

National Academic Bee – Round 1

Regulation Tossups

(1) The term for this concept was popularized by Whig opponents of John L. O'Sullivan. The controversial All of Mexico Movement was influenced by this concept, which is often represented by a painting called *American Progress*, which shows Columbia running along a plain while holding a telegraph wire. This concept was first used to justify such actions as the annexation of Texas and the Oregon territory. For the point, name this concept, which proposes that the United States was bound to expand westward.

ANSWER: **Manifest Destiny** (prompt on descriptive answers before "expand")

(2) In a 2021 dystopian novel by this author, a Cootings Machine that blocks the sun with pollution is destroyed by an "artificial friend" and a girl who was genetically engineered for academic success. In addition to *Klara and the Sun*, this author wrote a novel about teenage clones who are told they can extend their lives for a few years if they can demonstrate they are in love, but are actually scheduled to die as organ donors. For the point, name this Japanese-born British Nobel laureate and author of *Never Let Me Go* and *The Remains of the Day*.

ANSWER: Kazuo **Ishiguro**

(3) The Hipparcos mission intended to measure this effect and proper motions, while New Horizons was the first mission to calculate this effect in an interstellar context. Friedrich Bessel made the first measurements of this effect using a heliometer while studying 61 Cygni. A unit of distance called the parsec was created as a portmanteau of "[this effect] of one second." For the point, name this astronomical effect in which observing a star from two lines of sight causes it to appear in different places.

ANSWER: **parallax** (or stellar **parallax**; accept **parallax** of one second)

(4) This artist created a sculpture depicting Michael Jackson with a monkey as part of the *Banality* series. This artist created a massive sculpture made out of flowers called *Puppy*, which is displayed at the entrance to the Guggenheim Museum in Bilbao. In 2019, a work by this artist titled *Rabbit* became the most expensive work sold by a living artist at auction. For the point, name this American artist known for creating sculptures of balloon animals with mirror finish surfaces.

ANSWER: Jeff **Koons** (or Jeffrey Lynn **Koons**)

(5) Values discovered by this scientist explain properties of our galaxy in terms of rotational velocity and distance to the Galactic Center. This scientist discovered the galactic halo and pioneered radio astronomy. Planetesimals come from a region named for this scientist which is thought to provide a source for long-period comets in the Solar System. The Hills cloud is thought to be part of a region named for, for the point, what Dutch astronomer who names a "cloud" in our Solar System?

ANSWER: Jan **Oort** (or Jan Hendrik **Oort**; accept **Oort** cloud; accept Opik-**Oort** cloud; accept **Oort** constants)

(6) This person was the highest-ranking member of the Trump administration to resign over the January Sixth riots. This person has faced criticism over family ownership of the Foremost Group, and this person served as secretary of labor under George W. Bush, becoming the first Asian American woman to serve in a presidential cabinet. For the point, identify this Taiwanese-born woman who is married to Mitch McConnell and served as Secretary of Transportation from 2017 to 2021.

ANSWER: Elaine **Chao** (or Elaine Lan **Chao**)

(7) On this island, Jean Kina led a failed revolt, after which he was jailed at Newgate Prison. In 1759, Peregrine Hopson failed to capture this island, though a later 1762 expedition by Robert Monckton was successful. This island, which once used a flag showing four coiled snakes, was led by politician and Négritude movement poet Aimé Césaire. For the point, identify this Caribbean island where a prison cell protected Ludger Sylbaris from the 1902 eruption of Mount Pelée.

ANSWER: **Martinique** (accept **Matinik**; accept **Matnik**; accept **Madinina**; accept **Madiana**)

(8) As a teenager, this musician played a solo so poorly that Jo Jones threw a cymbal, as recounted in the movie *Whiplash*. It's not Duke Ellington, but Ray Noble's track "Cherokee" inspired a song by this musician featuring Miles Davis on trumpet called "Ko-Ko." Morgan Lewis' standard "How High the Moon" inspired this musician to apply the same chord progression to the standard "Ornithology," which inspired this musician's nickname. The "Yardbird Suite" is by, for the point, what mid-1900s bebop saxophonist nicknamed "Bird?"

ANSWER: Charlie **Parker** (prompt on "Bird" or "Yardbird" before mentioned)

(9) A theory concerning these things rests on an axiomatic system named for Ernst Zermelo and Abraham Fraenkel. The Cartesian product is defined for two of these things, as is the symmetric difference. The definition of one of these things that contains "all and only all objects that are not members of themselves" leads to Russell's paradox, and, if one of these things has cardinality n , the power version of it has size "two to the n ." For the point, name these mathematical collections of objects.

ANSWER: **set** (accept **set** theory; accept power **set**)

(10) The city of Ife is revered by members of this ethnic group, as it is believed to be the place that originated the supreme deity, Olodumare. The religion of this ethnic group has influenced diasporic religions such as Candomblé and Santería within Latin America. This ethnic group ruled over the Oyo Empire, and this ethnic group is one of the three major ethnic groups of its main country, together with the Igbo [[EE-boh]] and Hausa. For the point, name this ethnic group which is native to southwestern Nigeria.

ANSWER: **Yoruba** (accept Ìran **Yorùbá**; accept **Omo Oòduà**; accept **Omo Káàárò-oòjìrè**)

(11) The start of this literary form is credited to a 1767 Christoph Martin Wieland novel titled *The History of Agathon*. The names of some of this form's many subgenres contain the words "artist" or "development," but the main term coined for this form in 1819 includes a foreign word for "education." Commonly-cited examples of this genre include novels such as *Wilhelm Meister's Apprenticeship* and *Tom Jones*. For the point, identify this literary genre with a German name that means "forming novel."

ANSWER: **bildungsroman** (accept **coming of age** novels or other such descriptive answers)

(12) The Union of Lublin formally established this state, which reached its height under Sigismund the Third Vasa. Stephen Báthory ruled this state after the flight of Henry of Valois [[val-WAH]], and the forces of this state were victorious at the 1683 Siege of Vienna under the leadership of Jan the Third Sobieski. This state, which was united by the Jagiellonian dynasty, eventually fell to the First Partition of one of its component polities. For the point, name this commonwealth which united a European kingdom and grand duchy.

ANSWER: **Polish-Lithuanian Commonwealth** (or Kingdom of **Poland** and the Grand Duchy of **Lithuania**; or **Poland-Lithuania**; accept **First Polish Republic** before "component" is mentioned)

(13) Alongside pyridine, an oxide of this element forms the Collins reagent, while a trioxide of this element dissolved in sulfuric acid creates the Jones reagent. This metal is the third-hardest element after carbon and boron, and a carcinogenic ion of this element is hexavalent and can be formed by welding with stainless steel. For the point, identify this transition metal with atomic number 24, which is resistant to corrosion and reflects much of the visible spectrum.

ANSWER: **chromium** (or **Cr**; accept **chromium** trioxide; accept **chromium** oxide)

(14) A 1965 electric remix of this song shot it to the top of the Billboard singles chart after the album *Wednesday Morning, 3 A.M.* flopped. This song envisions walking alone "In restless dreams" and imagines "a vision softly creeping." The habit of this song's writer to come up with ideas while sitting on the bathroom floor with the lights off inspired this song's opening line, "Hello darkness, my old friend." For the point, name this song alluding to cultural alienation by Simon & Garfunkel.

ANSWER: "The **Sound of Silence**" (accept "The **Sounds of Silence**")

(15) François Englert was awarded a Nobel Prize for the predicted discovery of this particle, which was achieved by the ATLAS and CMS experiments. The Standard Model predicts this particle as having no spin, and this particle contributes to the phenomenon of mass. Leon M. Lederman wrote a book that called this particle the "God Particle," and this particle was first created in 2012 at the Large Hadron Collider. For the point, name this elementary particle, which is named for a British scientist.

ANSWER: **Higgs** boson (accept **Higgs** particle; accept **God** particle before mentioned)

(16) During this election year, Columbia University head Nicholas Murray Butler tried to secure the Republican nomination for president. This election year pitted two newspaper publishers from Ohio against one another, and the incumbent blocked his son-in-law William Gibbs McAdoo from winning the Democratic nomination for this election year in hopes that he would be asked to run for a third term. For the point, identify this election in which Warren G. Harding promised "a return to normalcy" and defeated Woodrow Wilson.

ANSWER: Election of **1920**

(17) In one poem, this author described the desire to have “nine bean-rows” and a “small cabin... of clay and wattles made.” Another poem by this author describes an aged man like “a tattered coat upon a stick” and begins with the line “that is no country for old men.” Another poem by this author opens with the declaration “things fall apart; the center cannot hold.” For the point, name this Irish poet of “The Lake Isle of Innisfree,” “Sailing to Byzantium,” and “The Second Coming.”

ANSWER: W. B. Yeats (or William Butler Yeats)

(18) In butterflies, this color is typically derived from the bile pigment pterobilin. The only vertebrates to produce pigments of this color are the picturesque dragonet and mandarin fish. Horseshoe crabs and lobsters have blood that turns this color after being exposed to oxygen due to the presence of hemocyanin, and the iris of the eyes appears this color in the absence of any pigments due to Tyndal scattering. For the point, name this color, a shade of which is derived from the indigo plant.

ANSWER: blue (accept indigo before mentioned)

(19) This person, who fought at the Battle of Seven Pines against Joseph Johnston, later tapped Copperhead Democrat George H. Pendleton as a running mate. This person commanded the Army of the Potomac during the Peninsula Campaign and the Battle of Antietam, but was removed as commanding general of the United States Army in 1862. For the point, name this Civil War general who unsuccessfully challenged Abraham Lincoln's re-election in 1864.

ANSWER: George B(rinton) McClellan

(20) This substance was said to be delivered to Mount Olympus by doves and administered by a special attendant of Zeus, or by Heracles' divine wife, the youngest goddess. The properties of this substance, which are variously described as solid and liquid, has led some mythological scholars to think that it may have simply been honey. For the point, name this substance that is served at the heavenly feast by Hebe [[HEE-bee]] or Ganymede, which can give immortality to those consuming it.

ANSWER: ambrosia (accept nectar of the gods)

(21) This story, which was first printed in *The New England Magazine* in 1892, concerns a "recurrent spot...like a broken neck." Though its author was a racist eugenicist, this story has been praised for its feminism by using the main character's journal entries to discuss postpartum depression, for which the main character is prescribed a "rest cure." For the point, name this story by Charlotte Perkins Gilman, whose narrator's mental state deteriorates within a bedroom's four walls.

ANSWER: "The Yellow Wallpaper"

(22) Igor Stravinsky once accused this composer of “wasting time performing operas,” which this artist began doing at age nine with *The Giant*. One of this composer's operas was dismissed as “Russian jazz with Bolshevik trimmings,” and that opera by this composer concerns a curse placed by Fata Morgana, which afflicts a prince with *The Love for Three Oranges*. For the point, identify this Soviet composer, whose works include the ballet *Romeo and Juliet* and the composition *Peter and the Wolf*.

ANSWER: Sergei Prokofiev (or Sergei Sergeyevich Prokofiev)

(23) This gas reacts with alkenes in the Koch-Haaf reaction to form carboxylic acids, and this gas can be created by the dehydration of formic or oxalic acids. This gas contains the strongest known chemical bond, above that of "N two," and, while the resistance of tin dioxide is increased by oxygen, it is decreased by the presence of this gas in a type of sensor. For the point, name this odorless gas with formula CO, which can cause poisoning within an enclosed space, possibly due to heating or car exhaust.

ANSWER: **carbon monoxide** (accept **CO** before mentioned; accept **carbon monoxide** detector)

(24) This body of water was formerly drained by the Mayo Kébbi into the Benue [[ben-WEH]] River. This body of water is fed by the Chari River, and it takes its name from a Kanuri word meaning "lake." This lake's fishing town of Baga Sola was targeted in a suicide bombing by the terrorist group Boko Haram, and it is the largest body of water located inside the Sahel. For the point, name this Central African lake split between Niger, Nigeria, Cameroon, and an eponymous country governed from N'Djamena.

ANSWER: Lake **Chad** (or Lac T**chad**)

(25) One subtype of this medium takes its name from the Italian for "mud" and is known for its opacity, and that subtype of this medium was used in medieval Persian, Indian, and European miniature painting. This medium's main type has long been used in wildlife illustration, such as the works of John Audubon, as well as Korean, Japanese, and Chinese nature painting, with soft monochrome blacks or browns. Aquarelle is another name of, for the point, what medium that involves the use of paints suspended in a solution which might include H₂O?

ANSWER: **watercolor** (accept **gouache**; accept **aquarelle** before mentioned; prompt on broad answers such as "art" or "painting")

(26) A novel by this author opens with a devastating asteroid strike in Italy in 2077. That novel by this author centers on the crew of the ship *Endeavour* as they explore a massive and mysterious cylindrical object and is named *Rendezvous with Rama*. In a novel that this author co-developed with director Stanley Kubrick, scientists David Bowman and Frank Poole struggle against the sentient AI HAL 9000. For the point, name this British science fiction writer, the author of *2001: A Space Odyssey*.

ANSWER: Arthur C(harles) **Clarke**

(27) This airline acquired its rival, Caledonian, in 1988, and it merged with Iberia to form the International Airlines Group. This airline conducted the "Dirty Tricks" campaign to undermine its rival, Virgin Atlantic, and it operates a secondary hub at Gatwick Airport. Alongside Air France, this airline was one of the two operators of the supersonic Concorde. For the point, name this airline, which is headquartered at Heathrow Airport and serves as the flag carrier of the United Kingdom.

ANSWER: **British Airways** plc (or **BA**)

(28) The ratio of this force to viscous forces is calculated in fluid mechanics as the Grashof number. When this force is not zero, air movement can occur in chimneys and possibly cause fire hazards, as explained in the stack effect. Ignoring surface tension, Archimedes' principle states that the strength of this force is equal to the weight of a displaced fluid. Occurring due to differences in pressure in a column of fluid, for the point, what net upward force allows an object to float in water?

ANSWER: **buoyancy** (or **upthrust**)

(29) In 2003, a diminutive descendent of *Homo erectus* that was discovered in this country was popularly referred to as a "Hobbit." The consequences of "deep play" were developed based on observations of cockfighting in this country, which was compared with Morocco by anthropologist Clifford Geertz in *Islam Observed*. For the point, identify this majority Muslim country where many foundational anthropological studies were carried out on the islands of Bali and Java.

ANSWER: Republic of **Indonesia** (or Republik **Indonesia**)

(30) This type of software reacts to hardware devices by allowing interrupt service routines to take control. This type of software can handle page faults generated by the memory management unit, and it provides abstractions for permanent storage called file systems, which allow for organization in directories. For the point, identify this type of software that manages different programs on a computer by sharing memory and time, as seen in versions like Linux and Microsoft Windows.

ANSWER: **operating system** (or **OS**)

(31) This novel served as inspiration for a 1933 animated short by Disney called *Mickey's Mellerdrammer*. Literature created in direct opposition to this work included Mary Schoolcraft's *The Black Gauntlet* and Philip Couzan's novel *Little Eva: The Flower of the South*. In this work, Eliza escapes north, while the main character is whipped to death by Simon Legree. For the point, name this 1852 anti-slavery novel written by Harriet Beecher Stowe.

ANSWER: **Uncle Tom's Cabin**

(32) Digitate or filiform types of these things can take on a finger-like shape and often form on the eyelids. Periungual types of these things take on a cauliflower-like shape and occur primarily around the cuticle of the finger and toenails. Precancerous genital examples of these things can be caused by infections from human papillomavirus, or HPV. Common treatments for these things include salicylic acid to dissolve the affected skin, or liquid nitrogen to freeze it. For the point, identify these virally-caused bumps on the skin.

ANSWER: **warts** (accept digitate **warts**; accept filiform **warts**; accept periungual **warts**; accept genital **warts**)

(33) An iconic symbol using these objects, which were made by a *skeuopoios* [[skew-AH-poy-ohs]], depicts examples that represent Thalia and Melpomene [[mel-PAH-muh-nee]]. Theories about the purpose of these objects included amplifying voices, allowing a limited number of actors to convincingly play all parts, and making emotions visible at a distance. For the point, name these items of costuming from ancient Greek drama that are often reduced to emblematic "comedy" and "tragedy" versions.

ANSWER: masks (accept prosopon; accept persona)

(34) Part of this region contains a transition zone between different types of rocks at the brittle-ductile transition zone. Part of this region forms from spreading centers, and a boundary underneath this region is called the Moho discontinuity. The oceanic variety of this region is formed by rocks like basalt, while the continental type of this region contains rocks like granite. A component of the lithosphere, for the point, what uppermost layer of the Earth sits atop the mantle?

ANSWER: crust (accept oceanic crust; accept continental crust)

(35) This city's short Moyka River connects to canals such as the Swan Canal and the Winter Canal, and this city's harbor includes the city of Kronstadt on Kotlin Island. This city, which is home to Finland Station, is the northernmost city in Europe with a population over one million residents. This city at the eastern end of the Baltic Sea hosts a stadium sponsored by Gazprom, and this city was formerly known as Leningrad. For the point, name this second-largest city of Russia after Moscow.

ANSWER: Saint Petersburg (accept Petrograd; accept Leningrad before mentioned)

Extra Question

(1) This city, which is home to a police training facility called "Cop City," has had recent mayors such as Andre Dickens and Keisha Lance Bottoms. The rapper Young Thug was subject to a RICO case in this city by district attorney Fani Willis, and this city's Fulton County Jail is known as the place where the mugshot of Donald Trump was taken. This city, which was struck by the Centennial Olympic Park bombing, also hosts the headquarters of CNN and the Carter Center. For the point, name this capital city of Georgia.

ANSWER: Atlanta