## Round 5

## First Half

(Tossup 1) One leader of this empire was assassinated by Milos Obilic, but his army still defeated Prince Lazar at the Field of the Blackbirds to win the Battle of Kosovo. It's not the Holy Roman Empire, but this empire's navy was controlled by a commander nicknamed for his (*) red beard. This empire's rulers kept a harem at Topkapi Palace and turned the Hagia Sophia into a mosque. For ten points, name this Muslim empire ruled from Istanbul.
ANSWER: Ottoman Empire
(Bonus 1) This country was once ruled by King Idris. For ten points each,
[Part A] Name this North African country with capital at Tripoli.
ANSWER: Libya
[Part B] This Libyan dictator deposed King Idris and ruled for decades until he was overthrown and killed during a 2011 civil war.
ANSWER: Muammar Gaddafi
[Part C] This Libyan city was the site of a 2012 attack on an American diplomatic mission that led to the death of US Ambassador J. Christopher Stevens.

ANSWER: Benghazi
(Tossup 2) One of this man's last compositions was the Mass in B minor. One of this composer's most famous works was dedicated to the Margrave Christian Ludwig and is a collection of 6 instrumental works, one of which notably has no (*) violins. This German improvised on a theme written by Frederick the Great to create The Musical Offering. For ten points, what Baroque composer wrote the Goldberg Variations and the Brandenburg Concertos?
ANSWER: Johann Sebastian Bach
(Bonus 2) This composer served as the civilian Inspector of Naval Bands. For ten points each,
[Part A] Name this Russian composer, a member of the Mighty Handful who composed works such as Scheherazade and the Russian Easter Festival Overture.
ANSWER: Nikolai Rimsky-Korsakov
[Part B] This other member of the Mighty Handful composed Night on Bald Mountain and Pictures at an Exhibition.
ANSWER: Modest Mussorgsky
[Part C] Modest Mussorgsky also composed this work based on an Alexandr Pushkin drama about a title Tsar during the Time of Troubles.

## ANSWER: Boris Godunov

(Tossup 3) The title character of one of this man's works has a daughter named Ada, inspired by Lord Byron's daughter. That work, Tamerlane, is a poem by this man who also wrote other poems like The Conqueror Worm and (*) Lenore. Montresor is walled up and buried alive by Fortunato in one of this man's works. For ten points, name this American writer who wrote Cask of Amontillado and The Raven.
ANSWER: Edgar Allan Poe
(Bonus 3) In addition to his literary work, this author was a town official in Salem, Massachusetts. For ten points each,
[Part A] Name this New Englander who wrote The House of the Seven Gables.
ANSWER: Nathaniel Hawthorne
[Part B] One short story by Hawthorne concerns this native of Salem who follows his wife into the forest one night and stumbles onto a Black Mass.

## ANSWER: Young Goodman Brown

[Part C] In this Hawthorne novel, Hester Prynne is sentenced to wear the mark of her adultery on her clothing for the rest of her life.
ANSWER: The Scarlet Letter
(Tossup 4) Excess activity in this organ can cause a namesake storm. A substance produced by this organ helps inhibit osteoclast activity, thus decreasing levels of calcium in the blood. Parafollicular cells of this organ produce calcitonin. This (*) butterfly-shaped organ, which produces the hormones T3 and T4, is found below the Adam's apple. For ten points, name this endocrine gland that requires iodine and is swollen in a goiter.
ANSWER: Thyroid gland
(Bonus 4) During saltatory conduction, action potentials "jump" between consecutive nodes of Ranvier, which lack this substance. For ten points each,
[Part A] Name this fatty substance that forms a namesake "sheath" around the axon to speed up electrical impulses.
ANSWER: myelin
[Part B] These cells that make up the brain and spinal cord carry electrical signals through a long axon and communicate with each other at synapses.
ANSWER: neurons (accept nerve cells; accept nervous cells)
[Part C] This colorful term refers to regions of the nervous system composed primarily of myelinated axons. It contrasts with gray matter, which refers to regions of mostly neuronal cell bodies.
ANSWER: white matter
(Tossup 5) In March 2019, a TV channel dedicated to playing speeches and rallies of this country's leader was created. This country's leader is also the subject of a May 2019 film depicting his humble origins as a tea seller. The recent Lok Sabha elections in this country saw heavy defeats for the (*) Congress party and were the largest elections in the world. For ten points, name this country where the 2019 General Elections were won by the BJP and Narendra Modi.

## ANSWER: India

(Bonus 5) Joe Manchin was the only Democrat who voted in favor of this man's confirmation. For ten points each,
[Part A] Name this Supreme Court Justice who was accused of sexual assault by Dr. Christine Blasey Ford. This justice was nominated by President Trump to replace Justice Kennedy.

## ANSWER: Brett Kavanaugh

[Part B] This second female justice to be appointed to the Supreme Court was appointed by Bill Clinton in 1993 and is still serving today.
ANSWER: Ruth Bader Ginsburg
[Part C] This man is the current Chief Justice of the Supreme Court. He succeeded William Rehnquist as Chief Justice in 2005.
ANSWER: John Roberts
(Tossup 6) The convergence of this quantity is the subject of the Law of Large Numbers. A famous inequality states that the square root of " $a$ times $b$ ", which is known as the geometric form of this quantity, is never larger than this quantity's (*) arithmetic form. This statistical quantity is abbreviated "mu". For ten points, give this mathematical quantity equal to the sum of all data points divided by the number of data points, often simply called the "average".
ANSWER: mean (prompt on "average" before mention)
(Bonus 6) Groups with this property are called "abelian" [uh-BEEL-yan]. For ten points each,
[Part A] Identify this property that states that certain operations can be performed in either order and give the same result. This property guarantees that " $a$ plus $b$ " is always equal to " $b$ plus $a$ ".
ANSWER: commutative property (or commutativity
[Part B] The commutative property can be used to explain why this number is the coefficient of " $x$ times $y$ " in the expansion of "the quantity $x$ plus $y$ end quantity squared".

## ANSWER: 2

[Part C] Even in number systems in which multiplication is not commutative, multiplying one number by a number in this relationship to it can be done in either order, since multiplying two numbers in this relationship always results in the multiplicative identity.
ANSWER: reciprocal or multiplicative inverse (prompt on "inverse")
(Tossup 7) After his president was shot at by a man who was attempting to impress Jodie Foster, John Hinckley Jr, his wife began to consult an astrologer. During this man's presidency, the US overthrew Hudson Austin's government in Operation (*) Urgent Fury, and invasion of Grenada. The slogan "Just Say No" was promulgated by this president's wife through the War on Drugs. For ten points, name this president who told Mikhail Gorbachev to "tear down this wall" in 1987 in Berlin.
ANSWER: Ronald Wilson Reagan
(Bonus 7) In 1964, the Student Nonviolent Coordinating Committee mobilized to register voters in this city. For ten points each,
[Part A] Name this city from which three protest marches to Montgomery were launched in 1965. This Alabama city is the seat of Dallas County.
ANSWER: Selma
[Part B] After civil rights leaders declared their intention to march from Selma to Montgomery, state troopers tear-gassed and assaulted them on this Selma bridge during "Bloody Sunday".
ANSWER: Edmund Pettus Bridge
[Part C] The Selma to Montgomery marches were organized with the aid of this leader of the Southern Christian Leadership Conference. This famous orator gave the "How Long, Not Long" speech in Montgomery as well as a later speech in Washington D.C
ANSWER: Martin Luther King Jr.
(Tossup 8) This man defeated an army of Philistines using the jawbone of a donkey and his power was a result of his consecration to God as a Nazarite. This man was later tricked by his lover, who had a servant (*) cut his hair while he slept. After he lost his power, the Philistines gouged out this man's eyes, though he later regained his strength and toppled the Temple of Dagon. For ten points, name this biblical figure, the last judge of the ancient Israelites

ANSWER: Samson
(Bonus 8) The Catholic Bible includes a number of additional books when compared to the Protestant Bible. For ten points each,
[Part A] There are this many added books to the Catholic canon as compared to the Protestant canon. There are this many deadly sins in Christian thought.

## ANSWER: Seven

[Part B] This woman has an "added" Old Testament book dedicated to her exploits, such as beheading Holofernes to save the Israelites from the Assyrians.

## ANSWER: Judith

[Part C] The "added" Book of Tobit tells of a righteous Israelite living in this Mesopotamian City. In another book, Jonah tries to avoid going to this city and is eaten by a whale as a result of disobeying God.
ANSWER: Nineveh

## Sixty-Second Rounds

The categories are ...

1. Don Quixote
2. US Counties
3. Electromagnetic Spectrum

Don Quixote
Name the...
(1) Author of Don Quixote.

ANSWER: Miguel de Cervantes
(2) Companion of Don Quixote who serves as his squire.

## ANSWER: Sancho Panza

(3) The objects which he tries to fight as he thinks they are giants.

ANSWER: Windmills
(4) Region where the title character is from.

## ANSWER: La Mancha

(5) Girl who Don Quixote designates as his love, his queen and his lady.

ANSWER: Dulcinea del Toboso (Accept either underlined section, accept Aldonza Lorenzo)
(6) Horse which Don Quixote rides.

ANSWER: Rocinante

## US Counties

Name the state where you would find...
(1) Cook County, home to the USA's third largest city by population

ANSWER: Illinois
(2) Spotsylvania County, site of a major 1864 Civil War battle ANSWER: Virginia
(3) Harris, Travis, Deaf (pr. DEEF) Smith, and 251 others, the most of any state

ANSWER: Texas
(4) No counties, but comparable divisions called parishes instead of them

ANSWER: Louisiana
(5) Aroostook County, the site of a bloodless 19th century war

ANSWER: Maine
(6) Richmond County, found on an island with close to 500,000 people. It is the southernmost county in its state.
ANSWER: New York

## Electromagnetic Spectrum

What type of electromagnetic radiation...
(1) Is used to cook food by a namesake oven?

ANSWER: microwaves
(2) Has a colorful spectrum that the human eye can see?

ANSWER: Visible light
(3) Is used to make images of bones by medical professionals?

ANSWER: X-rays (accept X-radiation and Rontgen rays)
(4) Occurs between 10 and 400 nanometers of wavelengths and is absorbed by sunblock.

ANSWER: Ultraviolet light (accept UV, prompt on only "light" or "sunlight")
(5) Has the highest frequency, lowest wavelength, and a namesake decay that releases photons of energy from atomic nuclei?
ANSWER: Gamma Radiation
(6) Has the longest wavelengths in the electromagnetic spectrum from 3 kilohertz to about 1 gigahertz?

ANSWER: Radio waves (accept ELF waves or extremely low frequency waves, but prompt on partial answer)

## Second Half

(Tossup 9) A character in this work discovers he has no taste for milk and later causes his mother to faint when he attempts to save a picture on the wall. This character's sister plays the violin to entertain three lodgers and is named (*) Grete. The main character of this work is severely injured after being hit in the back by an apple and later dies of starvation. Gregor Samsa is transformed into a giant insect in, for ten points, what Franz Kafka work?
ANSWER: The Metamorphosis
(Bonus 9) For ten points each, answer these questions about Homer's Odyssey.
[Part A] The Odyssey begins in Ithaca, where this wife of Odysseus tries to fend off a host of suitors who insist that she marry one of them.

## ANSWER: Penelope

[Part B] Athena prompts this son of Penelope and Odysseus to leave in search of news about his father's whereabouts.
ANSWER: Telemachus
[Part C] Odysseus navigates numerous obstacles and magical beings as he tries to return home, including this witch who turns his men into pigs. This witch lived on the island of Aeaea

## ANSWER: Circe

(Tossup 10) A change in the energy states of this element can produce the 21-centimeter line. In cosmology, the eras of reionization and recombination refer specifically to this element, which can produce the Lyman and Balmer series. This element includes the isotopes (*) deuterium and tritium, which can fuse into helium. This is the most abundant element in the universe. For ten points, name this first element of the periodic table.

## ANSWER: Hydrogen

(Bonus 10) This period followed the Ediacaran period. For ten points each,
[Part A] Name this first geological period of the Paleozoic Era. Life on Earth rapidly diversified during this period in a namesake "explosion".

ANSWER: Cambrian
[Part B] This last period of the Paleozoic era ended with the largest extinction event in Earth's history. This period was followed by the Triassic, with which it names the aforementioned extinction event.
ANSWER: Permian
[Part C] The Permian and Triassic periods were followed by this period, during which dinosaurs became the dominant life form on earth. The Stegosaurus and Allosaurus lived during this period, though the T-Rex did not.
ANSWER: Jurassic
(Tossup 11) One story tells of how the naiad Cyane turned into a pool of water upon seeing this figure get taken away in front of her, prompting this figure's mother to search all over the world for her with Hecate and Helios. This figure was obliged to spend (*) one half of the year with her abductor after eating pomegranate seeds. For ten points, name this daughter of Zeus and Demeter who became queen of the underworld after her abduction and marriage to Hades.
ANSWER: Persephone
(Bonus 11) This deity has been described as half blue and half flesh-colored. For ten points each,
[Part A] Name this female Norse deity who ruled over a realm of death with the same name.
ANSWER: Hel
[Part B] Hel was the daughter of this Norse trickster god, the son of Laufey.

## ANSWER: Loki

[Part C] Loki fathered this monstrous wolf with the jotun Angrboda. This wolf bit off the right hand of Tyr.
ANSWER: Fenrir
(Tossup 12) This painter of The Spanish Singer and numerous cafe scenes considered himself a Realist but played a key role in the rise of Impressionism. This Frenchman used the same model, Victorine Meurent [Murr-OHN], in two of his most famous paintings: one, a painting modelled after Titian's (*) Venus of Urbino; the other, a depiction of two fully clothed men picnicking next to a naked woman. For ten points, what French artist created Olympia and Luncheon on the Grass?
ANSWER: Edouard Manet
(Bonus 12) An incomplete painting by this man is titled The Tennis Court Oath. For ten points each, [Part A] Name this French artist who painted The Death of Socrates and The Death of Marat. ANSWER: Jacques-Louis David
[Part B] Jacques-Louis David also painted this painting of a French leader on a rearing horse at the Great St. Bernard pass as he led an army through a title mountain range.
ANSWER: Napoleon Crossing the Alps
[Part C] This other Jacques-Louis David painting features Pope Pius VII, a kneeling Josephine, as well as Napoleon holding a crown.
ANSWER: The Coronation of Napoleon
(Tossup 13) The Mameyes landslide occurred in this territory's municipal capital of Ponce. Mona, Culebra, and Vieques are islands in this territory. President Trump tweeted about this territory stating that $(*)$ "3000 people did not die" as a result of two natural disasters to hit it. Hurricanes Irma and Maria struck, For ten points, what Commonwealth of the US located in the Caribbean with capital San Juan.
ANSWER: Puerto Rico
(Bonus 13) Mount Elbert is the highest point in this state. For ten points each,
[Part A] Name this state home to Mount Evans and Pikes Peak.
ANSWER: Colorado
[Part B] This military complex in Colorado is the headquarters of NORAD and the United States Northern Command. This complex is named for the mountain where it is located.
ANSWER: Cheyenne Mountain Complex
[Part C] The Cheyenne Mountain Complex is located next to this city, the county seat of El Paso County. It is also the largest city in Colorado by area.

ANSWER: Colorado Springs
(Tossup 14) The Hunter process can be used to produce this element. The chloride process separates this element from its ore, which is then purified using the Kroll process. On the fourth row of the periodic table, this element is found between (*) scandium and vanadium. This element's dioxide is found in white paints. For ten points, name this lightweight element commonly used in aircraft design with atomic number 22 and symbol Ti .
ANSWER: Titanium
(Bonus 14) James Dewar and Heike Onnes raced to achieve this temperature. For ten points each,
[Part A] Name this theoretical lowest-possible temperature that is exactly zero Kevins.
ANSWER: Absolute Zero
[Part B] Absolute Zero is equal to -273.15 on this temperature scale.
ANSWER: Celsius
[Part C] One of the first scientists to discuss Absolute Zero was this author of New Experiments and Observations touching Cold. This scientist also wrote The Sceptical Chymist.
ANSWER: Robert Boyle
(Tossup 15) This man's short story collection The Phantom 'Rickshaw and Other Tales contains a story about British adventurers titled The Man Who Would Be King. This author wrote about a "Bloomin' idol made o' mud / Wot they called the Great Gawd Budd" in a work that coined the phrase (*) "east of Suez". This author's most famous work features Mowgli and the tiger Shere Khan. For ten points, name this author of Mandalay and The Jungle Book.
ANSWER: Rudyard Kipling
(Bonus 15) This St. Louis native is often thought of as an Englishman because he spent most of his life there. For ten points each,
[Part A] Name this modernist author who wrote The Waste Land.
ANSWER: T.S. Eliot
[Part B] This Eliot poem contains the recurring refrain, "In the room the women come and go/Talking of Michelangelo." This poem's protagonist asks himself, "Shall I part my hair behind? Do I dare to eat a peach?"

## ANSWER: The Love Song of J. Alfred Prufrock

[Part C] This verse drama by Eliot portrays the assassination of Archbishop Thomas Becket.
ANSWER: Murder in the Cathedral
(Tossup 16) Federigo Giambelli created hellburners to help this modern-day country fight off an invading force led by Alessandro Farnese. This country was led by officials called stadtholders who ruled this country during a conflict against Spain known as the (*) Eighty Years' War. It's not England, but the House of Orange led this country under many kings named William. For ten points, name this country whose economic center was in Amsterdam.
ANSWER: The Netherlands
(Bonus 16) This leader initially co-ruled with his half-brother Ivan V. For ten points each,
[Part A] Name this Tsar of Russia who embarked on the Great Embassy and implemented numerous westernizing reforms. This man is often called "The Great".
ANSWER: Peter the Great (Accept Peter I)
[Part B] Peter the Great defeated Sweden in this conflict during which the Battle of Poltava took place.
ANSWER: Great Northern War
[Part C] Peter the Great founded this city on the Baltic Sea which became the capital of Imperial Russia. During Soviet times, this city was known as Leningrad.
ANSWER: Saint Petersburg (Accept Petrograd)

## Tiebreakers

(Tossup 17) This leader's power was limited after his Prime Minister Sergei Witte created a legislative body through the October Manifesto. A protest march on the Winter Palace led by (*) Father Gapon was violently put down by this ruler in 1905 on Bloody Sunday. This ruler and his family were executed by Bolsheviks in 1917, thus ending the rule of a 300 -year dynasty. For ten points, name this final Russian Tsar overthrown in the 1917 Russian Revolution.
ANSWER: Nicholas II (accept Nikolai II or Saint Nicholas the Passion-Bearer)
(Bonus 17) Contrary to its name, this war lasted 116 years. For ten points each,
[Part A] Name this long war between France and England from 1337 to 1453. It notably featured the longbow and lasted over a century.
ANSWER: Hundred Years' War
[Part B] This French girl became famous during the Hundred Years War for leading French troops to victory.
ANSWER: Joan of Arc (prompt on partial answer, accept Jeanne de Arc, Jehanne, La Pucelle de Orleans or The Maid of Orleans but do not mention Orleans to the competitors)
[Part C] Joan of Arc was known as the "Maid of" this French city because she won the siege of this city against England.
ANSWER: Orleans (do not accept or prompt on New Orleans)

