

CEESA Bee Round 2

Tossups

(Tossup 1) In a story about this man, Badr al-Badur unknowingly gives away this man's most prized possession to an evil sorcerer who claims to be the brother of Mustapha the tailor. In a story told by Scheherazade, this man escapes a cave by rubbing a magic ring, and he marries the daughter of a sultan with the help of a powerful jin. For the point, name this fairy tale character who appears in *The Thousand and One Nights* in a story about his magic lamp.

ANSWER: **Aladdin** (accept **Ala ud-Din** or **Ala ad-Din**)

(Tossup 2) The summed squares of the reciprocals of the natural numbers converge to this number squared over six. Buffon developed a Monte Carlo technique for calculating this number by dropping toothpicks on a striped floor. Steradians on a sphere go from 0 to 4 times this number on a sphere. For the point, name this constant which relates the radius of a circle to its circumference – approximately equal to 3.14.

ANSWER: ***pi*** (accept ***tau over two*** or ***one half tau***)

(Tossup 3) This country established a trading post on Dejima to trade with the Tokugawa Shogunate. A company based in this country operated out of Batavia, which later evolved into Jakarta. Settlers from this country established a colony on Manhattan Island that was led by Peter Stuyvesant. For the point, name this county where the Dutch East India Company operated in Amsterdam.

ANSWER: **Netherlands** (prompt on Holland)

(Tossup 4) A character in this play begs, "give me my sin again" and is told "palm to palm is holy palmers' kiss" when he attends a party to meet Rosaline. Prince Escalus exiles one of this play's title characters, who kills Count Paris outside a tomb and duels Tybalt over the death of Mercutio. For the point, name this tragic play by Shakespeare about a pair of "star-cross'd lovers" from the opposing houses of Montague and Capulet.

ANSWER: **Romeo and Juliet** (accept The **Tragedy of Romeo and Juliet**)

(Tossup 5) The period of one of these systems can be estimated with the small-angle approximation. A "double" example of this simple harmonic oscillator is an example of a chaotic system. An experiment to demonstrate Earth's rotation, created by Leon Foucault [foo-COH], uses one of these devices. For the point, name these systems that consist of a weight on the end of a rod, used to power grandfather clocks.

ANSWER: **pendulum** (accept **double pendulums**; accept **Foucault's pendulums**)

(Tossup 6) Ergot alkaloids produced by one of these organisms can cause hallucinations. The first antibiotics were discovered when one of these organisms was found to kill bacteria. *Neurospora crassa* is a type of this organism that can contaminate bread, and the "black" form of these organisms can infest water-damaged buildings. For the point, name these fungi that can appear on spoiled foods.

ANSWER: **molds** (prompt on "fungus" or "fungi" before mentioned)

(Tossup 7) A project dedicated to creating this technology was launched after Leo Szilard wrote a confidential letter to Franklin Roosevelt. Klaus Fuchs leaked information about this technology to the Soviet Union after successfully infiltrating the Los Alamos National Laboratory. The Trinity Test proved the viability of these weapons which were the focus of the Manhattan Project. For the point, name these extremely destructive weapons which were dropped on Hiroshima and Nagasaki during World War II.

ANSWER: **nuclear** weapons (accept **atomic** bombs; accept **nukes**)

(Tossup 8) This author instructed, "leave not the bridegroom quiet" while trying to inspire Northern recruitment in the poem "Beat! Beat! Drums!" This poet said "our fearful trip is done" and described a leader who has "fallen cold and dead" in a poem memorializing Abraham Lincoln, and wrote "I celebrate myself and sing myself" in another work. For the point, name this American poet who collected poems like "O Captain! My Captain!" and "Song of Myself" in *Leaves of Grass*.

ANSWER: Walt **Whitman** (accept Walter **Whitman**)

(Tossup 9) This dynasty's defeat at the Battle of Talas may have spread the secret of paper-making to the Middle East. Empress Wu Zetian temporarily seized power from this dynasty which also briefly co-existed with the Yan dynasty during the An Lushan Rebellion. This dynasty continued the use of civil service exams which had been restored by its predecessor, the Sui dynasty. A "golden age" was ushered in during, for the point, what dynasty that was succeeded by the Song?

ANSWER: **Tang** Dynasty

(Tossup 10) Economist William Jevons ludicrously claimed that these phenomena were connected to economic crises. It's not eclipses, but the variation in latitude of these phenomena is predicted by Sporer's Law. These phenomena, which consist of an umbra and penumbra, occur in eleven-year cycles linked to a certain body's magnetic field flipping orientation. For the point, name these dark, cool areas in the sun.

ANSWER: **sunspots**

(Tossup 11) This religious figure ordained Mahapajapati as the first *bhikkhuni*, and was the son of Maya. This religious leader was understood only by Mahakasyapa when he gave the wordless Flower Sermon, and in the Sarnath Deer Park, this religious figure preached the Four Noble Truths. Practicing the Middle Way and meditating under the Bodhi tree led to the enlightenment of, for the point, what Indian prince who became the leader of a namesake religion?

ANSWER: **Buddha** (accept **Gautama Buddha** or **Siddhartha** Gautama)

(Tossup 12) The Haldane effect describes a decrease in the affinity of hemoglobin for this compound near the lungs. Hyperventilation can cause a depletion of this compound in the lungs. Buffer solutions in the blood turn this compound into carbonic acid. Along with water vapor, this compound is produced by animal respiration. For the point, name this gas, which is used by plants to perform photosynthesis.

ANSWER: **carbon dioxide** (accept **CO2**)

(Tossup 13) The Heaviside step function of five returns this number. For calculations on the Collatz conjecture, odd numbers are tripled and have this number added to them. This number is the tangent of pi over four. This number is the determinant of an identity matrix. Zero factorial is defined to be this number. This positive number is equal to its own reciprocal. For the point, name this number which gives two when doubled.

ANSWER: **one** (or **unity**)

(Tossup 14) This author wrote a poem in which a group of Oysters wear shoes that are “clean and neat” even though “they hadn’t any feet,” and are eventually eaten by “The Walrus and the Carpenter.” This author created a character who asks Humpty-Dumpty about the poem “Jabberwocky” after following a White Rabbit with a pocket-watch into a magical land. 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 15) The Pigovian form of these policies are used against market activity that generates negative externalities. Types of these policies involving increases in value of real estate and precious metals are called capital gains. In the build-up to the American Revolution, colonists rejected this type of policy without representation. For the point, name these policies, such as property and income variants, by which a government collects revenue.

ANSWER: **taxes**

(Tossup 16) This company sued the Department of Defense for awarding the JEDI contract to one of its rivals. This company opened cashierless stores in Seattle after purchasing Whole Foods. This company, which owns the audiobook company Audible, developed the Echo and Alexa smart speakers. Jeff Bezos founded, for the point, what online retailer that offers free 2-day shipping with its “Prime” service?

ANSWER: **Amazon**

(Tossup 17) One of Zeno’s paradoxes replaces one of this story’s title characters with Achilles, who cannot catch up with a slow animal. This story concludes that a victory is “not always to the swift” when a fast animal takes a nap and is beaten in a footrace by a diligent but slow animal. For the point, name this fable attributed to Aesop that teaches “slow but steady wins the race.”

ANSWER: “**The Tortoise and the Hare**” (accept “**The Hare and the Tortoise**”; do not accept or prompt on “Achilles and the Tortoise”)

(Tossup 18) A ruler with this name ordered the executions of Thomas Cranmer and the Oxford Martyrs. A woman with this name was executed after the discovery of the Babington Plot which aimed to overthrow Elizabeth I. A Catholic queen of this name carried out the Marian persecutions, killing hundreds of protestants. For the point, give this shared name of a “Queen of Scots” as well as a “Bloody” Queen of England.

ANSWER: **Mary** (accept more specific answers like *Mary*, Queen of Scots or *Mary I*)

(Tossup 19) This country’s control of the Tamar Gas field was briefly contested by Lebanon in 2009. Tourists in this country flock to the Timna Valley which is located just 20 miles north of Eilat. The Sea of Galilee is located in this country which is also home to the western shore of the Dead Sea. For the point, name this Middle Eastern country that is led from Jerusalem.

ANSWER: State of **Israel**

(Tossup 20) Golgi’s black reaction uses this element’s nitrate as a stain. In a common lab experiment, this element forms a namesake mirror from an ammonia solution of this element’s oxide. When combined with gold, this element can form the alloy electrum. This element has the highest electrical and thermal conductivity. For the point, name this precious metal, whose atomic symbol is Ag.

ANSWER: **silver** (accept **Ag** before mentioned)

(Tossup 21) The theologian Theophan described one of these rituals reaching the mind and the heart when believers perform one of these rituals named for Jesus. This observance can be performed with the help of a knotted rope, or with a string of beads called a “rosary” using texts like the “Pater Noster” and the “Hail Mary.” For the point, name this religious ritual in which people speak to a god.

ANSWER: **prayer** (accept word forms like *praying*; prompt on “worshipping;” prompt on “rosary” before mentioned)

(Tossup 22) A symphony by this composer includes a movement based on his ballet *The Creatures of Prometheus*, and was dedicated “to the memory of a great man” after this composer crossed out a dedication to Napoleon. This composer created a third symphony nicknamed *Eroica* and a piano sonata that evokes the night sky reflecting on Lake Lucerne. For the point, name this composer who wrote the *Moonlight Sonata* and the bagatelle “Für Elise.”

ANSWER: Ludwig van **Beethoven**

(Tossup 23) The son of this nation’s leader, Flavio, has been accused of running a *rachadinha*, a kickback given by aides to an elected official for appointing the. The president of this nation, Jair Bolsonaro, contracted COVID this past July. For the point, name this country with the third highest number of Coronavirus cases of any country in the world to date, and the greatest number of any country in South America

ANSWER: Republic of **Brazil**

(Tossup 24) The nacreous type of these objects appears iridescent and may be related to global warming. Silver iodide can be used to “seed” these objects. High altitude types of these objects can be composed of ice crystals and are called cirrus, and types of these objects associated with thunderstorms are called cumulonimbus. For the point, name these collections of condensed water that can produce rain.

ANSWER: **clouds** (accept cirrus or cumulonimbus *clouds*)

(Tossup 25) Theophrastus was the second leader of the Peripatetic School in this city, where Xenocrates also led the Academy. Epicurus moved from Samos to this city to set up his school, called The Garden. In this city, a philosopher put on trial corrupting the youth was forced to drink hemlock; his fate is recorded in *The Apology*. For the point, name this Greek city, the home of Socrates, Plato, and Aristotle.

ANSWER: **Athens**

Tiebreaker or Replacement

(Tossup 326) Two of these creatures served a deity nickname Hrafnaguth in honor of these creatures. According to Snorri Sturluson, a pair of these birds believed to represent thought and memory departed every day at dawn and returned before breakfast to Valhalla. Hugin and Munin are, for the point, what kind of black birds that act as spies for Odin in Norse myth?

ANSWER: **ravens** (accept **Hugin and Munin** before mentioned; prompt on “bird” before mentioned)