## Playoff Round 2

## First Half

(1) One form of this phenomenon in the Pacific Northwest and Great Plains can cause severe temperature changes and is called a chinook. A naval officer created an unbalanced 0 -to- 12 scale to measure this phenomenon, which causes aeolian [ay-oh-lee-an] processes like the formation of $\left(^{*}\right)$ sand dunes and creation of dust devils. The Beaufort scale measures, for ten points, what phenomenon of air movement that is exceptionally high during hurricanes?

ANSWER: wind
(1) This man explained that, without an external force, an object will either continue to rest or continue to move at a constant velocity. For ten points each,

Name this English physicist, whose three laws of motion are the backbone of classical mechanics.
ANSWER: Sir Isaac Newton
Newton's second law of motion notes that the sum of the forces on an object will equal the mass of the object multiplied by this quantity.
ANSWER: the object's acceleration
An immediate result of Newton's second law is that this quantity, the product of mass and velocity, is conserved. The "Newton's Cradle" toy roughly displays the conservation of this quantity, though energy losses mean the toy will not operate forever.

ANSWER: momentum
(2) In a short story by this author, Edward Prendick escapes after Doctor Moreau is killed by a puma-woman. In one of this man's novels, Doctor Kemp discovers that Griffin plans to terrorize England after performing an experiment on himself. This man wrote about the Eloi and the $\left(^{*}\right)$ Morlocks, who are discovered by a Traveller, and about a group of aliens who use tripod war machines to invade Earth before being killed by native bacteria. For ten points, name this English science fiction author of The Invisible Man, The Time Machine, and The War of the Worlds.

ANSWER: H(erbert) G(eorge) Wells
(2) A poem about these bodies of water claims, "I bathed in the Euphrates when dawns were young." For ten points each,

Name these bodies of water. In a poem titled "The Negro Speaks of" these waterways, the speaker built his hut "near the Congo," "looked upon the Nile," and "heard the singing of the Mississippi."

ANSWER: rivers (accept The Negro Speaks of Rivers)
"The Negro Speaks of Rivers is by this African-American poet, who inspired Lorraine Hansberry with a poem that asks, "What happens to a dream deferred? / Does it dry up / like a raisin in the sun?"

ANSWER: (James Mercer) Langston Hughes
Langston Hughes's poem about "a dream deferred" shares its title with this New York neighborhood, which lent its name to a literary and artistic movement called this neighborhood's "Renaissance."

ANSWER: Harlem Renaissance
(3) This quantity is found by the Euclidean algorithm. If this value is $\mathbf{1}$ for a set of numbers, then the numbers are relatively prime. It is equal to 10 for 30 and 50 , but not for 30 and 60 ; for any two numbers, it is equal to the product of the numbers divided by their $\left(^{*}\right.$ ) least common multiple. For ten points, name this mathematical quantity, the largest number that, for numbers A and B , does not produce a remainder when divided into either A or B .

ANSWER: greatest common divisor or greatest common factor (accept GCD or GCF)
(3) FTPE, answer the following about Platonic solids, a set of three-dimensional shapes whose faces are made of regular polygons.

Squares make up the six faces of this Platonic solid, whose shape is used for regular dice.
ANSWER: cube
Three of the five Platonic solids-the tetrahedron, octahedron, and icosahedron-have faces made of this shape.

ANSWER: equilateral triangle
Icosahedrons are the largest Platonic solids, and have this many triangular faces.
ANSWER: 20
(4) One leader of this group released possession of the Black Hills with the signing of Treaty of Fort Laramie. Besides Red Cloud, another leader of these people, Spotted Elk, was killed by James Forsyth's men in the Wounded Knee Massacre. This group overwhelmed General (*) Custer at the Battle of Little Bighorn. For ten points, Sitting Bull and Crazy Horse were members of the Lakota branch of what Native American tribe?

ANSWER: Sioux Nation (accept Lakota before it is read; accept specific Lakota tribes, like Oglala or Hunkpapa; prompt on "Native Americans" or "American INdians" before "Native American" is read)
(4) This Axis power captured Singapore, among other targets, during a 1941 campaign to acquire rubber and oil supplies. For ten points each,

Name this Pacific country, that invaded the Aleutian islands and brought the United States into World War II by launching a sneak attack.

ANSWER: Empire of Japan
This man was Emperor of Japan during World War II. He was forced to renounce his divinity after the war.

ANSWER: Emperor Hirohito (accept Showa)
This Japanese general served as Prime Minister of Japan for the bulk of World War II.
ANSWER: Hideki Tojo
(5) A mixture of $95 \%$ ethanol and $5 \%$ this substance is a well-known azeotrope. This molecule's bond angle of 104.5 degrees is caused by the two unshared electron pairs on the central oxygen atom. It is less dense in the (*) solid phase than in the liquid phase due to hydrogen bonding. For ten points, name this "universal solvent," a three-atom molecule with chemical formula $\mathrm{H}_{2} \mathrm{O}$, a room-temperature liquid necessary for life.

ANSWER: water (accept $\underline{\mathbf{H}_{2} \mathbf{O}}$ before it is read)
(5) In 1610, Galileo discovered the four largest members of this set. For ten points each,

Name this set of 67 known astronomical bodies, including Callisto, Io, Europa, and Amalthea.
ANSWER: Jupiter's moons (accept Jovian moons; accept satellite in place of moon; prompt on moons or satellites alone)

This largest moon of Jupiter is twice the size of our moon and was named for the Olympian cup-bearer.

## ANSWER: Ganymede

Fifteen of Jupiter's moons orbit the planet in the same direction that the planet rotates; the other 52 known moons travel in the opposite direction, known as this type of motion.

ANSWER: retrograde motion
(6) This leader mediated the agreement to put the Lockerbie bombers on trial. After becoming president, this leader established the Truth and Reconciliation Commission. He proclaimed "I am prepared to die" at the Rivonia Trial, after which he was imprisoned on (*) Robben Island. He shared, with F.W. De Klerk, the 1993 Nobel Peace Prize for his work ending apartheid. For ten points, name this first black President of South Africa.

ANSWER: Nelson Mandela
(6) This man defeated Democrat James Cox in the election of 1920. For ten points each,

Name this 29th President of the United States, who died of a brain hemorrhage in 1923 and was succeeded by Calvin Coolidge.

## ANSWER: Warren Gamaliel Harding

Harding's Secretary of the Interior, Albert Fall, was responsible for this political scandal in which government land was improperly leased to insiders. The leases were legal; this scandal arose from illegal bribes.

ANSWER: Teapot Dome Scandal
Most of the land involved in the Teapot Dome scandal, including Teapot Dome itself, held valuable reserves of this resource, which the Navy required for fuel after it stopped using coal.

ANSWER: oil (accept equivalents, like petroleum)
(7) In Jainism, a form of this action called Preksha was created by Acharya Mahapragya. The Buddhist Pali Commentaries describe a form of this action focused on controlling (*) breathing. Practitioners of this action often sit in the lotus position, close their eyes, and recite mantras such as the simple syllable "om." For ten points, name this practice of searching for spiritual enlightenment by contemplating oneself.

ANSWER: meditation (accept word forms like meditating)
(7) Not all dead people are buried; religious beliefs often dictate other methods of dealing with the dead. For ten points each,

Name this practice, which is common in Indian religions like Hinduism and Sikhism, in which the flesh of a body is burned away, releasing the soul.

ANSWER: cremation (accept word forms like "being cremated")
In Zoroastrianism, bodies have traditionally been left in Towers of Silence so they do not contaminate the earth or fire. Many Towers of Silence are found in this modern nation, where Zoroastrianism was founded by a Persian prophet.

ANSWER: Islamic Republic of Iran (or Jomhuri-ye Eslami-ye Iran)
This practice, most common among the Indian Aghori sect and tribal cultures like the South American Yanomami, attempts to transfer the life essence or power of a dead person to the living.

ANSWER: cannibalism (accept descriptions like eating)

## Halftime

The categories are ...

1. Nonfiction
2. Russian Tsardom
3. Reptiles
4. New Testament Figures

Nonfiction
Name the...
(1) term for a narrative story of someone else's life.

ANSWER: biography (do not accept "autobiography" or "memoir")
(2) term for writing and publishing factual stories, done by newspaper reporters.

ANSWER: journalism
(3) Nevada city that was the subject of Fear and Loathing by "gonzo" writer Hunter S. Thompson.

ANSWER: Las Vegas
(4) philosophical treatise by Karl Marx and Frederick Engels that was published in 1848.

ANSWER: Communist Manifesto
(5) annual books that publish weather forecasts and farming advice, one of which was written by Benjamin Franklin?

ANSWER: almanac (accept Poor Richard's Almanac)
(6) American author, a friend of Harper Lee, who revolutionized true crime novels with 1966's In Cold Blood.

ANSWER: Truman Capote

Russian Tsardom
In the pre-revolutionary history of Russia, name the...
(1) Old World continent explored by Peter the Great's Grand Embassy, which sought to westernize Russia.

ANSWER: Europe
(2) tsar whose Massacre of Novgorod helped earned him the epithet "the Terrible."

ANSWER: Ivan the Terrible (or Ivan IV)
(3) term for Russian peasants who were finally freed by Alexander II.

ANSWER: serfs
(4) wife of Peter III, a "Great" empress who partitioned Poland.

ANSWER: Catherine the Great (or Catherine II)
(5) either of the two dynasties whose members ruled Russia as tsars between 862 and 1917.

ANSWER: Rurik dynasty OR Romanov dynasty
(6) regent whose 1605 death triggered the Time of Troubles and whose life story is told in a Pushkin play.

ANSWER: Boris (Fyodorovich) Godunov

## Reptiles

Give the term that describes...
(1) reptiles' inability produce sufficient internal heat, forcing them to change their environment to regulate body temperature.

ANSWER: cold-blooded (accept ectothermic)
(2) the outermost layer of skin that, in reptiles, often has scales to protect from drying out.

ANSWER: epidermis
(3) the modern, feathered class descended from theropod dinosaurs that includes hawks and falcons.

ANSWER: birds (accept Aves or Avians)
(4) the scientific study of reptiles and amphibians.

ANSWER: herpetology (accept word forms like herpetologists)
(5) the type of voluntary muscle, contrasted with cardiac and smooth, that reptiles move to help generate body heat.

ANSWER: skeletal muscle
(6) the mass extinction event that killed the pterosaurs and sauropods and allowed mammals to flourish.

ANSWER: K-T Extinction Event (accept Cretaceous Tertiary Extinction Event; accept K-Pg [K-P-G] or Cretaceous-Paleogene Extinction Event)

New Testament Figures
Which person from the life of Jesus was...
(1) the mortal father of Jesus and the husband of Mary?

ANSWER: Saint Joseph
(2) a disciple who betrayed Jesus for thirty pieces of silver?

ANSWER: Judas Iscariot
(3) a disciple who denied Jesus three times and was the first pope?

ANSWER: Saint Peter (accept Simon Peter; accept Simeon)
(4) the Roman prefect who sentenced Jesus to crucifixion?

ANSWER: Pontius Pilate
(5) the convict who was released instead of Jesus prior to the crucifixion?

ANSWER: Barabbas
(6) a man from Cyrene who carried Jesus's cross?

ANSWER: Simon of Cyrene

## Second Half

(1) One of this author's characters uses Françcois Rabelais's last words about "a Great Perhaps" as his reason to attend Culver Creek. This creator of Miles Halter wrote about Quentin's search for Margo in another novel. This author wrote (*) Looking for Alaska and Paper Towns. In another of his novels, Peter Van Houten, the author of An Imperial Affliction, appears in his book about Augustus Waters and Hazel Lancaster. For ten points, name this author of The Fault in Our Stars.

ANSWER: John Green
(1) This fictional sailor was based on Alexander Selkirk. For ten points each,

Name this character who spends twenty-eight years shipwrecked on an island before being saved by pirates. He titles the novel in which he first appears.

ANSWER: Robinson Crusoe (accept either underlined name)
Robinson Crusoe rescues a former cannibal and names him after this day of the week, on which Robinson met him.

ANSWER: Friday
This English author of Robinson Crusoe and Moll Flanders had a habit of spoiling the entire plots in the full titles of his novels.

ANSWER: Daniel Defoe
(2) This opera, which includes the aria "Quando me'n vo," was adapted into a Tony Award-winning musical by a composer who died the morning it premiered. In this opera, Rodolfo sings "Che gelida manina," which inspired Jonathan Larson's song "Light My (*) Candle." Mimi dies of tuberculosis in a French attic in, for ten points, what opera by Giacomo Puccini that was adapted into the Broadway musical Rent?

ANSWER: La Boheme [la bo-em]
(2) This artist painted The Old Guitarist and Boy with a Pipe. For ten points each,

Name this Cubist painter, who created Les Desmoiselles d'Avignon [lay day-mwah-zells da-vee-nyon].
ANSWER: Pablo Ruiz y Picasso
Pablo Picasso was from this European country. This nation was also the home of Salvador Dali and Francisco Goya, and its city of Toledo was painted by El Greco.

ANSWER: Kingdom of $\underline{\text { Spain (or Reino de España) }}$
The bombing of civilians in a northern Basque city during the Spanish Civil War inspired Picasso to paint this black and white mural, which shows a woman cradling her dead child and a screaming horse.

ANSWER: Guernica
(3) In February 2016, this player scored his team's 10,000th all-time goal in a Champions League match against Arsenal. After signing with a professional team at age 13, this player was treated for growth hormone deficiency. Like his Brazilian teammate (*) Neymar, he and his father have been investigated by Spanish authorities for tax fraud. For ten points, name this five-time Ballon d'Or winner, a forward from Argentina who leads Barcelona FC.

ANSWER: Lionel Andres "Leo" Messi
(3) This character was first portrayed by Sean Connery. For ten points each,

Name this British super spy, created by Ian Fleming, who has been most recently portrayed by Daniel Craig in films like Casino Royale and Skyfall

ANSWER: James Bond (accept Bond, James Bond; accept 007)
The most recent James Bond film is this 2015 blockbuster. In the film, Bond must protect Dr. Madeleine Swan from the title international crime syndicate.

ANSWER: Spectre
In Spectre, Bond steals a prototype version of this company's DB10. This car-manufacturer has appeared in James Bond films since 1964's Goldfinger

ANSWER: Aston Martin Lagonda Limited
(4) The Lion's Mound is on the site of this battle, which saw an attack by the Imperial Guard repelled. The tide turned when Gebhard von Blücher's Prussians arrived. Marshall Ney was unable to break Wellington's lines in this battle, which ended the (*) Hundred Days and forced the Emperor to abdicate and accept exile to Saint Helena. For ten points, name this decisive 1815 battle in which the Duke of Wellington defeated Napoleon Bonaparte.

ANSWER: Battle of Waterloo
(4) The original one of these areas was located in the Cannaregio district of Venice. For ten points each,

Name these areas in cities, broadly defined as section where minority groups are forced to live. Prominent examples were established by the Nazis for Jewish people, from which they were then sent to concentration camps.

ANSWER: ghetto
Thirteen thousand inhabitants of a ghetto in this Polish capital were massacred by Nazi forces in 1943.

## ANSWER: Warsaw

The Warsaw Ghetto Uprising tried to prevent the final deportations to concentration camps during this World War II genocide of Jews and other groups held by the Nazis to be "undesirable."

ANSWER: The Holocaust (or Shoah)
(5) In this novel, Fedallah predicts that his leader will be killed by hemp rope, and the Rebecca rescues the protagonist from drowning. Queequeg, (*) Starbuck, and the captain of the Pequod meet a man who says, "Call me Ishmael" in this novel by Herman Melville. For ten points, name this novel about Captain Ahab's quest for revenge against the title white whale.

ANSWER: Moby-Dick; or, The Whale
(5) For ten points each, answer the following about a novel in which a Hidalgo gives Aldona Lorenza the more noble name Dulcinea.

Name this novel by Miguel de Cervantes, in which a nobleman of La Mancha attempts to do battle with windmills he thinks are giants, while on an adventure on his aging horse, Rocinante.

ANSWER: The Ingenious Gentleman Don Quixote of La Mancha (or El Ingenioso Hidalgo Don Quixote de la Mancha)

Don Quixote goes on his adventure with this donkey-riding farmer, whom he decides is his squire.
ANSWER: Sancho Panza (accept either underlined name)
Cervantes wrote Don Quixote in this language, which was also used by Gabriel Garcia Marquez for One Hundred Years of Solitude.

ANSWER: Spanish (or Español)
(6) A "Lazarus taxa" is a species that was wrongly believed to have undergone this process. The Haast's eagle and moa jointly underwent this process, and the coelacanth [see-la-kanth] was wrongly thought to have undergone it. Vulnerable and (*) Endangered are two of the categories leading to this fate. For ten points, name this ecological disaster that has affected the passenger pigeon, dodo bird, and the dinosaurs.

ANSWER: extinction
(6) Testing for this condition can use a Snellen chart, which has a large, boldface E at the top. For ten points each,

Damage to tissues like the retina, iris, or cornea can cause this condition of vision loss that cannot be corrected with glasses.

## ANSWER: blindness

These cells concentrated in the center of the retina detect red, blue, and green, unlike rod cells, which detect shades and tints.

ANSWER: cones
This type of eye disease damages the optic nerve, usually from high pressure in the eye, unlike cataracts, in which the eye is clouded. This disease is prevalent among the elderly.

## ANSWER: glaucoma

(7) Metrojet Flight 9268 departed from this country's resort city of Sharm El-Sheikh, just south of the Straits of Tiran and the Gulf of Aqaba. The Aswan High Dam was built in this country, forming Lake Nasser; that dam controls the annual (*) flooding of this country's primary river, on whose mouth lie the cities of Mansoura and Alexandria. For ten points, name this African country where city sprawl in Giza and Cairo has reached the Great Pyramid.

ANSWER: Arab Republic of Egypt
(7) This man's thoughts were compiled in the Analects during the Warring States period. For ten points each,

Name this ancient philosopher who named the virtuous feeling gained by doing good deeds for others ren.

## ANSWER: Confucius

Confucius lived during the Spring and Autumn period of the Eastern Zhou dynasty in what is now this country.

ANSWER: People's Republic of China
Confucian philosophy emphasizes the importance of filial piety, or respect towards these people.
ANSWER: one's parents or elders or ancestors (accept mother and/or father and/or any other specific elders or ancestors)

## Extra Question

Only read if you need a backup or tiebreaker!
(1) The protagonist of this novel is given an envelope of letters by Wilson, which he sees as a sign of weakness. This novel's protagonist is called "Tom Jamison" by a "tattered soldier" who repeatedly asks where his (*) wound is, and he pretends that a cut on his head is from a bullet that grazed him during a battle. For ten points, name this Stephen Crane novel in which Union soldier Henry Fleming deals with his cowardice during the Civil War.

ANSWER: The Red Badge of Courage

