## Round 5

## Bee Round 5

(Tossup 1) This animal titles a poem from *Songs of Experience* that ponders "what shoulder and what art / could twist the sinews" of "this animal's" heart. This animal is asked "did he who made the Lamb make thee?" in a William Blake poem that also questions "what immortal hand or eye / could frame thy fearful symmetry?" For the point, name this big cat that is "burning bright / in the forests of the night," because of its orange fur.

ANSWER: The **Tyger** 

(Tossup 2) This scientist names a constant equal to the magnetic moment of an electron due to angular momentum, called his namesake "magneton." With Werner Heisenberg, this man co-developed an interpretation of quantum mechanics named after his home city. This man improved upon a model developed by Ernest Rutherford by explaining electrons orbiting the nucleus in levels. For the point, name this Danish physicist known for his model of the atom.

ANSWER: Niels (Henrik David) Bohr

(Tossup 3) A ruler of this empire introduced the twenty foot long sarissa pike and mounted units called companion cavalry. A military leader from this empire constructed a massive causeway in his successful siege of Tyre and won the battles of Issus and Gaugamela. In ancient times, this empire was ruled by Philip II and Alexander the Great. For the point, identify this northern Greek empire that today names a Balkan nation with capital Skopje.

ANSWER: Macedon (or Macedonia)

(Tossup 4) This value is a fixed point for y equals sine of x. At this input, the derivative of the absolute value function is undefined. A polynomial of this degree is constant and will graphically appear as a horizontal line; such a polynomial will also have a slope of this value. For the point, give this value, the number of x-intercepts of y equals 2, a line that never actually crosses the x-axis.

ANSWER: zero

(Tossup 5) This man painted a woman in orange spilling a jug in shock in his depiction of *Belshazzar's Feast*. In another of this man's paintings, seven men in neck ruffs gather to watch the title doctor demonstrate muscle movement with a cadaver's arm. A chiaroscuro painting by this artist is nicknamed because its veneer has darkened over time, and shows the shooting company of Frans Banning Cocq. For the point, name this Dutch artist of *The Anatomy Lesson of Dr Nicolaes Tulp* and *The Night Watch*.

ANSWER: Rembrandt Harmenszoon van Rijn

(Tossup 6) Due to a personal grudge against this man, Andrew Jackson vetoed the Maysville Road bill; that bill was part of this man's plan for high tariffs and new infrastructure, the American System. This man was made Secretary of State as part of a deal that gave John Quincy Adams the election of 1824. As Speaker of the House, this man successfully negotiated the Missouri Compromise. For the point, name this Kentucky politician who, despite being called the "Great Compromiser," was defeated in three presidential elections.

ANSWER: Henry Clay

(Tossup 7) This type of character plays chess with a knight in the film *The Seventh Seal*. Terry Pratchett's interpretation of this character speaks in small capital letters. In a Cartoon Network show, this type of character is enslaved by Billy and Mandy. The Marvel version of this character is annoyed when Thanos makes Deadpool immortal, preventing them from joining. For the point, name this type of character, usually personified by the scythe-wielding Grim Reaper.

ANSWER: <u>Death</u> (accept anything loosely related to a supernatural being that collects the <u>dead</u>, including the Grim Reaper before it is read)

(Tossup 8) Three days after taking this action, the men of Shechem who had assaulted Dinah were attacked by the sons of Jacob. A mohel oversees this action during a *brit milah* ceremony; that ceremony is done in obedience to a covenant made by Abraham, which dictates this act be required of "every male throughout your generations" eight days after their birth. For the point, name this religious surgical act of removing the foreskin.

ANSWER:  $\underline{\text{circumcision}}$  (accept descriptive equivalents; accept  $\underline{\text{brit}}$  milah or  $\underline{\text{bris}}$  milah before "brit milah" is read)

(Tossup 9) This transition metal is the basis for almost all heterogeneous Ziegler-Natta catalysts. This element's dioxide is found in the mineral rutile and used in food coloring as a white pigment. After composite plastics and aluminum, this is the most prominent element in Boeing 787 airframes, due to its resistance to corrosion and low density. For the point, name this silvery metal element with atomic symbol Ti.

ANSWER: **titanium** (accept **Ti** before read)

(Tossup 10) The Miles Franklin Award is a literary prize to an author from this country. A gamble regarding the transportation of a glass church across this country is central to the novel *Oscar and Lucinda*. Thomas Kenneally is an author from this country, who was shortlisted for the Booker Prize for a novel about Jimmie Blacksmith, an Aboriginal man. For the point, name this home country of Peter Caray, who partially set *The True History of the Kelly Gang* in Melbourne.

ANSWER: Commonwealth of Australia

(Tossup 11) This government ceded its claim to the Baltic States after signing the Treaty of Rapallo, which annulled the preceding government's Treaty of Brest-Litovsk. In a series of "Fire Decrees," this government limited civil liberties under Paul von Hindenburg after an arson at the Reichstag. This government experienced massive inflation of the deutschmark. For the point, name this German republic that was established after World War I and replaced by the Nazi regime.

ANSWER: Weimar Republic (prompt on Germany)

(Tossup 12) This man was originally selected to lead Donald Trump's transition team, but was replaced by Mike Pence. This man may have feuded with Mark Sokolich, the mayor of Fort Lee, by ordering two toll lanes to be closed; that caused a massive traffic jam on the George Washington Bridge. This governor was criticized by Republicans for welcoming President Obama to visit damage caused by Hurricane Sandy. For the point, name this embattled governor of New Jersey.

ANSWER: Chris Christie

(Tossup 13) This man was funded by the Secret Six, two of whom were forced to flee to Canada after his arrest. This man killed five supporters of slavery in the Pottawatomie Massacre, which he launched in response to an attack on Lawrence, Kansas. This man attempted to recruit Frederick Douglass for an 1859 assault on a Virginia arsenal; that attack was put down by Robert E. Lee. For the point, name this fierce abolitionist who was hanged after his failed raid on Harpers Ferry.

ANSWER: John **Brown** 

(Tossup 14) A memorial to a disaster in this city on Fish Street Hill is topped with a gilded urn. A building in this city contains a domed whispering gallery and was built on Ludgate Hill. This city's St Paul's Cathedral was redesigned by Sir Christopher Wren after a 1666 Great Fire. The Houses of Parliament sit next to the Thames in, for the point, what English capital city?

ANSWER: London

(Tossup 15) In a poem dedicated to this man, the poet describes "Columbia's scenes of glorious toils" and commands "proceed, great chief, with virtue on thy side" in a dedication to "His Excellency," "this man," written by Phyllis Wheatley. In a "fable" about this man written by Parson Weems, his father says this man has paid him for a cherry tree "a thousand fold" after this man refuses to tell a lie. For the point, name this first president of the United States.

ANSWER: George Washington

(Tossup 16) The Pinwheel galaxy is located in the part of the sky covered by this constellation, which is also the target for the Hubble Deep Field images. Mizar and Alcor are a binary star pair in this constellation, whose alpha and beta stars form a near straight line with Polaris. Seven bright stars in this constellation from an asterism that resembles a plow. For the point, name this constellation that contains the Big Dipper and whose Latin name means "great bear."

ANSWER: Ursa Major (prompt on "big dipper" or "big/great bear" before mentioned)

(Tossup 17) A lake in this state gave its name to a 19th century adult education movement and lecture series, the Chautauqua Movement. Lake Seneca and Lake Cayuga, both in this state, are part of a formation of 11 glacial lakes named for their resemblance to a hand. This state lies to the west of Lake Champlain, which is located on its border with Vermont. For the point, name this state where the Finger Lakes can be found between Ithaca, Rochester, and Syracuse, well west of Albany.

## ANSWER: New York

(Tossup 18) Thiobacilli is an example of the obligate form of these organisms. HNLC regions are marine environments with low concentrations of an organism that fulfills this role, phytoplankton. Organisms filling this role synthesize their own organic compounds, often from light via photosynthesis. For the point, name this organism type, named for the Greek for "self-flourishing," which are consumed by heterotrophs and generate their own nutrients.

ANSWER: autotrophs (or producers)

(Tossup 19) In one of this author's stories, Bill and Sam end up regretting kidnapping Johnny, and have to pay Ebenezer Dorset to take him back. "The Ransom of Red Chief' is by this man, who wrote another story in which Jim sells his prized watch to buy combs for his wife while Della sells her hair to buy a chain for Jim's watch. For the point, name this author whose stories often contain a twist ending, as in "The Gift of the Magi."

ANSWER: O. Henry (accept William Sydney Porter)

(Tossup 20) William Hays sought to improve this industry by instituting a moral code. In 1947, a group of ten men, including Dalton Trumbo, working in this industry refused to testify in front of the House Un-American Activities Committee and were blacklisted. Firms in this industry include United Artists and Metro-Goldwyn-Mayer, or MGM. For the point, name this American entertainment industry, centered in the Los Angeles neighborhood of Hollywood.

ANSWER: <u>film</u> industry (accept anything to do with <u>movies</u> or <u>motion pictures</u>; accept <u>Hollywood</u> before mentioned; prompt on entertainment)

(Tossup 21) Mozart wrote one of these pieces nicknamed "Coronation," while J.S. Bach's masterpiece of this type is in B minor. One of these pieces by Giovanni Palestrina is named for Pope Marcellus and was presented to the Council of Trent. These pieces usually begin with a Kyrie and end with an Agnus Dei. For the point, name these choral pieces intended to be used at church services.

ANSWER: masses (accept Mass in B Minor; accept Pope Marcellus Mass; accept Coronation Mass)

(Tossup 22) This novel's protagonist watches "falling stars" from Ottershaw Obervatory and wades through invasive "red weed" to see an enemy encampment filled with tentacled corpses. In this novel, a toxic black smoke and "heat-rays" finally stop, and destructive tripods are halted, when common Earth bacteria prove fatal to extraterrestrials. For the point, name this novel by H.G. Wells about a Martian invasion.

ANSWER: The War of the Worlds

(Tossup 23) The orthocenter lies inside this type of triangle. In this type of triangle, each altitude cuts through the interior. In a triangle with this property, the square of any side is *less than* the sum of the squares of the other two sides. Rays from the origin into the first or fourth quadrants make this type of angle with the positive x-axis. For the point, give this term for angles measuring less than 90 degrees.

ANSWER: acute (triangle and/or angle)

(Tossup 24) This deity, also called Kore or "the maiden" was one of the subjects of the Eleusinian Mysteries. This goddess ruled a territory that contained the Isles of the Blessed and Elysian Fields after she was abducted while picking flowers, resulting in a famine. The cycle of summer and winter occurs because this goddess ate some pomegranate seeds in the underworld. For the point, name this daughter of Demeter and wife of Hades.

ANSWER: Persephone (prompt on Proserpina)

(Tossup 25) In this play, Reverend Hale tries to persuade Danforth to show leniency, and Mercy Lewis steals from Reverend Parris after Tituba's séances are exposed. In this play, Giles Corey is pressed to death while demanding "more weight" and Elizabeth lies about the affair between Abigail Williams and John Proctor to save her husband from hanging. For the point, name this Arthur Miller play about the Salem Witch Trials.

ANSWER: The Crucible

(Tossup 26) This phenomenon names a trough in the doldrums where sea level pressure is minimized. This phenomenon stems from differences in water temperature and the temperature on land, causing atmospheric convection in the form of sea breezes. The Himalayan mountains help cause this phenomenon by forcing precipitation. For the point, name this seasonal weather pattern in which a reversal of winds brings heavy rain, common in West Africa and Southeast Asia.

ANSWER: monsoon (accept monsoon trough)

(Tossup 27) An intervention within this territory was criticized by the Morgan Report, but it was transferred through the Newlands Resolution nevertheless. Due to the alleged violation of the Bayonet Constitution and support from Sanford Dole, American marines overthrew this kingdom's Queen Liliuokalani. Under the presidency of William McKinley, this kingdom was annexed into the United States. For the point, name the 50th US state that was previously a Pacific island territory.

ANSWER: (Kingdom, Territory, State, etc. of) Hawaii

(Tossup 28) In sociology, the Concentric Zone Model was first applied to this city. Milton Friedman was a member of a group of economists named after this city. In 2014, Laquan McDonald was killed by a police officer in this city; though its mayor Rahm Emmanuel won reelection in 2015, concerns have persisted about its skyrocketing murder rate. For the point, name this city whose elevated trains go through the Loop, the largest city in Illinois.

ANSWER: Chicago

(Tossup 29) In this event, a man with a shoe made of all the world's extra leather stabs the heart of his father's killer. This event is preceded by a "great winter" and starts after the sun and moon are swallowed up Hati and Sköll, freeing their father. Lif and Lifthrasír are tasked with repopulating the world in the aftermath of this event, which also results in the death Jörmungandr at the hands of Thor. The wolf Fenrir kills Odin during, for the point, what apocalyptic event in Norse mythology?

ANSWER: Ragnarök (prompt on descriptions of the (Norse) end of the world before "apocalypse" is read)

(Tossup 30) A book titled after one of these works was written by Gertrude Stein about her lover, Alice B. Toklas. A set of seven of these works, including *All God's Children Need Traveling Shoes* and *Gather Together in My Name*, were written by Maya Angelou to describe the death of her son, her time as a lounge dancer, and her life in Cairo. For the point, name this literary genre in which an author tells his or her own life story.

ANSWER: autobiography (accept The Autobiography of Alice B. Toklas; prompt on biography)

(Tossup 31) This leader oversaw a period of economic isolation and crisis known as the "Special Period" after the Soviet Union, his ally, collapsed. This leader gave the "History will Absolve Me" speech six years before his movement overthrew Fulgencio Batista with Che Guevara's help. Nikita Khrushchev failed to arm this man's country during a 1962 Missile Crisis. For the point, name this Communist leader who ruled Cuba for over forty years and died in 2016.

ANSWER: Fidel Castro

(Tossup 32) Graft-versus-host disease is most commonly caused when this tissue is given to a recipient during a hematopoietic stem cell transplant, a process more commonly known as a transplant of this tissue. Receiving this tissue is a way to treat diseases like leukemia that prevent this tissue from producing hundreds of millions of cells per day. For the point, name this tissue where red blood cells are produced, found within bones.

ANSWER: bone marrow

(Tossup 33) One member of this group played Marius Pontmercy in the 25th Anniversary concert of *Les Miz* and sang "there's levels to your love" in a 2015 single. Another member of this group is a bandmate of Jack Lawless and JinJoo Lee and sings "I keep on hoping we'll be eating cake by the ocean" as the frontman of DNCE. Kevin is also a member of, for the point, what family of Joe and Nick, a Disney-fueled band of brothers?

ANSWER: the **Jonas** family (accept the **Jonas Brothers**)

(Tossup 34) The question of whether an item was made of this material inspired Archimedes' "Eureka" moment in which he explained buoyancy. Platinum and this element can be dissolved by the mixture of nitric acid and hydrochloric acid known as aqua regia. The philosopher's stone could legendarily turn base metals into this element, whose fineness is measured in karats. Pyrite is often mistaken for, for the point, what precious metal with symbol Au?

ANSWER: gold (accept Au before mentioned)

(Tossup 35) Gavin Menzies controversially claimed that Zheng He successfully traversed this body of water. The Manila Galleons traversed this body of water, bringing Chinese goods to the port of Acapulco. Thor Heyerdahl used the *Kon-Tiki* raft to traverse this body of water, putting forth a theory of the settlement of Polynesia. For the point, name this ocean that separates Asia from the Americas.

ANSWER: Pacific Ocean

## **Extra Question**

Only read if moderator botches a question.

(Tossup 36) Along this river, the completion of the Garrison Dam created Lake Sakakawea. This river's other major dams include the Fort Peck Dam. This river, created from the confluence of the Madison and the Jefferson rivers in Montana, was traversed in the first leg of the Louis and Clark expedition. For the point, name this river that flows into the Mississippi in its namesake state near St. Louis.

ANSWER: Missouri River