

## Round 6

### First Half

(Tossup 1) **This author concludes “it’s always ourselves we find in the sea” in a poem about a playful beach trip taken by four girls. This poet of “maggie and milly and molly and may” created a figure who “sang his didn’t” and “danced his did” in a place (\*) “with up so floating many bells down.”** For ten points, name this American poet of “anyone lived in a pretty how town,” known for his unusual punctuation and capitalization.

ANSWER: Edward Estlin Cummings (accept e. e. cummings)

(Bonus 1) In this novel, a creature strangles Elizabeth to death and demands a female companion. For ten points each,

[Part A] Name this work in which the protagonist Victor creates a hideous monster through his experiments.

ANSWER: Frankenstein; or, The Modern Prometheus

[Part B] *Frankenstein* was written by this author, the daughter of Mary Wollstonecraft.

ANSWER: Mary Shelley (Prompt on Shelley)

[Part C] Mary Shelley was married to this poet who wrote *Ozymandias*

ANSWER: Percy Shelley (Prompt on Shelley)

(Tossup 2) **This war was preceded by the Diplomatic Revolution. The Nawab of Bengal was defeated by Robert Clive at the Battle of Plassey during this war. The Miracle of the House of Brandenburg helped (\*) Frederick the Great during this war. The American theatre of this war was known as the French and Indian War.** For ten points, name this war that lasted a namesake number of years from 1756 to 1763.

ANSWER: Seven Years War

(Bonus 2) At this battle, a fool named Taillefer recklessly charged one side after juggling his sword and singing the Song of Roland. For ten points each,

[Part A] Name this 1066 battle that concluded the Norman conquest of England.

ANSWER: Battle of Hastings

[Part B] This first Norman king of England defeated Harold Godwinson at the Battle of Hastings. His epithet refers to his military prowess.

ANSWER: William the Conqueror (or William I or William the Bastard)

[Part C] William the Conqueror is shown in this large artwork depicting his conquest of England. Strangely, Taillefer is not in this work, although several other events are depicted, including Halley’s Comet and William’s coronation.

ANSWER: Bayeux Tapestry

(Tossup 3) **This process can be induced by p53 after DNA damage. This process destroys the cells between digits during embryonic development. The release of (\*) cytochrome C leads to a caspase activation cascade during this process. Cell fragmentation occurs during, for ten points, what form of programmed cell death?**

ANSWER: Apoptosis

(Bonus 3) The Crab Nebula is the famous example of these astronomical events. For ten points each,

[Part A] Name this explosion that occurs at the end of a massive star's lifetime. They may be caused by sudden gravitational collapse.

ANSWER: supernova

[Part B] This is the result of when a red giant goes supernova. This small, dense stellar remnant is less massive than black holes and neutron stars.

ANSWER: white dwarf (prompt on dwarf)

[Part C] This is the star around which the Earth orbits. After about five billion years, this star will become a white dwarf.

ANSWER: the Sun

(Tossup 4) **Paintings of this scene originated in Germany and are called “vesperbild.” The pose of this sculpture is often compared to the stabat mater and the mater dolorosa. The most famous version of this scene depicts a (\*) woman much younger than usual and was sculpted out of one large block of marble. The seated character in this sculpture holds a dead Jesus in, for ten points, what Michelangelo sculpture of Mary, which has a name meaning “compassion”?**

ANSWER: *La* Pieta

(Bonus 4) Composer Darius Milhaud wrote a set of “Saudades” based on the music of this country. For ten points each,

[Part A] Name this home country of the composer of “The Little Train of Caipira,” Heitor Villa-Lobos, who spent much of his life in Rio de Janeiro.

ANSWER: Federative Republic of Brazil

[Part B] This genre of music was pioneered by Brazilian pianist Antonio Carlos Jobim. Stan Getz popularized a jazzy song in this genre titled The Girl from Ipanema.

ANSWER: Bossa nova

[Part C] During this event, street bands play Afoxé music, a secularized version of candombe. This popular Brazilian festival that marks the beginning of Lent is the primary locale for frevo music.

ANSWER: Carnival of Brazil (accept Carnaval do Brasil; accept Brazilian Carnival)

(Tossup 5) **An ancient Greek problem involved “doubling” this shape. In one higher dimension, this shape is called a tesseract, and its most common net is made up of polygons in the shape of a cross. If this shape had a side length of A, its surface area would equal 6 times A squared. This shape has (\*) eight vertices and six faces, all of which meet at 90 degree angles. A standard die has the shape of, for ten points, what figure that is the three dimensional analogue of the square?**

ANSWER: cube

(Bonus 5) This mathematical constant is approximately equal to 2.71828. For ten points each,

[Part A] Name this mathematical constant, the base of the natural algorithm.

ANSWER: e (Accept **Euler’s number**)

[Part B] The constant  $e$  is named after this Swiss mathematician who worked for many years at the Berlin Academy.

ANSWER: Leonhard Euler

[Part C] Euler famously proved that there was no solution to this problem about crossing all the bridges of a major Prussian city only once.

ANSWER: Seven Bridges of Koenigsberg

(Tossup 6) **This religion’s god is referred to as Ik Ongkar in the Mool Mantra. In this religion’s baptism ceremony, water is stirred with a double edged sword, and after that ceremony members are inducted into the Khalsa. This religion’s members wear shorts and carry a wooden comb known as a (\*) Kangha. That practice is part of the five ks of this religion. For ten points, name this Asian religion whose members study the Guru Granth Sahib.**

ANSWER: Sikhism

(Bonus 6) This figure was the son of Iapetus and Asia. For ten points each,

[Part A] Name this mythological figure condemned to hold up the heavens for eternity.

ANSWER: Atlas

[Part B] Atlas was the father of this group of nymphs whose garden grew the golden apples.

ANSWER: Hesperides

[Part C] Atlas was a member of this group of deities based on Mount Othrys who were overthrown by the gods.

ANSWER: Titans

(Tossup 7) **This novel contains a three-chapter excerpt from a treatise on “Oligarchical Collectivism” by Emmanuel Goldstein. The Minitrue worker Syme is “vaporized” in this novel before completing a dictionary of Newspeak. In Room 101, a member of the (\*) Thought Police named O’Brien uses rats to torment this novel’s protagonist into betraying his lover Julia. Winston Smith is tortured into loving Big Brother in, for ten points, what novel by George Orwell?**

ANSWER: Nineteen Eighty-Four (accept 1984)

(Bonus 7) This poem influenced Edward Thomas to enlist in World War I. For ten points each,

[Part A] Name this poem in which “Two roads diverged in a yellow wood” and the narrator says “I took the one less travelled by / And that has made all the difference”.

ANSWER: The Road Not Taken

[Part B] *The Road not Taken* was written by this American poet who recited his poem *The Gift Outright* at John F. Kennedy’s inauguration.

ANSWER: Robert Frost

[Part C] This other Robert Frost poem is titled for the two elements which the poem ponders the world could end in.

ANSWER: Fire and Ice

(Tossup 8) **During this battle, Major General Clarence Tinker was killed and the Mogami collided with the Mikuma. Captain Tomeo Kaku and Rear-Admiral Tamon Yamaguchi were killed after they chose to go down with their ship, the (\*) Hiryu, which had earlier launched an attack which sunk the USS Yorktown. Akagi, Kaga and Soryu were sunk in, for ten points, which decisive 1942 victory of the United States Navy over the Imperial Japanese Navy?**

ANSWER: Battle of Midway

(Bonus 8) Answer some questions about the early U.S. Navy. For ten points each,

[Part A] This vessel’s greatest victory came during the War of 1812, against the HMS *Guerriere*. Commissioned in 1794, this ship was christened after America’s founding document.

ANSWER: USS Constitution (accept “Old Ironsides”)

[Part B] This naval commander served during the War of 1812, notably, during the Battle of Lake Erie. He uttered the famous words, “We have met the enemy, and they are ours.”

ANSWER: Oliver Hazard Perry (accept Oliver Hazard Perry)

[Part C] The Battle of Hampton Roads during the American Civil War was the first ever clash of this kind of warship. This type of warship was named for their thick metal armor.

ANSWER: ironclads

## Sixty-Second Rounds

The categories are ...

1. 20th Century American playwrights
2. Mexican-American War
3. Diseases

### 20TH CENTURY AMERICAN PLAYWRIGHTS

In the lives of 20th century American playwrights, name the...

(1) Author of *The Glass Menagerie* and *A Streetcar Named Desire*.

ANSWER: Thomas Lanier "Tennessee" **Williams** III

(2) Playwright who wrote *The Iceman Cometh* and *Long Day's Journey Into Night*.

ANSWER: Eugene **O'Neill**

(3) Play by Lorraine Hansberry about the Younger family.

ANSWER: A **Raisin in the Sun**

(4) City that is the namesake of a "Cycle" of plays by August Wilson including *Fences*.

ANSWER: **Pittsburgh**

(5) Play set in Grovers Corners about George Gibbs and Emily Webb.

ANSWER: **Our Town**

(6) Author of plays like *Barefoot in the Park* and *Lost in Yonkers*.

ANSWER: Neil **Simon**

## MEXICAN-AMERICAN WAR

Name the...

(1) Century in which the conflict took place. The Civil War also occurred in that century.

ANSWER: **19th century** (Accept 1800s)

(2) Capital of Mexico which was captured after the Battle of Chapultepec.

ANSWER: **Mexico City**

(3) The southern US state led by Sam Houston which the US annexed prior to the war.

ANSWER: **Texas**

(4) Modern US state where the Battle of Palo Alto took place.

ANSWER: **California**

(5) President of Mexico during that conflict who had earlier led Mexican forces at the Alamo.

ANSWER: Antonio Lopez de **Santa Anna**

(6) Treaty which ended the conflict.

ANSWER: Treaty of **Guadalupe Hidalgo**

## DISEASES

Name the...

(1) Virus spread primarily by bodily fluids which attacks the immune system and causes AIDS.

ANSWER: Human Immunodeficiency Viruses (Accept HIV)

(2) Insect which spreads diseases such as malaria and dengue fever.

ANSWER: Mosquito

(3) Disease which had a major outbreak in West Africa from 2013 to 2016, primarily affecting the countries of Guinea, Liberia and Sierra Leone

ANSWER: Ebola (Accept EVD, accept EHF)

(4) Region of the world where MERS-CoV was first reported in 2012.

ANSWER: Middle East

(5) Bacteria which causes the pneumonic and bubonic plagues.

ANSWER: Yersinia Pestis

(6) Subtype of the Influenza A virus which caused the Spanish flu.

ANSWER: H1N1

## Second Half

(Tossup 9) **The Cotentin Peninsula extends northwest into this body of water. This body of water contains islands such as Guernsey and the Isle of Wight, and cities like Le Havre, Brighton and (\*) Calais.** Attractions like Mont Saint Michel and The Cliffs of Dover sit along the shoreline of this body of water. For ten points, name this body of water that separates Northern France and southern England.

ANSWER: English Channel

(Bonus 9) The country is home to the regions of Sabah and Sarawak. For ten points each,

[Part A] Name this country home to the cities of Malacca, Johor and Penang. It is located to the north of Singapore.

ANSWER: Malaysia

[Part B] This city, home to the Petronas Twin Towers, is the capital and largest city of Malaysia.

ANSWER: Kuala Lumpur

[Part C] Malaysia is located in this region of the world. ASEAN is an organisation made up of countries in this region.

ANSWER: Southeast Asia (Prompt on Asia)

(Tossup 10) **One outdated treatment of schizophrenia involved the injection of this hormone in large quantities, intentionally causing hypoglycemia. Type 1 of one disease is caused by the inability of the body to produce this hormone, whereas a body's low sensitivity to it can cause (\*) Type 2 of the same disease.** Diabetes involves complications of, for ten points, what hormone that stimulates the lowering of blood glucose levels?

ANSWER: insulin

(Bonus 10) Water boils at 100 degrees according to this scale of temperature. For ten points each,

[Part A] [10] Name this scale of temperature used by most countries. It is not to be confused with the Fahrenheit scale.

ANSWER: Celsius

[Part B] [10] Unlike Celsius, this scale of temperature is used in the ideal gas law. Its lowest value is absolute zero.

ANSWER: Kelvin

[Part C] Three significant figures required. This is the mathematical difference between Celsius and Kelvin. Zero degrees Celsius is equal to this number of Kelvin.

ANSWER: 273.15

(Tossup 11) **In Hindu myth, a type of these creatures live on Mount Meru and are known as nagas. In European myth, Lindworms and Wyverns are types of these creatures. Beowulf is wounded while fighting one of these creatures, and Sigurd killed one of these creatures named (\*) Fafnir. In Chinese myth, these creatures have four legs and bring rainfall or floods. For ten points, name these mythical creatures, one of which was slain by St. George.**

ANSWER: dragon (accept snake, serpent, or drake; accept naga before mention)

(Bonus 11) Rishabhanatha is the first Tirthankara in this religion. For ten points each,

[Part A] Name this religion which practices the principle of Ahimsa, or non-violence.

ANSWER: Jainism

[Part B] Most adherents of Jainism adopt this form of diet in which they consume no meat.

ANSWER: Vegetarianism (Accept Vegan)

[Part C] Adherents of Jainism usually undertake this number of vows, one of which is Ahimsa.

ANSWER: 5

(Tossup 12) **In one of this composer's works, Leporello warns Elvira that his master has seduced more than a thousand women in Spain by singing the "Catalog" aria; his master is later dragged to Hell by a living statue. In another of this composer's works, the (\*) Queen of the Night sings a challenging aria, and Tamino and Pamina are protected from a trial by fire because of the title instrument. For ten points, name this Austrian composer of the operas *Don Giovanni* and *The Magic Flute*.**

ANSWER: Wolfgang Amadeus Mozart

(Bonus 12) This artist was born in Heraklion on Crete. For ten points each,

[Part A] Name this artist of the Spanish Renaissance whose name literally translates to "The Greek".

ANSWER: El Greco

[Part B] El Greco painted a work depicting the burial of a figure with this title "of Orgaz". This title is also held by the vampire Dracula.

ANSWER: Count

[Part C] El Greco spent much of his career in this Spanish city, the former capital of the Visigothic kingdom which he painted a "View of".

ANSWER: Toledo

(Tossup 13) **Okun's law says that a 1% increase in this quantity will lead to a 2% decrease in Gross Domestic Product. This quantity comes in frictional, structural, and seasonal types. This quantity is related to inflation by the Phillips curve. Many argue that this quantity will increase if the (\*) minimum wage is increased.** For ten points, name this economic quantity, which measures how many people in the labor force cannot find jobs.

ANSWER: Unemployment

(Bonus 13) The world's tallest building is located in this city. For ten points each,

[Part A] Name this largest and most populous city in the United Arab Emirates.

ANSWER: Dubai

[Part B] The Burj Al Arab hotel in Dubai was built to resemble one of these objects which can be found on Dhows and many yachts.

ANSWER: Sail

[Part C] The development of this artificial archipelago in Dubai fell into difficulty after the Great Recession. The Royal Island Beach Club is located on the archipelago's Lebanon island.

ANSWER: The World (Accept World Islands)

(Tossup 14) **The Eastern Band of these people established communities in Cheoah and Snowbird, North Carolina. This group settled in New Echota, Georgia, until their forced removal overseen by Winfield Scott. (\*) Sequoyah created this group's writing system consisting of 86 characters resembling Cyrillic and Greek letters.** For ten points, identify this most populous "Civilized Tribe" which was forcibly relocated to Oklahoma on the Trail of Tears.

ANSWER: Cherokee Nation [accept Ani-Yunwiya]

(Bonus 14) This leader was supposedly born with a clot in his hand, an omen of great leadership. For ten points each,

[Part A] Name this nomadic leader born as Temujin. This man's father Yesugei arranged his marriage to Borte.

ANSWER: Genghis Khan

[Part B] Genghis Khan was a member of this East-Central Asian ethnic group, which he led as the first Great Khan.

ANSWER: Mongols

[Part C] Kublai Khan established this Mongol dynasty in China after overthrowing the Song. This dynasty was the first to use paper money with banknote called the "chao".

ANSWER: Yuan Dynasty

(Tossup 15) **A “disease” named for this material which is actually a type of corrosion is similar to verdigris, where the surfaces of this material turns green. Speculum metal and bell metal are composed of the same materials as this material. Before (\*) mirrors were made from glass, they were made from this material. An archaeological period named for this material falls between the stone and iron ages. For ten points, name this alloy that is composed of copper and tin.**

ANSWER: bronze

(Bonus 15) Answer the following about “glowing” bacteria. For ten points each,

[Part A] Bacteria can be made to fluorescently “glow” this color if they are inserted with the protein GFP. This is the color of the pigment chlorophyll.

ANSWER: green

[Part B] One way to make bacteria “glow” green in the lab is through a process called transformation, in which the gene for producing GFP is spliced into one of these circular pieces of DNA and inserted into the cell.

ANSWER: plasmids

[Part C] The GFP protein was first isolated from *Aequorea victoria*, a species of these marine animals. These gelatinous Cnidarians may have stinging tentacles.

ANSWER: jellyfish (accept sea jellies)

(Tossup 16) **This novel’s protagonist rescues a Parsee woman named Aouda from being burnt to death in a Sati. In this novel, Inspector Fix pursues the protagonist who is suspected of being a bank robber. The protagonist of this novel returns back to the (\*) Reform Club to win a bet he made due to a miscalculation in the date. For ten points, name this novel about Passepartout and Phileas Fogg’s circumnavigation the globe by Jules Verne.**

ANSWER: Around the World in Eighty Days

(Bonus 16) This country is home to Four Classic Novels. For ten points each,

[Part A] Name this country where *Romance of the Three Kingdoms* and *Journey to the West* was written.

ANSWER: China

[Part B] In *Journey to the West*, Sun Wukong is one of these animals and is often called the “king” of these animals. Many of these animals lived on Huaguo mountain.

ANSWER: Monkeys

[Part C] Another Chinese Classic Novel, *Dream of the Red Chamber*, is largely set in this city, the capital of modern China.

ANSWER: Beijing

## Tiebreakers

(Tossup 17) **The Lambda-CDM model begins with this event, which is responsible for the CMBR. This event was followed by its namesake nucleosynthesis event, creating elements up to lithium. Edwin Hubble's observation that most galaxies are (\*) moving away from the Earth was early evidence of this event. This event's theorized reverse is a similarly named "crunch". For ten points, the universe is thought to have begun with what explosive-sounding event?**

ANSWER: the **Big Bang**

(Bonus 17) Answer some things about notation in chemistry, for ten points each.

[Part A] This man's notation requires drawing atoms with lines for bonds and double dots for lone pairs. He is also the namesake of an electron-based acid-base theory.

ANSWER: Gilbert Newton **Lewis**

[Part B] This man's structures are used for sugars and show crosses with horizontal lines facing towards the viewer. He is the namesake of an "esterification" reaction.

ANSWER: Hermann Emil Louis **Fischer**

[Part C] The skeletal line structures used in organic chemistry are sometimes named for this man. This man was the first to suggest a cyclical structure for benzene.

ANSWER: Friedrich August **Kekule** von Stradonitz