

Playoff Round 1

First Half

(1) **In one novel, this author wrote of the reunion of Anne and Captain Wentworth. In another novel by this author, John Willoughby vies for the attention of Marianne. The Dashwood sisters appear in that novel by this author, who wrote about George (*) Wickham's marriage to Lydia in a novel which opens with Mr. Bingley getting into an argument. For ten points, name this author who wrote about Darcy's marriage to Jane Bennet in *Pride and Prejudice*.**

ANSWER: Jane **Austen**

(bonus) This poem describes soldiers who "All went lame / all blind / Drunk with fatigue." For ten points each,

* Name this Wilfred Owen poem whose title is inspired by a Horatian ode. "An ecstasy of fumbling" occurs in this poem while soldiers fit "the clumsy helmets just in time."

ANSWER: "**Dulce et Decorum est**" [[DOOL-cheh et deh-KOH-room EST]]

* "Dulce et Decorum est" describes a gas attack on the Western Front during this global conflict.

ANSWER: **World War One** (accept **WW One**; accept **First World War**)

* Structured like a Petrarchan sonnet, Wilfred Owen wrote an "Anthem" for these people. He describes "bugles calling for them from sad shires" in that work titled for these people.

ANSWER: Doomed **Youth** (prompt on synonymous answers such as "Young People")

(2) **Bolyai [[BOHL-yai]] and Lobachevsky developed a "hyperbolic" system that notably ignores this thinker's rules. This thinker discovered a method for finding the greatest common divisor, his namesake algorithm. This thinker lends his name to the (*) physical space represented by a three-dimensional coordinate space. This thinker wrote an early textbook listing fundamental axioms of geometry. For ten points, name this ancient Greek mathematician who wrote *The Elements*.**

ANSWER: **Euclid** [[YOO-klid]] of Alexandria (accept **Eukleides**; accept **Euclidean** algorithm; accept **Euclid's** algorithm; accept **Euclidean** space)

(bonus) The poet Omar Khayyám [[kai-YAM]] found a geometric solution to polynomials of this degree by determining the intersection of a curve and a circle. For ten points each,

* Give this number, the largest exponent of a cubic equation, which is also the number of dimensions of a solid figure.

ANSWER: **Three**

* The graph of a cubic equation has a single one of these points, which is where the curvature switches from concave up to concave down or vice versa.

ANSWER: **Inflection** Point (accept **Flex** Point)

* "18abcd" is the first term in this part of the cubic formula that equals zero if there is a double root. In the quadratic formula, this expression is "b squared minus 4ac."

ANSWER: **Discriminant**

(3) **Inhabitants of this country were the subject of the Blum-Viollette proposal. A treaty granting this country independence called for the removal of troops with the exception of a garrison at Mers-el-Kébir. Europeans living in this country were referred to (*) by a term translating to "black feet" and were targeted in the 1962 Oran Massacre. For ten points, name this North African country which won a war of independence against France in 1962.**

ANSWER: People's Democratic Republic of **Algeria** (accept al-Jumhūriyya **al-Jazā'iriyya** ad-Dīmuqrāṭiyya aš-Ša'biyya; accept République **algérienne** démocratique et Populaire)

(bonus) Throughout the Age of Exploration, several men set off into the unknown seeking riches as well as figurative and literal immortality. For ten points each, identify these European explorers.

* This Englishman was knighted in 1581 as a reward for circumnavigating the globe on the *Golden Hind*.

ANSWER: Francis **Drake**

* This Italian-born sailor may have coined the term "New World." The word "America" is derived from his name.

ANSWER: **Amerigo Vespucci** (accept either underlined answer)

* This Frenchman, credited for naming Canada, was responsible for exploring and mapping the St. Lawrence River.

ANSWER: Jacques **Cartier** [[kar-tee-YEH]]

(4) **While sleeping at Bethel, one man in this book dreams of a ladder to heaven. After killing one figure, a man in this book asks, "Am I my brother's keeper?" A man's rib is used to form the first (*) woman as described in this book. Two people in this book eat from the tree of the knowledge of good and evil after a serpent deceives them. For ten points, name this first book of the Judeo-Christian Bible, which includes the stories of the Garden of Eden and Noah's Ark.**

ANSWER: Book of **Genesis** (accept **Bereshit**; prompt on "Bible," "Tanakh," "Torah," or "Old Testament")

(bonus) One holder of this title once worked in a food science laboratory in Buenos Aires. For ten points each,

* Name this head of the Catholic Church alternatively called the Bishop of Rome. The first holder of this position to be named Francis took the role in 2013.

ANSWER: **Pope** (accept Supreme **Pontiff**; accept Roman **pontiff**; accept but do NOT reveal **Pontifex Maximus**)

* The pope is decided upon by the College of Cardinals during a meeting referred to by this name.

ANSWER: Papal **Conclave**

* This term bestowed upon the pope means "greatest priest" in Latin. It was previously held by religious leaders of the Roman empire.

ANSWER: **Pontifex Maximus**

(5) **The upper mass bound of these bodies is the Tolman–Oppenheimer–Volkoff limit, analogous to the Chandrasekhar [[chahn-drah-SEH-kar]] limit for white dwarves. These bodies experience "glitches" when their equatorial radius decreases, causing an increase in (*) rotational speed. Soft gamma repeaters are believed to be caused by magnetars, one type of these bodies. For ten points, name these bodies which are formed from the collapsed core of a supergiant star.**

ANSWER: **Neutron Stars** (accept **Pulsars**; accept **Magnetars** before mentioned; prompt on "star")

(bonus) Graupel [[GRAU-pul]], also called the "soft" kind of this precipitation, rarely has a diameter greater than five millimeters. For ten points each,

* Name this form of precipitation consisting of hard balls of ice which may reach twenty centimeters in diameter.

ANSWER: **Hail** (accept **Hailstone(s)**; prompt on "ice pellets")

* Hail, like rain and snow, can fall from this type of dense, vertical cloud which accompanies thunderstorms.

ANSWER: **Cumulonimbus** clouds (do not accept or prompt on "cumulus" or "nimbostratus")

* A three-body spike is indicative of hail on the screens of this meteorology technology named for an Austrian physicist.

ANSWER: **Doppler Radar** (prompt on "radar" and "weather radar"; prompt on Christian "Doppler")

(6) **One of this man's paintings features Cosimo de Medici [[meh-DEE-chee]] kneeling in front of the Virgin Mary. This man was commissioned to paint seven versions of *The Adoration of the Magi*, one of which is displayed in the (*) Uffizi [[oo-FEET-see]] Gallery. Another painting by this man depicts Zephyr, a scallop shell, and a goddess emerging from the sea. For ten points, name this Italian painter of *Primavera* [[pree-mah-VEH-rah]] and *The Birth of Venus*.**

ANSWER: Sandro **Botticelli** [[boh-tih-CHEH-lee]] (be lenient on pronunciation)

(bonus) This artist's painting *Number 17A* set a record after it was purchased by Kenneth Griffin for \$200 million in 2015. For ten points each,

* Name this American abstract expressionist known for his "action paintings." He created works like *Autumn Rhythm*.

ANSWER: Jackson **Pollock**

* Jackson Pollock's technique of splashing paint on to a canvas from above is often referred to by this four-letter word.

ANSWER: **Drip** painting

* Jackson Pollock's wife, Lee Krasner, specialized in these works, which often use an array of media like newspaper clippings and found objects.

ANSWER: **Collages**

(7) **Radiation from this region of the electromagnetic spectrum can detect vibrational modes such as wagging, stretching, and scissoring. A technique using this type of radiation identifies molecules in a "fingerprint region" and displays a carbonyl band at (*) 1700 inverse centimeters.** Night goggles and thermal imaging cameras use radiation from, for ten points, what region of the electromagnetic spectrum with wavelengths longer than visible light?

ANSWER: **Infrared** [[in-fra-RED]] light (accept **IR** in place of **Infrared**; accept **Infrared** radiation; accept **Infrared** spectroscopy; prompt on "Electromagnetic Radiation"; prompt on "Vibrational Spectroscopy")

(bonus) When water auto-ionizes, it produces a hydronium cation [[KAT-"eye"-on]] as well as a hydroxide ion with this type of charge. For ten points each,

* Name this kind of charge possessed by all anions [[AN-"eye"-ons]], in contrast with metal cations like potassium and sodium.

ANSWER: **Negative** charge (accept **Minus**)

* This is the common name of the compound formed from sodium cations and hydroxide anions, used to make hard soap and drain cleaner.

ANSWER: **Lye** (accept **Caustic Soda**)

* The ability to form hydroxide anions in water is this Swedish chemist's definition of a base.

ANSWER: Svante **Arrhenius** [[ah-RAY-nee-uhs]] (be lenient on pronunciation)

(8) **One national park in this country containing sharp limestone spikes and fissures is called Tsingy de Bemaraha. The silky sifaka lives in the northeastern region of this country, which is home to the Nosy Hara leaf (*) chameleon, the world's smallest known chameleon.** Other animals endemic to this island include the cat-like fossa. For ten points, name this island country in the Indian Ocean, famous for its native wildlife, including the ring-tailed lemur.

ANSWER: Republic of **Madagascar** (or Repoblikan'i **Madagasikara**)

(bonus) The Ursari are a subgroup of these people who train bears. For ten points each,

* Name these traditionally nomadic people of Europe who speak an Indo-Aryan language.

ANSWER: **Romani** (accept **Gypsy** or **Gypsies** but avoid using the term)

* This South American country has the largest population of people of Romani descent in the world other than the United States.

ANSWER: Federative Republic of **Brazil** (or Republica Federativa do **Brasil**)

* This other nomadic European group includes members who often refer to themselves as the Mincéir [[min-KEHR]] or the Pavee [[pah-VEH]]. Over 30,000 of these people live in Ireland.

ANSWER: Irish **Travellers**

Halftime

The categories are:

1. American Plays
2. Britain in World War Two
3. The Copernican Revolution

American Plays

Name the...

(1) Author who set his play *The Crucible* during the Salem Witch Trials.

ANSWER: Arthur **Miller**

(2) Play by that author in which a professional marketer named Willy Loman kills himself.

ANSWER: ***Death of a Salesman***

(3) Play which includes the omniscient "Stage Manager" set in the town of Grover's Corners by Thornton Wilder.

ANSWER: ***Our Town***

(4) Man with more Tony nominations than any writer, the creator of *Biloxi Blues* and *The Odd Couple*.

ANSWER: Neil **Simon**

(5) African-American playwright who set a cycle of plays including *The Piano Lesson* and *Fences* in Pittsburgh.

ANSWER: August **Wilson**

(6) Jewish playwright who won a Pulitzer for *Glengarry Glen Ross*, which includes the line, "Coffee's for closers."

ANSWER: David **Mamet**

(7)

ANSWER:

(8)

ANSWER:

Britain in World War Two

Regarding the involvement of the United Kingdom in World War Two, name the...

- (1) Prime minister who was in office throughout World War Two.

ANSWER: Winston **Churchill**

- (2) Armed forces branch which defeated the German Luftwaffe [[LOOFT-vah-fuh]] during the Battle of Britain.

ANSWER: **Royal Air** Force (accept **RAF**)

- (3) Informal name of the German bombing campaign that bombarded London for 57 days straight.

ANSWER: The **Blitz** (accept **Blitzkrieg**)

- (4) Evacuation site of 330 thousand Allied soldiers, codenamed Operation Dynamo.

ANSWER: **Dunkirk**

- (5) Bernard Montgomery-led battle in Egypt in the fall of 1942 which was called "Britain's first victory."

ANSWER: **Second** Battle of **El Alamein** (prompt on "El Alamein")

- (6) Operation in the Netherlands planned by Montgomery, which failed to secure a bridgehead on the Rhine.

ANSWER: Operation **Market Garden**

- (7)

ANSWER:

- (8)

ANSWER:

The Copernican Revolution

Name the...

(1) Celestial object around which the Solar System revolves.

ANSWER: **Sun** (accept **Sol**)

(2) Shape in which planets move during their orbits.

ANSWER: **Ellipses** (accept **Elliptical**)

(3) Non-Copernican Danish astronomer under whom Johannes Kepler was a student.

ANSWER: Tycho **Brahe** [[BRAH-heh]]

(4) Quantity whose square has a proportional relationship with the cube of the semi-major axis of a planet's orbit.

ANSWER: Orbital **period** (accept Solar **Year**; accept descriptions like "the time needed to travel around the Sun")

(5) Progressive variations in lighting that Venus experiences over the course of 584 days, discovered by Galileo.

ANSWER: **Phases** of Venus

(6) 2nd century treatise which promotes geocentrism and epicyclic [[eh-pih-SIH-clip]] orbits as explained by Ptolemy.

ANSWER: **Almagestum** (accept **Syntaxis Mathematica**)

(7)

ANSWER:

(8)

ANSWER:

Second Half

(1) **The narrator of this poem, found in a similarly-titled collection of poems, compares a walk to that of “oil wells pumping in [her] living room.” Claiming to do the title action “Out of the huts of history’s shame,” this poem opens, “You may write me down in (*) history / With your bitter, twisted lies.” Published in a collection that followed *I Know Why the Caged Bird Sings*, for ten points, what poem discusses hopeful determination and was written by Maya Angelou?**

ANSWER: "**Still I Rise**" (do not accept "And Still I Rise")

(bonus) After the protagonist dies from losing his hand, the central family of this poem merely "turned to their affairs." For ten points each,

* Name this poem, which centers on a boy who loses his hand in an accident with a buzz saw. This poem takes its title from a line by Lady Macbeth.

ANSWER: "**Out, Out—**"

* "Out, Out—" was written by this American poet. This poet's other works include "Stopping by Woods on a Snowy Evening" and "Fire and Ice."

ANSWER: Robert **Frost**

* This other poem by Frost popularized the phrase "good fences make good neighbors." This poem follows two men as they fix the title barrier.

ANSWER: "**Mending Wall**"

(2) **The 1825 iteration of this event broke with precedent when a “Volume of Laws” was used. In 1853, the central statement of this event was replaced with an affirmation for the only time in history. The Judiciary Act required (*) judges to undergo a similar process to this event, which typically involves the raising of one hand. For ten points, name this process, in which a president solemnly swears to “preserve, protect, and defend the Constitution of the United States.”**

ANSWER: President taking the **Oath of Office** (accept **Swearing in** of a president; prompt on "president placing a hand on a Bible" or similar answers; prompt on "inauguration" and similar answers)

(bonus) One currency of this name is printed in a Security Plant Complex found in Quezon City. For ten points each,

* Give this shared name of the currency of the Philippines and several Spanish-speaking countries including Argentina and Mexico.

ANSWER: **Peso**

* A commonly used third reserve currency after the dollar and the Euro is this frequently-used currency in Japan.

ANSWER: **Yen** (accept **JPY**)

* 100 *sen* make up one unit of this national currency of Indonesia, which replaced the Netherlands Indies *gulden* after the nation's independence.

ANSWER: **Rupiah** (accept **Rp**; prompt on "Perak")

(3) **During this event, *Time* magazine ran a picture of Senator John Stennis with the caption "Technical Assistance Needed." During this event, Elliot Richardson, William Ruckelshaus, and Robert Bork were ordered to fire Special Prosecutor (*) Archibald Cox during the "Saturday Night Massacre." For ten points, name this event during which the DNC headquarters was broken into and bugged, leading to the resignation of Richard Nixon.**

ANSWER: **Watergate** Scandal

(bonus) For ten points each, answer these questions about bucks.

* Nicknamed "Buck," this tobacco magnate established a large endowment for a Durham, North Carolina, university which was named for his father.

ANSWER: James Buchanan **Duke**

* In 2014, Duke University basketball player, Jabari Parker, was selected in the first round of the draft by the NBA's Bucks, who play in this city.

ANSWER: **Milwaukee**

* From 1985 to 2014, the Milwaukee Bucks were owned by this U.S. Senator. His family's namesake department store has more stores than any other in the U.S.

ANSWER: Herbert "Herb" **Kohl** (accept **Kohl's**)

(4) **In the *Iliad*, this goddess's name is linked with the epithet "cow-eyed" or "ox-eyed." This daughter of Cronus and Rhea [[RAY-ah]] rides a chariot pulled by peacocks. Worshipped as the patroness of (*) marriage, this goddess often sought vengeance against women, such as Io [[EYE-oh]], who bore the children of her philandering husband. This jealous deity sent snakes to kill the infant Heracles. For ten points, who is this wife of Zeus and counterpart of the Roman Juno?**

ANSWER: **Hera** (or **Hērē**; do not accept or prompt on "Juno")

(bonus) To avoid going to war, this figure pretends to be insane by plowing a field with an ox and a donkey until his ruse is outed by Palamedes [[pah-lah-MEE-dees]]. For ten points each,

* Name this mythical figure who titles a Homeric [[hoh-MEH-rik]] epic. This brilliant Greek hero is depicted as devising the Trojan Horse in *The Aeneid*.

ANSWER: **Odysseus** (accept **Ulysses**)

* Odysseus spends a decade after the Trojan War attempting to return home to this island.

ANSWER: **Ithaca** (accept **Ithake**)

* This wife of Odysseus stalls opportunistic suitors who hoped to marry her until her husband finally returns from war.

ANSWER: **Penelopeia**

(5) **This compound is nitrated to form a common membrane used in Western blotting. This compound is distinguished from starch by a crystalline structure. This compound is held together by linkages binding D-glucose monomers. Symbiotic *Trichonympha* [[TRIK-oh-NIM-fah]] allows (*) termites to digest this compound, while ruminants like cows digest this compound through fermentation. For ten points, name this polysaccharide [[pah-lee-SAK-ah-ride]] compound which makes up the cell walls of plants.**

ANSWER: **Cellulose** (accept **(C6 H10 O5)n**)

(bonus) Answer the following about cystic fibrosis. For ten points each,

* Cystic fibrosis primarily causes the buildup of mucus in this organ, which contains sacs called alveoli that are used for gas exchange.

ANSWER: **Lungs**

* Cystic fibrosis is diagnosed by testing the concentration of certain ions in this substance, which is secreted by eccrine and apocrine glands in the skin to cool the body.

ANSWER: **Sweat** (accept **Perspiration**)

* The CFTR protein can no longer transport these positively charged ions because it did not properly undergo protein folding.

ANSWER: **Chloride**

(6) **In this novel, one general utilizes the eastern wind to set his enemy's ships on fire at the Battle of Red Cliffs. That general, Zhuge Liang [[ZHOO-GEH LYAHNG]], faces off against his nemesis Si Ma Yi [[SEE-MAH-YEE]]. Three main characters in this novel suppress the (*) Yellow Turban Rebellion and swear the Oath of the Peach Garden. For ten points, name this novel, written by Luo Guanzhong [[LWOH-GWAHN-ZHOHNG]], set between the end of the Han Dynasty and its namesake period.**

ANSWER: ***Romance of the Three Kingdoms*** (or ***San Guo Yan Yi***)

(bonus) John Goodcountry tries to impede the religious influence of Ezeulu [[eh-ZEH-oo-loo]] in this man's novel *Arrow of God*. For ten points each,

* Name this African author who wrote about the Igbo [[EE-boh]] wrestling champion Okonkwo in his novel *Things Fall Apart*.

ANSWER: Chinua **Achebe** [[CHIN-wah uh-CHEH-bay]]

* *Things Fall Apart* is set in this home country of most of the Igbo people. Achebe also partly set *No Longer at Ease* in its most populous city, Lagos.

ANSWER: Federal Republic of **Nigeria**

* Chinua Achebe also wrote an essay titled "An Image of Africa," accusing this author of being a "thoroughbred racist" based on his novel *Heart of Darkness*.

ANSWER: Joseph **Conrad** (accept Józef Teodor Konrad **Korzeniowski**)

(7) **While working for the Duke of Chandos [[SHAHN-doss]], this composer was said to have repeated a note after hearing the pounding of an anvil. Another of this man's works was composed to celebrate the end of the War of the Austrian Succession. This composer of *The* (*) *Village Blacksmith* included lines from the Book of Revelation in a portion of an oratorio he premiered in London. For ten points, name this English composer who included the "Hallelujah" chorus in his *Messiah*.**

ANSWER: George Frideric **Handel** (accept similar names such as "Georg" and "Frederick"; be lenient on pronunciation of **Handel**)

(bonus) A solo dance choreographed by Mikhail Fokine [[FOH-keen]] for Anna Pavlova is titled for a "dying" one of these creatures. For ten points each,

* Odile [[oh-DEEL]] is referred to as the "Black" variety of what flying creatures, which partly title an 1876 Russian ballet?

ANSWER: **Swans** (accept **Swan** Lake; accept Black **Swan**)

* *The Dying Swan* was based on a portrayal of a swan in the thirteenth movement of this composer's *Carnival of the Animals*.

ANSWER: Camille **Saint-Saëns** [[sahn-SAWN]]

* Camille Saint-Saëns worked as an organist at La Madeleine, the official church of the French Empire, belonging to this Christian denomination.

ANSWER: **Catholicism** (accept Roman **Catholic** Church; accept Ecclesia **Catholic**)

(8) **The losers of this battle were encircled by Hydarnes II, who led the Immortals, after having been betrayed by Ephialtes** [[eh-FEE-ahl-tees]]. **This battle occurred at the same time as the Battle of (*) Artemisium** [[ar-teh-MEE-see-um]] and took place in a tight mountain pass near the Malian Gulf whose name translates to "hot gates." For ten points, name this battle at which the legendary 300 Spartans led by Leonidas [[lee-oh-NAI-dahs]] made a last stand against the Persians.

ANSWER: Battle of **Thermopylae** [[ther-MAH-pih-lee]]

(bonus) England, Ireland, and Scotland aren't the only independent countries within the British Isles. For ten points each,

* Owen Glendower led this region of the British Isles in revolt against Henry IV of England.

ANSWER: **Wales** (or **Cymru**)

* The BBC Singer of the World contest for opera singers is held every two years in this capital city of Wales.

ANSWER: **Cardiff** (or **Caerdydd**)

* This other Welsh city on the Gower Peninsula once held the title "copper-smelting capital of the world" during the 18th century.

ANSWER: **Swansea** (or **Abertawe**)

Extra Questions

(1) **One man who held this position was abducted and held as a hostage at Sunpu in his youth. One holder of this position issued the Sakoku edict of 1635 and faced the Shimabara Rebellion. The last man to hold this position lost the Battle of (*) Toba-Fushimi during the Boshin War. Prominent holders of this position ruled during the Ashikaga and Tokugawa periods. For ten points, name this position in feudal Japan held by military dictators, which ended during the Meiji Restoration.**

ANSWER: **Shogun**

(bonus) The lateral malleolus [[mah-lee-OH-luss]] on the lower end of this bone helps form the outer ankle. For ten points each,

* Name this calf bone lateral to the tibia.

ANSWER: **Fibula**

* Often referred to as the kneecap, this bone above the fibula is the largest sesamoid [[SEH-sah-moyd]] bone in the human body.

ANSWER: **Patella**

* The longest bone in the human body is this other leg bone which forms the thigh.

ANSWER: **Femur**