

National Academic Bee – Round 3

Regulation Tossups

(1) In an early play by this author, Driscoll comforts a sailor who sees "a pretty lady dressed in black" while dying aboard the *Glencairn*. This playwright of *Bound East for Cardiff* included *The Hunted* and *The Haunted* in a trilogy about the post-Civil War Mannon family. Edmund decries having a "dope fiend for a mother" in a 1956 play by this author that chronicles the Tyrone family. For the point, identify this playwright of *Long Day's Journey into Night*.

ANSWER: Eugene **O'Neill** (or Eugene Gladstone **O'Neill**)

(2) This prime minister oversaw the creation of the Glace Bay Heavy Water Plant. This prime minister developed the Quebec Pension Plans and successfully replaced the 73-year-old Red Ensign. This prime minister introduced universal health care and won the Nobel Peace Prize for resolving the Suez Crisis through the creation of UN peacekeeping forces. For the point, name this Liberal prime minister of Canada who introduced Canada's distinctive maple leaf flag and names the busiest airport in Ontario.

ANSWER: Lester B(owles) **Pearson** (accept Toronto **Pearson** Airport)

(3) Toluene is converted into this compound when mixed with hydrogen and a chromium catalyst in toluene hydro-dealkylation. X-ray diffraction shows the bonds in this compound are the same length, at 140 picometers between single and double bond lengths. This carcinogenic, aromatic hydrocarbon is sweet-smelling and flammable, and the structure of this compound was discovered by August Kekulé, who had a dream of a snake eating its own tail. For the point, name this organic compound with formula "C-6-H-6."

ANSWER: **benzene** (accept **C-6-H-6** before mentioned)

(4) In this work, a choir sings "The Noble Woods are Burgeoning" as part of a section titled "In the Meadow." The full title of this work mentions a Bavarian municipality and describes "magical images." Five timpani drums are used in this work, which depicts scenes in the "Court of Love," as well as "In the Tavern," where a falsetto voice portrays a swan cooked on a spit. A choir sings how "fate strikes down the strong man" in, for the point, what Carl Orff cantata known for the iconic movement "O Fortuna?"

ANSWER: **Carmina Burana**

(5) This politician vied for the 1980 Republican nomination for president, despite close political ties to President Lyndon B. Johnson and service as Secretary of the Navy in the Kennedy administration. As Secretary of the Treasury, this politician orchestrated the removal of the U.S. dollar from the gold standard, and this person left the cabinet to chair Democrats for Nixon in 1972. For the point, identify this liberal-turned-conservative governor of Texas who was shot and grievously wounded during the John F. Kennedy assassination.

ANSWER: John **Connally** (or John Bowden **Connally**, Jr.)

(6) This person was the only member to serve on both of the committees that investigated the loss of the *Challenger* and the *Columbia*. This person flew in the STS-Seven mission and operated the robotic arm that retrieved the SPAS-One shuttle. In 1983, this astronaut became the third to accomplish a feat that was previously achieved by cosmonauts Svetlana Savitskaya and Valentina Tereshkova. For the point, identify this astronaut, the first American woman to enter space.

ANSWER: Sally **Ride** (or Sally Kristen **Ride**)

(7) This person wrote the book *Is There A Santa Claus?* and the story "Nibsy's Christmas." This person, who was one of the first to adopt flash photography, worked alongside Henry Piffard and Richard Lawrence on a project that showed the Bandits' Roost in the Mulberry Bend slum. In an 1890 work, this person captured photos of the urban poor of New York and their tenement homes. For the point, name this Danish-American muckraker who created the book *How the Other Half Lives*.

ANSWER: Jacob **Riis** (or Jacob August **Riis**)

(8) In *The Search for Truth by Natural Light*, Descartes defined this concept as a receptacle for portraits taken from nature. This concept titles a 2002 book by Stephen Pinker subtitled *The Modern Denial of Human Nature*, which argues for the importance of evolutionary psychology. The modern definition of this concept was outlined in *An Essay Concerning Human Understanding*, which describes this concept as "white paper." For the point, identify this concept developed by John Locke, which holds that infants are born without any innate qualities.

ANSWER: **tabula rasa** (or **blank slate**; accept *The **Blank Slate**: The Modern Denial of Human Nature*; accept **white paper** before mentioned)

(9) A larger-than-expected amount of this type of radiation might be caused by dark matter and is found in the Galactic Center. The cross-section of this type of radiation can be calculated with the Sauter Equation. The decay of cobalt followed by the decay of nickel causes the release of this type of radiation, which was discovered by Paul Villard while studying radium. For the point, identify this type of radiation with the highest photon energy and shortest wavelength.

ANSWER: **gamma** ray (or **gamma** radiation)

(10) This singer stated "When I get that crazy feeling, I know I'm in trouble again" at the start of the song "Help Me." This singer quoted William Shakespeare with the line "I am as constant as a northern star" in the lyrics to the song "A Case of You." It's not John Mayer, but in one song, this singer imagines "a pink hotel, a boutique, and a swinging hot spot" that were erected where "they paved paradise and put up a parking lot." For the point, name this Canadian-born folk singer of the 1970 hit "Big Yellow Taxi."

ANSWER: Joni **Mitchell** (or Roberta Joan **Mitchell**)

(11) During this election year, political strategist Mark Hanna raised money to fund one candidate's front porch campaign. The Fourth Party System arose as the result of this election year, which led to the rapid decline of the Populist Party. During this election year, the Democratic party rejected its own "Bourbon" faction and one candidate delivered an oration in favor of bimetallism, which became known as the "Cross of Gold" speech. For the point, name this presidential election year, the first in which William Jennings Bryan was defeated by William McKinley.

ANSWER: Election of **1896**

(12) Methyl mercaptan is often added to this resource in order to impart an odor, and this resource contains byproducts such as butane. This resource's production has dramatically increased due to the development of technology that can be used to extract it from shale rock. This resource, which is often liquefied for ease of transport, is often acquired from fracking, and this resource is the world's third-largest source of energy. For the point, name this fossil fuel, which primarily consists of methane.

ANSWER: natural **gas** (accept fossil **gas**; accept methane **gas**; do not accept "gasoline")

(13) This author documented the recipes and spiritual practices of Hoodoo followers in New Orleans as part of the collection *Mules and Men*, which also described Eatonville, Florida. After Alice Walker published an essay titled "In Search of" this author, readers re-discovered a novel in which Jody Starks abuses the protagonist, Janie, and a rabid dog bites Tea Cake. For the point, name this African-American author who wrote *Their Eyes Were Watching God*.

ANSWER: Zora Neale **Hurston**

(14) This architectural style was used to construct the Marine Air Terminal of La Guardia Airport. The Griffith Observatory was inspired by this architectural style, which includes subcategories such as zigzag and streamline. This architectural style grew in popularity after the 1916 Zoning Resolution favored the use of setbacks in New York City buildings. For the point, name this architectural style, which was used to build 1930s skyscrapers such as the Chrysler Building.

ANSWER: Art **Deco**

(15) An instrumental genre from this country, which is popular among serenaders, is known as *choro*, or "little lament." This country is the origin of a fusion of various Afro-Caribbean genres called *axé*, which is popular during Lenten celebrations. The American jazz saxophonist Stan Getz collaborated with a musician from this country to compose the song "The Girl from Ipanema," which featured the debut vocals of Astrud Gilberto. For the point, name this country that originated samba and bossa nova.

ANSWER: Federative Republic of **Brazil** (or República Federativa do **Brasil**)

(16) Examples of this device include the Winkler-Dennis gas combustion version and the Ostwald-Folin version, which is used in conjunction with blood. Techniques for using this device include the "winged elbow" and thumb plunger methods. Louis Pasteur names an example of this device that features a bulb at the top and a thin point at the bottom, and these devices are capable of creating a partial vacuum. For the point, name this device, which is used in chemistry labs to move a specified amount of liquid.

ANSWER: **pipette** (accept **dropper**; accept eye **dropper**; accept Winkler–Dennis gas combustion **pipette**; accept Ostwald-Folin **pipette**; accept Pasteur **pipette**)

(17) This tempera painting includes a representation of Zephyrus lifting Chloris, and this painting has been compared to Flemish millefleur tapestries with its depiction of 500 known plant and flower species. This painting, which depicts Cupid aiming an arrow toward the three Graces, is set in an orange grove with Venus as the central figure. For the point, name this Italian Renaissance painting by Sandro Botticelli, which was likely commissioned by the Medici family for a wedding in the Spring.

ANSWER: **Primavera** (prompt on "Spring" before mentioned)

(18) In a five-book epic poem, this author wrote the maxim "no ideas but in things." This poet envisioned a place "By the road to the contagious hospital" at the opening of the collection *Spring and All*. The speaker states "forgive me they were delicious" in a poem by this author which focuses on a person who eats plums in an icebox. "So much depends" on the title implement in a poem by, for the point, what American modernist poet and author of "The Red Wheelbarrow?"

ANSWER: William Carlos **Williams**

(19) A waterway named for this explorer was first sailed through by Europeans during the voyage of Semyon Dezhnev. This explorer searched for the "Joao-da-Gama-Land" from the outpost of Okhotsk. The Steller's sea cow was encountered on an expedition led by this explorer, who led the First Kamchatka Expedition and the Great Northern Expedition, the latter of which mapped the coastline of easternmost Siberia. For the point, identify this Danish-born Russian explorer who names a sea to the west of Alaska.

ANSWER: Vitus **Bering** (or Vitus Jonassen **Bering**; accept **Bering** Strait; accept **Bering** Sea)

(20) An aerobic form of this process is named for open windrows, while another form of this process uses perforated piping. This process can be completed in around 18 days using the Berkeley method, which works best with a carbon-to-nitrogen ratio of less than 30-to-1. Bacteria and earthworms can help this process, which turns brown and green waste into humus. For the point, name this process of producing plant fertilizer by gathering leaves and food scraps, which will then decompose.

ANSWER: **composting** (accept open windrow **composting**; accept aerated static pile **composting**)

(21) In one story in this collection, a woman wishes to live in Buenos Aires with her lover, Frank. "Eveline" appears in this collection just after a story about a young boy who attempts to buy a gift for his crush at the title bazaar. The story "Araby" appears in this collection, which concludes with a Twelfth Night party after which Gabriel Conroy hears "the snow falling faintly through the universe." "The Dead" is the final story of, for the point, what collection of stories by James Joyce, named for the Irish capital?

ANSWER: **Dubliners**

(22) These people perpetrated the Eulmi Incident, which involved the assassination of Empress Myeongseong. This class of people took part in the failed Keian Uprising to stop the seizure of estates under the *Han* system. During the Akō incident, 47 of these people killed Kira Yoshinaka to avenge a former *daimyo*, before committing *seppuku* in accordance with the code of *bushido*. For the point, name this class of samurai who lacked masters and often acted as mercenaries.

ANSWER: **rōnin** (accept 47 **rōnin**; prompt on "Japanese" or similar answers; prompt on "samurai" before mentioned)

(23) This disease is treated by Casgevy, the first approved CRISPR gene therapy. Hydroxyurea treats this disease by up-regulating the "fetal" form of a protein with high oxygen affinity. This disease is caused by a glutamate to valine point mutation in the beta-globin gene, which can lead to vaso-occlusive crises that block capillaries, and this disease engenders resistance to malaria. For the point, name this disease, which causes red blood cells to take on a namesake crescent-like shape.

ANSWER: **sickle cell** disease (or **SCD**; accept **sickle cell** anemia; prompt on "anemia")

(24) Odilon Redon depicted this figure *Among the Flowers* in a pastel work from the Symbolist movement. A willow branch extends over a pond in a John Waterhouse painting in which this figure fixes her hair and has flowers on her lap. Elizabeth Siddal became ill after sitting in a bathtub while modeling for this character, who sings while drifting down a river. John Everett Millais painted, for the point, what tragic Shakespearean character who drowns after the death of Polonius in *Hamlet*?

ANSWER: **Ophelia** (accept **Ophelia** *Among the Flowers*)

(25) This country formerly had a semi-exclave in its south that was connected by the Pelješac [[peh-LEE-shots]] Bridge. This country's east contains a region called Syrmia, which is part of the southern Pannonian Plain and split between this country and Vojvodina [[voy-VOH-dee-nuh]]. This country is natively known as Hrvatska, and it is also home to the majority of the Istrian peninsula. Hungary and Montenegro are bordered by, for the point, what country on the Adriatic Sea, which is known for the tourist town of Dubrovnik?

ANSWER: Republic of **Croatia** (accept Republika **Hrvatska** before mentioned)

(26) Plant versions of these compounds can be used as inputs in the Marker degradation process. That process was used in Mexico after its namesake established Syntex to create these compounds from *Barbasco*, and "broken" versions of these compounds include vitamin D-Three. The "nucleus" of these compounds is composed of three rings of cyclohexane and one ring of cyclopentane, which is called gonane, and made of four fused hydrocarbon rings. Testosterone is an example of, for the point, what type of compound, known for its anabolic forms?

ANSWER: **steroids** (accept broken **steroids**; accept anabolic **steroid**; accept anabolic-androgenic **steroid**)

(27) These people captured Captain William Bainbridge and crew during an 1801 engagement. Stephen Decatur destroyed the *Philadelphia* while it was in the possession of these people by mounting a daring raid in Tripoli. Shortly after becoming president, Thomas Jefferson sent a U.S. Navy fleet to confront these people in the Mediterranean. For the point, identify these hostile, seafaring people who were associated with several North African states, including Algiers, Tunis, and Morocco.

ANSWER: **Barbary pirates** (accept **Barbary corsairs**; accept **Ottoman corsairs**; accept **naval mujahideen**; prompt on partial answers)

(28) The author of this work considered titling it *The Secret Annex* after hearing Gerrit Bolkestein on the radio. A series of books by Cissy van Marxveldt inspired the author of this work, which was recorded in a red and white autograph book with a checked pattern. The author of this book was forced to cease writing after being sent to the Bergen-Belsen concentration camp. For the point, identify this book written by a Dutch teenager during the Nazi occupation of the Netherlands.

ANSWER: *The* **Diary of a Young Girl** (accept *The* **Diary of Anne Frank**)

(29) This person experimented with mitred [["metered"]] gates for pound locks in the *navigli* canals of Milan. This person theorized the creation of devices such as a mechanical knight and a giant crossbow, as well as an "aerial screw." A collection of this person's writings, which was purchased at auction by Bill Gates, is called the Codex Leicester [["LESS"-stir]] and includes a discussion on the luminosity of the Moon. For the point, name this Italian polymath who created a drawing known as *Vitruvian Man*.

ANSWER: **Leonardo da Vinci** (accept either)

(30) A bronze sculpture of this figure by the Renaissance artist Donatello was the first freestanding nude male sculpture since antiquity. This figure is mentioned in the Book of Samuel as being initially favored by Saul before being accused of plotting to take the throne. This figure's son was Solomon, and he was also the subject of a marble sculpture by Michelangelo. For the point, name this biblical king known for using a sling and stone to defeat Goliath.

ANSWER: **David** (or **Dāwīd**)

(31) A series of shark attacks in this region in 1916 ended when a lion tamer for Barnum and Bailey caught a great white near Matawan Creek. It's not part of Connecticut, but this region contains the oldest working lighthouse in the U.S. at Sandy Hook, within Monmouth County. This region is home to Asbury Park, where Bruce Springsteen first performed, and the Garden State Parkway stretches through this region, where the streets of a certain city inspired spaces in the board game *Monopoly*. For the point, name this coastal region home to Atlantic City.

ANSWER: **Jersey Shore** (prompt on "New Jersey")

(32) This technique can entail an extra step involving gadolinium, and this technique has been used to study mummified remains. This technique sometimes involves stereotaxis, and “functional” types of this technique can be used to monitor brain activity. This technique differs from related methods, such as positron emission tomography, by not using ionizing radiation. Contrast agents are sometimes employed in, for the point, what medical imaging technique that uses magnetic fields?

ANSWER: **MRI** (or **magnetic resonance imaging**; accept functional **MRI**)

(33) This character dressed in green to disguise as a hunter on Saint John and Paul’s Day. This character, whose name refers to multi-colored clothes, fled to Koppenberg Mountain through the Weser [[VAH-sur]] River. The most famous act carried out by this character, which is recounted in an inscription on the Rattenfängerhaus, occurred after a refusal of payment for driving certain pests out of Hamelin. For the point, name this character from European folklore who used a musical instrument to steal a town’s children.

ANSWER: **Pied Piper** (or **Pan Piper**; accept **Rat-Catcher of Hamelin** before “Hamelin” is mentioned)

(34) Abbreviations for the names of these things are given by IMA symbols. These things are classified by their chemical composition in the Dana system, and class, division, family, and group numbers are used to categorize these things via the Nickel-Strunz classification scheme. The scratch resistance of these things can be measured via the Mohs scale for hardness, for which diamond is a ten. For the point, name these solids with a crystalline structure, which are considered different from rocks.

ANSWER: **minerals** (accept **mineral** species)

(35) The secretary of this body, Charles Thompson, burned documents detailing its activities for fear that they would damage the reputations of American leaders. A representative from Pennsylvania, John Dickinson, considered the actions of this group premature and left the proceedings instead of signing this group’s final product. As a member of this body, Richard Henry Lee proposed a resolution calling for American separation from the British. For the point, identify this group which approved the Declaration of Independence.

ANSWER: **Second Continental Congress** (prompt on “Continental Congress”)

Extra Question

(1) This U.S. state’s smallest county is sandwiched between Rio Arriba and Sandoval counties, and this state’s most populous county is Bernalillo [[ber-nah-LEE-yoh]] County. The eastern portion of this state is home to part of the Llano Estacado, including the town of Clovis, and this state is known as the source of the Pecos River, which flows through Roswell. This state, the only one where Spanish is officially used, extends from the Four Corners to the Carlsbad Caverns. For the point, name this U.S. state governed from Santa Fe.

ANSWER: **New Mexico** (or **Nuevo México**; or **Nuevo Méjico**; accept **Yootó Hahoodzo**)