

# Round 1

## Bee Round 1

(1) Susanna Dickinson's life was spared at this location, so that someone lived to tell the tale. Supposedly, a "line in the sand" at this location was not crossed by the coward Moses Rose, who fled to Nacogdoches. William Travis led forces at this location, including James Bowie and Davy Crockett. For the point, name this San Antonio mission complex that was besieged by Santa Anna's troops in 1836, ending in the deaths of all the defenders, a massacre that Sam Houston rallied to "remember!" during the Texan Revolution.

ANSWER: the Alamo

(2) This value is equal to an infinite alternating series of fractions of the form "4 over the  $n$ th odd number;" that is, this number equals four, minus four-thirds, plus four-fifths, and so on. This value, which is a little smaller than 22 over 7, is multiplied by the square of the radius in the area formula for a circle. For the point, name this mathematical constant that describes the ratio between the diameter and circumference of a circle, approximately equal to 3.14.

ANSWER: pi

(3) In this phenomenon's cooling technique, red lasers slow down particles. Edwin Hubble used this effect to discover that galaxies were moving away from the Milky Way. This effect, in which frequency shifts, is caused by the observer's motion relative to the source and is commonly experienced as a bystander hearing a passing ambulance siren. For the point, name this effect, used in developing most weather radar systems, that causes the pitch of a sound to decrease as the source moves away from you.

ANSWER: Doppler effect (prompt on red and/or blueshift)

(4) This novel's protagonist helps a man who becomes known as Provis, but hides that fact from his uncle, Joe Gargery. A character in this novel lives in Satis House, where all the clocks are stopped at eight forty, and wears her wedding dress even though she is still Miss Havisham. The protagonist falls in love with Estella and receives financial support from the former convict Abel Magwitch. For the point, name this novel about an orphan nicknamed Pip, written by Charles Dickens.

ANSWER: Great Expectations

(5) The composer of this work criticized Arturo Toscanini's tempo in directing it at its 1929 premiere. This musical piece is meant to evoke a slow dance that is usually accompanied by castanets in Spain. This piece is particularly technically demanding for one of its performers, who must maintain perfect tempo and a very minor crescendo through 169 repetitions of a two-bar snare drum rhythm. For the point, name this composition by Maurice Ravel.

ANSWER: Boléro

(6) During this politician's tenure, the National Union of Mineworkers, under the leadership of Arthur Scargill, went on strike. This politician bolstered her popularity after giving a speech at a Conservative convention the day after the IRA attempted to assassinate her at a hotel in Brighton. As Education Minister under predecessor Edward Heath, this politician was labeled a "milk snatcher." The United Kingdom was led through the 1980s by, for the point, what Prime Minister, nicknamed the Iron Lady?

ANSWER: Margaret Hilda Thatcher (accept Baroness Thatcher)

(7) The longest chapter of this book is called "The Cow" and contains the Throne Verse. A hafiz is someone who has memorized this book. Almost all of chapters of this work all begin with the Bismillah. Chapters of this book are called suras, and its verses are called ayat. This book is composed of revelations provided by the angel Jibreel over a period of 23 years to the prophet Mohammed. For the point, name this central religious text of Islam.

ANSWER: al-Quran

(8) An organic example of these substances have a carboxyl functional group with a partial positive charge on hydrogen. The Lewis type of this object accepts electrons, while the Bronsted-Lowry type increases hydronium concentration. They have a sour taste, and some are highly corrosive and can dissolve metal. Litmus paper is turned red by this type of substance, examples of which include the two-atom molecule HCl [H C L]. For the point, name this type of substance with a pH lower than 7 that can neutralize bases.

ANSWER: acids

(9) This modern city houses a giant altar built by Eumenes II in its Pergamon Museum. In the 1920s, this city's nightlife was centered around the Alexanderplatz, found in its "Alt," or "old," neighborhood. Located on the river Spree, this city's boroughs include Spandau, which borders neighboring Potsdam. For the point, name this site of the Brandenburg Gate, a city reunified in 1990 after the destruction of a namesake wall.

ANSWER: Berlin

(10) This city was led by two kings and five ephors. Despite being vastly outnumbered, a king of this city held off a large force of Persians at a pass called Thermopylae. Leonidas was from this city, which mandated the agoge [uh-goh-gey], a strict training regiment for all of its male citizens. For the point, name this Greek city, a dominant land-based military power that rivaled Athens during the Golden Age of ancient Greece.

ANSWER: Sparta

(11) An author from this nation wrote about Julien Sorel in the novel *The Red and the Black*. This nation is the setting of a short story in which a woman nicknamed Ball of Fat is stopped in a stagecoach during a war with Prussia and a novel in which the "Sergeant of Waterloo" inn is the home of Eponine and Cosette, who is rescued by Jean Valjean. For the point, name the home nation of Stendhal, Guy de Maupassant, and Victor Hugo.

ANSWER: France

(12) The Chikyu project failed to drill into this region, whose top layer is called the asthenosphere. This region is bounded by discontinuities named for Gutenberg and Mohorovicic. Parts of this area which reach the surface are called plumes, which result in hot spots. Plate tectonics is believed to be driven by convection from this region. Like the outer core, which this region surrounds, this region is liquid. For the point, name this molten layer of the Earth found below the crust.

ANSWER: **mantle**

(13) Early hits by this band include a song that notes “We’re falling apart to half time” and a song with a vowel-less title, “Thanks fr th Mmrs,” [”Thanks for the Memories”]. This group asked “Am I more than you bargained for yet?” in one song and incessantly repeats the phrase “Light Em Up” in another. Patrick Stump and Pete Wentz are members of, for the point, what pop-punk group behind the songs “Dance, Dance,” “Sugar, We’re Going Down,” and “Uma Thurman”?

ANSWER: **Fall Out Boy**

(14) A poet from this movement described “fighting back” in poem “If We Must Die” and wrote the novel *Banana Bottom*. Another poet from this movement wrote about a poem where a mother states, “life for me ain’t been no crystal stair,” and wrote about a man “droning a drowsy, syncopated tune.” An author from this movement wrote about Tea Cake’s marriage to Janie Crawford. “The Weary Blues” and *Their Eyes are Watching God* were produced in, for the point, what New York-based literary movement of Zora Neale Hurston and Langston Hughes?

ANSWER: **Harlem Renaissance**

(15) One of these wars began when the *Arrow* was seized on suspicion of being a pirate ship. The first of these wars, began after a letter to Queen Victoria was written by Lin Zexu, who destroyed nearly 3 million pounds of a medicinal drug. The Unequal Treaties of Tianjin and Nanking ended two of these wars. For the point, name this series of wars between China and England that were concerned with the smuggling of a certain narcotic drug.

ANSWER: **Opium** War(s) (prompt on “wars between China and England” before those names are said)

(16) In 2015, wildfires devastated this state’s town of Twisp. This state’s Cape Flattery sits on the Strait of Juan de Fuca, while in this state’s southeast is the winemaking Walla Walla Valley. This state’s city of Vancouver lies on the north bank of the Columbia River, which forms Lake Roosevelt at this state’s Grand Coulee Dam. For the point, name this state, where Puget Sound borders the home of the Space Needle, Seattle.

ANSWER: **Washington** (do not accept “Washington, D.C.”)

(17) During this process, a cleavage furrow forms in animal somatic cells. This process is preceded by gap I, synthesis, and gap II phases. In this process, spindle fibers connect to kinetochores to pull sister chromatids apart in anaphase after lining them up on the metaphase plate. For the point, name this eukaryotic cell production process that makes two identical diploid daughter cells, as contrasted with the four non-identical cells produced in meiosis.

ANSWER: **mitosis** (prompt on cell division)

(18) Cramer’s Rule may be used to find the solution to one of these things. In two variables, these mathematical problems can be considered graphically as two or more lines that may or may not intersect. Elimination, substitution, or graphing are common methods for solving, for the point, what sets of equations that are considered together, such that the desired solution must satisfy *every* equation in the set?

ANSWER: system of equations (accept any additional information describing what kind of equations the system involves)

(19) This passage tells listeners to not worry about food or clothing, since birds and lilies are provided for by God. Like a similar passage found in Luke, this passage begins with a section that blesses those who are merciful, humble, and meek, “for they shall inherit the earth.” The Beatitudes and the Lord’s Prayer are from this larger speech in the Book of Matthew. For the point, name this speech given by Jesus from the top of a mountain.

ANSWER: Sermon on the Mount (prompt on Gospel of Matthew)

(20) This artist attempted to capture “the terrible passions of humanity” with a painting of a landlord in a cream suit standing next to a billiard table in a red-walled room in *The Night Cafe*. This man painted five peasants pouring tea and eating the title food in *The Potato Eaters*, and he adapted the view from his asylum in a painting of the town of San Remy beneath a swirling sky. For the point, name this Dutch artist of *The Starry Night* and *Self-Portrait With Bandaged Ear*.

ANSWER: Vincent Willem van Gogh

(21) In this novel, Perico the bodega owner provides the protagonist with newspapers that report baseball scores. This novel ends with the protagonist dreaming of African lions on a beach. This novel’s protagonist also talks about “the great DiMaggio,” and breaks an eighty-four day unlucky streak by catching a giant marlin, only to have it devoured by sharks. For the point, name this novel about the boy Manolin and the fisherman Santiago, written by Ernest Hemingway.

ANSWER: The Old Man and the Sea

(22) One defining characteristic of these objects is the failure to “clear their neighborhood.” The IAU created that definition in 2006 but has yet only applied it to five objects. Up to 200 more of these may be in the Kuiper [kye-per] Belt. Dysnomia and Charon each orbit one of these objects, which are spherical but fail other criteria, granting them a “lesser” status. For the point, name this astronomical term that was applied to Pluto in 2006, making it no longer a “real” planet.

ANSWER: dwarf planets (do not accept or prompt on planet)

(23) A form of these things named for Arthur Pigou balances the effects of negative externalities. A diagram famously drawn on a napkin in the 1970s explains how both high and low values for these quantities produce poor returns. One of these was legalized by the 16th Amendment and is today administered using Form 1040 for most people, including married couples filing jointly. For the point, name these payments, two of which are based on one’s property or income, which provide revenue for governments.

ANSWER: taxes (accept Pigouvian taxes; accept income tax)

(24) D.C. Stephenson led a branch of this organization in Indiana. The Enforcement Act of 1870 was passed to combat this organization. William Joseph Simmons founded a revival branch of this organization at Stone Mountain. This group opposed Republican state governments during Reconstruction under one of its early leaders, Nathan Bedford Forrest. *The Birth of a Nation* glorified, for the point, what white supremacist organization, led by Grand Wizards, whose members wear white capes and hoods?

ANSWER: Ku Klux Klan (accept KKK)

(25) A Margaret Atwood novel is titled for an “assassin” with this condition. A poem about this condition ends “They also serve who only stand and wait” and was written by an author with this condition, who dictated the entirety of *Paradise Lost* to his friends. After being afflicted with this condition, John Milton wrote the poem “When I consider how my light is spent,” and a King of Thebes inflicted this condition on himself after discovering that his mother-wife, Jocasta, had hanged herself. For the point, name this condition which afflicts Oedipus after his eyes are gouged out.

ANSWER: blindness (accept word forms like “being blind”)

(26) This element is bonded to four ethyl groups in an additive once used to increase octane ratings that was driven out of use due to its neurotoxicity. A sulfide ore of this element is called galena. Historically, tin and this element were mixed in solder. This element, which is still commonly used for radiation shielding, can leach into water when pipes corrode, as has happened in Flint, Michigan. For the point, name this element that is no longer common in house paint due to toxicity concerns, whose atomic symbol is Pb.

ANSWER: lead (or Pb before mentioned)

(27) Charles Ives’ *Concord Sonata* calls for one of these musical concepts to be created with a long piece of wood. An unusual one of these is named for Wagner’s [vahg-ner’s] *Tristan and Isolde*, in which it appears. The tri-tone is often called the “Devil’s” type of this concept. They are augmented if their highest elements are raised a half step, and they can be broken up into an arpeggio, in which each note is played sequentially. For the point, give this musical term for three or more musical notes played simultaneously.

ANSWER: chord (accept cluster chord or tone cluster; prompt on cluster)

(28) Legend states that there were plans to construct an all-black counterpart to this building across the river. In front of this building is a garden with a large reflecting pool, and it has four minarets for each of its corners. This building was built after Mumtaz died in childbirth. This building in Agra contains two false sarcophagi, one for Mumtaz, and the other for her husband, Mughal emperor Shah Jahan. For the point, name this white marble mausoleum in India.

ANSWER: Taj Mahal

(29) Alfred Temple pours ink on this character’s book, and after running away with Joe Harper to become a pirate, this character witnesses his own funeral. This character testifies on behalf of Muff Potter, who has been framed for the murder of Dr. Robinson by Injun Joe, and is made to whitewash a fence by his Aunt Polly. For the point, name this character who falls in love with Becky Thatcher and is friends with Huck Finn, created by Mark Twain.

ANSWER: Tom Sawyer (accept either underlined portion)

(30) In this work, a character originally played by Michael Crawford tells another to “turn your face away from the garish light of day.” This work includes a production of the fictional *Don Juan Triumphant*. Sarah Brightman originated the female lead in this musical, singing in the duet “All I Ask of You” as the soprano Christine Daae. “The Music of the Night” is sung in, for the point, what Andrew Lloyd Webber musical about a disfigured, mask-wearing man who haunts a Parisian opera house?

ANSWER: The **Phantom of the Opera**

(31) In this country, Operation Car Wash was begun to investigate money laundering. On May 12th, the Senate voted to suspend this country’s president for 6 months. That suspension derived from faulty accounting, as well as corruption charges involving former President Lula, at this country’s state oil company, Petrobras. For the point, name this South American country led by embattled president Dilma Rousseff, the largest country in South America.

ANSWER: **Brazil**

(32) This mythological figure was given to Eos [ay-ohs] after he scaled Mount Olympus. This figure created the Hippocrene spring and was the brother of a golden Iberian king. He delivered to Polydectes the head of Medusa after this mythological figure rose from her blood, and he was ridden by Bellerophon when he attempted to fly up Mount Olympus. For the point, name this winged horse from Greek mythology.

ANSWER: **Pegasus**

(33) These structures are called megaphylls if they have multiple veins and microphylls if they only have one. These structures have a waxy cuticle on top and stomata on their undersides, which are bordered by guard cells for gas exchange. They have spongy and palisade mesophyll layers, with cells containing chloroplasts. For the point, name these plant structures that absorb sunlight for use in photosynthesis and, in deciduous trees, annually fall off of branches.

ANSWER: **leaves**

(34) In this novel, the nanny Justine Moritz is unjustly hanged for the murder of the protagonist’s brother after his locket is found in her pocket. This novel’s frame story consists of letters written by Robert Walton from the North Pole. In this novel, Henry Clerval is strangled by a monster created from the recombined body parts of criminals by the title scientist. For the point, name this novel subtitled “The Modern Prometheus,” written by Mary Shelley.

ANSWER: **Frankenstein**; or, The Modern Prometheus

(35) This man denounced an “unjust, evil, and futile war” in his speech “Why I Am Opposed to the War in Vietnam.” This man told sanitation workers in Memphis “I’ve been to the mountaintop” in a speech given hours before his death. He used the metaphor of a “bad check” in his most famous speech, which ends “Thank god almighty, we are free at last!” and was delivered on the steps of the Lincoln Memorial. For the point, name this civil rights leader who gave the “I Have a Dream” speech.

ANSWER: Martin Luther **King**, Jr.

## Extra Question

Only read if moderator botches a question.

(36) This element's +1 ion oddly exists as two atoms bonded with a net +2 charge. This element's most common ore is cinnabar, and mixtures of this element are called amalgams. A column of this element can be used to find atmospheric pressure, with 760 millimeters equaling one atmosphere. Alcohol and this element are sometimes used to fill the bulb of a thermometer. For the point, name this toxic element, a liquid at room temperature, whose chemical symbol is Hg.

ANSWER: mercury (or Hg before mentioned)