

# Round 4

## Tossups

(Tossup 1) As a result of protesting oil extraction in Ogoniland in this country, Sani Abacha ordered the execution of activist Ken Saro-Wiwa. In the late 1960s, this country fought a civil war against the largely Igbo region of Biafra. Boko Haram formerly controlled large areas of this country's majority Muslim northern half. For the point, name this West African nation that was governed by the British from Lagos.

ANSWER: Republic of *Nigeria*

(Tossup 2) This function is considered "standard" when mu is 0 and sigma is 1, though the man it is sometimes named for defined standard as having variance equals one-half. In a simple type of hypothesis test, a result's modified z-score is compared to tabulated values of this common distribution. For the point, the symmetrical shape of which distribution is often called a 'bell curve'?

ANSWER: *normal* distribution [or Gaussian distribution]

(Tossup 3) A work in this dramatic genre uses a parabasis delivered by a group of knights to praise its playwright. Menander frequently won the Lenaia festival with plays in this genre, as did a playwright who satirized the politician Cleon and mocked the history of Athenian drama in works like *The Wasps* and *The Frogs*. Aristophanes wrote, for the point, what lighthearted genre of ancient Greek play, contrasted with tragedy?

ANSWER: *comedy* (accept *Old Comedy* accept *New Comedy*; accept word forms like *comedic* plays; accept *komoidia*; do not accept or prompt on "satyr plays")

(Tossup 4) The Heisenberg uncertainty principle states that the position and this property of a particle cannot both be known with absolute certainty. The change in this quantity is equal to the impulse, and one form of Newton's second law of motion states that force is equal to the rate of change of this quantity. This quantity is usually symbolized "p." For the point, give this quantity, equal to an object's mass times its velocity.

ANSWER: linear *momentum* (do not accept or prompt on "angular momentum")

(Tossup 5) A book titled for this country's "Crisis" criticizes people who have shrunk from "the times that try men's souls." A pamphlet that supported this country's independence argued that it is absurd for an island to own a continent. Another document arguing for this country's independence begins with the line "When in the course of human events." For the point, name this country whose independence was advocated for by Thomas Paine and Thomas Jefferson.

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

(Tossup 6) In a painting by this artist, a centurion's helmet perches atop an easel while this man looks at himself in the mirror. *Triple Self-Portrait* is by this artist, whose *The Problem We All Live With* shows Ruby Bridges being escorted to school by U.S. marshals against a backdrop scrawled with racial slurs. For the point, name this American painter whose *The Four Freedoms* appeared in *The Saturday Evening Post*.

ANSWER: Norman **Rockwell** (accept Norman Perceval **Rockwell**)

(Tossup 7) The failure of foam insulation on one of these vehicles led to the death of Rick Husband and 6 other people. High School teacher Christa McAuliffe died aboard one of these vehicles after it exploded 73 seconds into a mission. Sally Ride became the first American woman to ride in one of these vehicles as part of STS-7. For the point, name these NASA-operated vehicles, such as Columbia and Challenger, that took astronauts into space.

ANSWER: **Space Shuttle** (accept orbiter; prompt on rockets; prompt on spaceships)

(Tossup 8) An element from this group is used in a test that dyes starch blue. This group possesses elements that form solids, liquids, and gasses at room temperature. The first noble gas compound was formed by reacting an atom of xenon with four atoms of an element from this group. This group's members are one electron short of a full shell. For the point, name this group of highly reactive elements which includes fluorine and chlorine, and are found next to the noble gases in the periodic table,.

ANSWER: **halogens** (accept **group 17**; accept **group 7a**)

(Tossup 9) A character created by this author works with Nippers and Ginger Nut, and dies when he "would prefer not to" eat while in debtor's prison. This author wrote the short story "Bartleby the Scrivener," as well as a novel whose protagonist sails with Queequeg and Starbuck aboard the *Pequod* and asks the reader to "call me Ishmael." For the point, name this American author who described Captain Ahab's quest for revenge against a white whale in *Moby-Dick*.

ANSWER: Herman **Melville**

(Tossup 10) This religious figure is shown the miracle of the birds and survives a fire that becomes cool for him when King Nimrod attempts to have him executed. This man cast out the Egyptian princess Hajar at the request of his other wife, Sarah, and received a pair of ram's horns when God stopped him from sacrificing his son, Ismail. For the point, name this religious patriarch who built the Kaaba in Mecca.

ANSWER: **Ibrahim** (accept **Abraham**; accept **Abram**)

(Tossup 11) The price of this product skyrocketed after Harvey Du Cros bought the rights to the most famous invention of John Dunlop. After ivory supplies were depleted, King Leopold II enacted cruel policies for producing this product in the Congo Free State. The invention of vulcanization allowed for a hardened form of this product to be made. For the point, name this product that was used by Charles Goodyear to make tires.

ANSWER: **rubber** (accept **latex**)

(Tossup 12) A character created by this author transforms into a “daughter of air” who will one day be able to reach heaven despite not being human. In another story by this man, Gerda’s tears melt a splinter of a troll mirror and save Kai from the title evil witch, “The Snow Queen.” A character created by this man turns into seafoam after trading her voice to leave the ocean and court a human prince. For the point, name this Danish author of fairy tales who wrote “The Little Mermaid.”

ANSWER: Hans Christian *Andersen*

(Tossup 13) This island is home to the Hilina Slup, a landslide that is slowly falling into the ocean. On this island, a luxury brand of coffee is cultivated in its Kona district. The Alenuihaha strait separates this island from its northwestern neighbor. The largest city on this island, Hilo, sits at the bases of Mauna Kea and Mauna Loa. For the point, name this island, which lends its name to the 50th U.S. state.

ANSWER: *Hawaii* (accept *Big Island*)

(Tossup 14) This Greek god’s followers included Agave, who dismembered her son, Pentheus, with a group of other maenads. This god married a princess who was abandoned on Naxos by Theseus, Ariadne. When this god’s pregnant mother, Semele (**SEM-a-lee**), asked to see his father in full glory, she was killed. This god was then sewn into Zeus’s thigh. For the point, name this “twice-born” Greek god of divine inspiration and wine.

ANSWER: *Dionysus* (do not accept or prompt on “Bacchus”)

(Tossup 15) These molecules are broken into Okazaki fragments by a ligase enzyme. Mitochondria and chloroplasts contain their own circular form of this molecule. The replication of this molecule is semi-conservative. Rosalind Franklin, Watson, and Crick discovered the double helix structure of this molecule. For the point, nucleotides compose what molecule that carries genetic information?

ANSWER: *DNA* (or *Deoxyribonucleic acid*)

(Tossup 16) The finale of a work named for this figure begins with a C-D-F-E theme that develops into a five-theme fugue, and was the forty-first symphony by its composer. This mythical figure is the namesake of a movement describing this “Bringer of Jollity” that comes fourth in Gustav Holst’s *The Planets*. For the point, Mozart’s last symphony was nicknamed for what chief Roman god?

ANSWER: *Jupiter* (accept *Jupiter*: Bringer of Jollity; accept *Jupiter Symphony*)

(Tossup 17) During one battle, this man commented “It is well that war is so terrible, otherwise we should grow too fond of it.” This man took his most famous command after Joseph Johnston was wounded at the Battle of Seven Pines. This man failed to defend Richmond in the Siege of Petersburg, deciding instead to retreat to Appomattox Courthouse. For the point, name this Confederate general whose 1865 surrender to Ulysses S. Grant ended the Civil War.

ANSWER: Robert Edward *Lee*

(Tossup 18) In this novel, the Journalist rejoices at hearing a report from “Our Special Correspondent in the Day after Tomorrow,” who produces two white flowers from Weena to explain his story. This novel’s protagonist chronicles the society of the childlike Elio, a race hunted by hulking, underground creatures called Morlocks, who are descended from England’s working poor. For the point, name this novel by H.G. Wells about a scientist who builds a device to journey into the future.

ANSWER: The *Time Machine*

(Tossup 19) Subsets of this set, which are constructed so as not to be Lebesgue measurable, are named for Vitali. Conventionally, the x-axis of an Argand diagram represents this set. When the discriminant is positive, both roots of a quadratic equation lie in this set. This set can be considered as an extension of the rational numbers, since it also includes irrational numbers like pi and e. For the point, name this set, usually denoted by boldface R.

ANSWER: the *real* numbers [accept *R* before mentioned]

(Tossup 20) This material can be held in place using the “hard stabilization” method. Marram grass can be used to stabilize hills made out of this material. A black form of this material can be formed by volcanoes, and a pink form is derived from coral fragments. This material is defined as having a grain size smaller than pebbles but larger than silt. For the point, name this rocky material that covers many beaches and deserts.

ANSWER: *sand* (prompt on “sediment”)

(Tossup 21) This author wrote about Nina Gordon and an escaped slave who lives in the Great Dismal Swamp in the novel *Dred*. In another novel, this author characterized racist Northerners like Miss Ophelia and Simon Legree, who had a slave beaten to death. Legendarily, this author “made this big war” in a quote attributed to Abraham Lincoln. For the point, name this author of the abolitionist novel Uncle Tom’s Cabin.

ANSWER: Harriet Beecher *Stowe* (accept Harriet Elisabeth Beecher *Stowe*)

(Tossup 22) Mahler’s *Das Lied (LEED) von der Erde (AIR-deh)* was named to avoid a curse with this number, though he still failed to complete a final symphony that would have broken the curse. A symphony with this number includes a 6/8 [six-eight] scherzo “Turkish march,” and includes a setting of Friedrich Schiller’s poem “Ode to Joy.” For the point, give the number of Beethoven’s Choral symphony, the last he wrote before his death.

ANSWER: *nine* (accept the *Curse of the Nine* or *Curse of the Ninth*; accept Beethoven’s *ninth* symphony or Beethoven’s Symphony Number *Nine* in D minor)

(Tossup 23) A highly treatable form of childhood cancer in this organ is named for the German surgeon Max Wilms. The innermost parts of this organ are called its “pyramids” and are separated from each other by the columns of Bertin. This organ is made up of nephrons and sits directly below the adrenal glands. For the point, name these bean-shaped, blood-filtering organs that come in pairs.

ANSWER: *kidneys*

(Tossup 24) 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 them. This country's leader compared those afraid of COVID to "weaklings" in an inflammatory speech given in November of 2020. That President of this nation, Jair Bolsonaro, contracted COVID in 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 25) This man championed an excise tax on domestically produced liquor that directly led to the Whiskey Rebellion. With James Madison and John Jay, this man supported the United States' Constitution in *The Federalist Papers*. This man supported his political rival Thomas Jefferson in the Election of 1800, a move that contributed to his death at the hands of Aaron Burr. For the point, name this first Secretary of the Treasury.

ANSWER: Alexander ***Hamilton***

(Tossup 26) This state's capital is overlooked by Camelback Mountain. The southwestern portion of this state is dominated by the Sonoran Desert, which contains the city of Yuma. In this state, the city of Flagstaff greatly benefits from its proximity to the Grand Canyon. For the point, name this state that contains cities like Tucson and Phoenix.

ANSWER: ***Arizona***

(Tossup 27) This holiday can include the singing of a song about the "days of the Hasmonians," titled Ma'oz Tzur. This holiday commemorates a revolt against Antiochus IV by Judah Maccabeus, who rededicated the Second Temple in Jerusalem. Modern celebrations of this holiday include eating fried foods like latke and spinning a dreidel. For the point, name this Jewish holiday celebrated by lighting a special, nine-branched menorah.

ANSWER: ***Hanukkah***

(Tossup 28) This country was invaded after the false-flag Operation Canned Goods. The Battle of Krojanty led to the myth that cavalry forces from this country charged German tanks. In the prelude of an attack on this country, Germany repeatedly demanded to annex the free city of Danzig. For the point, name this country whose invasion on September 1st, 1939 sparked World War II.

ANSWER: Republic of ***Poland***

(Tossup 29) In March of 2020, a six- to eleven-foot body called "2020 CD3" was discovered to be in a temporary orbit around this planet. This planet's only permanent natural satellite may have been formed from a collision with the planet Theia. This planet is orbited by the most "space junk" of any planet in the solar system. For the point, name this planet, from which NASA launches rockets.

ANSWER: ***Earth***

(Tossup 30) The first rulers of this fictional land, Frank and Helen, are the ancestors of the hereditary rulers of this nation's southern neighbor, Archenland. Jadis, the White Witch, works to destroy this literary nation, which is ruled by the Pevensie children with the blessing of this land's creator, Aslan, in *The Lion, the Witch, and the Wardrobe*. For the point, name this fictional land described in a series of Chronicles by C.S. Lewis.

ANSWER: *Narnia* (accept The *Chronicles of Narnia*)

### **Tiebreaker or Replacement**

(Tossup 31) Following an assassination attempt by Maurice Bavaud, Adolf Hitler banned a play depicting this man. This man was forced to perform his most famous act after he refused to bow to a hat placed on a pole. This man, whose story was popularized by a Friedrich Schiller play, drew two arrows to kill a nobleman if he failed his most famous task. For the point, name this semi-legendary Swiss folk-hero, who was forced to shoot an apple off his son's head.

ANSWER: William *Tell* (accept Wilhelm or Guillaume for "William")