

Round 1

Bee Round 1

(Tossup 1) In the novel named for this character, Mr Peggotty and Little Em'ly move to Australia with the Micawber family. This title character is nicknamed "Trotwood" by his Aunt Betsey, and helps his eventual wife, Agnes Wickfield, foil the plans of Uriah Heep. For the point, name this semi-autobiographical title character of a Charles Dickens novel, who ponders "whether [he] shall turn out to be the hero of [his] own life."

ANSWER: David Copperfield

(Tossup 2) Leigh lights were designed specifically to locate these vessels. Crew members on these vessels experienced success during the so-called "Happy Times" during the Battle of the Atlantic. One of these vessels sank the Lusitania in 1915, provoking American anger over unrestricted warfare practices involving these vessels. For the point, name these German submarines.

ANSWER: U-boats (or unterseeboots ; prompt on German submarines before mentioned)

(Tossup 3) Fossilized remains of this phylum's *Crinoidea* class have been found in limestone quarries. Movement and respiration are among the functions controlled by the water vascular system of this phylum's members. Though not *Cnidaria* [ni-dare-ee-uh], members of this phylum display radial symmetry, usually with five points. For the point, name this phylum that contains starfish and is named for the Greek for "hedgehog-like skin" due to their spines.

ANSWER: echinodermata (accept echinoderms)

(Tossup 4) This event began in the cellar of Moika Palace with a serving of wine and cakes that were laced with ineffective cyanide. This event ended shortly after a fall from the Petrovsky Bridge, as its victim drowned in the Neva River. According to legend, this event involved multiple gunshots, stab wounds, and blunt force traumas, none of which finished the job. For the point, name this December 1916 event in which the Russian royal family lost its mystic advisor.

ANSWER: death of Grigori Yefimovich Rasputin (accept equivalents, like murder or assassination of Rasputin)

(Tossup 5) In the U.S., the Federal Reserve puts an annual target of two percent on the rate of this phenomenon. This phenomenon's origin and continuation are often described in "demand-pull" and "cost-push" forms, respectively. The rate of this phenomenon is usually computed by tracking the value of a basket of goods via the consumer price index. For the point, name this phenomenon, the general increase in prices of goods and services over time.

ANSWER: inflation rate

(Tossup 6) This is the decimal value for the hexadecimal value 2D ["two d"]. This number's reciprocal is 1 over 0.02 with just the 2 repeating. This is the smallest positive degree value for which the tangent function is equal to 1; such an angle can also be expressed as pi over 4 radians. This is the sum of the consecutive natural numbers from 1 to 9. An angle of this many degrees is complementary to itself and supplementary to 135 degrees. For the point, what degree value is equal to half of a right angle?

ANSWER: 45

(Tossup 7) This composer used a tonally-ambiguous half-diminished seventh chord in the prelude to an opera that ends with a liebestod, or "love-death." This composer of *Tristan and Isolde* constructed an opera house at Bayreuth [bye-royt] for the performance of his own works, and drew on Norse myth for a four-opera work that begins with *Das Rheingold*. For the point, name this German who included a "Ride of the Valkyries" in his *Ring of the Nibelung* Cycle.

ANSWER: Richard Wagner

(Tossup 8) In a novel by this author, Kitty and Snowball transform into opposing rulers, and Dinah turns into Humpty-Dumpty to recite the poem "Jabberwocky" in a dream. In another novel by this man, the title girl meets the Queen of Hearts after she follows the White Rabbit into a land inhabited by a mad Cheshire Cat. For the point, name this English author of *Through the Looking-Glass* and *Alice's Adventures in Wonderland*.

ANSWER: Lewis Carroll (accept Charles Lutwidge Dodgson)

(Tossup 9) In one song, this singer talks of boys who said he "never struggled, wasn't hungry" before responding "yeah, I doubt it." Eminem sings "Nuts they go; Macadamian, they go so ballistic, whoa" on a song by this artist whose first verse opens "last name ever, first name greatest." The global ambassador for the Toronto Raptors is, for the point, what rapper behind "Forever," who created a heavily parodied dance in his music video for "Hotline Bling?"

ANSWER: Aubrey Drake Graham (accept either underlined portion)

(Tossup 10) This time period is the setting of a novel in which Rose-of-Sharon breastfeeds a starving man and one in which George promises his friend plenty of alfalfa to feed the rabbits on a farm. The Joad family flees Oklahoma to California during this time period, which is the setting of John Steinbeck's novels *The Grapes of Wrath* and *Of Mice and Men*. The Dust Bowl was part of, for the point, what era of extreme economic downturn in the early twentieth century?

ANSWER: Great Depression (prompt on Dust Bowl until it is read; prompt on 1930s)

(Tossup 11) This deity was forced to produce red-colored beer to stomp a rampaging Sekhmet, whom this god had sent to kill humans plotting against him. Apep was able to temporarily swallow this god, who was known as Horekhty when syncretized with Horus, but was never able to fully contain this god during his daily journey around the world. Heliopolis was the cult site of, for the point, what major Egyptian sun god?

ANSWER: Ra (accept Amun-Ra; accept Atem-Ra; accept Ra-Horekhty)

(Tossup 12) This state operates the United States' largest ferry system, including a popular route from its largest city to Winslow on Bainbridge Island. In 2013, workers in this state's largest airport were granted a \$15 minimum wage by voters in the city of SeaTac. Gonzaga University is in this state's second largest city, Spokane. For the point, name this Pacific Northwest state, home to Tacoma, Seattle, and Olympia.

ANSWER: Washington

(Tossup 13) Reinforcements sent to this battle never arrived because Thomas Graves was defeated by the admiral de Grasse at Chesapeake Bay. Redoubts 9 and 10 fell in this battle, where the tune "The World Turned Upside Down" was allegedly played as Charles O'Hara surrendered. A joint force of the Comte de Rochambeau and George Washington won, for the point, what battle of the Revolutionary War where Cornwallis's army surrendered?

ANSWER: Battle of Yorktown

(Tossup 14) A group of these works by Gerard Manley Hopkins are nicknamed the "terrible" ones. One of these works imagines a man who stood "silent, upon a peak in Darien" and is "On First Looking into Chapman's Homer" by Keats. Poems of this type can be written in the "Italian" style, like Petrarch's, or can have three quatrains and a couplet, as in the "Elizabethan" style. For the point, name this style of fourteen-line poem.

ANSWER: sonnets (prompt on poems before it is read)

(Tossup 15) A photo taken by this project included an object described as "a mote of dust suspended in a sunbeam." A recording of human audio and artistic achievements known as the Golden Record was carried by this program's probes. The *Pale Blue Dot* image was taken by this program's first probe, which is the farthest man-made object from Earth. For the point, name this space program, the only one to visit Uranus and Neptune, whose two launches were made in 1977.

ANSWER: Voyager program (accept Voyager I and/or II)

(Tossup 16) This policy was developed by Dr. Hendrik Verwoerd and included the use of "pass laws" and the construction of bantustans. The book *Long Walk to Freedom* was written by the most famous opponent of this policy, who spent over a decade imprisoned on Robben Island; that opponent later shared a Nobel Prize with F.W. de Klerk for helping end this policy. Nelson Mandela opposed, for the point, what South African system of racial segregation?

ANSWER: apartheid (prompt on generic terms relating to racial discrimination and/or segregation)

(Tossup 17) The coordinates of these points are used as inputs in the shoelace algorithm. A polygon is called cyclic if all of these points lie on a circle. The Euler characteristic for polyhedra relates the number of these points, faces, and edges. An octahedron has six of these points, while cubes have eight. Diagonals are drawn between, for the point, what points on a polygon where two edges meet?

ANSWER: vertex (or vertices; accept elaborations like vertices of (any specific) polygon; prompt on descriptions of "the corners of a shape" by asking "I need a technical term")

(Tossup 18) This poem's speaker says of his friend, "he is all pine and I am apple orchard" and protests that their shared project should only be needed where there are cows. In this poem, a pair of men "wear [their] fingers rough" while one reflects "something there is that doesn't love a wall" and the other repeats "good fences make good neighbors." For the point, name this poem by Robert Frost in which two men repair a barrier between their property.

ANSWER: Mending Wall

(Tossup 19) Abdulkadir Masharipov attacked a nightclub in this country's capital on New Year's Day. This country declared NBA player Enes Kanter a terrorist and revoked his passport, temporarily stranding him in Romania earlier this month. In 2016, this country's military seized the Bosphorous Bridge in what may have been a false-flag operation organized by its dictatorial president, Recep Erdogan [air-doh-wan]. For the point, name this Eurasian country where protesters have marched in Istanbul.

ANSWER: Republic of Turkey

(Tossup 20) Members of this religious group preach that there "is no emotion, there is peace." This religious group operated an enclave on Dantooine that was heavily damaged by Malak, and many adherents of this group were killed, on the command of Order 66, by clone troopers. For the point, name this religious sect, broken into masters, knights, and padawans, who often fight the Sith in lightsaber combat.

ANSWER: Jedi Order

(Tossup 21) This man was able to cross the Anoma river thanks to the leaping abilities of his horse Kathaka [Kuth-uhk]. A dream of a six-tusked white elephant appeared to this man's mother, Maya, before his birth. Born into the Kshatriya caste, this man abandoned a palace to discover sickness, poverty, and old age. The Theravada and Mahayana schools worship this figure, who ascended after meditating under a Bodhi tree. For the point, name this Indian sage, the namesake of a religion focused on achieving enlightenment.

ANSWER: Gautama Buddha (accept Siddhartha Gautama)

(Tossup 22) Allie Mae Burroughs was a common subject of works in this medium by Walker Evans. Edward Weston was a member of a San Francisco group that practiced in this medium called f/64 [F-stop-sixty-four], which included a man known for his works in this medium depicting Yosemite. Dorothea Lange created *Migrant Mother* using, for the point, what artistic medium that Ansel Adams used to capture black-and-white images?

ANSWER: photography (accept word forms like taking photographs)

(Tossup 23) This region of the Earth's atmosphere is bounded below by a pause where water vapor concentration usually drops to zero. The highest altitude reached by commercial airplanes is in the lower range of this region, which extends up to an altitude of about 30 miles. The ozone layer is in this region, which is named because warm air rises to its top. For the point, name this layer of the Earth's atmosphere found between the mesosphere and troposphere?

ANSWER: stratosphere

(Tossup 24) In this novel, Fleur-de-Lys [floor-duh-LEE] is engaged to the Captain of the King's Archers, Phoebus de Châteaupers [fee-bus duh shah-toh-purs], who seduces a performer who demonstrates counting tricks with the goat Djali. This novel's protagonist is crowned the Pope of Fools and murders Archdeacon Frollo for laughing at the death of the Romani dancer Esmeralda. For the point, name this novel by Victor Hugo about the bell-ringer in the title Parisian cathedral.

ANSWER: The Hunchback of Notre Dame (accept Notre-Dame de Paris)

(Tossup 25) An estate belonging to this family was seized by the American military and transformed into a National Cemetery in Arlington. A member of this family earned the nickname "Light-Horse Harry" during his service in the Continental Army. A general from this family led the Army of Northern Virginia and was forced to surrender at Appomattox Courthouse to Ulysses S. Grant. For the point, name this American military family that included Civil War general Robert E.

ANSWER: Lee family (accept Robert E. Lee and/or "Light-Horse Harry" Henry Lee)

(Tossup 26) High blood pressure detected in patients with this status may be a sign of pre-eclampsia. Amniocentesis is a diagnostics test performed on people in this state. Folic acid supplements are recommended to people in this state to decrease the risk of neural tube defects. People in this state may suffer from morning sickness for some or all of the nine months it usually lasts. For the point, name this medical state during which a fetus develops within the mother.

ANSWER: pregnancy (or gestation; accept descriptive answers relating to being pregnant; do not accept descriptions of actively giving birth)

(Tossup 27) Some of these devices exert a torque proportional to kappa times the twist angle. The maximum force exerted by these devices is proportional to their diameter to the fourth power times Young's modulus. These devices ideally undergo simple harmonic motion, with their restoring force governed by Hooke's Law. For the point, name these devices that store energy through compression, as seen in Slinkys.

ANSWER: spring

(Tossup 28) In an attempt to claim payment earned during this conflict, the Bonus Army marched on Washington, D.C. John Pershing led the American Expeditionary Force in this war. The end of this war was commemorated on Armistice Day, which later evolved into the broader Veterans Day. Woodrow Wilson's claim that he "kept us out" of this war helped him win the election of 1914. For the point, name this global conflict that ended with the Treaty of Versailles.

ANSWER: World War I (accept the Great War)

(Tossup 29) This god scorched a white raven black after learning of an affair of Coronis, the mother of this god's son Asclepius, who became the god of healing. This god pursued a nymph who turned into a laurel tree to avoid his advances, and who was named Daphne. This son of Leto governed light and prophecy. For the point, name this Greek god, the twin brother of Artemis.

ANSWER: Apollo (accept Paean; prompt on Phoebus or Phoebus Apollo)

(Tossup 30) A form of nuclear magnetic resonance named for these particles seeks to observe them in hydrogen atoms. Along with the CNO cycle, stars create helium from hydrogen in a chain reaction named for this particle. According to Bronsted-Lowry theory, these particles are accepted by bases. The number of these particles in an element is given by its atomic number. For the point, name this subatomic particle with a positive charge.

ANSWER: protons

(Tossup 31) In this novel, Stubb theorizes that Fedallah is the secretly the devil, who is trying to trick a man who nails a gold coin to a ship's mast. This novel's protagonist barely avoids drowning along with Queequeg and Starbuck when the *Pequod* is destroyed by the object of Captain Ahab's obsession. For the point, name this novel by Herman Melville about the search for a vicious white whale.

ANSWER: Moby Dick or The Whale

(Tossup 32) One of these organizations was attacked by Pinkerton agents on the orders of Henry Clay Frick. An anarchist-planted bomb hurt the cause of these organizations after it was detonated at Haymarket Square. The Flint sit-down was planned by one of these organizations, which later forced a collective bargaining agreement with Ford. For the point, name these organizations, including the Knights of Labor and AFL-CIO, which advocate for workers' rights.

ANSWER: labor unions (accept trade unions and other equivalents; accept iron/steelworkers' unions; accept autoworkers' unions after Flint is said)

(Tossup 33) Two answers required. The virial theorem relates averages of these two quantities, which are summed to give the Hamiltonian and subtracted to give the Lagrangian. These two quantities, whose units are both Joules, are converted between each other as a roller coaster train goes up and down hills. For the point, name these two contrasting types of energy, the energy of motion and the energy stored in an object at rest.

ANSWER: kinetic and potential energy (prompt on partial answers)

(Tossup 34) One of these structures named Itzhi-Tezhi was responsible for the creation of the Kafue Flats in Zambia. The Cahora Bassa one of these structures is found along the Zambezi River. Low and High versions of this type of structure were built at Aswan, the latter of which created Lake Nasser. For the point, name these blockades of rivers that often generate hydroelectric power.

ANSWER: dams (accept Itzhi-Tezhi Dam; accept Cahora Bassa Dam; accept Aswan High Dam)

(Tossup 35) Hugh Baker bought a version of this painting which became known as its "Isleworth" version, and Marcel Duchamp painted a parody of it title L.H.O.O.Q. [ehl-osh-oh-oh-koo], in which the central figure has a moustache. This painting shows a woman whose black veil and eyebrows have almost entirely faded, and which is housed in the Louvre. For the point, name this portrait of a smiling woman by Leonardo da Vinci.

ANSWER: Mona Lisa (accept La Gioconda)

Extra Question

Only read if moderator botches a question.

(Tossup 36) A paradox that arises in this process is explained by Fisherian runaway. Undertakers of this process can engage in cheating or honest signalling. A theory of this process was put forth in *The Descent of Man* by Charles Darwin. Colorful peacock tails are an example of a quality central to this process's aspect of mate choice. For the point, name this aspect of natural selection in which organisms determine who to reproduce with.

ANSWER: sexual selection (prompt on natural selection before read)