27.	Characters created by this author include Jim Chee and Joe Leaphorn. Which author, born in Oklahoma, set many of his books in the Four Corners area of New Mexico and Arizona?		
	Answer: Tony <u>Hillerman</u>	_____	_____

**OSSAA 2023-2024
STATE GAME 7
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
28.	Science Computation: How much heat energy, in joules, must be added to 3.00 kilograms of gold to raise the temperature of the gold by 2.00 degrees Celsius? Use the specific heat of gold to be 129 joules per degree Celsius. Remember, specific heat is heat energy divided by mass and change in temperature.		
	Answer: 774	_____	_____
29.	The Treaty of San Ildefonso saw the return of this territory to France. Which territory did Napoleon plan to use to restore the French empire in the New World?		
	Answer: <u>Louisiana Territory</u>	_____	_____
30.	This man has represented the 4 th congressional district from Louisiana since 2017. Which Republican was vice chair of the House Republican Conference prior to being elected Speaker of the House in 2023?		
	Answer: <u>Mike Johnson</u>	_____	_____
31.	In 1890, this French artist's only painting sold during his lifetime, <i>The Red Vineyard at Arles</i> , was purchased for the equivalent of about \$2000 in today's market. Which artist's work <i>Wooded Cabins among the Olive Trees and Cypresses</i> sold for \$71 million in 2021?		
	Answer: <u>Vincent van Gogh</u>	_____	_____
32.	Math Computation: Angle theta is in quadrant one and the sine of angle A equals 7 over 25. Find the sine of 2A by using the double angle identity for sine, $\sin 2A = 2 \sin A \cos A$ [sine 2 A equals 2 sine A cosine A].		
	Answer: 336/625	_____	_____
33.	This Tennessee Williams play was made into a 1958 movie starring Paul Newman and Elizabeth Taylor. Which play tells the story of Brick and Maggie Pollitt and their interaction with Brick's father, Big Daddy?		
	Answer: <u>Cat on a Hot Tin Roof</u>	_____	_____

**OSSAA 2023-2024
STATE GAME 7
THIRD QUARTER
TOSS UP QUESTIONS**

		Team One	Team Two
34.	This dwarf planet's moons include Styx, Nix, and Hydra. Which dwarf planet is slightly smaller than Eris by mass but is the largest in the Solar System by volume?		
	Answer: Pluto	_____	_____
35.	This social class of the Roman empire included citizens who were not members of the patrician, senatorial, or equine classes. Which social class consisted of the average working citizens of Rome?		
	Answer: <u>Plebian(s)</u>	_____	_____
36.	The sixth and final season of this Netflix show dropped in November of 2023. In which show about the reign of Queen Elizabeth did the first episodes of season 6 focus on the death of Princess Diana?		
	Answer: The Crown	_____	_____
37.	This ballet, Tchaikovsky's longest, revolves around the life of Princess Aurora. Which ballet features the Garland Waltz in Act 1?		
	Answer: <u>Sleeping Beauty</u>	_____	_____
38.	Math Computation: What is the product of the two binomials, 2x plus 13 and x minus 21?		
	Answer: $2x^2 - 29x - 273$ [two x squared minus 29x minus 273]	_____	_____
39.	This classic frame story contains 100 tales told by 3 men and seven women fleeing the plague in the 14 th century. What is the title of this famous work by Giovanni Boccaccio?		
	Answer: The <u>Decameron</u>	_____	_____
40.	This term is used for the veins that return blood from the head to the superior vena cava. What is the name for these large veins in the neck?		
	Answer: <u>Jugular</u> veins	_____	_____

**OSSAA 2023-2024
STATE GAME 7
FOURTH QUARTER
60 SECOND QUESTIONS**

GEOGRAPHY - ISLAND COUNTRIES AND CAPITALS

Directions: Given the capital of an island country, name the country

- | | | |
|-----|---------------------|-------------------------|
| 1. | Reykjavik | Iceland |
| 2. | Nassau | Bahamas |
| 3. | Bridgetown | Barbados |
| 4. | Nicosia | Cyprus |
| 5. | Apia | Samoa |
| 6. | Suva | Fiji |
| 7. | Bandar Seri Begawan | Brunei |
| 8. | Majuro | Marshall Islands |
| 9. | Funafuti | Tuvalu |
| 10. | Tarawa | Kiribati |

EXTRA:

- | | | |
|----|----------|-------------------|
| 1. | Victoria | Seychelles |
| 2. | Kingston | Jamaica |

**OSSAA 2023-2024
STATE GAME 7
FOURTH QUARTER
60 SECOND QUESTIONS**

MATH - SURFACE AREAS OF PRISMS

Directions: Given the length, width, and height, find the surface areas of each of the following rectangular prisms. You do not need to say “units squared”.

1.	3 by 5 by 6	126
2.	3 by 6 by 8	180
3.	4 by 5 by 7	166
4.	5 by 6 by 9	258
5.	6 by 7 by 11	370
6.	7 by 9 by 10	446
7.	5 by 9 by 12	426
8.	6 by 11 by 12	540
9.	10 by 14 by 20	1240
10.	16 by 20 by 30	2800

EXTRA:

1.	7 by 8 by 9	382
2.	12 by 15 by 30	1980

**OSSAA 2023-2024
STATE GAME 7
FOURTH QUARTER
60 SECOND QUESTIONS**

ZOOLOGY - MAMMAL ORDERS

Directions: Identify the order to which each of the following mammals belong. You may give either the scientific name or the common name.

- | | | |
|-----|------------|---|
| 1. | Tigers | Carnivora (or carnivore) |
| 2. | Monkeys | Primates |
| 3. | Koalas | Marsupalia (or Diprodontia or marsupial) |
| 4. | Bats | Chiroptera |
| 5. | Squirrels | Rodentia (rodent) |
| 6. | Porpoises | Cetacea |
| 7. | Rabbits | Lagomorpha |
| 8. | Walruses | Pinnipedia |
| 9. | Armadillos | Edentata (or Cingulata) |
| 10. | Moles | Soricimorpha (or insertivora) |

EXTRA:

- | | | |
|----|--------------|--|
| 1. | Otters | Carnivora (or carnivore) |
| 2. | Rhinoceroses | Perissodactyla (or even-toed ungulates) |

**OSSAA 2023-2024
STATE GAME 7
EXTRA QUESTIONS**

Extra:

		Team One	Team Two
E1.	Italy completely surrounds this third smallest country in Europe. Which landlocked republic is almost completely surrounded by the Italian state of Emilia Romagna?		
	Answer: San Marino	_____	_____
E2.	This player went down in training camp with a calf injury and had to be carted off. Name this franchise player for the Cincinnati Bengals.		
	Answer: Joe Burrow	_____	_____
E3.	According to the book of Exodus, this candelabrum was lit daily inside the tabernacle. What is the 7-letter name for this golden candleholder with seven branches?		
	Answer: Menorah	_____	_____
E4.	Math Computation: Convert a weight of 45 pounds into ounces.		
	Answer: 720	_____	_____
E5.	Works by this English poet include <i>The Eve of St. Agnes</i> and <i>Endymion</i> . Which poet of the Romantic era is commonly linked with Percy Bysshe Shelley and Lord Byron?		
	Answer: John Keats	_____	_____
E6.	This tree's scientific name is <i>Ochromo lagopus</i> [oh-kroh-moh lah-goh-pus]. Which tree, grown in Ecuador, is prized by model builders for its high strength to weight ratio?		
	Answer: Balsa	_____	_____