## Playoff Round 3

## First Half

(1) This city's "Back of the Yards" is the setting of a novel in which Jurgis [YUR-giss] Rudkus is evicted from his home. A poem named for this city claims that it "laughs even as an ignorant fighter who has never lost a battle." The opening of that poem calls this city the (*) "Hog Butcher of the World" and "City of Big Shoulders." For ten points, name this city, which is the subject of Upton Sinclair's The Jungle and a namesake poem by Carl Sandburg.

ANSWER: Chicago, Illinois (prompt on "Packingtown")
(1) The title character of this novel stares at the green light at the end of Daisy Buchanan's dock. For ten points each,

Name this Jazz-age novel narrated by Nick Carraway, whose title character throws lavish parties in his mansion on West Egg.

ANSWER: The Great Gatsby
This American author of The Great Gatsby wrote about Nicole and Dick Diver in Tender is the Night.
ANSWER: Francis Scott (Key) Fitzgerald
Fitzgerald based the character of Nicole Diver on this woman, Fitzgerald's wife, who struggled with schizophrenia.

ANSWER: Zelda Fitzgerald Sayre
(2) War survivors' tendency to re-enact traumatic experiences inspired this man's idea of a "death drive," an explanation of human behavior that went "beyond" the pleasure principle. He suggested that wish fulfillment was the primary reason for a process that occurs during the (*) REM stage. The id, ego, and superego were suggested as portions of the human psyche by, for ten points, what Austrian psychologist and author of The Interpretation of Dreams?

ANSWER: Sigmund Freud
(2) The Little branch of this river flows through Akron and a namesake national park before reaching Lake Erie. For ten points each,

Name this river. Time Magazine claimed that this highly polluted river "oozes, rather than flows" after it caught fire in 1969.

ANSWER: Cuyahoga [kye-uh-hoe-guh] River
The Cuyahoga River is entirely within this Rust Belt state, whose capital and most populous city is Columbus.

## ANSWER: Ohio

This second-most populous city in Ohio lies on the mouth of the Cuyahoga River. It has lost more than half its peak population in the past century.

## ANSWER: Cleveland

(3) The behavior of these entities at an interface is described by Snell's Law. Until the Michelson-Morley experiment debunked it, the luminiferous ether was proposed to explain how these entities traveled through space. Heinrich (*) Hertz is the namesake of a unit describing how many of them cycle per second. Light exists as both a particle and as, for ten points, what phenomenon that transfers energy and can be visualized using the surface of moving water?

ANSWER: (light) waves (or electromagnetic (EM) waves; prompt on (electromagnetic) radiation)
(3) This grass's tensile strength rivals steel and has a compressive strength greater than wood, brick, and concrete. For ten points each,

Name this largest member of the grass family. It's used as a building material in South and East Asia and notably eaten by pandas.

ANSWER: bamboo
Bamboo contains bundles of this type of tissue dispersed through its stem, instead of in the center of the plant. Xylem and phloem are examples of this type of tissue, which transports water and nutrients through the plant.

ANSWER: vascular tissue
Some bamboo species go through a massive form of this process every 65-120 years to attract pollinators. This process is the defining characteristic of angiosperms.

ANSWER: flowering (accept word forms)
(4) One attempt to escape this city is known as La Noche Triste. Nahuatl was spoken in this rival city of Tlatelolco [t'lah-tell-ol-coh], which was home to the Axayacatl Palace and Templo Mayor and was built on an island in Lake Texcoco [TESH-coco]. After (*) Montezuma's death, this city was besieged by Hernan Cortés in 1521. For ten points, name this capital of the Aztec empire, whose ruins are in modern Mexico City.

ANSWER: Tenochtitlan
(4) Under Murad I, this empire moved its capital to Edirne [ay-DEER-nay], once known as Adrianople. For ten points each,

Name this "Sick Man of Europe," an empire based in present-day Turkey that dissolved after World War I.

ANSWER: Ottoman Empire
In 1453 , the Ottomans captured this city from the Byzantines and made it their final capital city. This city is now the most populous city in Turkey.

ANSWER: Constantinople (or Istanbul)
The second Ottoman sultan of this name earned the nickname "the Conqueror" for his leadership in the sacking of Constantinople.

ANSWER: Mehmed the Conqueror (or Mehmed II)
(5) In the credits of this film, a schoolteacher fantasizes about going to the Bahamas with a Brazilian helicopter pilot. In order to cause the main character to have a nightmare, three characters in this film wake up (*) Jangles the Clown. During an escape from the Memory Dump on a magic wagon, Bing Bong sacrifices himself to save Joy. For 10 points, name this 2015 Pixar film about the personification of Riley's emotions.

ANSWER: Inside Out
(5) A breakup in this song "clearly doesn't tear you apart anymore," although its speaker is "in California dreaming about who we used to be." For ten points each,

Name this 2015 song, in which the singer "must have called a thousand times / to tell you I'm sorry for everything that I've done."

ANSWER: Hello
"Hello" was the first single from this performer's album 25. This singer earned worldwide acclaim with songs like "Set Fire to the Rain" and "Rolling In the Deep."

ANSWER: Adele Laurie Blue Adkins
Adele "saved Thanksgiving" by performing "Hello" on an episode of this long-running sketch comedy show, whose cast members have included Chevy Chase, Bobby Moynihan, and Tina Fey.

ANSWER: Saturday Night Live (or SNL)
(6) Diane Arbus used this medium to show a boy holding a toy hand grenade, and Richard Drew created a work in this medium called The Falling Man. An early pioneer of this medium was Louis Daguerre, and Mathew (*) Brady pioneered it during the American Civil War. This medium was used to depict a soldier kissing a nurse in Times Square on $V-J$ Day. For ten points, name this genre of art in which pictures are taken by a camera.

ANSWER: photography (accept word forms)
(6) This man was so inspired by Beethoven that his first symphony is often labeled "Beethoven's Tenth." For ten points each,

Name this man, who composed a German Requiem and a famous lullaby.
ANSWER: Johannes Brahms
This German composer of The Well-Tempered Clavier joins Brahms and Beethoven as the traditional "Third B" of classical music.

ANSWER: Johann Sebastian Bach
In this genre of music, a theme is introduced, then imitated by other voices throughout the piece. Brahms was inspired by Bach's The Art of this type of music, which differs from a round by using different pitches for the imitations, and is not as strict as a canon.

ANSWER: fugue
(7) This author's last novel is about a matchmaker named Emma, and her novel Northanger Abbey was published after her death. This author described the marriage politics of Regency-era English nobility in a novel about the (*) Dashwood sisters, and wrote a novel in which Elizabeth Bennet eventually gives in and marries Mr Darcy. For ten points, name this English author of Sense and Sensibility and Pride and Prejudice.

ANSWER: Jane Austen
(7) This work begins, "I sing of arms and the man, he who, exiled by fate, first came from the coast of Troy to Italy." For ten points each,

Name this epic poem about the title founder of Rome. The title character is the son of Anchises and father of Ascanius.

ANSWER: The Aeneid
This Roman author of The Aeneid also wrote The Georgics and The Eclogues.
ANSWER: Publius Vergilius Maro
This Carthaginian Queen was the lover of Aeneas. She commits suicide by stabbing herself with Aeneas's sword.

ANSWER: Queen Dido

## Halftime

The categories are ...

1. Literary Mammals
2. British Military History
3. Atomic Theory
4. Choral Music

## Literary Mammals

Famous works of literature don't always use humans as characters. Name the...
(1) brother of the rabbits Flopsy, Mopsy, and Cottontail in a series of Beatrix Potter stories.

ANSWER: Peter Rabbit
(2) Brian Jacques [jakes] fantasy series about Abbey warriors like Martin and Mattimeo.

ANSWER: Redwall
(3) E.B. White book about the title mouse, born to a family in New York.

ANSWER: Stuart Little
(4) mouse, created by Kate DiCamillo, who rescues Princess Pea.

ANSWER: Despereaux [dess-pair-oh] Tilling (accept either name; accept The Tale of Deseperaux)
(5) Richard Adams novel in which Hazel leads a group of rabbits to a new warren.

ANSWER: Watership Down
(6) British poet of Old Possum's Book of Practical Cats, as well as The Waste Land.

ANSWER: T.S. Eliot

## British Military History

Great Britain has a storied military tradition. Name the...
(1) war in which Douglas Haig commanded the British Expeditionary Force from 1915 to 1918.

ANSWER: World War I
(2) American traitor who plotted to give West Point to the British.

ANSWER: Benedict Arnold
(3) battle where Lord Cornwallis' surrender ended the American Revolution.

ANSWER: Battle of Yorktown
(4) Lord Protector of the Commonwealth who led the New Model Army in the English Civil War.

ANSWER: Oliver Cromwell
(5) admiral who died at the Battle of Trafalgar and is commemorated with a tall column in London.

ANSWER: Horatio Nelson (or 1st Viscount Nelson)
(6) general who surrendered his force of over 6,000 soldiers after being surrounded at Saratoga.

ANSWER: John Burgoyne

Atomic Theory
Name the...
(1) central location of the atom, where two of the three primary sub-atomic particles are found.

ANSWER: nucleus
(2) positively charged sub-atomic particle, of which helium has 2 .

ANSWER: proton
(3) neutral particle bound by the strong force to the previously mentioned answer.

ANSWER: neutron
(4) precious metal whose foil was used by Rutherford to discover that central location.

ANSWER: gold (foil experiment)
(5) region where a negatively charged particle may be found, which may be classified $\mathrm{s}, \mathrm{p}, \mathrm{d}$, or f . ANSWER: atomic orbital
(6) element whose spectral lines were described by Rydberg formula and the Bohr model.

ANSWER: hydrogen (or $\underline{\mathbf{H}) ~}$

## Choral Music

In choral music, name the...
(1) highest of the four "S-A-T-B" vocal ranges, above alto.

ANSWER: soprano
(2) lowest vocal range, which also names a common clef.

ANSWER: bass
(3) term, from the Italian for "as in the chapel," for unaccompanied singing.

ANSWER: a cappella
(4) system for teaching pitch that uses syllables like do, re, and mi.

ANSWER: solfege (or solfeggio or solfa)
(5) chorus that ends Part 2 of Handel's Messiah, often sung by itself at Christmas time.

ANSWER: Hallelujah Chorus
(6) type of multi-voice Renaissance music, based on Italian poetry, contrasted with religious motets.

ANSWER: madrigals

## Second Half

(1) The Kerr metric applies to these objects if they spin and have no charge. Sagittarius A* [A-star] is believed to be one of these bodies, which emit Hawking radiation in a process where a pair of particles is created just outside their (*) event horizon. Spiral galaxies have supermassive examples of these objects at their centers. For ten points, name these massive collapsed stars that produce enough gravitational force that no light can escape.

ANSWER: black holes
(1) Examples of these chemical species include sulfate and sulfite, whose chemical formulas are $\mathrm{SO}_{4}{ }^{2-}[\mathrm{S}$ O 4, 2 minus] and $\mathrm{SO}_{3}{ }^{2-}$ [ $\mathrm{SO} 3,2$ minus], respectively. For ten points each,

Give this term for particles, whether atoms or molecules, that have an unequal number of protons and electrons, and are therefore charged.

ANSWER: ion (accept monatomic and/or polyatomic ions; accept, but do NOT otherwise reveal, cations and anions)

Cations [cat-ions] are positively charged; this term refers to ions with a net negative charge.

## ANSWER: anion

When an extra hydrogen is added to ammonia, $\mathrm{NH}_{3}$ [ NH three], this positively charged cation is formed. Give the common name; the formula, after all, is just $\mathrm{NH}_{4}{ }^{+}$[ NH 4 , plus].

ANSWER: ammonium
(2) This god took revenge on Apollo by making the nymph Daphne hate him, and he caused his mother to become obsessed with the mortal Adonis. This god made the beautiful (*) Psyche [SYE-kee] immortal so that he could marry her, since he had grazed himself with his own weapon and fallen in love with her. This son of Aphrodite carried arrows tipped with lead and gold, which he fired to inspire either hate or love. For ten points, name this Greco-Roman god of romantic love, who is often depicted as a baby with a bow and arrow.
ANSWER: Eros (or Cupido)
(2) This creature and his brother Chryasoar were born after Medusa was decapitated. For ten points each,

Name this winged horse who helped defeat the Chimera after being tamed with a golden bridle.
ANSWER: Pegasus
Pegasus was tamed by this Greek hero who failed to ascend to a certain location and lived the rest of his life blind and crippled.

## ANSWER: Bellerophontes

Bellerophon was crippled in an attempt to reach the top of this mountain, the realm of the gods. In reality, this is the highest mountain in Greece.

ANSWER: Mount Olympus
(3) This man's employee, John Scalise, was arrested for his role in one event, after which Frank Gusenberg claimed "No one shot me" in a hospital before dying of 14 bullet wounds. After the IRS ruled that (*) tax must be paid on income earned illegally, this man was convicted of tax evasion and finally sent to prison. The Saint Valentine's Day Massacre targeted Bugs Moran, a rival of this man, nicknamed "Scarface". For ten points, name this crime boss in Prohibition-era Chicago.

ANSWER: Alphonse Gabriel "Al" Capone
(3) This man took power after defeating Chiang Kai-Shek in the Chinese Civil War. For ten points each, Name this Communist Leader of China, who led the Cultural Revolution.

ANSWER: Mao Zedong
The quotations of Mao Zedong were collected in a "little book" of this color.
ANSWER: red
An early supporter of Mao Zedong was this future leader of China who stated "It doesn't matter whether a cat is white or black, as long as it catches mice."

ANSWER: Deng Xiaoping
(4) This property can be applied before cancellation to show that zero times any number is zero. Expanding and factoring are inverse operations that make use of this property, which can be used twice to multiply binomials in a process called (*) FOIL. When subtracting a quantity, one must apply this property with a negative. For ten points, name this property which states that A times the quantity B plus C end quantity is equal to A times B plus A times C.

ANSWER: distributive property
(4) These numbers can be ordered into Farey sequences. For ten points each,

Name this type of number that can be written as an integer divided by another integer. Pi is not this type of number.

ANSWER: rational numbers
One example of an irrational number is this one, which is the length of a diagonal of a square with side length 1.

ANSWER: square root of $\underline{2}$ (or radical 2)
Irrational numbers have decimal expansions that continue forever without doing this.
ANSWER: repeat (accept descriptions of repeating; prompt on "end," even though the question says "continue forever")
(5) A common type of these devices may be anchored to the bone to allow conduction transmission. Another type of these devices, which must be surgically implanted, counteracts the loss of hair cells by providing electric stimuli to the (*) acoustic nerve, as opposed to the more common and less expensive amplification devices. Cochlear implants are one type of, for ten points, what kind of medical equipment used by the deaf or nearly deaf?

ANSWER: hearing aids or devices (accept cochlear implant between "surgically" and before it is mentioned)
(5) These events are detected on seismographs. For ten points each,

Name these geological events that are often measured on the moment-magnitude or Richter scales and involve the ground shaking.

ANSWER: earthquakes
Earthquakes often occur along these regions, where two or more tectonic plates come together. Types of these include the reserve and transform kinds, and one of these named San Andreas is located in California.

ANSWER: faults
The San Andreas Fault is an example of this type of fault, in which the walls of the plates move horizontally instead of vertically.

ANSWER: strike-slip fault (prompt on partial answer)
(6) In an Edna Ferber novel, Kim Ravenal is named after where three states meet on this river, which is traveled by the title Show Boat. Faulkner's story "The Old Man" concerns this river's Great Flood of 1927. Life on this river is the subject of a memoir by (*) Mark Twain, who also wrote about Jim and Huck Finn traveling on this river. For ten points, name this longest American river, which stretches from Minnesota to the Gulf of Mexico.

ANSWER: Mississippi River
(6) For ten points each, answer the following about Holocaust novels.

In this Lois Lowry novel, Annemarie Johansen and her family try to escape from Copenhagen during the Holocaust.

## ANSWER: Number the Stars

This Elie Wiesel novel is narrated by Eliezer, and is based on Wiesel's time at Auschwitz and other concentration camps. Like Wiesel's other novels, Dawn and Day, it is titled for a time of day.

## ANSWER: Night

Thomas Keneally wrote a novel about this German industrialist's "ark." He saved over 1,000 Jews from being put to death, and Steven Spielberg directed a movie named for this man's "List."

ANSWER: Oskar Schindler
(7) This event was executed by the Cheka secret police under Yakov Yurovsky, who held its victims in Yekaterinburg. Fearing that the White Army would free the victims, it began around midnight; each prisoner was shot, including (*) Anastasia, likely under orders from Vladimir Lenin. For ten points, name this 1918 event, in which the family of the final Russian Tsar and his family were murdered.

ANSWER: deaths of the Romanovs (accept deaths of Tsar Nicholas II and his family; accept shooting, assassination, murder, etc. for death; prompt on partial answers)
(7) This man published a Narrative of his life as a slave in 1845. For ten points each,

Name this author of My Bondage and My Freedom and publisher of The North Star, an escaped slave from Maryland.

ANSWER: Frederick Douglass (accept Frederick Augustus Washington Bailey)
Frederick Douglas was present at this convention organized by Elizabeth Cady Stanton, where the Declaration of Sentiments was signed.

ANSWER: Seneca Falls Convention
During the Seneca Falls Convention, Douglas controversially argued in favor of this right, which was only granted by the 19th Amendment.

ANSWER: women's voting (or women's suffrage; prompt on partial answers, including women's rights)

## Extra Question

Only read if you need a backup or tiebreaker!
(1) This country lost the Cisplatine War, which led to the creation of its southern neighbor. It abolished slavery with its Golden Law which was sanctioned by the daughter of Pedro II. This country's war for independence began with a declaration on the Ipiranga Brook, which is memorialized with a monument in (*) Sao Paulo. For ten points, name this country that gained its independence from Portugal with the Treaty of Rio de Janeiro.

ANSWER: Federative Republic of Brazil (accept Empire of Brazil)

