

Round 4

Bee Round 4

(Tossup 1) The 1996 Nobel in Chemistry was awarded for the discovery of some of these things; one of them that looks similar to a geodesic dome was named fullerene. For phosphorus, these things are identified by colors like white and red. Diamonds and graphite are other examples of these for carbon. For the point, give this term for elements that exist in different forms based on their bonding, unlike atomic weight-based differences that create isotopes.

ANSWER: allotropes (accept (buckminster)fullerenes or buckyball until fullerene is read; prompt on compounds of carbon before “white” is read)

(Tossup 2) In 2016, Bill Clinton violated this state’s election laws by giving a speech too close to a polling location in New Bedford. The Basketball Hall of Fame is in this state’s city of Springfield. Traditionally paired colleges in this state include Mount Holyoke and Amherst, as well as Radcliffe and an Ivy League school in Cambridge. For the point, name this New England state, home to Harvard and MIT.

ANSWER: Massachusetts

(Tossup 3) This scandal led the Supreme Court to rule, in *McGrain v. Daugherty*, that Congress could force people to testify. This scandal involved Edward Doheny’s lease of the rights to Elk Hills. The first ever Cabinet member to be thrown in jail, Albert Fall, was imprisoned after leasing Navy oil reserves to private companies at low prices in, for the point, what 1921 bribery scandal that hurt the reputation of president Warren G. Harding?

ANSWER: Teapot Dome scandal

(Tossup 4) A character in this play swears to Lorenzo that she will “become a Christian and thy loving wife” by running away dressed as a boy. In this play, Nerissa disguises herself as Stephano to witness a court case about a pound of flesh be argued by a lawyer who is really Portia in disguise. For the point, name this Shakespeare play in which the antisemitic Antonio butts heads with the Jewish Shylock in the title Italian city.

ANSWER: The Merchant of Venice

(Tossup 5) The sum of the reciprocals of all of these numbers equals pi squared over 6, according to the Basel problem. Two consecutive triangular numbers will always add up to a number with this property; that can be seen geometrically with, for example, 6 and 10 placed in a 4 by 4 grid. For the point, name these numbers, such as 1, 4, 9, and 16, that result from multiplying an integer by itself.

ANSWER: perfect square numbers

(Tossup 6) In 1555, members of this empire agreed to follow the principle of *cuius regio, eius religio*, somewhat calming a religious dispute. This empire dissolved after Francis II's loss to Napoleon at the Battle of Austerlitz in 1806. A redbearded ruler of this empire drowned in the River Saleph during the Third Crusade and belonged to the House of Hohenstaufen. Frederick III was the first Habsburg ruler of, for the point, what central European empire?

ANSWER: Holy Roman Empire (or HRE)

(Tossup 7) In this poem, "The Eyes around - had wrung them dry" before the speaker expects to see "the King" among the "Stillness in the Room." The speaker of this poem says "I willed my Keepsakes - Signed away / what portion of me be / assignable" before hearing a "Blue - uncertain - stumbling" sound "Between the light - and me." For the point, name this poem by Emily Dickinson in which the speaker hears the title insect "when I died."

ANSWER: I heard a Fly buzz - when I died

(Tossup 8) A form of erosion caused by these features, called incision, is caused by tectonic uplift. Plant life found near these features in a riparian zone prevent erosion, which may otherwise cause these features to meander, forming oxbow lakes. In 1900, the city of Chicago hired engineers to reverse one of these features, which had been polluting Lake Michigan. For the point, name these natural features that often form deltas at their mouths when they reach the ocean.

ANSWER: rivers (accept streams, creeks, or any other flowing course of water)

(Tossup 9) In this opera, a woman defends a boy in the aria "Vous ne l'obtiendrez pas." [voo nay lobe-tee-en-dray pah] Melcthal blesses couples before marriage during the opening Shepherd Festival of this work. The theme of the Lone Ranger was taken from this work's "March of the Swiss Soldiers." This opera's title character is forced by Gessler to risk the life of his son, Jemmy. For the point, name this Rossini opera about a marksman who shoots an apple off his son's head.

ANSWER: William Tell (or Guillaume Tell)

(Tossup 10) In one speech, this man referenced a check that has been returned and marked "insufficient funds." This man attempted to end a sanitation strike with his last speech, which claimed he had "seen the promised land" from the mountaintop. A "Letter from Birmingham Jail" was written by this man in 1963, four months before he quoted "Free at last!" to end a speech given in Washington. For the point, name this civil rights leader who gave the "I Have a Dream" speech.

ANSWER: Martin Luther King Jr.

(Tossup 11) To achieve a higher mental state, this thinker argued that man must be more than "the parrot of other men's thinking." In a work titled "Experience," this man argues against attempts to create Utopian societies like Brook Farm. This author said that "a foolish consistency is the hobgoblin of little minds." For the point, name this transcendentalist author of "Nature" and "Self-Reliance."

ANSWER: Ralph Waldo Emerson

(Tossup 12) One of this planet's moons has a bright crater near its equator named Wunda, while another moon has the highest known cliff in the Solar System. After Saturn, this was the second planet in the solar system discovered to have a ring system. This planet's moons include Umbriel, Titania, Miranda, and other literary inspired names, and it notably rotates on its side. For the point, name this planet, the seventh from the sun.

ANSWER: Uranus

(Tossup 13) The Black Eyed Peas appear on this game series' *The Urbs* spin-off. The third game in this series features a "Mysterious Mr Gnome" which stealthily moves around the player's lot. The Goths have appeared in every main title of this game series, in which the Charismatic trait improves the quality of conversational ability in a nonsensical namesake language. For the point, name this series of games by EA Maxis in which players need to balance the needs of the title simulated people.

ANSWER: The Sims

(Tossup 14) This country lobbied to be allowed to attend the 2017 World Health Assembly after being blocked by a neighboring country. Donald Trump caused a minor controversy after fielding a phone call from this country's Tsai Ing-wen. This country recently legalized same-sex marriage, becoming the first country in Asia to do so. For the point, name this country whose Taipei-based government clashes with China over its autonomy.

ANSWER: Taiwan (accept Republic of China; accept Chinese Taipei before mention)

(Tossup 15) In this novel, a character whose family had "never done *anything* for their money" is the young Nately. Another character in this novel, the protagonist's tent-mate Orr, practices crashing his plane to get closer to Sweden. This novel's protagonist tries to fake insanity to get out of World War II. Yossarian appears in, for the point, what satirical novel by Joseph Heller?

ANSWER: Catch-22

(Tossup 16) A faction in this city known as the "Weepers" helped carry out a destruction of "subversive" art in the Bonfire of the Vanities, carried out by the Dominican friar Girolamo Savonarola. Rulers of this city on the Arno River included Cosimo and Lorenzo the Magnificent. Tuscany's capital is, for the point, what northern Italian city, the power base of the Medici family and "Cradle of the Renaissance?"

ANSWER: Florence

(Tossup 17) The specific form of this quantity is equal to r cross v . Kepler's second law can be proven by noting that this quantity is constant in the two-body problem. Torque is the rate of change of the angular form of this quantity, and impulse is the net change in its linear form. This quantity is conserved in both elastic and inelastic collisions. For the point, name this quantity equal to an object's mass times velocity.

ANSWER: momentum (accept both linear and angular momentum)

(Tossup 18) This god was merged with the bull Apis to create Serapis. The King of Byblos cut down a tree which had grown around a chest containing this god. Depictions of this eldest son of Nut show him with green skin and wielding a crook and flail. Part of this god was eaten by fish after he was torn into fourteen pieces by his brother Set. Isis is the wife of, for the point, what Egyptian god of resurrection who rules the underworld?

ANSWER: Osiris (or Usiris or Aser)

(Tossup 19) These beliefs include Zakat; observances at Fajr, Dhuhur, and Maghrib; and shahada, a declaration of faith. This group of beliefs includes Salat and the Hajj, the act of praying five times daily and the act of making a pilgrimage to Mecca, the birthplace of Muhammad. For the point, name this group of five core beliefs that are central to Islam.

ANSWER: Five Pillars of Islam (accept arkan al-Islam or arkan al-din)

(Tossup 20) Northrop Frye described the “naive” type of this literary device as possessing two-dimensional characters embodying individual parts of human nature, as in *The Faerie Queen* and *Everyman*. Plato’s *Republic* includes one of these “of the Cave,” and a novel that uses this literary device portrays Lenin and Stalin as pigs ruling a barnyard. For the point, *Animal Farm* is what type of narrative, an extreme extension of metaphor, in which a story as a whole has a hidden second meaning?

ANSWER: allegory (prompt on metaphor or extended metaphor until it is read)

(Tossup 21) A war injury suffered by this man is commemorated by a statue of a boot; that statue purposefully doesn’t mention his name. John Andre was captured and executed after attempting to meet with this man. After a shouting match with Horatio Gates, this man was removed from command during the Battle of Saratoga. A plot to hand over West Point was planned by, for the point, what disgraced American general who defected to the British during the Revolution?

ANSWER: Benedict Arnold

(Tossup 22) In this sea, the medieval city of Visby was built on the island of Gotland by Hanseatic League traders. The Kalmar Union fought to control piracy in this sea. Access to this sea was a key factor in the location of Peter the Great’s capital. Inlets of this sea include the Gulf of Bothnia, the Gulf of Riga, and the Gulf of Finland. For the point, name this large northern European sea whose namesake “states” on its eastern shore are Estonia, Latvia, and Lithuania.

ANSWER: Baltic Sea

(Tossup 23) Julius Wagner-Jauregg won a Nobel Prize for giving mentally ill patients this disease, as this disease’s fever would kill a syphilis infection. For discovering a drug to treat this disease, Tu Youyou won a 2015 Nobel Prize; that drug is called artemisinin and is based on traditional Chinese medicine. *Cinchona* plants are processed into quinine, a common treatment for, for the point, what disease transmitted by *Anopheles* mosquitoes?

ANSWER: malaria

(Tossup 24) A tale about one of these creatures is recounted by Achaemenides after being rescued by Aeneas. Three of these creatures, named Brontes, Steropes, and Argos, were freed from Tartarus by Zeus and forged his thunderbolts in thanks. Odysseus saved his men from one of these creatures by hiding them on the underside of sheep. For the point, name these humanoid creatures, children of Poseidon who had only one eye.

ANSWER: cyclops (accept cyclopes)

(Tossup 25) In a painting of this type, the poet William Cullen Bryant stands on an outcropping next to an artist. *Kindred Spirits* is a painting of this type by Asher Durand, who specialized in this kind of painting. *The Course of the Empire* series, including *Pastoral State*, are works of this type by Thomas Cole, a member of the Hudson River School who painted these paintings in the Catskill Mountains. For the point, name this type of painting depicting natural scenes.

ANSWER: landscapes

(Tossup 26) For a parabola, the latus rectum and axis of symmetry have this property. The dot product of vectors with this relationship is zero. A tangent line and a normal line have this property with respect to each other, as do the diagonals of a rhombus or the adjacent sides of a rectangle. For the point, name this relationship in which two line segments meet at a 90 degree angle.

ANSWER: perpendicularity (accept word forms; accept orthogonality and word forms; prompt on descriptions of “meeting at a 90 degree angle”)

(Tossup 27) This poet wrote “Yes, call me by my pet-name!” and described “the depth and breadth and height / my soul can reach.” This poet’s works are collected in *Sonnets from the Portuguese*, which includes “How do I love thee? Let me count the ways.” For the point, name this English poet, the wife of fellow poet Robert.

ANSWER: Elizabeth Barrett Browning (accept Elizabeth Barrett Browning; prompt on Browning)

(Tossup 28) Some participants in an experiment conducted in this country were locked in a dark closet as a makeshift solitary confinement. A university in this country hosted a simulated prison run by Philip Zimbardo. In this country, subjects obeyed commands to administer damaging electric shocks in the Milgram Experiment. For the point, name this country where that psychological research was conducted at Yale and Stanford Universities.

ANSWER: United States of America (or USA or America)

(Tossup 29) Professor Tony Brown has used this substance in forensic analysis of mass graves in Bosnia. This substance is consumed by some adult members of the *Heliconius* genus of butterflies. The term anemophily refers to this substance’s transfer via the wind from anther to pistil. Hay fever is an allergy to, for the point, what substance containing the male gametes of plants that is transferred by insects like bees?

ANSWER: pollen

(Tossup 30) In this show, Yuki Yoshida fights with her old rival in a scene animated by 4 Degrees C studios. Almost all the jobs in this show are held by Larry Needlemeier, whose decision to quit after being berated over a pizza leads to a collapse of Elmore's economy. The central family of this show is entirely composed of felines and rabbits except for an adopted goldfish named Darwin. For the point, name this Cartoon Network show about the title blue cat.

ANSWER: The Amazing World of Gumball

(Tossup 31) Red and white terra cotta flooring is found in the Reading Room of this man's Laurentian Library. This man signed one of his sculptures on the sash of the central woman, who cradles the body of the dead Jesus. A freestanding nude by this sculptor of *Pietà* stands contrapposto and holds a slingshot over his shoulder. For the point, name this Renaissance sculptor of a marble statue of *David*.

ANSWER: Michelangelo di Lodovico Buonarroti Simoni

(Tossup 32) After this leader lost a war, his country was allowed to sell oil for humanitarian supplies in the United Nations Oil-for-Food Programme. Forged documents claimed this man attempted to buy uranium from Niger; that was used as pretext to invade his country and depose him in 2003. This ruler warred against Iran after the Iranian revolution and perpetrated a genocide of Kurdish people in the 1980s. For the point, name this former dictator of Iraq.

ANSWER: Saddam Hussein

(Tossup 33) A work written in this country includes short stories about Federigo's falcon and "the patient Griselda," and a writer from this country composed "scattered rhymes" about Laura. This country is the home of Petrarch and a collection in which young nobles avoid the Black Plague by fleeing Florence, Boccaccio's *Decameron*. For the point, name this European country home to Dante's *Divine Comedy*.

ANSWER: Italy (accept Italian Republic; accept Italia or Repubblica Italiana)

(Tossup 34) In the aftermath of this event, one man was trapped in Richard Garrett's burning barn. The victim of this event was taken to the Peterson House where he was laid in bed diagonally due to his height. Henry Rathbone was injured in this event shortly before its perpetrator jumped onto a stage yelling "sic semper tyrannus!" Ford's Theater was the site of, for the point, what event in which John Wilkes Booth killed the 16th President of the United States?

ANSWER: assassination (or murder, killing, shooting, etc.) of Abraham Lincoln

(Tossup 35) The striking of this phenomenon against metal causes electrons to be emitted in the photoelectric effect. This phenomenon formed a series of bands in Thomas Young's double-slit experiment, which demonstrated that it behaves as both waves and particles. For the point, name this phenomenon, a type of electromagnetic radiation that is emitted by the Sun and LEDs and is generally visible to the human eye.

ANSWER: (visible) light (accept electromagnetic radiation or EM radiation before mentioned)

Extra Question

Only read if moderator botches a question.

(Tossup 36) In this novel, Prissy helps deliver Melanie's baby before they are abandoned by the protagonist's love interest during the burning of Atlanta. In this work, Frank Kennedy is killed while raiding a shantytown, leaving the protagonist free to marry the father of Bonnie Blue, who dies while riding her pony. This novel's central family lives on the Tara plantation which falls into disrepair due to a Union blockade. For the point, name this Margaret Mitchell novel which follows Scarlett O'Hara in the Civil War South.

ANSWER: Gone with the Wind