

Round 1

First Half

(Tossup 1) **This empire used the Sparabara infantry alongside an elite unit of 10,000 soldiers. This empire's fleet was destroyed at the Battle of Mycale on the same day its general Mardonius was defeated and killed at the Battle of (*) Plataea.** Earlier, this empire's forces defeated the Spartan King Leonidas at the Battle of Thermopylae. Cyrus the Great founded, for ten points, what empire later ruled by Darius I and Xerxes I?

ANSWER: **Persian** Empire (Accept **Achaemenid** Empire)

(Bonus 1) This country initiated the South American dreadnought race. For ten points each,

[Part A] Name this largest South American country, governed during its imperial era from Rio de Janeiro.

ANSWER: **Brazil**

[Part B] This man was the last Emperor of Brazil. He was overthrown in an 1889 military coup.

ANSWER: **Pedro II** (Prompt on "Pedro")

[Part C] Pedro II's daughter Princess Isabel signed the Golden Law, which ended this practice in Brazil. This practice had earlier been ended in the United States via an 1865 Constitutional amendment.

ANSWER: **Slavery**

(Tossup 2) **This author's namesake "question" is a debate over whether this man wrote two famous works attributed to him and whether he existed at all. One work by this author contains the "Catalogue of Ships," which lists the contingents of the (*) Achaean army.** That work by this author is set near the end of a 10-year conflict and concludes with the burial of a Trojan prince who was slain by Achilles. For ten points, name this author of the Illiad and the Odyssey.

ANSWER: **Homer**

(Bonus 2) This author's works include *Cancer Ward* and *August 1914*. For ten points each, [Part A] Name this Russian author of *One Day in the Life of Ivan Denisovich*.

ANSWER: Alexander **Solzhenitsyn**

[Part B] Alexander Solzhenitsyn wrote about this type of Soviet forced labor camp, including a work titled for their "Archipelago".

ANSWER: **Gulag**

[Part C] In 1970, Alexander Solzhenitsyn was awarded this prize, but did not dare travel to Stockholm to receive it. This award was not presented in 2018 a misconduct scandal that led to the resignation of numerous Swedish Academy board members.

ANSWER: **Nobel** Prize in **Literature** (Prompt on "Nobel Prize")

(Tossup 3) **Sagittarius A* [ay star] is likely the location of one of these objects. John Mitchell was the first to postulate the existence of these objects. One of these objects, which lies at the center of the Messier 87 galaxy, was (*)** photographed by the Event Horizon Telescope in April 2019. For ten points, name this region of spacetime exhibiting gravitational acceleration so strong that nothing, including light, can escape from it.

ANSWER: **Black Holes**

(Bonus 3) This location's Complex 39 was the site of the Apollo Program launches. For ten points each,

[Part A] Name this primary launch center of NASA's manned space flights. This center is named after the American president who announced the goal of landing a man on the moon by 1970.

ANSWER: **Kennedy** Space Center (Prompt on "Cape Canaveral")

[Part B] In order to utilize Earth's rotational speed, most spaceports, including Kennedy Space Centre and Guiana Space Centre, are placed near this imaginary line which divides the Earth into two hemispheres.

ANSWER: **Equator**

[Part C] This Russian spaceport is located in Kazakhstan. It is the first and largest spaceport in the world.

ANSWER: **Baikonur** Cosmodrome

(Tossup 4) **French President Sarkozy was once overheard saying to President Obama that he could not bear this man because he was "a liar". This man is the first Prime Minister of Israel to be born after its establishment During this man's (*)** fourth term as Prime Minister, the US moved its embassy to Jerusalem. For ten points, name this man who was recently elected for a historic fifth term as Israel's Prime Minister despite being investigated for corruption.

ANSWER: Benjamin "Bibi" **Netanyahu**

(Bonus 4) This country is currently led by the People's Action Party. For ten points each,

[Part A] Name this Southeast Asian country which experienced rapid growth under the leadership of Lee Kuan Yew.

ANSWER: **Singapore**

[Part B] This current leader of Singapore is this man, the son of Lee Kuan Yew.

ANSWER: **Lee Hsien Loong** (Prompt on "Lee")

[Part C] Singapore is known for applying this punishment to numerous offenders, including American teenager Michael Fay. This punishment involves the use of a Rattan.

ANSWER: **Caning**

(Tossup 5) **This painter said, “I see drawings and pictures in the poorest of huts and the dirtiest of corners.” This painter of *Wheatfield with Crows* also painted another work which depicts a peasant family who are gathered in a dim room and eating a poor dinner. The most famous work by this artist depicts a (*) swirling night sky above a French village. For ten points, what Dutch artist painted *The Potato Eaters* and *Starry Night* ?**

ANSWER: Vincent Van Gogh

(Bonus 5) This artist painted his younger sister in the painting *Inger on the Beach*. For ten points each, [Part A] Name this Norwegian artist who created *Madonna* as part of his *Frieze of Life* series.

ANSWER: Edvard Munch

[Part B] This iconic Munch painting shows a figure engaging in the title action with a blood red sky in the background.

ANSWER: The Scream

[Part C] This other Munch painting records the moment before the death of his older sister from tuberculosis.

ANSWER: The Sick Child

(Tossup 6) **Energy generated at this location is harnessed by Sir Adam 1 and 2 and the Robert Moses Power Plant. Ships can bypass this place via the Welland Canal which was incorporated into the nearby (*) St Lawrence Seaway. The closest view of this location can be viewed from the Rainbow Bridge. Annie Edson Taylor famously went down this place in a barrel. For ten points, name this big waterfall between upstate New York and Ontario.**

ANSWER: Niagara Falls

(Bonus 6) The Isla del Sol is located in this body of water. For ten points each,

[Part A] Name this high-elevation lake often considered the largest lake in South America.

ANSWER: Lake Titicaca

[Part B] Lake Titicaca is shared between this Peru and this landlocked South American country.

ANSWER: Bolivia

[Part C] Lake Titicaca is located within this long mountain range which runs along the western edge of South America.

ANSWER: Andes Mountain

(Tossup 7) **This man wrote *After the Fall*, a semi-autobiographical work about his failed marriage to a Hollywood star. Earlier in his career, this author wrote about Joe Keller, a manufacturer who shipped defective airplane parts during World War II. Another of this author’s plays, set in (*) Salem, Massachusetts, is a commentary on the Red Scare of the 1950s. For ten points, name this American playwright who wrote *All My Sons* and *The Crucible*.**

ANSWER: Arthur Miller

(Bonus 7) This often-misunderstood poem ends with the line “And that has made all the difference”. For ten points each,

[Part A] Name this poem, which begins “Two roads diverged in a yellow wood.”

ANSWER: **The Road Not Taken**

[Part B] This other poem by the same author observes that “good fences make good neighbors”. The narrator muses “where are the cows?” in response to the title object.

ANSWER: **Mending Wall**

[Part C] This poet wrote “The Road Not Taken” and “Mending Wall” He also contemplated how the world will end in the poem “Fire and Ice”.

ANSWER: Robert **Frost**

Sixty-Second Rounds

The categories are . . .

1. Romeo and Juliet
2. World War II Battles
3. Marine Mammals

ROMEO AND JULIET

Name the...

(1) British playwright who wrote *Romeo and Juliet*.

ANSWER: William **Shakespeare**

(2) City in which it is set.

ANSWER: **Verona**

(3) The house which Juliet belongs to, the enemies of the House of Montague.

ANSWER: **Capulet**

(4) Type of event at which Romeo meets Juliet.

ANSWER: masked **ball** (accept **dance**; accept **masquerade**; prompt on party or equivalents that don't necessarily entail dancing)

(5) Cousin of Juliet who duels Mercutio and is later killed by Romeo.

ANSWER: **Tybalt**

(6) Ruling prince of the city where the play is set, who delivers an elegy for the two lovers. ANSWER: Prince **Escalus**

WORLD WAR II BATTLES

Name the World War II battle in which...

(1) The allies invaded Normandy on June 6, 1944.

ANSWER: **D-Day** (Accept Operation **Overlord**, accept Operation **Neptune**)

(2) The Japanese lost four aircraft carriers in June 1942 in the middle of the Pacific.

ANSWER: Battle of **Midway**

(3) The German army surrendered on the Volga River in a city named for the Soviet leader.

ANSWER: Battle of **Stalingrad**

(4) American marines planted a flag on top of Mount Suribachi.

ANSWER: Battle of **Iwo Jima**

(5) British forces under Montgomery stopped the German advance into Egypt.

ANSWER: (First and/or Second) Battle of **El Alamein**

(6) American forces at Bastogne were surrounded but notably did not surrender.

ANSWER: Battle of the **Bulge** (accept **Ardennes Counteroffensive**; accept Operation **Watch on the Rhine**)

MARINE MAMMALS

Name the...

(1) Largest marine mammal in existence, a species of whale.

ANSWER: **Blue Whale**

(2) Carnivorous bear which lives largely within the Arctic circle.

ANSWER: **Polar Bear**

(3) Intelligent marine mammal known for often leaping above the water surface and swimming alongside boats.

ANSWER: **Dolphin**

(4) Marine mammal with huge tusks that can largely be found in the Arctic.

ANSWER: **Walrus**

(5) Herbivorous marine mammal which mostly lives in rivers and coastal waters. It resembles the Dugong which it is related to.

ANSWER: **Manatee** (Accept **Sea Cow**)

(6) Extinct member of the order Sirenia which once lived in the Commander Islands and is named for a German naturalist.

ANSWER: **Steller's Sea Cow**

Second Half

(Tossup 8) **This people's burial rituals involved cutting dogs in half according to the account of Ahmad ibn Fadlan. These people began establishing longphorts in Ireland after Alcuin of York decried this people's 793 attack on Lindisfarne Monastery. These people established an outpost at (*) L'Anse aux Meadows in modern-day Newfoundland they called Vinland after Leif Erikson's travels. For ten points, name these Scandinavian invaders who conducted raids in their characteristic longboats.**

ANSWER: **Vikings** (accept **Rus'** until "longphorts"; prompt on "Norsemen")

(Bonus 8) This man was defeated at the Battle of Leipzig. For ten points each,

[Part A] Name this Emperor of the French who conquered most of Europe before launching a disastrous campaign against Russia.

ANSWER: **Napoleon** Bonaparte (or **Napoleon I**)

[Part B] Napoleon was decisively defeated at this June 1815 battle by the Duke of Wellington.

ANSWER: Battle of **Waterloo**

[Part C] Napoleon had earlier launched a campaign against the British in this country where his forces defeated the Mamluks and unearthed the Rosetta Stone.

ANSWER: **Egypt**

(Tossup 9) **The process of creating one of these substances always has a negative enthalpy of hydration. A solid's K_{sp} value describes its readiness to form one of these substances, which are mixed together to cause a solid to form in a (*) precipitation reaction. Molarity is often used to measure the concentration of these mixtures, which are called saturated if no more solute can be dissolved in the solvent. For ten points, name these homogeneous mixtures.**

ANSWER: **solutions** (accept aqueous **solutions**)

(Bonus 9) Lewis dot structures are fun to draw, but you don't have to draw one to earn points here. For ten points each,

[Part A] These particles are represented by dots in Lewis dot structures. They can come in lone or bonded pairs and have a charge of negative 1.

ANSWER: **electrons**

[Part B] Noble gases have this number of valence electrons, which is the number of electrons that most atoms need to have a full valence shell.

ANSWER: **8** (accept **octet**)

[Part C] Unlike ionic bonds, these types of bonds occur when two atoms share electrons equally.

ANSWER: **covalent** bonds

(Tossup 10) **If partial derivatives are performed on a scalar function, it will yield a Hessian type of these objects. Gaussian elimination can cause these objects to be in echelon form. Cofactor expansion is used to calculate these objects' (*) determinant.** An identity one of these objects has all elements on the main diagonal equal to 1 and the rest equaling 0. For ten points, name these rectangular arrays of numbers arranged in rows and columns.

ANSWER: **Matrix**

(Bonus 10) The square of this function of x is equal to “secant squared x minus 1”. For ten points each: [Part A] Identify this function computed as “opposite over adjacent”.

ANSWER: **tangent**

[Part B] The tangent function is equal to the quotient of the leg lengths in this type of triangle. The sine function compares the opposite leg to the hypotenuse in this type of triangle.

ANSWER: **right** triangle

[Part C] The sine, cosine, and tangent functions are studied in this branch of mathematics that deals with measurement of triangles.

ANSWER: **trigonometry**

(Tossup 11) **While in exile, this god served as a herdsman for King Admetus. The infant Hermes stole a number of sacred cattle belonging to this god and may have given him a musical instrument in exchange. A temple of this god housed the (*) Pythia, who is more commonly known as the Oracle at Delphi. Born on the island of Delos, this son of Leto was the twin brother of Artemis.** For ten points, name this Greek god of archery, prophecy, and light.

ANSWER: **Apollo**

(Bonus 11) This man was the son of the Nereid Thetis. For ten points each,

[Part A] Name this Greek hero whose only vulnerable point was his heel.

ANSWER: **Achilles**

[Part B] This close friend and companion of Achilles was killed during the Trojan war while impersonating Achilles on the battlefield.

ANSWER: **Patroclus**

[Part C] Patroclus was killed by this Trojan prince, the older brother of Paris. This Trojan prince was later slain in a duel by Achilles.

ANSWER: **Hector**

(Tossup 12) **One character in this work lives at Rosings Park with her daughter Anne. Another character in this work attempted to elope with Georgiana for her dowry. In this work, the practical Charlotte Lucas marries a clergyman named (*) William Collins. Lydia runs away with and later marries the militia officer George Wickham while Jane marries Mr. Bingley in this novel. Elizabeth Bennet falls in love with Mr. Darcy in, for ten points, what Jane Austen novel?**

ANSWER: **Pride and Prejudice**

(Bonus 12) In this work, a drunken Cassio is stripped of his rank after fighting with Montano. For ten points each,

[Part A] Name this Shakespeare work about the title “Moor of Venice”.

ANSWER: **Othello** (Accept **The Tragedy of Othello, the Moor of Venice**)

[Part B] Othello is married to this character who he suspects is cheating on him with Cassio. Othello ultimately strangles this woman to death.

ANSWER: **Desdemona**

[Part C] This husband of Emilia is the main villain in *Othello*. This man serves as Othello’s Ensign and is jealous of Cassio’s promotion.

ANSWER: **Iago**

(Tossup 13) **This figure accepted a pardon from Governor Eden before sailing to Ocracoke Island with Robert Deal and Calico Jack. The captain of *La Concorde* surrendered to this figure, possibly frightened by this figure’s use of ‘slow matches’ and legend says this figure’s (*) headless body swam around John Maynard’s ship three times.** For ten points, identify this pirate who captained the *Queen Anne’s Revenge*, a scoundrel born with the name Edward Teach.

ANSWER: **Blackbeard** (accept Edward **Teach** before mentioned)

(Bonus 13) For ten points each, answer some questions about the end of World War I.

[Part A] The Fourteen Points were written by this American President during the war who was reelected on a platform of neutrality.

ANSWER: Woodrow **Wilson**

[Part B] The Thirteenth of Wilson’s points called for the creation of this country which Germany invaded to begin the second World War.

ANSWER: **Poland**

[Part C] Wilson’s final point called for the creation of this international organization, the predecessor of the United Nations.

ANSWER: **League of Nations**

(Tossup 14) **Wild aurochs from 10,000 years ago were domesticated and gave rise to the indicine and taurine lines of these animals. The most widespread species of this animal is the Bos (*) Taurus, and all belong to the subfamily Bovinae.** A disease that originated from these animals was abbreviated as BSE, more commonly known as Mad “these animals” Disease. For ten points, name this large domesticated livestock which gives us beef.

ANSWER: **Cows**

(Bonus 14) Hay fever is an example of this condition. For ten points each,

[Part A] Name this condition caused by the hypersensitivity of the immune system and can occur in reaction to pollen and certain foods.

ANSWER: **Allergy** (Accept **Allergic Reactions**)

[Part B] Allergic reactions are commonly treated using these drugs which target the compound involved in local immune responses.

ANSWER: **Antihistamines**

[Part C] Allergic reactions often lead to the outbreak of these red, itchy bumps on the skin.

ANSWER: **Hives** (Prompt on “Rashes”)

Tiebreakers

(Tossup 15) **One variety of these animals is known for their blue tongues and is called the skink. The horned variety of these animals can shoot blood from their eyes, and the (*) Gila monster is one of the few venomous types of these animals. Komodo dragons are the largest specie of these animals, which also include geckos and chameleons. For ten points, name these reptiles, which, unlike snakes, typically have legs.**

ANSWER: **lizards** [prompt on reptiles]

(Bonus 15) The fall of the Byzantine Empire is sometimes considered the end of the European Middle Ages. For ten points each,

[Part A] The Byzantine Empire came to an end following the fall of this Byzantine capital, which was named after the first Christian Roman Emperor.

ANSWER: **Constantinople** (prompt on Byzantium)

[Part B] This Muslim empire destroyed the Byzantine Empire in 1453. It often employed Janissaries and was later led by Suleiman the Magnificent.

ANSWER: **Ottoman** Empire

[Part C] This Muslim ruler led the Siege of Constantinople and was succeeded by Bayezid

II. ANSWER: **Mehmed II** (accept **Mehmed the Conqueror**, prompt on Mehmed)