

# Round 4

## Bee Round 4

(1) This mountain range was the site of stoneworks known as ushnus, and narrow blades of ice known as “penitents” characterize its Dry subrange. This range contains the point on Earth farthest from the planet’s center, and this range was formed by the subduction of the Nazca Plate. This range is home to Chimborazo and Aconcagua, and runs south to Tierra del Fuego. For the point, name this range found along the Pacific coast of South America.

ANSWER: Andes Mountains

(2) A novel from this country depicts 108 bandits who gather in a marsh and rebel against the government. *The Story of the Stone* is a name sometimes given to a novel from this country called *The Dream of the Red Chamber*, which is one of its four great classic novels, as is the *Romance of the Three Kingdoms*, in which the Monkey King helps a monk travel west to India to collect Buddhist scriptures. For the point, name this country whose literature depicts characters like Liu Bei, Guan Yu, and Cao Cao [tsao tsao].

ANSWER: China (or Zhongguo)

(3) One collection by this composer includes a “Bee’s Wedding,” and a “Venetian Boat Song.” This composer of *Songs Without Words* wrote one piece to be played after Hermia and Lysander, as well as Demetrius and Helena, marry. This composer was inspired by a trip to Fingal’s Cave to write *The Hebrides*. For the point, name this German composer of the *Scottish* and *Italian* symphonies who wrote a set of incidental music to *A Midsummer Night’s Dream*, including a famous Wedding March.

ANSWER: Felix Mendelssohn Bartholdy

(4) The historian Josephus survived one of these conflicts despite proposing a mass suicide pact. A leader of one of these conflicts was given a name meaning “Son of a Star” by Akiva. Josephus also reported a similar mass suicide after the Siege of Masada during one of these conflicts, after which 960 zealots killed themselves. Nero sent Vespasian to Judea to stop one of these conflicts, and Vespasian’s son destroyed the Second Temple during it. For the point, name these events in which a certain religious group revolted against Roman rule.

ANSWER: Jewish revolts (accept Jewish-Roman wars or pretty much anything suggesting Jews are fighting Romans)

(5) Helena burns a formula required to make these objects in a Karel Capek play that coined the term for these machines and takes place in a factory where “Rossum’s Universal” ones of these are made. Isaac Asimov invented three laws of these machines, including that they must protect their own existence and obey the orders given them by humans. For the point, name these automated machines that are called gynoids and androids when they take humanoid form.

ANSWER: robots (accept gynoids or androids before they are read)

(6) This man signed a deal with an American film company, which captured footage of the Battle of Ojinaga. This man led the Division of the North in his revolt against Victoriano Huerta, although his relationship with new leader Venustiano Carranza later soured. A future World War I general attempted to avenge this man's attack on Columbus, New Mexico, his most famous raid across the U.S. border. For the point, name this general and bandit during the Mexican Revolution who was chased by John "Black Jack" Pershing.

ANSWER: Pancho Villa (or Francisco Villa; or Jose Doroteo Arango Arambula)

(7) When the narrator of this work goes to retrieve a lantern, the servant Joseph mistakes him for an intruder and sets the dogs loose on him. Frances dies in this work after giving birth to Hareton. Nelly Dean relates the story of this novel to Lockwood, a lodger at Thrushcross Grange. Edgar Linton ends up marrying Catherine Earnshaw, to the anguish of Heathcliff in, for the point, what only novel by Emily Brontë?

ANSWER: Wuthering Heights

(8) The motion of one of these shapes creates another shape that solves the brachistochrone problem. Specifically, tracing the path of a point on the edge of this shape as it moves along a flat surface will create a cycloid, solving the problem. The "unit" type of this shape is used as a reference in trigonometry. For the point, name this geometric figure that solves the isoperimetric problem, or the question of "what shape holds the most area, for a given perimeter?"

ANSWER: circle

(9) In this event, whose only human survivors are Lif and Lifthrasir, the world burns by the flames of Surtr. Before this event, three roosters led by Gullinkambi crow, and Heimdall blows his Gjallarhorn [gy-OLL-ur-horn]. Thor and Jormungandr [YOR-mun-gon-dur] mutually slay each other during this destructive war between the Aesir and the Jotunn [YOH-tun], which begins after Loki is freed from his bindings. For the point, name this event from Norse mythology which causes the end of the world.

ANSWER: Ragnarökr

(10) Capillary action occurs depending on adhesive forces and this phenomenon. Liquid droplets form spheres due to this phenomenon, which makes them minimize their surface area. It is measured in units of force per unit length, or energy per unit area, and it is decreased by surfactants. This phenomenon causes the formation of a meniscus when water is placed in a tube. For the point, name this phenomenon that allows strider bugs to walk on water.

ANSWER: surface tension

(11) In 2014, this school won its annual Civil War game against a rival school from Corvallis thanks to a Heisman-winning quarterback from Hawaii; that QB, a current Tennessee Titan, was Marcus Mariota. An alumnus of this school, Phil Knight, founded Nike and provides the school with their eccentric green and yellow football uniforms. For the point, name this Pac-12 university in Eugene, home of the Ducks, whose rival schools include Washington and California.

ANSWER: University of Oregon (accept the Oregon Ducks)

(12) "Palm Cards" are often given out to assist people in performing this action. Diebold produces machines used in this process that were hacked in 2004. Some laws meant to verify the legitimacy of this process are criticized for their disparate impact on students and minorities, who are less likely to have drivers licenses to serve as ID. For the point, name this civic duty, which is performed every four years on the first Tuesday after the first Monday in November to elect a President.

ANSWER: voting (accept word forms and any additional information, like voting for President)

(13) This province's credit rating was recently downgraded by Standard & Poor after their budget included a \$10.4-billion deficit. Senior wildlife manager of this province Chad Morrison plans to bring 1,000 additional firefighters to fight a wildfire which threatens this province's oil sands industry. Tens of thousands of people have evacuated Fort McMurray in, for the point, what Canadian province whose recent wildfire has carried thick layers of smoke into Edmonton?

ANSWER: Alberta

(14) This quantity is constant in centripetal motion and equals velocity squared over the radius of the motion. This quantity is equal for the two masses of an Atwood's machine. This quantity is constant in the vertical direction of projectile motion. The rapid negative type of this quantity during a car crash can throw the driver against the windshield. For the point, name this vector quantity, the rate of change of velocity, which often describes the change in one's speed.

ANSWER: acceleration (accept negative acceleration; accept deceleration)

(15) After embellishing his role in this battle, James Wilkinson was promoted to brigadier general. A general who was wounded at this battle earned a commemorative statue of a boot for it. This battle ended a campaign through upstate New York by John Burgoyne, who surrendered his army in October 1777. Benedict Arnold and Horatio Gates were victorious at, for the point, what Revolutionary War battle that convinced Spain and France to further support the colonies, thus turning the tide in the war?

ANSWER: Battle(s) of Saratoga (prompt on Battle of Bemis Height(s) and/or Battle of Freeman's Farm)

(16) A character in this play recites the ten commandments, but forgets the seventh. Thomas Putnam makes money in this play by buying the land of the accused, and a request for "more weight" causes Giles Corey to be crushed by rocks. Reverend Parris postpones hangings in this play after his niece Abigail Williams flees. John Proctor dies at the end of, for the point, what play about the Salem Witch Trials, written by Arthur Miller?

ANSWER: The Crucible

(17) Between 1979 and 2009, this man was the Lucasian professor of mathematics at the University of Cambridge. A phenomenon named for this man is emitted in particle-antiparticle pairs at the event horizon; that form of thermal radiation could make black holes evaporate. Various aspects of cosmology are explained in this man's book *A Brief History of Time*. This physicist suffers from amyotrophic lateral sclerosis, also known as Lou Gehrig's disease, and therefore is forced to use a machine to speak. For the point, name this wheelchair bound physicist.

ANSWER: Stephen Hawking

(18) Working with Ben Jonson, Inigo Jones revolutionized this artistic field in England by introducing the proscenium arch. Isamu Noguchi performed this task for Martha Graham and Aaron Copland's *Appalachian Spring*, in which he used a rocking chair and house frame. Though sometimes a rock is used, in *Waiting for Godot*, this is done traditionally with just a tree on a country road. For the point, name this artistic aspect of creating a drama, the act of designing the features and backdrop of the stage.

ANSWER: set design (or scene design; accept word forms of either; accept descriptions that use either underlined word)

(19) One police officer to die in the line of duty in this city was J.D. Tippit. A film taken in this city shows Clint Hill jumping on the back of a car to grab the hand of a woman in pink. While travelling through this city's Dealey Plaza, John Connally was wounded by a bullet that struck another man first; that bullet was fired from a nearby school book depository. For the point, name this Texas city where, on November 22nd, 1963, John F. Kennedy was assassinated.

ANSWER: Dallas, Texas

(20) This scale was developed using a Wood-Anderson torsion device. The use of this scale has been largely succeeded by the moment magnitude scale. The Mercalli scale measures the same phenomena as this scale, but focuses on the intensity of their effects rather than the amount of energy they release. An event with magnitude greater than 4.5 on this scale should be able to be detected anywhere in the world. For the point, name this scale used for measuring the magnitude of an earthquake.

ANSWER: Richter scale

(21) This religious figure was the father of Menasseh and Ephraim, and he settled his father in Goshen after hiding a silver cup in his brother's belongings. This man lost his cloak to the wife of the captain of the guard, Potifar, and described the meaning of seven thin cows that ate seven fat cows in the Pharaoh's dreams. This son of Rachel was sold into slavery by Judah, Benjamin, and his other nine brothers because of a gift from his father, Jacob. For the point, name this biblical man who owned a beautiful coat.

ANSWER: Joseph (or Yosef or Yusuf)

(22) This work features a figure who had "out-Heroded Herod." It takes place "towards the close of the fifth or sixth month" of a character's retreat, and occurs in an "imperial suite" consisting of seven vividly colored chambers. In this story, Prince Prospero hosts the title ball, only to be killed by one of its attendees, a personification of a deadly pestilence. For the point, name this story about a fatal illness, written by Edgar Allan Poe.

ANSWER: The Masque of the Red Death

(23) An 1897 study classified this action into four types: altruistic, anomic, egoistic, and fatalistic. That work, a revolutionary text in sociology, noted that Protestants perform this action more often than Catholics do, and soldiers more often than civilians. Emile Durkheim studied the causes of this action, which Dr. Jack Kevorkian assisted his patients in committing. For the point, name this action that involves ending one's own life.

ANSWER: suicide (accept clear descriptions until "ending" is read; accept physician-assisted suicide and synonyms after "Kevorkian" is read)

(24) These animals can suffer from antennapedia, or legs forming where antennae should be. Some of these insects may have curly or vestigial wings. Only males of this species may have white compound eyes, derived from a recessive sex-linked trait, as discovered by Thomas Hunt Morgan at Columbia. For the point, name this arthropod model organism used in inheritance studies, an insect named for its tendency to lay eggs in ripened produce.

ANSWER: fruit fly (or drosophila melanogaster; prompt on fly)

(25) Guests who have filled in for members of this group have included Michael Flatley and Baz Luhrmann. This group was expanded to four to include Julianne Hough [huff], who had been twice crowned by this group. Its primary members include Bruno Tonioli, who often stands when giving a perfect score, as well as Carrie Ann Inaba and Len Goodman. For the point, name this group who use glittery paddles to rate the footwork and choreography of celebrities and their partners on an ABC reality show.

ANSWER: the judges (or judging panel, etc.) on Dancing With the Stars (prompt on partial answers, including on “DWtS” alone; do not accept hosts)

(26) Angles A and B have this property if and only if A and B lie in different quadrants and sine of A equals sine of B. Two adjacent angles with this property form a straight line. If two angles have this property, they cannot both be acute; instead, either one is acute and one obtuse, or both are right angles. For the point, give this term for angles whose measures add up to 180 degrees, in contrast with complementary angles, which add up to 90 degrees.

ANSWER: supplementary angles

(27) A ruler of these people replaced their assegai spears with shorter ones meant for stabbing, called iklwa. These people were defeated after the destruction of their capital of Ulundi, though the British lost to these people at the Battle of Isandlwana [ee-sahnd-il-wahna] despite their technological superiority. Cetshwayo ruled these people when they fought the British, half a century after they were led by Shaka. For the point, name this 19th century Bantu empire in South Africa.

ANSWER: Zulu kingdom

(28) After Ixion impregnated a cloud shaped like Hera, the resulting child fathered these creatures. At the wedding of Pirithous, these creatures began a war with the Lapiths due to being unused to wine. The blood of one of these creatures named Nessus was used to kill Heracles. Asclepius, Jason, and Achilles were all trained by a member of this race named Chiron. For the point, name these creatures who were half man, half horse.

ANSWER: centaurs

(29) An atom of this element is bound to two chlorines and two ammonia atoms in a common anti-cancer drug. This element makes up the most expensive portion of a fuel cell. The kilogram is currently defined using a standard composed of 90% this element and 10% iridium. This element and gold are both notably dissolved by aqua regia. This most ductile metal has similar properties to gold, and is found immediately to its left on the periodic table. For the point, name this element with atomic number 78, an unreactive metal with symbol Pt.

ANSWER: platinum (or Pt before mentioned)

(30) Southampton Island sits on this body of water's entrance from Foxe Basin, which in turn is separated by the Fury and Hecla Strait from Baffin Island. This body of water's namesake was killed when a mutiny set him adrift in this body's southern arm, James Bay. This body drains a basin of 1.5 million square miles, stretching from the Prairie Provinces to Quebec. For the point, name this saltwater bay in northeast Canada.

ANSWER: Hudson's Bay

(31) One character in this novel tells Governor Bellingham that she was plucked out of a rosebush near a prison. After spending two years in England, another character in this novel disguises himself as Roger Chillingworth. Pearl kisses her father, Reverend Arthur Dimmesdale, after he stands on a scaffold confessing committing adultery with the protagonist. For the point, name this novel in which Hester Prynne wears a red "A" on her chest, written by Nathaniel Hawthorne.

ANSWER: The Scarlet Letter

(32) During the celebration of this man's coronation, rumors involving the free sausages and pretzels resulted in nearly 1400 people being trampled to death at Khodynka Field. This man's soldiers fired at protesters led by Father Gapon on Bloody Sunday. This ruler brought the mystic Rasputin to treat his son's hemophilia, and this man was killed with Anastasia and the rest of the Romanov family by Bolshevik forces in 1918. For the point, name this last Tsar of Russia.

ANSWER: Nicholas II

(33) Henry Cowell's *The Banshee* calls for "thumping" this instrument. Prior to the performance of a Brahms concerto for this instrument, Leonard Bernstein explained that the soloist had prepared an "unorthodox" performance. Bösendorfer manufactures a particularly long-ranged type of this instrument, which can be "prepared" by putting random objects on the strings. Glenn Gould was an eccentric virtuoso on, for the point, what instrument manufactured by Steinway and Sons in a "grand" size with 88 keys?

ANSWER: pianoforte

(34) Lupus is a disease in which this system of the body becomes hyperactive. HIV attacks this system's CD4 and CD8 cells, leaving patients susceptible to opportunistic diseases. This system produces B-cells, which mature in the bone marrow, and T-cells, which mature in the thymus. Vaccines make use of the adaptive form of this system. In it, antibodies mark pathogens for destruction by white blood cells. For the point, name this biological system that detects and fights off sicknesses.

ANSWER: immune system

(35) This work's protagonist refuses a dinner with his nephew, Fred, and relives a dance at Mr. Fezziwig's. In the work, a miserly money-lender encounters the ghost of his former partner, Jacob Marley, and sends an enormous turkey to his impoverished employee, Bob Cratchit. For the point, name this work by Charles Dickens in which Ebenezer Scrooge discovers the true meaning of Christmas by helping Tiny Tim.

ANSWER: A Christmas Carol

### Extra Question

Only read if moderator botches a question.

(36) Franz von Walsegg may have commissioned this man's final work, which this man believed he was composing for his own funeral. This rival of Antonio Salieri wrote an opera in which the Queen of the Night sings a challenging aria and Tamino is protected by playing the title instrument. For the point, name this Austrian composer of *The Magic Flute*, a child prodigy who died at age 35 before finishing his *Requiem*.

ANSWER: Wolfgang Amadeus Mozart (accept Mozart's requiem in the first sentence)