

FROSHMORE CHAMPIONSHIPS

Round Ten

Read only for Round Ten

Officials Checklist and reminders:

- 1.) Review this checklist and reminders document and the rules flow chart. _____
- 2.) Pencils and fresh scratch paper for each participant _____
- 3.) Timer instructions _____
- 4.) Identify the head coach for each team. _____
- 5.) Identify the team captain. _____
- 6.) Review the pumpnickel rule _____

Accept only the answer to the bonus question that comes from the captain.

The captain may defer to another team member to give the answer to the bonus question.

If you want them to indicate a deferral in a specific way – tell them at the beginning of the match. “If you are going to defer on a bonus question, please do so by”

Coaches may use an ipad or table to keep score (I've sent out an excel score sheet) They may not use their ipad, phone or other technology to look up answers, send or received text messages or emails or to make calls during competition.

Before you begin, remind students that on a toss-up question they must buzz-in and be recognized before giving the answer and that they may NOT confer on a toss-up. You may only confer on a bonus question.”

When you read a toss-up question – identify the subject, then read the question.

If the team member buzzes-in before the question is completed and the answer is incorrect, say ‘incorrect, I will finish the question’ then finish reading the question.

If you have finished reading the question when the first team buzzes-in and gives an incorrect response say ‘incorrect,’ look at the second team call them by team name and say ‘_____ I have finished the question’

If the time has expired, their response should be to immediately buzz-in to be recognized. If there is still time (5 seconds for a regular question 15 on a math computation) they have the remaining time to buzz.

If the toss-up question is not answered correctly by either team, give the correct answer. Do NOT read the bonus question, go on to the next toss-up. **If you need a replacement question for this subject, you may use the unused bonus.**

The first time you read a bonus question for each team say ‘Here is your bonus question, you do not need to buzz-in. Remember you may confer on this question, and I will take the answer from the team captain.’

There is NOT a penalty for buzzing during a bonus question.

When the time for conferring has expired (10 seconds – 15 on math or science computation) **call for the answer.** Say, ‘Captain?’ or ‘answer please’ (or something similar). If they do not give you an immediate answer say ‘time’ and give the correct answer.

There is no limit to the number of team members a team substitutes.

On a toss-up question, do not give the correct response until you have given both teams an opportunity to answer the question.

Leading articles such as “the,” “an,” and “a” are not required (e.g., Tale of Two Cities is an acceptable answer for The Tale of Two Cities). However, if an article is given, it must be the correct one.

Plural/Singular answers are acceptable unless otherwise delineated.

Last names are acceptable, except where there is more than one common person in the same field.

Prompt for more information by saying – ‘more’ or ‘more specific’.

Questions requiring additional computation time (15 seconds) have computation in the subject line - MATH COMPUTATION: or SCIENCE COMPUTATION: or BONUS COMPUTATION: (If it needs it and we forgot it, add it!)

Math or Science questions that do not require computation and receive regular question time (5 for toss-up and 10 for bonus) do not have computation in the subject line - MATH: or SCIENCE: or BONUS

Explain the addition of the word Computation to the timer and the team at the beginning of the tournament. After the first question containing COMPUTATION: You may choose to say only Computation if you wish.

Give your stall count before the game starts. A stall count is the amount of time allowed for the student to begin their answer once you've called on them. "My stall count is _ _ _." Fill in the blanks with your count. Do you count 1, 2, stall? 1, 2, 3, stall? Do you say stall on the upbeat of the 3rd second or the downbeat? My preference is you count 1(1001), 2(1002), 3(1003) with stall being called on the downbeat of 3. (Down beat being the end of the 1003 with 100stall. You do not have to say the 1000 or the second 1, 2 or 3 out loud. You do need to make some type of physical indication - head nod, hand count (like a basketball referee counting the backcourt) even a foot tap. But do something so the student can see the seconds slipping away. This also helps with consistency. Neither team can say the other team received more time before a stall was called. When an immediate answer is expected 1 second is adequate time to allow before a stall is called.

"Welcome to Round ____ of the tournament. I am _____, your moderator. (if you have a judge, timer and scorekeeper, introduce them as well) Our two teams are _____ and _____. Head coaches, will you please stand. A protest may be lodged only by the head coach." (run a buzzer check) "Students, remember, you may not give an answer until you are recognized. If you do so, it will be ruled as an incorrect response, even if your answer is correct. Explain the timing for Math or Science Computation: (see instructions) Good sportsmanship is expected from **all** players, substitutes, coaches, spectators and parents. Except for using the excel spreadsheet to keep score, you may not use computers, smart phones, iPad, etc. during the competition. Turn off all and put away all electronics at this time. (pause) Are there any questions? Let's begin."

_____ 1. MATHEMATICS: What kind of graph is represented by the equation $3x^2 - 3y^2 + 4y + 4 = 0$?

ANSWER: **Hyperbola**

BONUS BONUS: What kind of graph is represented by the equation $5x^2 + 10x - 20 = 5y - 5y^2$

ANSWER: **Circle**

_____ 2. SOCIAL STUDIES: **Richard Neville earned the epithet "Kingmaker" during this war which included Buckingham's Rebellion. The Battle of * Bosworth Field was the decisive defeat of Richard III during this war. The House of Tudor was established during what war fought between the Houses of York and Lancaster?**

ANSWER: (Wars of the) **Roses**

BONUS BONUS: The first battle of the Wars of the Roses took place in what cathedral city 22 miles north of London?

ANSWER: **St. Albans**

_____ 3. SCIENCE: **Using an artificial intelligence program, computer scientists in Singapore were able to create a realistic animation using only an audio clip and one of these.** Using this item, the program was able to create realistic and consistent facial animations to match the audio clip. What item was used instead of a video clip for this work?

ANSWER: **Photograph**. [accept any synonym for a non-moving picture]

BONUS BONUS: This is the AI program in question that was used.

ANSWER: **Diverse yet Realistic Facial Animations** [accept "**DIRFA**"]

_____ 4. FINE ARTS: **One composer from this country created the suite *Pictures at an Exhibition*. This country was home to a group of five composers known as the * Mighty Handful. Modest Mussorgsky and Nikolai Rimsky-Korsakov are composers from what country?**

ANSWER: **Russia**

BONUS BONUS: What other Russian composer wrote the *Pathetique Symphony*?

ANSWER: (Pyotr Ilyich) **Tchaikovsky**

_____ 5. MATHEMATICS: What is 43 trillion, 85 billion in correct scientific notation?

ANSWER: **4.3085×10^{13}** [**Four point three zero eight five times ten to 13th (power)**]

BONUS BONUS: What is twenty-five hundred-thousandths in correct scientific notation? .

ANSWER: **2.5×10^{-4}** [**Two point five times ten to the negative four (power)**]

6. SOCIAL STUDIES: **The wars of the Diadochi were sparked by this man's alleged final words that his empire go to "the strongest." This man won the Battles of * Gaugamela and Issus and legendarily split the Gordian Knot. Who is this Macedonian general?**

ANSWER: Alexander the Great [also accept Alexander III]

- BONUS BONUS: Alexander was a great admirer of what cynic philosopher who legendarily carried a lamp during the day to search for an "honest man?"

ANSWER: Diogenes (of Sinope) [also accept Diogenes the Cynic]

END OF FIRST QUARTER

The score at the end of the first quarter is
Team one _____ Team two _____

Are there any questions?

(pause and look at the coaches if there are no protests proceed)

"Coaches... you may substitute if you wish."

7. CURRENT EVENTS: **The House of Representatives voted to impeach him.*** It's only the second time in history that a Cabinet member has been impeached. Name the Homeland Security Secretary.

ANSWER: Alejandro Mayorkas

- BONUS BONUS: Secretary of War William Belknap was impeached because he was accused of taking bribes during which war?

ANSWER: Civil War

8. SCIENCE: **This device converts rotational energy into electrical energy.*** They can be small enough to put on a bicycle or weighing several tons and producing outputs in the megawatt range. What is this device that on a car is called an "alternator?"

ANSWER: (Electric) Generator

- BONUS BONUS: The generator was first conceived and produced in disk form by this scientist for whom the law of electromagnetic induction is named.

ANSWER: (Michael) Faraday

9. HUMANITIES: **"He went by sleep that drowsy route" is a poem by this author. This author's works frequently use hyphens to represent a stop between a comma and period in length. * "I Heard a Fly Buzz when I died" is a poem by what "Belle of Amherst?"**

ANSWER: (Emily) Dickinson

- BONUS BONUS: In another Emily Dickinson poem, what figure "kindly stopped" for the narrator because she could not stop for him?

ANSWER: Death

- _____ 10. SOCIAL STUDIES: **The only perpetrator of this event to be convicted had his life sentence reduced by Richard Nixon. This event was originally known as the * Pinkville Massacre** and was performed by members of Charlie Company. William Calley was one of the perpetrators of what massacre of civilians during the Vietnam War?

ANSWER: My Lai (Massacre) [pronounce Mee Lie; also accept Son My Massacre]

BONUS BONUS: William Calley was not tried as a war criminal because civilians of allied nations are not protected under the Conventions named for what Swiss city?

ANSWER: Geneva

- _____ 11. MATHEMATICS COMPUTATION: Fred has a stack of logs in his back yard. There are 20 logs on the bottom row, with each succeeding row having one less log. How many logs are on the 8th row up?

ANSWER: **13** (logs)

BONUS BONUS COMPUTATION: How many total logs are in these 8 rows? ?

ANSWER: **132** (logs)

- _____ 12. POP CULTURE: **This famous Oklahoman died in early 2024 at the age of 62.*** The country singer had previously been diagnosed with stomach cancer. Name the man who wrote and performed *Red Solo Cup*.

ANSWER: **Toby Keith**

BONUS BONUS: Toby Keith was a well-known fan of which Oklahoma sports team?

ANSWER: OU Sooners

END OF FIRST HALF

The score at the end of the first half is

Team one _____ Team two _____

Are there any questions?

(pause and look at the coaches if there are no protests proceed)

"Coaches... you may substitute if you wish."

- _____ 13. SCIENCE: **A study published in November 2023 shows no evidence to support that the use of these devices reduce the spread of viral infections. Researchers compared infection rates between people whose indoor spaces used these devices*** and those who did not use them, and found no significant differences. What devices became popular in classrooms and offices during the COVID pandemic in a hope to reduce infection rates of airborne illnesses?

ANSWER: Air Cleaners [accept "Air Purifiers" or "Air filtration"]

BONUS

BONUS: One of the most popular means of cleaning the air in a room is the use of these physical filters known by a 4-letter abbreviation. What is this abbreviation?

ANSWER: HEPA

_____ 14.

LITERATURE: **This American novelist and critic wrote 20 novels, 112 tales and 12 plays.*** He is regarded as a key transitional figure between literary realism and literary modernism. Name the author who wrote *The Turn of the Screw* and *The Portrait of a Lady*.

ANSWER: **Henry James**

BONUS

BONUS: Which Henry James novella portrays the courtship of a beautiful American girl by Winterbourne?

ANSWER: **Daisy Miller**

_____ 15.

SOCIAL STUDIES: **This man oversaw the Second Schleswig War against Denmark. This man received the Ems Dispatch which caused Napoleon III to start the * Franco-Prussian War.** The “Blood and Iron” speech was delivered by what Iron Chancellor, who led the Unification of Germany?

ANSWER: (Otto von) **Bismarck**

BONUS

BONUS: Bismarck was eventually forced out of power by what German Kaiser who led Germany to its defeat in World War I?

ANSWER: **Wilhelm II**

_____ 16.

MATHEMATICS: What is the geometric term for statements that must be proved to be true?

ANSWER: **Theorems**

BONUS

BONUS: What ‘A’ term has the same meaning as the statement in geometry that is accepted as true without proof – a postulate?

ANSWER: **Axiom**

_____ 17.

SCIENCE: **Avast, ye scurvy dogs! If you had this in your diet,*** you could have avoided the scurvy. What is this vital nutrient that the English navy sailor's diets by using limes?

ANSWER: Vitamin C [accept "Ascorbic Acid"; prompt on "citrus (fruits)"]

BONUS

BONUS: Although better known as vitamin C, what is the chemical name of this compound?

ANSWER: Ascorbic acid

_____ 18.

CURRENT EVENTS: **The House Intelligence Chair is sounding the alarm over a space threat from this country.*** Reports say that the country is threatening to detonate nuclear weapons in space, potentially targeting satellites and harming communications. Name the country that signed The Outer Space Treaty of 1976.

ANSWER: **Russia**

BONUS

BONUS: What are Russian astronauts called?

ANSWER: **cosmonauts**

END OF THIRD QUARTER

The score at the end of the third quarter is
Team one _____ Team two _____

Are there any questions?

(pause and look at the coaches if there are no protests proceed)

"Coaches... you may substitute if you wish

_____ 19.

FINE ARTS: This composer's "Hebrides Overture" was inspired by a trip he took to Scotland. This composer of the melody for * "Hark! The Herald Angels Sing!" also wrote incidental music for a play by Shakespeare about the marriage of Theseus and Hippolyta. Who is this composer of *A Midsummer Night's Dream*?

ANSWER: (Felix) Mendelssohn

BONUS

BONUS: Mendelssohn also helped to revive interest in the work of what German composer of *The Brandenburg Concertos*?

ANSWER: (Johann Sebastian) Bach [also accept JS Bach, but do NOT accept or prompt on JC Bach or Johann Christian Bach]

_____ 20.

SOCIAL STUDIES: A blue eagle holding gears and lightning bolts was featured on a logo for one of the organizations created by this policy. This policy included the formation of the Tennessee Valley Authority and the * National Recovery Administration. What is this Depression era economic policy of Franklin Delano Roosevelt?

ANSWER: New Deal

BONUS

BONUS: The New Deal was opposed by what New York governor who lost the 1932 Democratic primary to FDR?

ANSWER: (Al) Smith

_____ 21.

MATHEMATICS COMPUTATION: Solve for x: $22x - 876 = 457 - 9x$

ANSWER: (x =) **43**

BONUS

BONUS COMPUTATION: Solve for x: $\frac{4}{5}x - \frac{7}{10} = \frac{3}{10}x + \frac{7}{5}$

ANSWER: **21/5 OR 4 1/5 OR 4.2**

_____ 22.

SCIENCE: Lycopodium powder is actually these structures from a club moss that have been dried. These are haploid reproductive structures* that can produce haploid individuals that reproduce sexually. What are these structures associated with mushrooms and infectious agents?

ANSWER: Spores

BONUS

BONUS: The gametophyte of ferns develops from the spores. It is tiny and requires this substance to allow the sperm to reach the egg and fertilize it. They occur mostly in climates with large amounts of what substance?

ANSWER: Water

23.

HUMANITIES: **This author wrote a poem about the deportation of the Acadians in his “Evangeline.” Another work by this author is about the lover of * Minnehaha and is the “Song of Hiawatha.” Who is this American fireside poet of “Paul Revere’s Ride?”**

ANSWER: (Henry Wadsworth) Longfellow

BONUS

BONUS: What other fireside poet wrote “Thanatopsis?”

ANSWER: (William Cullen) Bryant

24.

SOCIAL STUDIES: **One of the 6 options officially considered by one side during this event was “doing nothing.” Vassily Arkhipov * refused to fire missiles from his submarine during this event which likely avoided Nuclear War. What is this event, in which the Soviet Union placed nuclear warheads in an island country controlled by Fidel Castro?**

ANSWER: Cuban Missile Crisis

BONUS

BONUS: What man was premier of the Soviet Union during the Cuban Missile Crisis?

ANSWER: (Nikita) Khrushchev

END OF GAME

The score at the end of the game is

Team one _____

Team two _____

If there is a tie allow for substitution before you ask the tie-breaker questions. Read all 5 questions to determine a winner.

Tie Breakers

LANGUAGE ARTS: What is the word part added to the root of a word to change its meaning?

ANSWER: affix

SOCIAL STUDIES: In what war were the Battles of the Queenston Heights, Lake Erie, Mobile Bay, and New Orleans fought?

ANSWER: (War of) 1812

POP CULTURE: This streamer rocketed to fame during covid for his “Big Brain” and high IQ while playing Among Us. In 2023, he launched his own esports organization. Name the person that won Best Strategy Game Streamer at the 2024 Streamer Awards.

ANSWER: Disguised Toast (Jeremy Wang)

MATH COMPUTATION: How many numbers are there in the arithmetic sequence 2, 5, 8, ...53?
[READ two, five, eight, dot, dot, dot, fifty-three]

ANSWER: **18**

SCIENCE: The characteristic clicking sound of this device is iconic. Named for its inventor, it has a tube of low pressure inert gas that will normally not conduct a current but will do so when the gas is struck by ionizing radiation. This produces the “click” sound. What is this radiation detecting device?

ANSWER: Geiger Counter

Are there any questions? (pause and look at the coaches if there are no protests proceed)
This ends the game. "

