

Playoff Round 2

First Half

(1) **One side in this war managed to take the vital Ali Muntar ridge. One cause of this war was the closure of the Straits of Tiran by Gamal Abdel Nasser. During this war, one side attacked the USS (*) Liberty under mistaken friendly fire. At the end of this war, the Sinai Peninsula of Egypt and the Gaza Strip were controlled by its victors. For ten points, name this short conflict that ended in victory for Israel against its Arab neighbors in 1967.**

ANSWER: **Six Day** War (accept **June** War; accept **1967 Arab-Israeli** War before "1967"; accept **Third Arab-Israeli** War)

(bonus) During a campaign in the Andes, this leader was assisted by Brigadier General Francisco Santander. For ten points each,

* Name this South American revolutionary and first president of Gran Colombia, who was nicknamed "the Liberator."

ANSWER: Simón **Bolívar**

* During the Admirable Campaign, Bolívar's forces liberated cities in what is now this country. It is officially named a Bolivarian Republic and has been governed by figures like Hugo Chávez.

ANSWER: Bolivarian Republic of **Venezuela** (accept República Bolivariana de **Venezuela**)

* The future of Peru was the subject of an 1822 conference between José de San Martín and Bolívar that was held in this Ecuadorian city.

ANSWER: **Guayaquil** (accept **Guayaquil** Conference)

(2) **A test named for Gary L. Miller and Michael O. Rabin is used to find the likelihood of possessing this property. Euclid's theorem proved that there are infinitely many numbers with this property. According to (*) Goldbach's conjecture, every number greater than two can be expressed as the product of two numbers with this property. For ten points, name this mathematical property in which the only factors of a number are one and itself.**

ANSWER: **Prime** Number(s) (accept **Primality**)

(bonus) Triangles are very interesting shapes. For ten points each,

* Of the trigonometric functions, sine and tangent are, but cosine is not one of these functions noted for 180 degree rotational symmetry about the origin.

ANSWER: **Odd** functions

* This trigonometric function is calculated as the length of the hypotenuse divided by the length of the opposite leg of the triangle. It is the reciprocal of sine.

ANSWER: **Cosecant**

* The Law of Cosines generalizes this theorem for right triangles, for which the "minus 2 a b cosine gamma" term in the Law of Cosines equals zero.

ANSWER: **Pythagorean** Theorem (or **Pythagoras's** Theorem; accept "Equation" in place of "Theorem")

(3) **Herb Caen** [[KAN]] **coined the name for members of this movement, which was founded in part by Herbert Huncke and Lucien Carr at Columbia. The driver of the bus *Furthur*, Ken Kesey, joined this movement, a poet from which wrote, "I saw the (*) best minds of my generation destroyed by madness" in his poem "Howl." For ten points, name this American literary movement of the 1950s which included *On the Road* by Jack Kerouac** [[KEH-roo-ack]] and the poems of Allen Ginsberg.

ANSWER: **Beat** Generation (accept similar answers such as **Beat** Poets or **Beat** Writers)

(bonus) The main character of this work escapes execution after his correct prediction of a solar eclipse. For ten points each,

* Name this novel in which Hank Morgan is transported back in time to an era during which Merlin lived.

ANSWER: A ***Connecticut Yankee in King Arthur's Court*** (accept A ***Yankee in King Arthur's Court***; accept A ***Yankee at the Court of King Arthur***)

* A *Connecticut Yankee in King Arthur's Court* signified the transition away from this "golden" era of economic expansion, a term coined by Mark Twain.

ANSWER: **Gilded Age**

* Twain was inspired by his time working as a miner in 1860s California to pen a story about a "Celebrated" one of these amphibians named Dan'l Webster.

ANSWER: Jumping **Frog** (accept "The Celebrated Jumping **Frog** of Calaveras County")

(4) **This man made a druid priest fly into the air and fall to his death as punishment for blasphemy. This man, who was kidnapped and enslaved by pirates, founded a cathedral at Armagh [[ar-MAH]]. The absence of (*) snakes on this man's home island has been attributed to one of his miracles. During one sermon, this saint used a shamrock to illustrate the parts of the Trinity. For ten points, name this patron saint of Ireland, who names a March 17th holiday.**

ANSWER: Saint **Patrick** (accept **Patricius**; accept **Pádraig**; accept **Padrig**)

(bonus) The pillar of *sawm* is widely practiced during this month, which precedes Shawwal. For ten points each,

* Name this holy month, the ninth in the Islamic calendar.

ANSWER: **Ramadan** (accept **Ramzan**, accept **Ramathan**)

* The pillar of *sawm* refers to this practice, which occurs between sunrise and sundown during Ramadan.

ANSWER: **Fasting** (accept equivalents such as "not eating")

* The end of the month of Ramadan is celebrated during this "Festival of Breaking the Fast."

ANSWER: **Eid al-Fitr** [[eed al-FIT-er]] (accept **Lesser Eid**; accept **Sweet Eid**)

(5) The compressibility factor "Z" equals one for these substances whose particle speeds are described by the Maxwell-Boltzmann distribution. Setting the constants "a" and "b" equal to zero in the Van der Waals equation models these substances. These substances exist only at low pressure and high temperature according to the kinetic molecular theory. The law " $P V$ equals $n R T$ " describes, for ten points, what hypothetical gases unaffected by intermolecular forces?

ANSWER: **Ideal Gases** (accept **Ideal Gas** law; prompt on "General gas equation"; prompt on word forms of "gas")

(bonus) The two components of a racemic [[ray-SEE-mik]] mixture have this geometric property. For ten points each,

* Name this property of molecules that cannot be superimposed onto their mirror images, often referred to as "handedness."

ANSWER: **Chirality** [[kai-RAHL-ih-tee]] (accept **Enantiomers**)

* Enantiomers [[uh-NAN-tee-uh-mers]] are chiral [[KAI-ruhl]] molecules that have this relationship, which refers to compounds with the same molecular formula but different structures.

ANSWER: **Isomers** [{"EYE"}-soh-mers]] (accept **Isomerism**; accept Stereo**isomers**)

* To be chiral, a carbon atom must be bonded to this many different substituents, which is also the number of atoms bonded to the central atom of a tetrahedral compound.

ANSWER: **Four**

(6) **This thinker extrapolated his techniques to discover historical secrets, such as his idea that the title character was an Egyptian worshipper of Aten in his book *Moses and Monotheism*. This thinker described the manifest and latent (*) content of the title phenomenon in *The Interpretation of Dreams* and divided the unconscious into the ego, superego, and id. For ten points, name this Austrian founder of psychoanalysis.**

ANSWER: Sigmund **Freud**

(bonus) In the foreword to one work, this anthropologist's advisor, Franz Boas [[BOH-az]], wrote that "conformity to definite ethical standards [is] universal." For ten points each,

* Name this American anthropologist who studied the life of adolescent girls on the island of Ta'u.

ANSWER: Margaret **Mead**

* Ta'u is located in this island chain which gives its name to a book Mead wrote about "Coming of Age."

ANSWER: **Samoa** (accept **Samoa**n Islands; accept American **Samoa**)

* Margaret Mead studied under Franz Boas while a graduate student at this Ivy League university in New York.

ANSWER: **Columbia** University in the City of New York

(7) **This work's "Uji Chapters" follow the characters Kaoru [[kow-ROO]] and his best friend Niou [[NEE-OH]]. In some manuscripts, one chapter in this work translates to "Vanished into the Clouds," hinting at its protagonist's death. This work recounts the life of the (*) "shining" son of Emperor Kiritsubo and his romances with women, including Lady Aoi [[OW-EE]]. For ten points, name this novel set in the Japanese Heian [[HAI-AHN]] period, written by Lady Murasaki.**

ANSWER: *The **Tale of Genji*** (accept **Genji no Monogatari**)

(bonus) In a novel by this author, the protagonist travels to Johannesburg to help his sister Gertrude and discovers that his son Absalom is awaiting trial for murder. For ten points each,

* Name this South African author of *Cry, the Beloved Country*.

ANSWER: Alan Stewart **Paton**

* Absalom, the son of protagonist Stephen Kumalo, is, like many characters in *Cry, the Beloved Country*, named for a Biblical figure. In the Bible, Absalom is the son of this king.

ANSWER: King **David** (accept **Dawid**)

* Stephen Kumalo is a member of this South African tribe. Mazisi Kunene [[mah-ZEE-see koo-NAY-NAY]] wrote an epic titled *Emperor Shaka the Great*, one of this tribe's great kings.

ANSWER: **Zulu** Tribe

(8) **The Tyuleniy [[tyoo-LEN-ee]] Archipelago is found in the northeastern part of this body of water, which includes the Garabogazköl [[gah-rah-boh-GAZ-kull]] Bay. A pipeline carrying oil from this body of water passes through the cities of Tbilisi [[tuh-bih-LEE-SEE]] (*) and Ceyhan [[JEH-yan]], beginning in Baku, which lies on the coast of this body of water. The Volga and Ural rivers flow into, for ten points, what largest lake in the world, which borders Azerbaijan, Kazakhstan, and Turkmenistan?**

ANSWER: **Caspian** Sea (accept **Kaspiyskoye** More; accept **Hazar** Deñzi)

(bonus) A 32-year old medical student discovered over \$1 million worth of treasure buried by Forrest Fenn in this mountain range. For ten points each,

* Name this mountain range, many of whose highest peaks are in Colorado.

ANSWER: **Rocky** Mountains (accept **Rockies**)

* After Colorado, this U.S. state, the location of Fenn's treasure, has the largest percentage of the hundred highest peaks in the Rockies. This state is home to Grand Teton National Park.

ANSWER: **Wyoming**

* Though the Rocky Mountains extend into Canada, the country's highest point is not in the Rockies but rather this peak in the Saint Elias Mountains which pass through the Yukon.

ANSWER: Mount **Logan**

Halftime

The categories are:

1. Non-Fiction Classics
2. The Cold War
3. Landforms

Non-Fiction Classics

Name the...

- (1) Autobiography by a Jewish teenager written in Dutch and addressed to “Kitty.”

ANSWER: *The **Diary of Anne Frank*** (accept *The **Diary of a Young Girl***)

- (2) Naturalist who authored *On the Origin of Species* and studied finches and tortoises.

ANSWER: Charles **Darwin**

- (3) Italian author of several works of political philosophy, including *Discourses on Livy* and *The Prince*.

ANSWER: Niccolò **Machiavelli**

- (4) Transcendentalist who wrote *Walden* in a cabin owned by Ralph Waldo Emerson.

ANSWER: Henry David **Thoreau**

- (5) Precautionary environmental book by Rachel Carson on the harmful effects of pesticides.

ANSWER: ***Silent Spring***

- (6) Author who documented the stories of the first Mercury astronauts in *The Right Stuff*.

ANSWER: Tom **Wolfe**

- (7)

ANSWER:

- (8)

ANSWER:

The Cold War

Name the...

- (1) Disastrous CIA-led attempt to overthrow Fidel Castro in Cuba.

ANSWER: **Bay of Pigs** Invasion (accept Invasión de **Bahía de Cochinos**; accept Invasión de **Playa Girón**)

- (2) Wisconsin senator at the forefront of the Red Scare.

ANSWER: Joseph "Joe" **McCarthy**

- (3) German structure, the 1989 destruction of which symbolized increased freedom in the East.

ANSWER: **Berlin Wall** (or **Berlin Mauer**)

- (4) Term invented by Winston Churchill to describe the ideological split between the East and West during the Cold War.

ANSWER: "The **Iron Curtain**"

- (5) Country led by Hafizullah Amin which was invaded by the Soviet Union in 1979.

ANSWER: Republic of **Afghanistan** (or Jamhuri-ye Islami-ye **Afghanistan**; accept Islamic Republic of **Afghanistan**)

- (6) Russian word popularized by Mikhail Gorbachev to promote "openness" in the former USSR.

ANSWER: **Glasnost**

- (7)

ANSWER:

- (8)

ANSWER:

Landforms

Landforms are features of the terrain created by erosion, weathering and tectonic activity. Identify the landform...

(1) That is most often created by volcanic activity, creating a group or chain of islands in the ocean.

ANSWER: **Archipelagos**

(2) That is formed by volcanic activity or glacial erosion, creating an area of elevated flat terrain also called a "tableland" [{"table"}-{"land"}].

ANSWER: **Plateaus** (prompt on "Piedmont")

(3) That is formed by wave or sediment activity, creating a submerged ridge covered in deposited material at or near the water's surface.

ANSWER: **Shoals** (accept **Sandbars**; accept **Sandbanks**; accept **Gravelbars**)

(4) Created when a volcano's magma chamber empties and collapses into a depression.

ANSWER: **Caldera**

(5) Created by dissolving rocks, leading to sinkholes, caves, aquifers, and other underground drainage.

ANSWER: **Karst** topography

(6) Caused by weathering and erosion of rock faces, creating an accumulation of broken rock fragments at the base of a larger landform.

ANSWER: **Scree** (accept **Talus** deposit(s); prompt on "Stony accumulations" and similar answers)

(7)

ANSWER:

(8)

ANSWER:

Second Half

(1) **This scientist's namesake law was actually demonstrated two years prior by Georges Lemaître [[luh-MAY-truh]]. With data from Vesto Slipher [{"SLY"}-fer]], this scientist proved that galaxies are moving (*) away from the Earth at speeds proportional to their distance. This scientist invented a "tuning fork" classification scheme for galactic morphology. For ten points, name this American astronomer who lends his name to a large orbital telescope launched in 1990.**

ANSWER: Edwin **Hubble**

(bonus) *Luna 1*, an early spacecraft built by this country, confirmed the existence of the solar wind in 1959. For ten points each,

* Name this country, the first to send a human to outer space when cosmonaut Yuri Gagarin made a successful orbit in 1961.

ANSWER: **USSR** (accept **Soviet Union**; accept **Union of Soviet Socialist Republics**; do not accept or prompt on "Russia" or "Russian Empire")

* The USSR also sent the first non-human into space, a dog named Laika, aboard the second of these early artificial satellites.

ANSWER: **Sputnik 2**

* In 1965, this cosmonaut became the first person to perform a spacewalk though he was briefly stuck in the airlock on his return.

ANSWER: Alexei **Leonov**

(2) **Dorothy Lathrop was the first winner of this award, and Thomas Handforth won it for his work *Mei Li* [[MAY-LEE]]. Rene Paul Chambellan [[shahm-beh-LAHN]] designed this medal, depicting John Gilpin with a horse and the phrase (*) "Four and twenty blackbirds baked in a pie" on its reverse. Maurice Sendak won this award for *Where the Wild Things Are*. For ten points, name this medal given to the "most distinguished American picture book for children."**

ANSWER: Randolph **Caldecott** Medal

(bonus) A figure based on this artist's wife, Jo Nivison, stares blankly at a cup of coffee in his painting *Automat*. For ten points each,

* Name this American realist painter who depicted a building that contains an advertisement for Phillies five cent cigars.

ANSWER: Edward **Hopper**

* This Edward Hopper painting that contains the cigar advertisement also includes three figures being served at a downtown diner.

ANSWER: **Nighthawks**

* A parody of *Nighthawks* by Gottfried Helnwein featuring Marilyn Monroe has this title, which it shares with a 2004 hit song by Green Day.

ANSWER: **Boulevard of Broken Dreams**

(3) **To counteract this event, an alternate school of thought by John Maynard Keynes supported large amounts of government spending. Government actions including the Smoot-Hawley Tariff Act (*) worsened the effects of this event. Another factor which worsened this event was chronicled by John Steinbeck in the *Grapes of Wrath* and came to be known as the Dust Bowl. For ten points, name this worldwide economic downturn following the 1929 Wall Street stock market crash.**

ANSWER: Great **Depression**

(bonus) Errors in moral judgement can be devastating to one's political career. For ten points each, name these iconic American political scandals.

* The Whitewater Scandal revealed that this president and his wife, Hillary, invested money into a shady company led by Jim and Susan McDougal.

ANSWER: William Jefferson "Bill" **Clinton**

* This incident tarnished the reputation of Warren G. Harding's administration after it was revealed that Albert Fall illegally leased Federal lands in California and Wyoming for oil drilling.

ANSWER: **Teapot Dome** scandal (accept reasonable synonyms for "scandal")

* Members of Ulysses S. Grant's administration took bribes from the namesake company at the center of this 1867 scandal involving the Union Pacific Railroad.

ANSWER: **Crédit Mobilier** scandal (accept reasonable synonyms for "scandal")

(4) **A solo work by this composer that was inspired by a love interest of Pan is named *Syrinx*. Golaud [[goh-LOAD]] gives a ring that his lover loses in an opera by this composer based on a Maurice Maeterlinck [[MEH-tuh-link]] play. This composer of (*) *Pelléas et Mélisande* [[peh-leh-AHSS eh meh-lih-SAHND]] wrote an orchestral work translated as "The Sea," as well as a four-movement piano piece meant to represent moonlight. For ten points, name this French composer of *La Mer* [[lah-MEHR]] and "Claire de Lune."**

ANSWER: Claude **Debussy** [[clohd deh-byoo-SEE]] (be lenient on pronunciation)

(bonus) Barney Bigard often played clarinet for this man's band, which was known for works like "Sophisticated Lady" and "Mood Indigo." For ten points each,

* Name this pianist and band leader prominent in the 1930s who collaborated with Billy Strayhorn on "Take the "A" Train."

ANSWER: Edward Kennedy "Duke" **Ellington**

* In "Take the "A" Train," the singer speaks of going to "Sugar Hill, way up in" [this New York neighborhood], which experienced a cultural "Renaissance" spearheaded by prominent African-American musicians, artists, and literary figures.

ANSWER: **Harlem**

* Interest in Duke Ellington's work was revived after he made a 1956 appearance in the Newport Jazz Festival, which is held each summer in this state.

ANSWER: **Rhode Island**

(5) **These organelles contain reaction centers like P680 and P700. Like mitochondria, these organelles have their own DNA, likely due to symbiogenesis with prokaryotes [[proh-KAY-ree-otes]]. These organelles are a type of (*) plastid, which are characterized by their two membranes. Ribosomes and nucleoids float around the stroma of these organelles. Chlorophyll is found in, for ten points, what plant organelles where photosynthesis occurs?**

ANSWER: **Chloroplasts** [[KLOH-roh-plast]]

(bonus) The "master mix" for this process usually contains primers, nucleoside triphosphates, and the enzyme Taq [[TAK]] polymerase [[pah-lee-MEHR-"ace"]]. For ten points each,

* Name this laboratory procedure which uses a thermal cycler to make millions of copies of a single DNA sample.

ANSWER: **Polymerase Chain Reaction** (accept **PCR**)

* PCR can be used in a "site-directed" manner to generate these changes in a sequence of DNA, which can come in "point" and "frameshift" varieties.

ANSWER: **Mutations**

* PCR is also performed before the "high-throughput" form of this technique, which identifies the order of nucleotides in a piece of DNA.

ANSWER: DNA **Sequencing** (accept word forms)

(6) **During this event, Garm breaks free from Gnipa [[NIP-ah]] cave and runs free. The ship "Nail Farer" also breaks free during this event due to the waves caused by the World (*) Serpent.** At the start of this event, Gullinkambi [[goo-lin-KAM-bee]] lets out a crow and Heimdall blows the Gjallarhorn [[ee-YAH-lahr-horn]]. While fighting the wolf Fenrir, Odin is swallowed alive during this event. For ten points, name this series of events and battles, the apocalypse of Norse Mythology.

ANSWER: **Ragnarökkr** (accept **Fate of the Gods**; accept **Twilight of the gods**; accept **Götterdämmerung**; prompt on "End of the World", "End of Asgard", "Apocalypse", or similar answers)

(bonus) Ethnologists have speculated that the southern figure Br'er Rabbit is a mixture of this figure and tricksters found in Cherokee myth. For ten points each,

* Name this mythical figure whose child is ritually killed by the sky god Nyame.

ANSWER: Kwaku **Anansi** (accept Kweku **Anansi**)

* Anansi, the trickster figure of West Africa, is depicted as one of these animals, which trap their prey in sticky webs.

ANSWER: **Spiders**

* The tale of Anansi grew as an oral tradition among this Akan ethnic group. Today they have more than nine million people in a namesake region of Ghana.

ANSWER: **Ashanti** people (or **Asante**)

(7) **One side began this battle in response to the other side burning Sardis. In the prelude to this battle, a general was told that reinforcements could not arrive because of the festival of Carneia [[kar-NEE-ah]]. The archon [[AR-kon]] overseeing one side in this battle, Callimachus [[kah-lee-MAH-kus]], (*) was killed, but that side prevailed under the leadership of General Miltiades [[mil-TIE-ah-dees]].** For ten points, name this battle from which Pheidippides [[fye-DIP-ih-dees]] ran 26 miles to convey the news of the Greek victory over the Persians.

ANSWER: Battle of **Marathon**

(bonus) This city is sometimes referred to as the "Jerusalem of the Balkans." For ten points each,

* Name this city, a modern-day capital which was ruled by Austria-Hungary during its occupation of Bosnia and Herzegovina.

ANSWER: **Sarajevo**

* Sarajevo was the site of the assassination of this nephew of Emperor Franz Joseph I who was set to take the throne of Austria-Hungary. His death contributed to the start of World War One.

ANSWER: Archduke **Franz Ferdinand** (prompt on partial answer)

* The assassination was carried out by Gavrilo Princip, a member of Young Bosnia, which had alleged connections to this anti-Austrian Serbian secret society.

ANSWER: The **Black Hand** (accept **Unification or Death**; accept **Ujedinjenje ili smrt**; accept **Crna ruka**)

(8) **One of this man's plays tells the story of Oliver Cromwell's conflicts when offered the crown of England. One of this man's works features the deceitful Thenardiers [[teh-nahr-DYEHS]], as well as Prisoner 24601 who flees from Inspector (*) Javert. In one of this man's works, the Archdeacon Claude Frollo [[froh-LOH]] lusts for Esmeralda and asks Quasimodo to kidnap her. For ten points, name this French author of *The Hunchback of Notre-Dame* and *Les Miserables* [[leh mih-zeh-RAHB]].**

ANSWER: Victor **Hugo**

(bonus) The author of this work may have been inspired by a visit to a namesake German castle overlooking Darmstadt [[DAHRM-shtaht]]. For ten points each,

* Name this novel by Mary Shelley about an eight-foot-tall creature created by a scientist named Victor.

ANSWER: **Frankenstein**, or *The Modern Prometheus*

* *Frankenstein* begins with explorer Robert Walton finding Victor in an unhealthy state while leading a crew intent on reaching this location.

ANSWER: The **North Pole** (prompt on the "Arctic")

* Mary Shelley's husband had this first name and was also a prominent writer, penning a poem inspired by a statue of Ramesses II titled "Ozymandias."

ANSWER: **Percy** Bysshe Shelley

Extra Questions

(1) **One leader during this event pronounced the name of Ferdinand de Lesseps [[duh-leh-SEPS]] as a codeword for his forces to seize its namesake location. Military operations launched during this event included Operations Musketeer and Kadesh [[KAY-desh]]. Though Lester (*) Pearson resolved this conflict, its aftermath led to Anthony Eden's resignation and a political win for Gamal Abdel Nasser. For ten points, name this event in which British, French, and Israeli forces invaded Egypt after a namesake canal was nationalized.**

ANSWER: **Suez** Crisis (accept **Second Arab-Israeli** War; accept **Sinai** War; accept **Tripartite Aggression**)

(bonus) This character agrees to serve as a governess for Mrs. Kirke in New York City while working to become a writer. For ten points each,

* Name this character who travels to New York City after rejecting a marriage proposal from her friend Laurie.

ANSWER: **Jo** March (prompt on "March")

* Jo, as well as her fellow March sisters Amy, Beth, and Meg, are the main characters of this novel.

ANSWER: **Little Women**

* This author of *Little Women* based her collection *Hospital Sketches* on her experiences as a Union nurse during the U.S. Civil War.

ANSWER: Louisa May **Alcott**