## Round 7

## First Half

(Tossup 1) This colony was the site of the Walking Purchase, in which its proprietor claimed to have purchased all land as far west as a man could walk in a day and a half over the objections of the Lenape. In 1683, the Lenape (*) Chief Tamanend signed a treaty with this colony's founder, whose pacifism and tolerance of groups such as the Mennonites originated from his Quaker beliefs. For ten points, name this colony which was governed from Philadelphia.

## ANSWER: Pennsylvania

(Bonus 1) This case was the result of a public school district insisting on busing a student to a blacks-only school that was farther away than a nearby school. For ten points each,
[Part A] This unanimous Supreme Court decision basically overturned the "separate but equal" doctrine.
ANSWER: Brown vs. Board of Education
[Part B] The Board of Education from this Kansas state capital was a litigant in this case.

## ANSWER: Topeka

[Part C] The Brown family was represented by this attorney, who went on to become the first AfricanAmerican to sit on the Supreme Court.
ANSWER: Thurgood Marshall
(Tossup 2) The muscles involved in the formation of goosebumps in humans is an example of this behavior. Robert Wiedersheim mistakenly included the pineal gland in his list of 86 of these structures. It has been proposed that the hiccup is an example of this behavior, a (*) remnant of amphibian respiration. The human tailbone and appendix are examples of, for ten points, what type of structure that served a role in an ancestor species but does not have a present function?
ANSWER: Vestigial structures (accept "organs" or "behaviors" in place of "structures")
(Bonus 2) The cardiac and skeletal forms of this tissue are striated, but the smooth form is not. For ten points each,
[Part A] Name this tissue, which makes up organs such as the diaphragm and the biceps. Tendons connect the skeletal form of this tissue to bone.

ANSWER: Muscle
[Part B] The contraction of muscle relies on linkages between myosin and this other protein, which also forms microfilaments found in the cell's cytoskeleton.

## ANSWER: Actin

[Part C] During periods of high activity, glucose in the muscles is converted into this acid, which is a product of fermentation. It is often inaccurately cited as the reason why muscles become sore.
ANSWER: Lactic acid (accept lactate)
(Tossup 3) A musical form named for these pieces has three major sections: the exposition, development, and recapitulation. Domenico Scarlatti is best known for 555 of these pieces for keyboard. Brahms and Schumann collaborated on one of these works titled (*) "F-A-E". Mozart's 11th one of these works for piano includes his "Turkish March". For ten points, name these works that include ones for piano by Beethoven named "Pathetique" and "Moonlight".
ANSWER: sonata (accept specific types)
(Bonus 3) This close friend of Robert Schumann was a formidable musician who wrote hundreds of vocal and piano pieces, dozens of chamber works and four symphonies. For ten points each,
[Part A] Name this composer of A German Requiem
ANSWER: Johannes Brahms
[Part B] Brahms' famous Wiegenlied is commonly known as this type of song, often used to calm babies to sleep.

## ANSWER: Lullaby

[Part C] When the University of Breslau presented Brahms with an honorary doctorate, he wrote this concert overture, which is laced with student drinking songs.
ANSWER: Academic Festival Overture
(Tossup 4) In a story by this author, Mr. Behrman dies from pneumonia in Greenwich Village while painting his "great masterpiece." In another of his stories, a character visits Madame Sofronie's shop after sobbing about only having (*) one dollar and eighty-seven cents. In that story by this author of "The Last Leaf," Della and Jim sacrifice their most prized possessions to buy each other presents. For ten points, name this author of "The Gift of the Magi."
ANSWER: O. Henry [or William Sydney Porter]
(Bonus 4) This author wrote The Eighth Day. For ten points each,
[Part A] Name this American author who wrote the Pulitzer Prize-winning play The Skin of Our Teeth. ANSWER: Thornton Wilder
[Part B] Thornton Wilder also won a Pulitzer Prize for his novel The Bridge of San Luis Rey which is set in this country. Brother Juniper witnesses the collapse of the title bridge in this country.
ANSWER: Peru
[Part C] Thornton Wilder won yet another Pulitzer Prize for this play. This three-act play is set in the fictional town of Grover's Corners in New Hampshire.
ANSWER: Our Town
(Tossup 5) A deity who is worshipped by fishermen in this belief system has a name meaning "Leech-child." Another deity in this belief system who once threw a dead horse at his sister defeated a monster named (*) Orochi. Susanoo is the storm god in this religion whose temples are entered through gates known as torii, the oldest of which is in Yamagata Prefecture. Amaterasu is worshipped in, for the point, what religious belief system of Japan?
ANSWER: Shintoism
(Bonus 5) A number of Old Testament prophets foretold the coming of the Messiah. One prophet, however, appears in the New Testament. For ten points each,
[Part A] Name this preacher who lived in the wilderness and anointed Jesus in the River Jordan.
ANSWER: John the Baptist (prompt on John)
[Part B] After John criticized this ruler of Galilee for divorcing his wife and marrying his brother's ex-wife, this man imprisoned John.
ANSWER: Herod (Accept Herod Antipas. Do not accept Herod I, II, or the Great)
[Part C] This step-daughter of Herod danced for him and, as a reward, was granted her wish. She asked for John's head on a platter.

ANSWER: Salome
(Tossup 6) BFM-TV decided to send a bodyguard with every journalist who covered this movement. This movement was sparked by a projected rise in fuel taxes. Members of this movement vandalized numerous locations, including the (*) Arc de Triomphe. Participants in this movement wear an item required for French motorists in case of an emergency. For ten points, name this anti-establishment movement in France named for a colorful piece of clothing
ANSWER: Yellow Vests Movement (accept Yellow Jackets Movement; accept Mouvement des Gilets Jaunes)
(Bonus 6) This man carried a copy of Meditations during his deployments in the Middle East. For ten points each,
[Part A] Name this American general who served as Secretary of Defence in President Trump's cabinet until his resignation in December 2018. This man was nicknamed "Mad Dog".

ANSWER: James Mattis
[Part B] After his resignation, James Mattis was replaced by this man, who currently serves as the Acting Secretary of Defence.
ANSWER: Patrick Shanahan
[Part C] This former Director of the CIA currently serves as Secretary of State. This man replaced Rex Tillerson in April 2018.

ANSWER: Mike Pompeo
(Tossup 7) This leader was saved from an assassination attempt by Manuela Saenz. Forces under this leader won the Admirable Campaign, and other victories came later at Boyaca and Carabobo. This leader issued the (*) Decree of War to the Death and the Cartagena Manifesto. Jose de San Martin met with this leader at the Guayaquil Conference. For ten points, name this South American commander who led Gran Colombia and was known as "the Liberator".
ANSWER: Simon Bolivar (or Simon Jose Antonio de la Santisima Trinidad Bolivar Palacios Ponte y Blanco; prompt on "El Libertador")
(Bonus 7) This man worked as a bus driver before being elected to the National Assembly. For ten points each,
[Part A] Name this current leader of Venezuela who is supported by countries such as Russia and China. ANSWER: Nicolas Maduro
[Part B] Nicolas Maduro took power after the death of this former president of Venezuela in 2013.
ANSWER: Hugo Chavez
[Part C] Maduro's presidency is disputed by this politician, the President of the National Assembly who is recognized as acting President of Venezuela by the United States and numerous Western countries.

## ANSWER: Juan Guaido

(Tossup 8) This color names a phenomenon in which electromagnetic radiation increases in wavelength as it moves away from a person's line of sight due to the Doppler Effect. This color has the smallest frequency and the (*) largest wavelength in the visible spectrum of light. This color also names an "infra" type of radiation. For 10 points, name this color which comes first in the ROYGBIV spectrum and can be seen in ruby lasers.
ANSWER: red
(Bonus 8) Objects lose their ferromagnetic properties when heated above a temperature named for this scientist. For ten points each,
[Part A] Name this scientist, who shared a Nobel Prize with his wife and Henri Becquerel for their studies on radioactivity.
ANSWER: Pierre Curie (prompt on "Curie")
[Part B] Pierre and Marie Curie studied pitchblende, an ore of this radioactive element symbolized U. Its isotope 235 is commonly used in nuclear power plants.

## ANSWER: uranium

[Part C] Curie also co-discovered piezoelectricity, the buildup of electric charge in these ordered solids with applied mechanical stress. These solids are made up of unit cells within a lattice structure.
ANSWER: crystals (accept crystalline solids)

## Sixty-Second Rounds

The categories are ...

1. Nineteen Eighty-Four
2. African American Women
3. Deadly Diseases

Nineteen Eighty-Four
Name the...
(1) Author of Nineteen Eighty-Four

ANSWER: George Orwell
(2) Mysterious leader of "the Party" who according to a slogan is always "Watching You". ANSWER: Big Brother
(3) Woman who Winston Smith begins an affair with.

ANSWER: Julia
(4) Ministry where Winston Smith works. It is tasked with rewriting historical records.

ANSWER: Ministry of Truth
(5) Name of Great Britain in the novel.

ANSWER: Airstrip One
(6) Opposition leader who founded "the Brotherhood", and enemy of the state of Oceania.

ANSWER: Emmanuel Goldstein (accept either underlined section)

## African American Women

Name the...
(1) Woman who refused to move to the back of a Montgomery, Alabama bus, thus sparking a boycott.

ANSWER: Rosa Parks
(2) Leader of the Underground Railroad known by the nickname Moses who operated in pre-Civil War Maryland
ANSWER: Harriet Tubman
(3) Senator from California who is currently seeking the Democratic nomination for president

ANSWER: Kamala Harris
(4) Winner of 23 grand slam singles tennis tournaments, the second-most all time

ANSWER: Serena Williams (Prompt on "Williams")
(5) African-American author who recited her poem "On the Pulse of Morning" at Bill Clinton's inauguration and also wrote I Know Why the Caged Bird Sings.
ANSWER: Maya Angelou
(6) First African-American woman to win the Best Actress Oscar for her role in Monster's Ball.

ANSWER: Halle Berry

## Deadly Diseases

Name the...
(1) Disease caused by the bacterium Yersinia Pestis which wiped out a third of Europe's population during the Middle Ages
ANSWER: Black Death (Accept Plague)
(2) Disease which had a major outbreak from 2013-2016 in West Africa, a viral hemorrhagic fever.

ANSWER: Ebola virus disease (Accept Ebola Hemorrhagic Fever)
(3) Virus which caused the Spanish Flu.

ANSWER: H1N1 Influenza virus
(4) Virus spread by mosquitoes which causes microcephaly and had a major outbreak from 2015-2016 in Brazil.

ANSWER: Zika fever
(5) Coronavirus which was first reported in 2012 and spread quickly through countries such as Saudi Arabia, the UAE and Qatar.
ANSWER: Middle East respiratory syndrome-related coronavirus (Accept MERS, accept MERS-CoV , accept EMC/2012)
(6) Respiratory disease which had a severe 2002-2003 outbreak in Asia, particularly Southern China.

ANSWER: Severe acute respiratory syndrome (Accept SARS)

## Second Half

(Tossup 9) One work from this country includes a character who beats a tiger to death while drunk and features the gathering of 108 outlaws." Redology" is the academic study of a work from this country in which a character is born with a magical piece of jade. That work from this country is also called (*) The Story of the Stone and features the declining Jia clan. Water Margin is a novel from, for ten points, what country where Dream of the Red Chamber is set in Beijing?
ANSWER: China
(Bonus 9) This work's protagonist is pursued by Captain Richard Madden. For ten points each,
[Part A] Name this short story about a Chinese professor named Doctor Yu Tsun who serves as a German spy and seeks to understand a novel written by his ancestor Ts'ui Pen.

## ANSWER: The Garden of Forking Paths

[Part B] The Garden of Forking Paths was written by this Argentine author of El Aleph and Ficciones. ANSWER: Jorge Luis Borges
[Part C] This other work by Jorge Luis Borges features an immense library in which the order and content of the books are random and meaningless. In this work, the "purifiers" arbitrarily destroy books while others seek the "man of the book"
ANSWER: The Library of Babel
(Tossup 10) This value is the surface area of Gabriel's Horn. A sequence is said to converge if " $a$ sub $n$ " approaches some value as $n$ approaches this quantity. Intervals with this right (*) endpoint extend all the way to the right on a number line. Euclid showed that this quantity is the number of prime numbers. For ten points, identify this quantity larger than any real number that is symbolized with a sideways " 8 ".
ANSWER: infinity
(Bonus 10) You are gluing together two identical triangles. For ten points each,
[Part A] If the two triangles are glued together so that one copy is a rotation of the other along a side, the result will be this type of quadrilateral. This type of quadrilateral has two pairs of opposite sides with the same length.
ANSWER: Parallelogram
[Part B] If the two triangles are glued together so that one copy is a reflection of the other along a side, the result will be this type of quadrilateral. This type of quadrilateral has two pairs of congruent adjacent sides.

## ANSWER: Kite

[Part C] This is the maximum number of sides that the figure resulting from gluing two triangles together can have. The triangles do not necessarily need to be glued together along a side.
ANSWER: $\underline{12}$
(Tossup 11) This apprentice of Fra Filippo Lippi placed Mary and the baby Jesus within an ancient ruin in his Adoration of the Magi. Two of his works appear together in the Uffizi [oo-FEETS-ee] museum. One of those works by this man features the (*) Three Graces and several other figures in an orange grove, while the other depicts the title goddess rising from the sea standing atop a seashell. For ten points, what Italian painted La Primavera and The Birth of Venus?
ANSWER: Sandro Botticelli
(Bonus 11) Answer the following about the art colony of Taos. For ten points each,
[Part A] Taos is found in this southwestern state, whose deserts inspired many paintings of cow skulls by an artist who made abstract depictions of its "Black Place".

## ANSWER: New Mexico

[Part B] This aforementioned artist was the wife of Alfred Stieglitz and painted Cow's Skull: Red, White, and Blue in addition to many paintings of flowers.
ANSWER: Georgia Totto O'Keeffe
[Part C] This other artist's photo book titled Taos Pueblo depicts sites like the San Francisco de Asis Mission Church. He's more famous for his Moon and Half Dome.
ANSWER: Ansel Easton Adams
(Tossup 12) A member of this race called "The Piercer" is regarded as a progenitor of mankind. Another member of this race advised his son Deucalion to build an ark to ride out a world-wide flood and was severely punished for aiding mankind. In one of Heracles's labors, he temporarily removed a (*) great burden from the shoulders of one of these deities. For ten points, what group of immortals who ruled during the Golden Age includes Pallas, Prometheus, and Atlas?

ANSWER: Titans
(Bonus 12) This mythological creature was a favorite of many indigenous tribes in the western regions of North America. For ten points each,
[Part A] Name this creature whose name is also the modern word for a common canine. It was often portrayed as a trickster spirit.
ANSWER: Coyote
[Part B] This crafty, spider-like trickster god appears in West African and Caribbean tales.
ANSWER: Anansi
[Part C] Anansi legendarily acquired all of these things in the world from the Sky-Father, Nyame. In Arabian Nights, Scheherazade told one of these every night and ultimately finished one thousand of them. ANSWER: Stories
(Tossup 13) This lake's only outlet, Truckee River, flows eventually into Pyramid Lake. Fannette Island is the only island in this lake, and is located within its Emerald Bay State Park. (*) Kings Beach is a town on the northern shoreline of this place popular for water sports, while others are famed for their skiing spots. For ten points, name this lake straddling the California and Nevada borders, the largest alpine lake in North America?
ANSWER: Lake Tahoe
(Bonus 13) This city is home to the Turlington Building and Cascades Park. For ten points each,
[Part A] Name this county seat of Leon County. This city is located at the southern end of the Red Hills Region.
ANSWER: Tallahassee
[Part B] Tallahassee is the capital of this US State, the southernmost contiguous state in the USA. Jacksonville and Miami are located in this state.
ANSWER: Florida
[Part C] This largest freshwater lake in Florida is often called Florida's Inland Sea. This extremely shallow lake is home to Kreamer island.
ANSWER: Lake Okeechobee
(Tossup 14) One work by this author features a Trojan warrior who publicly mocks love and is struck with desire for the daughter of Calchas. This author of Troilus and Criseyde also wrote a poem titled The House of Fame. This author's most famous work features characters such as (*) "The Knight" and "The Wife of Bath" who journey to the shrine of Saint Thomas Becket. For ten points, name this author of The Canterbury Tales.
ANSWER: Geoffrey Chaucer
(Bonus 14) This author described "dark satanic mills" in his poem "And did those feet in ancient times". For ten points each,
[Part A] Name this author of The Marriage of Heaven and Hell.
ANSWER: William Blake
[Part B] This William Blake poem describes the subject animal "burning bright / In the forests of the night" and asks "Did he who made the Lamb make thee?"
ANSWER: The Tyger
[Part C] "The Tiger" was included in this William Blake poetry collection which was later combined with his Songs of Innocence collection.
ANSWER: Songs of Experience (Accept Songs of Innocence and of Experience)
(Tossup 15) One of these objects named the Conqueror destroyed the ARA General Belgrano. These vehicles enjoyed the First and Second Happy Time under the leadership of Karl Donitz. These vehicles frequently operated in (*) "wolf packs" and were countered by the convoy system during the Battle of the Atlantic. One of these vehicles sank the cruise liner Lusitania. For ten points, name this type of naval vessels which included U-Boats.
ANSWER: Submarines (Do not accept U-Boats, HMS Conqueror was not a U-Boat)
(Bonus 15) This man was the longest reigning monarch in European history. For ten points each,
[Part A] Name this French monarch often nicknamed "The Sun King".
ANSWER: Louis XIV
[Part B] Louis XIV was a member of this royal house which ruled France after the extinction of the House of Valois.
ANSWER: House of Bourbon
[Part C] Louis XIV sought to place his grandson Philip on the throne of this European country south of the Pyrenees, which led to a war of succession named for this country.

## ANSWER: Spain

(Tossup 16) In 2021, this device will be succeeded by one named for James Webb. The device has successfully obtained namesake Deep Field, Ultra Deep Field, and Extreme Deep Field images. The operation of this device was initially hampered after an incorrectly assembled $\left(^{*}\right)$ null corrector failed to detect the spherical aberration that caused this object's mirror to be polished to the wrong shape. For ten points, name this telescope located in low Earth orbit.
ANSWER: Hubble Space Telescope
(Bonus 16) High energy gamma ray bursts are emitted during the superluminous type of these phenomena. For ten points each,
[Part A] Name these massive stellar explosions, which are the primary source of all elements heavier than nitrogen in the universe.
ANSWER: supernovas (accept supernovae)
[Part B] Massive stars that undergo core collapse supernovae may degenerate into these stars, which are supported by the degeneracy pressure of their namesake uncharged particles.
ANSWER: neutron stars (prompt on pulsar; prompt on magnetar)
[Part C] White dwarves will collapse and trigger a supernova if they grow above this limit on their mass. This quantity is about 1.4 times the mass of the Sun.
ANSWER: Chandrasekhar limit

## Tiebreakers

(Tossup 17) The recurring ovals in Robert Motherwell's Elegy of the Spanish Republic are of this color. An entry into a series of paintings named for this color shows a grey-haired wide-eyed Saturn eating his son and was painted by (*) Goya. Though not grey, this is the dominant background color in Picasso's Guernica. Depictions of silhouettes often usually use, for ten points, what color in which the light is totally absorbed to create darkness?
ANSWER: black
(Bonus 17) This artist painted Madonna of the Pinks. For ten points each,
[Part A] Name this Renaissance artist, a rival of Michelangelo who painted the Portrait of Pope Julius II. ANSWER: Raphael (Accept Raffaello Sanzio da Urbino)
[Part B] This famous Raphael work depicts a scene in the title Greek city. Philosophers such as Socrates and Aristotle appear in this work
ANSWER: The School of Athens
[Part C] The School of Athens is part of the Raphael Rooms in this palace. This palace in the is the official residence of the Pope.
ANSWER: Apostolic Palace (Accept Papal Palace, accept Palace of the Vatican, accept Vatican Palace, accept Palace of Sixtus V)

