

Round 5

First Half

(Tossup 1) **This deity is depicted nude and lying next to a dog in a Titian painting set in Urbino. This deity stands next to the three Graces and beneath a cupid in an orange grove in (*) Primavera.** In another Botticelli painting, this goddess is depicted emerging from the water on a seashell during her *Birth*. For ten points, name this Roman goddess of love.

ANSWER: Venus (accept Venus of Urbino; accept The Birth of Venus; do not accept or prompt on Aphrodite)

(Bonus 1) One of this musician's albums contains the songs "Jeru" and "Venus de Milo." For ten points each,

[Part A] Name this jazz musician who recorded the albums *The Birth of the Cool* and *Sketches of Spain*.

ANSWER: Miles Davis

[Part B] This album by Miles Davis opens with the song "So What." This album, which featured John Coltrane and Cannonball Adderly, also includes the songs "Freddie Freeloader" and "Blue in Green."

ANSWER: Kind of Blue

[Part C] Miles Davis played this brass instrument. Dizzy Gillespie played a bent one of these instruments.

ANSWER: trumpet

(Tossup 2) **The active sites of cytochromes contain this nutrient, which clusters with sulfur in certain proteins. Transferrin is the primary protein used to transport this nutrient in the body. Consumption of (*) vitamin C promotes absorption of this nutrient.** Deficiency in this mineral causes anemia. Hemoglobin transports, for ten points, what mineral with symbol Fe?

ANSWER: iron (accept Fe before it is read)

(Bonus 2) The intercalated discs of this organ allow its individual cells to function as a single unit. For ten points each,

[Part A] Name this organ responsible for pumping blood throughout the body

ANSWER: heart

[Part B] The bottom two chambers of the heart are known by this term as opposed to the atria. Four cavities in the brain are known by this name.

ANSWER: ventricles

[Part C] The heart replaces ANP to reduce blood levels of sodium, which in turn reduces this quantity, which ideally is 120/80 [120 over 80].

ANSWER: blood pressure

(Tossup 3) **Tao uses these two forces as the basis for ba gua trigrams, and they form the basis of the taijitu [tye-jee-too] symbol. A common symbol in Chinese philosophy represents the interplay of these two (*)** opposing but complementary forces, which can represent stillness and energy or dark and light. For ten points, name these two forces that appear as swirling teardrop shapes in a circle in a symbol named for them.

ANSWER: yin and yang (accept in either order; accept yin-yang; accept taijitu before it is read; prompt on partial answers)

(Bonus 3) These stories include the “Prodigal Son” and the “mustard seed,” which encourages believers to think of the kingdom of heaven as a tiny seed that grows into a large tree. For ten points each,

[Part A] Name these biblical stories told by Jesus to teach moral lessons.

ANSWER: parables of Jesus

[Part B] In another parable similar to that of the mustard seed, believers are told that the kingdom of heaven is like one of these precious stones “of great price,” which a merchant should sell all of his goods to purchase.

ANSWER: parable of the pearl of great price

[Part C] In a parable from the Book of Luke, a priest and a Levite pass by a beaten man on the side of a road before one of these men kindly rescues him. Because of this parable, people who selflessly help others are often referred to as “Good” ones of these people.

ANSWER: parable of the good Samaritan

(Tossup 4) **This mountain contains Mount Tarn which is located on the Brunswick Peninsula. The volcanoes of Misti and Cotopaxi are located within this mountain range. The farthest point from the center of the earth, Mount (*)** Chimborazo, is located in this mountain range that also contains Mount Aconcagua. For ten points, name this mountain range that runs along the western coast of South America.

ANSWER: Andes Mountains (or Andean Range)

(Bonus 4) A lack of suffrage in this country led to an 1854 rebellion led by Peter Lalor. For ten points each,

[Part A] Name this country where workers revolted in the Eureka Rebellion. Prior to the rebellion, the state of Victoria underwent a major economic boom.

ANSWER: Australia

[Part B] The workers that rebelled in the Eureka Rebellion were gathering this resource. As a result of this discovery of this resource, the the town of Ballarat's population exploded.

ANSWER: gold

[Part C] The first settlements in Australia were originally founded as this type of colony. Australia's large size and sparse civilization made an ideal choice for this type of colony which aimed to isolate undesirables from the public.

ANSWER: penal colony (accept exile colony; accept specific types of criminals such as murderers; or debtors)

(Tossup 5) **Howell Jolly bodies are clusters of this molecule found in malformed red blood cells. The mitochondria and chloroplast have a circular form of this molecule. Okazaki fragments are made out of this molecule, which has a notable (*) "semi-conservative" replication. This molecule contains thymine, which is replaced by uracil in RNA. For ten points, name this molecule that makes up the genetic code.**

ANSWER: DNA (or Deoxyribonucleic acid; do not accept or prompt on "RNA" or "Ribonucleic acid")

(Bonus 5) This man won a Nobel Prize for his explanation of the photoelectric effect. For ten points each,

[Part A] Name this German physicist better known for a statement which reads $e = mc^2$ [e equals m c squared]

ANSWER: Albert Einstein

[Part B] Einstein's explanation of the photoelectric effect was published the same year as a paper about this random motion of particles suspended in a fluid. This phenomenon is named for a Scottish botanist who observed the motion of pollen.

ANSWER: Brownian motion

[Part C] The third of the Einstein's 1915 Annus Mirabilis papers laid out the groundwork for this "special" theory which explores behaviors that occur at near-light speeds.

ANSWER: special relativity

(Tossup 6) **The second stanza of this poem questions “On what wings dare he aspire? / What the hand, dare seize the fire?” This poem, which references its companion by asking “Did he who made the (*) Lamb make thee?” describes a title animal with “fearful symmetry” that is “burning bright, / In the forests of the night.” For ten points, identify this William Blake poem named for a large, striped cat.**

ANSWER: The Tyger

(Bonus 6) The student Toru Watanabe is the main character of this author’s novel that shares its name with a Beatles song, *Norwegian Wood*. For ten points each,

[Part A] Name this author of *The Wind-Up Bird Chronicle* and *1Q84*.

ANSWER: Haruki Murakami (accept Murakami Haruki)

[Part B] Murakami is an author from this country. Murasaki Shikibu was a medieval-era author from this Asian island country.

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

[Part C] Another Murakami novel is titled for a person with this name *on the Shore*. This is the surname of the Czech author Franz, who wrote “The Metamorphosis” and *The Trial*.

ANSWER: Kafka (accept Kafka on the Shore; accept Franz Kafka; accept Kafka Tamura)

(Tossup 7) **One representative from this state accused his opponent of being an Islamist despite his opponent being a Christian. That representative, Duncan Hunter, has pled guilty to corruption charges. Other representatives from this state include Devin (*) Nunes and the chair of the House Intelligence Committee, Adam Schiff. House Speaker Nancy Pelosi represents, for ten points, what U.S. state with capital Sacramento?**

ANSWER: California

(Bonus 7) The bill to implement this plan was introduced in the Senate by Ed Markey. For ten points each,

[Part A] Name this plan which aims to reduce economic inequality with environmentally friendly policies. Its name is a play on a term used by FDR to refer to his policies surrounding the Great Depression.

ANSWER: Green New Deal (prompt on New Deal)

[Part B] The Green New Deal was introduced in the House of Representatives by this freshman Democrat from New York City. This representative is a self identified Democratic Socialist who defeated Joe Crowley in the Democratic primary in 2018.

ANSWER: Alexandria Ocasio-Cortez (accept AOC; do not accept or prompt on just “Ocasio” or “Cortez”)

[Part C] This Democratic senator oppose the Green New Deal due to financial costs and the impossibility of passing it in the GOP controlled Senate. This senior senator from California was reelected in 2018 by defeating progressive challenger Kevin De Leon.

ANSWER: Dianne Feinstein

(Tossup 8) **This man began one invasion after being sent a ring by Honoria. Pope Leo I [the first] was sent by Valentinian III [the third] to convince this man not to sack a capital city. A coalition led by Flavius Aetius and (*) Theodoric I defeated this man at the Battle of Catalaunian Plains. For ten points, name this “Scourge of God” who led an invasion of the Western Roman Empire as the leader of the Huns.**

ANSWER: Attila the Hun

(Bonus 8) Answer some questions about the Fall of France. For ten points each,

[Part A] The Fall of France included the capture of this capital city. A photograph taken in this city shows Adolf Hitler in front of the Eiffel Tower.

ANSWER: Paris

[Part B] Despite the Fall of France, this general continued to lead Free French forces. This man would later become President of France, but was forced to flee the country in the midst of the May 1968 protests.

ANSWER: Charles de Gaulle

[Part C] After the Fall of France, Germany allowed much of the French government to form this puppet state. This puppet state, led by Philippe Petain, was centered on namesake city in central France.

ANSWER: Vichy France (accept Regime de Vichy)

Sixty-Second Rounds

The categories are ...

1. Lewis Carroll
2. The Empire of Japan
3. Polyhedra

LEWIS CARROLL

Name the...

(1) Girl whose *Adventures in Wonderland* title an 1865 Carroll novel.

ANSWER: Alice (accept Alice's Adventures in Wonderland)

(2) Colorfully-named animal who worries about being late while leading the girl into Wonderland.

ANSWER: White Rabbit (prompt on partial answers)

(3) Disappearing animal with a wide smile who leads the girl to a mad tea party in Wonderland.

ANSWER: Cheshire Cat (prompt on partial answers)

(4) Object that the girl steps through to enter Wonderland in an 1871 sequel novel.

ANSWER: looking-glass (or mirror)

(5) Creature that dies when a "vorpal blade [goes] snicker-snack" in a Carroll nonsense poem named for it.

ANSWER: Jabberwock (accept Jabberwocky)

(6) Creature that "was a Boojum, you see" at the end of a Carroll poem titled for its "Hunting."

ANSWER: Snark (accept The Hunting of the Snark)

THE EMPIRE OF JAPAN

Name the...

(1) Neighboring country where soldiers carried out war crimes at Nanjing.

ANSWER: China (accept Zhongguo)

(2) City, along with Nagasaki, that was targeted by an atomic bomb in World War II.

ANSWER: Hiroshima

(3) Emperor of Japan who renounced his divinity following World War II.

ANSWER: Showa (accept Hirohito)

(4) Emperor whose restoration of imperial power in 1868 started the Empire.

ANSWER: Meiji (accept Mutsuhito)

(5) City on the end of the Malay Peninsula, the so-called “Gibraltar of the East” that Japan seized from the UK in 1942.

ANSWER: Singapore

(6) Island where it defeated the Republic of Formosa after annexing it in 1895.

ANSWER: Taiwan

POLYHEDRA

Name the...

(1) Number of dimensions that polyhedra, like cubes, exist in.

ANSWER: three (accept additional information, like 3-dimensional objects)

(2) Number of faces on a cube.

ANSWER: six

(3) Number of faces on the simplest polyhedron, a tetrahedron.

ANSWER: four

(4) Term for the line segments that connect vertices and bound faces on a polyhedron.

ANSWER: edges (prompt on "side(s)")

(5) Term for a polyhedron with twelve faces.

ANSWER: dodecahedron (or dodecahedra)

(6) Term for a convex polyhedron whose faces are all the same regular polygon; five such examples exist.

ANSWER: Platonic solid

Second Half

(Tossup 9) **According to legend, a ruler of this city constructed a massive palace called the “Marvel of Mankind” as well as a gift for his wife, Queen Amytis, that became one of the wonders of the world. A law code in this city was based on social class and called for an (*) “eye for an eye.” Nebuchadnezzar II and Hammurabi ruled, for ten points, what city that legendarily contained the Hanging Gardens?**

ANSWER: Babylon

(Bonus 9) This politician recommended that Congress create the Reconstruction Finance Corporation. For ten points each,

[Part A] Name this Republican President whose failure to deal with an economic disaster led him to lose the Election of 1932 to Franklin Roosevelt.

ANSWER: Herbert Hoover

[Part B] Herbert Hoover lost the Election of 1932, in part, due to his failure to combat this event. This event included “Black Tuesday”, in which prices at the New York Stock Exchange collapsed on October 29th, 1929.

ANSWER: The Great Depression

[Part C] Herbert Hoover also lost popularity for forcibly removing this group that had made a camp at Anacostia Flats. This group, composed mainly by World War I veterans, demanded that their service certificates be cashed early.

ANSWER: Bonus Army (accept Bonus Expeditionary Force)

(Tossup 10) **Gas giant exoplanets are frequently called “hot” this planet. This planet shares its orbit with the Trojan Asteroids. This planet is orbited by the Halo and Gossamer Rings. This planet’s largest moons were discovered by (*) Galileo and include Ganymede and Europa. The Asteroid belt lies between this planet and Mars. The Great Red Spot is located on, for ten points, what largest planet in the solar system?**

ANSWER: Jupiter

(Bonus 10) The Laschamp event was the first discovered reversal of this structure. For ten points each,
[Part A] Name this structure, a field which causes magnets to always point north.

ANSWER: geomagnetic field (accept Earth's magnetic field; prompt on partial answer)

[Part B] The interaction of the geomagnetic field and solar wind can cause these events. These large, colorful lights in the sky are most frequently found in the far north and south.

ANSWER: aurora

[Part C] The geomagnetic field is believed to be caused by convection currents in this layer of the Earth. Unlike a similarly named layer of the Earth, this layer is composed of liquid nickel and iron.

ANSWER: outer core (prompt on core; do not accept or prompt on inner core)

(Tossup 11) **This author wrote about a god fashioning the first lyre by killing a tortoise and taking its shell in his “Hymn to Hermes.” This author wrote a poem about a “polytropos,” a cunning man who encounters the witch (*) Circe, Polyphemus, and the sea monster Scylla on his return trip to Ithaca to reunite with his wife, Penelope. For ten points, name this ancient Greek poet of the *Odyssey*.**

ANSWER: Homer (or Homeros)

(Bonus 11) In this play, Giles Corey asks for “more weight” as he is tortured by having heavy stones piled on his chest. For ten points each,

[Part A] Name this allegorical play in which John Proctor eventually rips up a confession and resigns himself to being executed for witchcraft.

ANSWER: The Crucible

[Part B] This author of *After the Fall* and one-time husband of Marilyn Monroe wrote *The Crucible*.

ANSWER: Arthur Miller

[Part C] *The Crucible* is set in this Massachusetts town. Many of the play's characters are based on real people who participated in this town's witch trials in the 1690s.

ANSWER: Salem (accept Salem Witch Trials)

(Tossup 12) **Eugene Goossens asked this composer for a composition that was premiered at income tax time. This composer was inspired by the folk song “Bonaparte's Retreat” for the closing number of a collaboration with Agnes de Mille. Martha (*) Graham choreographed a work for which this man wrote variations on the Shaker theme “Simple Gifts.” For ten points, name this American composer of *Fanfare for the Common Man* and the ballets *Rodeo* and *Appalachian Spring*.**

ANSWER: Aaron Copland

(Bonus 12) In *Two Sisters*, this artist depicted a pair of young girls wearing hats with flowers. For ten points each,

[Part A] Name this French painter, who also painted *The Luncheon of the Boating Party*.

ANSWER: Pierre-Auguste Renoir

[Part B] Renoir also painted people performing this action at *Bougival*. A group of orange people hold hands in a circle in an Henri Matisse painting titled for this action.

ANSWER: dance (accept word forms like dancing; accept Dance at Bougival or La Danse à Bougival; accept La Danse)

[Part C] Both Renoir and Matisse are artists from this country. Renoir's *Dance at Bougival* depicts a party near Paris in this country.

ANSWER: France

(Tossup 13) **The Abel-Ruffini theorem states that a large class of these functions cannot be solved in closed form. These functions can be divided using synthetic or long division. The degree of one of these objects is given by the largest (*) exponent of its terms. The quadratic formula is used to solve one type of these functions. For ten points, name these functions that can only include variables raised to non-negative powers, like "x cubed plus 4x squared."**

ANSWER: polynomials

(Bonus 13) Connecting the centers of the faces of this polyhedron will create its dual, the octahedron. For ten points each,

[Part A] Name this platonic solid with square-shaped faces.

ANSWER: cube

[Part B] This is the number of faces on a cube.

ANSWER: 6

[Part C] For a cube with edge length of 1, this is the length of the diagonal spanning one of its faces. Adding one to this number yields the silver ratio.

ANSWER: square root of 2

(Tossup 14) **After being arrested, this man argued that "injustice anywhere is a threat to justice everywhere." This man supported striking sanitation workers in Memphis with a speech declaring "I've Been to the Mountaintop." In a speech given at the (*) Lincoln Memorial, this man spoke of a day where black children will be able to join hands with white children. For ten points, name this Civil Rights leader who gave the "I Have a Dream" speech.**

ANSWER: Martin Luther King Jr. (accept MLK)

(Bonus 14) This country is home to the city of Aberdeen, which is known as the “Oil Capital of Europe.” For ten points each,

[Part A] Name this northernmost member country of the United Kingdom, which lies directly north of England. This country’s capital is Edinburgh.

ANSWER: Scotland

[Part B] This Scottish city was formerly known for its gang violence and was known as the “Murder Capital of Europe.” Today, this is the largest city in Scotland and the third most populous city in the UK.

ANSWER: Glasgow

[Part C] The city of Inverness is known as the “Capital of” this region of Scotland. This northern mountainous region of Scotland is the origin of the Scottish Clan system and names a type of games that include the caber toss and sheaf throw.

ANSWER: Highlands

(Tossup 15) **Unlike her sisters, a character in this novel diligently visits the neighboring Hummel family every day, but ends up contracting scarlet fever. A character in this novel meets her future husband, Professor (*) Bhaer, at a boarding house, and another marries her next-door neighbor, Laurie. This novel’s title characters are the sisters Meg, Jo, Beth ,and Amy March. For ten points, what Louisa May Alcott novel was adapted into a 2019 film?**

ANSWER: Little Women

(Bonus 15) A group of literary characters who stop at the Tabard Inn on the way to this city includes the Wife of Bath, a Pardoner, and a Franklin. For ten points each,

[Part A] Name this British city that titles a series of “Tales” told by a group of pilgrims traveling to this city’s shrine of Thomas Beckett.

ANSWER: Canterbury (accept The Canterbury Tales)

[Part B] This author of *The Book of the Duchess* wrote *The Canterbury Tales*.

ANSWER: Geoffrey Chaucer

[Part C] *The Canterbury Tales* is written in this form of English. This form of English followed the use of Old English and was used from the 11th Century until approximately 1500.

ANSWER: Middle English

(Tossup 16) **Thor gave Magni one of these animals, which was named Gullfaxi because of its golden hair. After distracting one of these creatures, Svadilfari, from completing the walls of Valhalla, Loki gave (*) birth to an eight-legged one of these animals, Sleipnir, who became the steed of Odin. For ten points, name this type of fast-running, hooped animal.**

ANSWER: horses

(Bonus 16) King Eurystheus ordered this man to steal queen Hippolyta's girdle and the golden apples of the Hesperides. For ten points each,

[Part A] Name this mythical Greek hero who killed his wife and sons and was forced to perform twelve labors in compensation.

ANSWER: Heracles (accept Hercules)

[Part B] Heracles is often depicted wearing the golden skin of one of these animals. During his first labor, Heracles killed one of these animals by strangling it, since its hide was impenetrable to weapons.

ANSWER: Nemean lion

[Part C] Heracles also had to capture the Golden Hind, a deer sacred to this goddess of the hunt.

ANSWER: Artemis

Tiebreakers

(Tossup 17) **This country is home to the indigenous rights leader, Raoni Metuktire. This country's president called Greta Thunberg a "brat" for criticizing deforestation in this country. That president was elected in the aftermath of Operation (*) Car Wash, which led to the impeachment of Dilma Rousseff. Jair Bolsonaro is the president of, for ten points, what South American country whose largest city is Sao Paulo?**

ANSWER: Brazil

(Bonus 17) A literary governess is frightened by two of these beings, which she thinks are threatening the children Flora and Miles. For ten points each,

[Part A] Name these otherworldly beings, the spiritual echoes of dead humans.

ANSWER: ghosts (accept clear equivalents)

[Part B] Flora, Miles, and their governess appear in this novella, in which the spirits of Miss Jessel and Peter Quint. In the frame story of this novella, a group of storytellers agree that ghosts threatening children give a scary story the title twist.

ANSWER: The Turn of the Screw

[Part C] *The Turn of the Screw* is by this American author of *Daisy Miller* and *The Portrait of a Lady*.

ANSWER: Henry James