

Playoff Round 1

First Half

(1) **During this event, one diplomat demanded “Don’t wait for the translation, answer Yes or No!” One result of this event was the secret removal of Jupiter sites in Turkey. Awkward negotiations between Khrushchev and Kennedy during this event led to the (*) installation of a Moscow-to-Washington hotline. For ten points, name this 13-day crisis, one of the most tense moments of the Cold War, that ended when the Soviet Union agreed to remove nuclear weapons from a Communist Caribbean island.**

ANSWER: Cuban Missile Crisis (accept descriptions; prompt on partial answers)

(1) This first president of Gran Colombia won the battles of Boyaca and Carabobo against the Spanish. For ten points each,

Name this “Liberator” of several South American countries.

ANSWER: Simon Bolivar Suarez

In addition to having Bolivia named for him, this other South American country actually calls itself a “Bolivarian Republic.” This country was once led by Hugo Chavez from Caracas.

ANSWER: Bolivarian Republic of Venezuela

Bolivar’s state of Gran Colombia included modern Columbia and Venezuela and extended into several other modern South American countries, including this one that controls the Galapagos Islands.

ANSWER: Ecuador

(2) **In a parody, a horrified employee of this business cries, “Chicken of the Sea is tuna!” In this location, Nosferatu flickers the lights on and off, which was believed to signal the arrival of the Hash-Slinging Slasher. This surprisingly expensive restaurant is located next door to the (*) Chum Bucket, whose owner Plankton often tries to steal a secret formula. For ten points, name this restaurant whose fry cook, SpongeBob Squarepants, makes Krabby Patties.**

ANSWER: The Krusty Krab

(2) This team defeated the Texas Rangers in the 2015 ALDS, which was decided by a home run and bat flip. For ten points each,

Name this MLB team, the only one to play home games in Canada since the Montreal Expos moved to D.C. in 2005.

ANSWER: Toronto Blue Jays (accept either or both names)

This Blue Jays outfielder, known as “Joey Bats,” hit the go-ahead three-run home run that eventually won the series for Toronto.

ANSWER: José Bautista

The Rangers had taken a late lead in Game 5 of the 2015 ALDS when catcher Russell Martin tried to throw the ball back to the pitcher, but hit the bat held by this Korean outfielder, standing in the batter’s box.

ANSWER: Shin-Soo Choo

(3) **This process is driven by complexifying and adaptive forces, according to Jean-Baptiste Lamarck. This process cannot occur in Hardy-Weinberg equilibrium. The convergent type of this process occurs as different populations develop analogous structures in similar environments. On the (*) *Origin of Species* argues that this process occurs via natural selection.** For ten points, name this biological theory describing changes in a population’s genetic traits over time, supported by Charles Darwin.

ANSWER: evolution (prompt on natural selection before mentioned by asking “can you be less specific?”)

(3) This circle is centered on the ecliptic, or the apparent path that the Sun takes through the celestial sphere. For ten points each,

Name this map that is divided into twelve segments, though each segment does not necessarily line up perfectly with the constellation it represents.

ANSWER: Zodiac

The Pleiades and Hyades open clusters are part of this Zodiac constellation, which represents a bull.

ANSWER: Taurus

Antares and Alniyat are stars in this constellation, whose tail is made of stars Shaula and Lesath. In many myths, this figure killed Orion.

ANSWER: Scorpius

(4) **One character in this work notes “I’m not in the business of denying myself the simple pleasure of saying true things” in confessing his love to another character. This novel’s title is taken from a quote by Cassius in Shakespeare’s *Julius Caesar*. In this work, a sequel to the novel (*) *An Imperial Affliction* by Peter Van Houten is left unfinished at Augustus Waters’ death.** For ten points, name this 2012 novel by John Green about cancer patient Hazel Lancaster.

ANSWER: The Fault in Our Stars

(4) The speaker of this poem notes that it is “the darkest evening of the year” and ends the poem by repeating “And miles to go before I sleep.” For ten points each,

Name this 16-line poem.

ANSWER: Stopping by Woods on a Snowy Evening

This American poet wrote “Stopping by Woods on a Snowy Evening.”

ANSWER: Robert Lee Frost

”Stopping by Woods on a Snowy Evening” uses a tetrameter of this metrical foot, consisting of an unstressed, stressed syllable pair. Shakespeare commonly uses the foot in pentameter.

ANSWER: Iambs (accept Iambic tetrameter or pentameter)

(5) **A type of this shape named for Varignon is formed by connecting the consecutive midpoints of any quadrilateral. The diagonals of this type of quadrilateral bisect each other. Opposite sides of these polygons have the same length, so (*) rhombuses are a special case of them. Consecutive angles in this type of quadrilateral sum to 180 degrees. For ten points, name this kind of quadrilateral with two pairs of parallel sides.**

ANSWER: parallelogram

(5) The periodic function of this name has vertical asymptotes every π radians, starting at $\pi/2$. For ten points each,

Give this term that refers to a trigonometric function found by dividing sine and cosine, as well as any line that touches a curve at only one point.

ANSWER: tangent (accept tangent function, tangent line)

The tangent function is related to this other trig function by a Pythagorean identity. In addition, this type of line “cuts through” a curve at two points, contrasted with the tangent line meeting it at only one.

ANSWER: secant (accept secant function, secant line)

The tangent of an acute angle can be found by dividing the lengths of opposite and adjacent sides in one of these figures; notably, its hypotenuse is not involved in that formula.

ANSWER: right triangle (prompt on triangle)

(6) **A fan theory suggests that, in one of this man’s films, the presence of Calumet Baking Soda reveals the presence of vengeful Native American spirits, which manifest as an elevator overflowing with blood. The antagonist of a film by this man sings “Daisy Bell” as he goes offline. That (*) computer tells Dave that he can’t “open the pod bay doors” in a film directed by this man based on an Arthur C. Clarke novel. For ten points, name this reclusive director who created *The Shining* and *2001: A Space Odyssey*.**

ANSWER: Stanley Kubrick

(6) This “Red Priest” taught music at the Ospedale della Pieta, an orphanage in Venice. For ten points each,

Name this composer of *The Four Seasons*.

ANSWER: Antonio Vivaldi

The Four Seasons are this type of composition for a featured violin. In these works a soloist is accompanied by an orchestra.

ANSWER: violin concerto

Vivaldi’s *Juditha triumphans* is his only surviving work of this type. These works for orchestra and choir are similar to operas in structure, though while operas involve stage performance, these works are simply performed as concert music.

ANSWER: oratorio

(7) **The landing site for this battle was suggested by the exiled tyrant Hippias, though the losing side was commanded by Datis and Artaphernes. This battle was a victory for Miltiades over troops fighting for Darius the Great, and it was followed by (*) Pheidippides relaying news of the battle back to Athens. For ten points, name this 490 BC battle in which the Persians were soundly defeated by the Greeks, commemorated today with a 26.2 mile footrace.**

ANSWER: Battle of Marathon

(7) One colony in this modern state mysteriously disappeared sometime during the 1580s while John White tried to get extra supplies. For ten points each,

Name this state where the Roanoke Colony was funded by Sir Walter Raleigh.

ANSWER: North Carolina

A hint to the fate of the Roanoke Colony was the presence of this word, the name of a nearby island, carved into a tree.

ANSWER: Croatoan

The Roanoke Colony was populated from settlers from this country, who were granted a charter by Queen Elizabeth I.

ANSWER: England

Sixty Second Rounds

The categories are ...

1. Nations by Literary Works
2. War of 1812
3. Gases by Number
4. Catholic Saints

NATIONS BY LITERARY WORKS

What modern day country is the setting of...

(1) *The Catcher in the Rye*?

ANSWER: **United States of America** (or **USA**; or **America**)

(2) Italo Calvino's *If on a Winter's Night a Traveler*?

ANSWER: **Italy**

(3) *Eugene Onegin*, and the birthplace of its author, Alexander Pushkin?

ANSWER: **Russia**

(4) Chinua Achebe's [uh-CHAY-bay's] *Things Fall Apart*?

ANSWER: **Nigeria**

(5) Marcel Proust's seven volume novel *In Search of Lost Time*?

ANSWER: **France**

(6) Jose [joh-zay] Saramago's novel *Blindness*?

ANSWER: **Portugal**

WAR OF 1812

Name the...

(1) European country that America fought in the war.

ANSWER: United **Kingdom** (accept **England** or Great **Britain**)

(2) 1814 treaty that ended the war.

ANSWER: Treaty of **Ghent**

(3) January 1815 battle in Louisiana fought before news of the treaty could reach the armies.

ANSWER: Battle of **New Orleans**

(4) Future President who commanded troops in that battle.

ANSWER: Andrew **Jackson**

(5) American lawyer who wrote the poem "Defense of Fort McHenry" during the war.

ANSWER: Francis Scott **Key**

(6) Battle where an American loss doomed Washington D.C. to be set on fire.

ANSWER: Battle of **Bladensburg**

GASES BY NUMBER

You do not need to give units for any numerical answer. Consider gases at standard temperature and pressure, or STP, answer the following questions.

(1) At 78 percent, what gas is the most common in Earth's atmosphere?

ANSWER: **Nitrogen** (or **N₂**)

(2) How many protons are in a single atom of hydrogen?

ANSWER: **1**

(3) What noble gas has atomic number 10?

ANSWER: **Neon** (or **Ne**)

(4) How many elements in group 2 of the periodic tables are gases at STP?

ANSWER: **0**

(5) What is the atomic weight of diatomic oxygen?

ANSWER: **32** (accept any unit, if one is given)

(6) volume, within three liters, of a mole of any gas at STP?

ANSWER: **22.4** liters (accept any answer between **19.4** liters and **25.4** liters, including those values)

CATHOLIC SAINTS

Name the...

(1) Saint commemorated on February 14 for legendarily marrying Christian couples in secret.

ANSWER: Saint **Valentine**

(2) Legendary saint who drove the snakes out of Ireland.

ANSWER: Saint **Patrick**

(3) Mysterious events that must happen after death for a person to be canonized as a saint.

ANSWER: **miracles**

(4) Saint who founded the Jesuits with Saint Francis Xavier.

ANSWER: Saint **Ignatius** of Loyola

(5) Term for when a dead person is able to intercede for the living, before they are canonized as a saint.

ANSWER: **beatification**

(6) Patron saint of travelers, a status earned by legendarily carrying Jesus across a river.

ANSWER: Saint **Christopher**

Second Half

(8) **These phenomena are counted by the Wolf number, and a butterfly diagram plots their latitude of occurrence against time. These objects frequently occur in pairs of opposite polarity, and the magnetic flux through them decreases their temperature. Peaks in the (*) magnetic field create these objects, around which coronal mass ejections and solar flares may occur.** These phenomena appear in a roughly 11-year cycle. For ten points, name these temporary cool and dark patches on the Sun's photosphere.

ANSWER: sunspots

(8) This man's law describes how charged particles exert a force on each other, analogous to Newton's law of universal gravitation. For ten points each,

Name this French physicist who also names the SI unit of electric charge.

ANSWER: Charles-Augustin de Coulomb

One coulomb is equal to the charge carried in one second by one unit of current. Name that base SI unit for current, named for another French physicist and often shortened to a three-letter name.

ANSWER: ampere (accept Andre-Marie Ampere)

This unit measures work, both in electrical systems where an incandescent light bulb may be rated as using 100 of these units of work, and in physical systems where one of these units is equal to a Joule of energy used per second.

ANSWER: watt

(9) **Port cities on this body of water include Dalian and Nampo. The innermost bay of this body of water is the Bohai Gulf, which is enclosed by the Shandong and Liaodong Peninsulas as they jut into this body of water. (*)** Inchon lies on the eastern shore of this sea. For ten points, name this sea west of the Korean Peninsula, an arm of the East China Sea that shares its colorful name with the Huang He River's other common name.

ANSWER: Yellow Sea

(9) According to Gresham's Law, less valuable forms of this will drive out more valuable forms, especially as determined by their accepted face values. For ten points each,

Give this economic term for a commodity or note that serves as payment for goods and services.

ANSWER: money (accept any description of currency, including coins, paper money, cash, etc.)

One's money may become less valuable over time as this economic phenomenon, the general rise in prices of good and services, progresses.

ANSWER: inflation

Inflation need not be the same in the economies of different countries; for that and many other reasons, these mathematical calculations exist to determine how valuable one currency is in terms of another country's currency.

ANSWER: foreign exchange rate

(10) **This character, after kidnapping a 10-year-old named after the author, is exiled to Suma. This character's death is represented in the chapter "Vanished Into the Clouds," whose pages are blank. This "shining" protagonist has an affair with (*) Fujitsubo, angering his first wife, Lady Aoi. For ten points, name this title prince whose "Tale" is told in what is sometimes called the world's first novel, written by Lady Murasaki.**

ANSWER: Genji (accept Tale of Genji or Genji Monogatari)

(10) With the Black Knight, this character helps to rescue some Saxon prisoners from the Castle of Torquilstone. For ten points each,

Name this leader of a band of outlaws, a noble thief renowned for his archery skills.

ANSWER: Robin of Locksley (accept Robin Hood)

Robin of Locksley appears in this 1820 novel, whose title character, the son of Cedric of Rotherwood, disguises himself as Desdichado and marries Lady Rowena.

ANSWER: Ivanhoe

Ivanhoe was written by this man, whose other Waverley novels include *Rob Roy* and *The Heart of Midlothian*.

ANSWER: Sir Walter Scott

(11) **One of these mythical figures threw a flayed horse into his sister's loom, causing her to retreat to a cave until a mirror drew her back outside. One of these gods, Inari [ee-nah-ree], commanded kitsune [kee-tsoo-nay], or fox-spirits. Another of these deities, (*) Amaterasu [ah-mah-tay-rah-soo], was the daughter of Izanagi, who dipped a spear into the ocean to create the island nation to which these deities are native. For ten points, name these animistic spirits from Japanese Shinto religion.**

ANSWER: kami (accept Shinto gods or Shinto deities before "Shinto" is read)

(11) This god created mankind by obtaining the bones of the previous generation from the underworld Mictlan, and sprinkling them with his blood. For ten points each,

Name this Aztec feathered serpent god. Spanish sources claimed that the Aztecs viewed Hernán Cortés as the return of this deity.

ANSWER: Quetzalcoatl

The aspect of Quetzalcoatl that represents the morning star is represented by one of these animals. The Aztec sun god told the Aztecs to build a city over a site where one of these animals perched on a cactus and ate a snake.

ANSWER: eagle (prompt on bird)

The Aztec deity Tlaloc controlled this phenomenon; the Aztecs would sacrifice human hearts to Tlaloc to encourage this phenomenon. His Mayan equivalent was Chaac.

ANSWER: rain (accept equivalents, like storms)

(12) **For electromagnetic waves, this vector points perpendicular to the magnetic field and the electric field. During centripetal motion, there is constant change in this quantity, even if speed remains the same, because the direction of motion is constantly changing. Linear momentum is the product of (*) mass and this quantity, and it is squared in the formula for kinetic energy.** For ten points, name this vector quantity that describes speed with direction.

ANSWER: velocity

(12) In plant chloroplasts, the Calvin cycle begins by fixing carbon into sugar molecules using this enzyme. For ten points each,

Name this protein, possibly the most abundant enzyme on Earth.

ANSWER: RuBisCO (or ribulose-1,5-bisphosphate carboxylase/oxygenase)

The Calvin cycle is one reaction pathway in this process, in which plants use absorbed light to generate food within chloroplasts.

ANSWER: photosynthesis

These molecules absorb the sunlight used to power photosynthesis. They then reflect green light.

ANSWER: chlorophyll

(13) **The building of this structure created the Great Bitter Lake, where the Yellow Fleet was trapped after the Six-Day War. This structure runs from Port Tewfik to Port Said [sah-eed]. It was nationalized in 1956 by Gamal Abdel (*) Nasser, causing France and Britain to support an Israeli invasion in a namesake “crisis.”** For ten points, name this canal that connects the Red and Mediterranean Seas west of the Sinai Peninsula in Egypt.

ANSWER: Suez Canal

(13) Molly Brown's survival of this ship's sinking inspired a hit musical fifty years later. For ten points each,

Name this "unsinkable" ocean liner whose only voyage ended at the bottom of the Atlantic in April 1912.

ANSWER: RMS Titanic

A legend about the sinking holds that Harold Bride and Jack Phillips became the first to perform this action. They alternated this action with the "CQD" call, and it succeeded in alerting the *Carpathia* to the *Titanic's* plight.

ANSWER: sending SOS over the wireless radio via Morse code (accept any description; accept Save Our Ship or Save Our Souls for SOS; do not prompt on "calling for help" or other descriptions that don't mention SOS)

This Irish shipbuilder designed the *Titanic*. Like Captain Edward Smith, he went down with the ship and was widely praised for his heroism loading lifeboats.

ANSWER: Thomas Andrews

(14) This poet wrote "how dreary to be Somebody!/How public like a frog" in the poem "I'm Nobody! Who Are You?," and described a bird "that perches in the soul" in "Hope is the thing with feathers." The narrator of another poem by this author "surmised the Horses' Heads/Were toward (*) Eternity" while taking a carriage ride with a figure who "kindly stopped for me." For ten points, name this reclusive "Belle of Amherst" who wrote "Because I could not stop for death."

ANSWER: Emily (Elizabeth) Dickinson

(14) Answer the following about cats in literature for ten points each.

The crazy old man Nakata can speak to cats in *Kafka on the Shore*, a novel by Haruki Murakami, an author from this Asian country.

ANSWER: Japan (accept Nippon-koku or Nihon-koku)

The basis for the musical *Cats* was *Old Possum's Book of Practical Cats*, a collection by this poet of *The Waste Land* and *The Love Song of J. Alfred Prufrock*

ANSWER: Thomas Sterns Eliot

This feline from *Alice in Wonderland* has the ability to appear and disappear at will and is noted for its bizarre grin.

ANSWER: Cheshire Cat

Extra Question

Only read if you need a backup or tiebreaker!

(15) **This man succeeded Johnny “The Fox” Torrio as the leader of his outfit. His warm relationship with mayor “Big Bill” Thompson protected him from police intervention, allowing him to operate a bootlegging operation that imported alcohol from Detroit. This man ordered an attack on his rival, (*) Bugs Moran, which failed to kill him but did kill 7 others in the St. Valentine’s Day Massacre. “Scarface” was the nickname of, for ten points, what Chicago gangster who was arrested for tax evasion, rather than any of his more direct mob activities?**

ANSWER: Alphonse “Al” Capone