**Round 10**

**Buzzer Question:** “What was your favorite question from today’s tournament?”

**Tossups:**

1. Juan Marîa Fernández y Krohm attempted to assassinate this man in Fátima, Portugal. This man wrote *Love and Responsibility* and *The Splendor of Truth*. He was the first world leader to recognize the Rwandan genocide and he was awarded the Presidential Medal of Freedom for helping to end communism. This leader re-established diplomatic relations with Great Britain and the United States and he was also shot by Mehmed Ali Agca. This man-initiated World Youth Day and made major contributions to the Second Vatican Council. For ten points, name this Polish pope who was beatified by his successor, Pope Benedict XVI.

*Answer:* Pope **John Paul II** or Karol Josef **Wojtyla**

1. Garnet and Andalusite are two minerals that are characteristic of this kind of rock. This kind of rock undergoes foliation due to shearing forces, which produces layers. Precursors to this kind of rock are called protoliths. Protoliths become this kind of rock’s contact form through magma intrusions and the regional form through tectonic shifts. This kind of rock is formed in areas above bedrock in a namesake zone. Quartzite and marble, which were once sandstone and limestone, were changed into this kind of rock. For ten points, name this category of rocks which are formed over time by heat and pressure.

 *Answer:* **metamorphic**

1. One tradition practiced in this novel is known as a “gam.” Fleece gives a speech to group of ravenous carnivores in this novel, which also features a Parsee character named Fedallah. One character has a coffin made after falling ill, though that coffin is later used by the narrator as a raft. A single gold doubloon is nailed to a post as an incentive and a Londoner named Boomer relates his own interaction with this novel’s eponymous antagonist. Starbuck serves as the first mate of the *Pequod* in, for ten points, what novel that follows Captain Ahab and his hunt for the titular whale, a work by Herman Melville?

 *Answer*: ***Moby-Dick***

1. In an early work by this artist, girls challenge a group of boys to physical activity. Before painting *Young Spartans Exercising*, this man created a portrait of his aunt and her two daughters all in black and another painting that depicts a forlorn woman dressed in white sitting at a table with a glass of green liquid. Besides the *Bellelli Family*, a more notable work by this impressionist features a workstation full of top hat-wearing-men examining the titular textile with another man leaning back while reading the newspaper. For ten points, name this painter of *L’Absinthe* and *A Cotton Office in New Orlean*s who is more well known for his depictions of ballerinas.
*Answer:* Edgar **Degas**
2. The Ramsar Convention designated this location and others like it as places of international importance. The Kissimmee River is found near the northern boundary of this location which is primarily dominated by sawgrass and mangroves. A portion of this location, located in Collier County, is known the “Big Cypress.” Lake Okeechobee borders the northern part of this area. Thousands of invasive Burmese pythons native to South Asia have been captured and removed from this location since 2002. For ten points, name this area in South Florida which contains millions of acres of protected marshes and wetlands.

*Answer:* Florida **Everglades** (Everglades National Park) Prompt on (South) Florida.

1. One member of this group briefly pursued an acting career in the 1970s and won a Golden Globe for his performance in the film *Carnal Knowledge*. The names of two of this group’s songs, *Baby Driver* and *The Only Living Boy in New York,* were used as film titles in 2017. One of their most well-known songs has been used as a running gag on the TV series *Arrested Development*. This band contributed music to the 1967 film *The Graduate*, including one song which asks, “where have you gone Joe DiMaggio?” For ten points, name this American folk-rock duo, whose hits include “Mrs. Robinson” and “The Sound of Silence.”

 *Answer*: Paul **Simon** & Art **Garfunkel** (prompt on either name)

1. This story starts with the narrator emphasizing how “a wrong is redressed when retribution overtakes its redresser.” In this story, one character’s family crest depicts a serpent biting the heel of a foot and another character suffers from a persistent cough due to humidity. The narrator pulls out a trowel to prove he is a mason and his family motto is “Nemo me impune lacessit.” Luchresi cannot tell sherry from the title object in this short story, which concludes: “In pace requiescat” after the narrator lures his friend to the catacombs with promises of the title object. For ten points name this Edgar Allan Poe short story in which Montresor entombs Fortunato alive.

*Answer:* “The **Cask of Amontillado**”

1. ELISA tests use these entities to identify the presence of certain substances in samples. Immunohistochemistry is a laboratory technique used to stain tissue using these entities. Depending on its affinity for epitopes, these bodies can be monoclonal or polyclonal. Gerald Edelman discovered that these bodies are made of heavy and light chains. They are present in opsonization and agglutination, and various Ig isotypes form the Fc portion of these entities. Released from B cells, for ten points, name these Y-shaped proteins that are able to bind to foreign antigens which are commonly associated with immune response.

*Answer*: **antibody**

1. In 2014, dancers in Odessa performed a segment from this piece to protest Vladimir Putin’s possession of Crimea. Act one of this work shows one character preparing for a hunt with his tutor Benno. A curse is broken when the two leads throw themselves into a magical pool, ascending into heaven in the final act. Most productions usually have the lead actress also play the character Odile, the daughter of the enchanter Baron von Rothbart. Featuring a love affair with Prince Siegfried, for ten points, name this Tchaikovsky ballet that depicts Odette being cursed into becoming the titular animal.

*Answer:* ***Swan Lake***

1. This country was rejected from the League of Nations because of its enslavement of the Shanqalla people. The Adal Sultanate attempted to conquer this country, but was deterred with the help of the Portuguese, and it later fought the Ogaden War with his eastern neighbor. A militaristic queen known as Gudit destroyed many Christian churches in this country. The Zagwe dynasty ruled this country from Lalibela. This country’s emperors of the Solomonic Dynasty included Menelik II, who fought Italy whilst ruling this country. For ten points, name this country whose city of Axum is said to host the Ark of the Covenant.

*Answer:* Federal Democratic Republic of **Ethiopia**

1. This academic discussed a conflict with the Kahama in what was described as the “Four Year War.” Important subjects studied by this individual include Gigi, Goliath, and David Greybeard. This individual’s earliest research focused on the Kasakela group, who she observed hunting colobus monkeys. This individual was one of the first to describe affectionate behavior in her subjects’ family group and she was also one of the first to describe a “fishing” like behavior in which her subjects used sticks or reeds to harvest termites. This woman got started in her field thanks to her correspondence with Louis Leakey. Most of her work was done at Gombe River National Park. For ten points, name this English primatologist, most notable for studying chimpanzees.

 *Answer*: Jane **Goodall**

1. After studying radioactive emission of a gas he called “thoron” this man published his “Atomic Disintegration Theory.” Though not a Curie, this scientist notably observed the emissions of radium leading to his coining of the term “gamma rays.” He was able to develop scintillation screens made of zinc sulfide which he developed with Hans Geiger. In his most famous experiment he observed backward scattering of alpha particles when he deflected them through a thin metal layer. For ten points, name this English physicist whose “Gold Foil Experiment” helped prove the existence of the nucleus.

 *Answer*: Ernest **Rutherford**

1. The title character of this novel is a witness to the theft by Mr. Filcher, but is unable to report the crime. The protagonist and his coworkers decry the fashion of the times at Berwick Park, especially when it involves cruelty towards animals. After falling ill to a fever, doctors bloodlet the title character in an attempt to cure him. The protagonist’s mother tells him to keep up his good name when he leaves her, as man can be kind but also cruel. Rob Roy, the protagonist’s brother, is killed during a hunting trip, and he later finds his friend Ginger dead on a cart in the middle of London. For ten points, Anna Sewell wrote about animal welfare in what novel about the titular horse?

*Answer:* ***Black Beauty***

1. During the Mexican-American War this individual attempted to acquire percussion rifles for his regiment, which led to a feud with Winfield Scott. This leader owned Brierfield Plantation and for a time was married to the daughter of Zachary Taylor. This politician was captured in Irwinville, Georgia, not long after fleeing to Danville, Virginia; after capture he was held in Fort Monroe with an American flag in in his cell. This leader appointed Judah P. Benjamin and Christopher Memminger to his cabinet, and he himself was sworn into office in Montgomery, Alabama. For ten points, name this President of the Confederate States of America.

*Answer*: Jefferson Finis **Davis**

1. Stoke’s law was used to calculate the drag force acting on bodies in this experiment. This experiment was notably criticized by Felix Ehrenhaft. The air at the bottom of this experiment’s apparatus was ionized using x-rays. The result of the experiment was off due to miscalculations based on a wrong value for the viscosity of air. In this experiment, two plates were aligned on top of one another and an electric field was induced until the applied voltage plus gravity keep particles suspended in the air. For ten points, name this experiment run by Robert Millikan to determine the charge of an electron.
*Answer*: Millikan **Oil Drop** experiment
2. One character with this profession states how sleepwalking is “a great perturbation in nature” in *Macbeth.* John Seward meets Renfield through his work in this profession and Sylvia Ward gave a rose to one character with this profession in a short story by Nathaniel Hawthorne. Edward Prendick meets one character with this profession after a shipwreck and another character of this profession aids Wargrave in his murders before being pushed off a cliff in *And Then There Were None*. Christopher Marlowe wrote a play about one character with this profession who decides to sell his soul to the devil. For ten points, name this profession that usually requires a medical degree.

*Answer*: **doctor**

1. This child of Haumea stayed close to home with Lono-makua before being driven away by her sister Namakaokahai, who later kills this deity in a fight. On one journey, this figure brought her sister Hi’iaka along in the form of an egg, which she kept warm in her armpit. Children of this deity include her daughter, Laka, and a son, Menehune. This figure once cheated in a sledding race by causing her opponent, Poli’ahu, to almost fall into a stream of lava. Believed to reside in the Kilauea volcano, for ten points, name this goddess of fire and creator of the Hawaiian islands.

 *Answer:* **Pele**

1. One man who held this position under Calvin Coolidge authored an anti-war treaty with Aristide Briand. It's not chief justice of the Supreme Court, but this position was first held by John Jay in an acting capacity. One politician supported the policy of *detente* while in this position and another practiced brinkmanship and outlined the Dawes Plan. This position is the fourth in the line of presidential succession, and several holders of this position included John Foster Dulles, Henry Kissinger, and Madeleine Albright. For ten points name this position, currently held by Rex Tillerson, that is responsible for US foreign affairs.

*Answer:*Secretary of **State**

1. In the preface of one work, this philosopher claimed that “philosophy is its own time comprehended in thoughts.” In one work, this philosopher narrates a story in which two self-conscious beings have a “struggle to the death;” that narrative exemplifies one of this man’s concepts which is composed of a thesis, antithesis, and synthesis. Karl Marx claimed to have “turned [this philosopher] on his head to develop dialectical materialism.” For 10 points, name this German philosopher who formulated the master-slave dialectic in his *Phenomenology of Spirit*.

*Answer*: Georg Wilhelm Friedrich **Hegel**

1. This man was a frequent participant in the Great Dionysia, and he may have fought and been wounded in the Battle of Marathon. Legend has it that this man died after an eagle dropped a tortoise on his head, mistaking it for a rock. Atossa summons the ghost of the Emperor Darius who then condemns his son Xerxes in this man’s play *The Persians*. In one of his works, Eteocles leads the army of the titular city against an invading force led by his brother Polynices. This man’s works include a series containing *Agamenon* and *The Eumenides*. For ten points, name this Greek dramatist, who wrote *Prometheus Bound, Seven Against Thebes*, and the *Oresteia* trilogy.
*Answer:* **Aeschylus** (ESS-cuh-lus)
2. Robert Michels’ Iron Law of Oligarchy states that all forms of this system will decay into the titular concept. Sortition is a form of this system based on randomized selection, and Walter Lippman discussed a ‘guided’ form of this system. Joseph Schumpeter argued that in this system, the political zeitgeist was dictated by politicians in a market-like manner, as opposed to any form of ‘popular will.’ Marxist theoreticians believe that most Western countries are “bourgeois” forms of this system as opposed to the pure ‘socialist’ form of this system. The use of lot systems is a hallmark of the “direct” form of this concept. For ten points, name this system in which the people ostensibly control the government.

*Answer:* **democracy**

**Bonuses:**

1. His compositions often fused jazz and classical music, and he famously created one work that was premiered at event known as “ An Experiment in Modern Music.” For ten points each:

[10] Name this Russian-American composer of *Rhapsody in Blue*, who often partnered with his brother Ira.

*Answer*: George **Gershwin**

[10] Ira and George Gershwin partnered with DuBose Heyward to write this controversial folk opera set in Catfish Row. It opens with the song “Summertime.”

*Answer*: ***Porgy & Bess***

[10] This other piece by Gershwin features maracas and guiros and was originally titled “Rumba.”

*Answer*: ***Cuban Overture***

1. For ten points each, answer some questions about a major North American oil exporter:

[10] Although, the first European settlers in this country were French fur traders, the most spoken language in the country is currently English. It was led by Prime Ministers Lester Pearson and Pierre Trudeau.

*Answer:* **Canada**

[10] This man was made first prime minister of Canada in 1867 and served in that office for a record 19 years.

*Answer:* John A. **MacDonald**

[10] Louis Riel led this mixed-race ethnic group in a failed rebellion against the Canadian government in 1885.

*Answer:* **Metis** (may-tee)

1. For a wire loop in a magnetic field, this quantity equals the strength of the field multiplied by the dipole moment multiplied by the sine of the angle between them. For ten points each:

[10] Symbolized tau, this is the vector acting on an extended object; it is produced by a force exerted on an axis of rotation.

*Answer*: **torque**

[10] Torque is the product of angular acceleration and this entity, the rotational analogue of mass.

*Answer*: **moment of inertia**

[10] Torque can be found by doing this procedure between distance and force. This is the equivalent of taking the determinant of a three by three matrix.

*Answer*: **cross product**

1. This thinker argued that beliefs could be rational even if they lacked empirical evidence in his essay “The Will to Believe.” For 10 points each:

[10] Name this American philosopher and coiner of term “stream of consciousness” who subtitled one series of his lectures as “Some New Ways of Old Thinking.”

*Answer*: William **James**

[10] That aforementioned series of lectures were named after this school of American philosophy founded by C.S. Peirce. This school defined truth in terms of “cash value.”

*Answer*: **pragmatism** or **pragmaticism**

[10] This other book by James, a compilation of his 1902 Gifford lectures, compared “healthy-mindedness” to the twice born “sick soul” that exists before conversion.

*Answer*: ***Varieties of Religious Experience****: A Study in Human Nature*

1. Name some things associated with Ragnarok, for ten points each:

[10] This god’s carriage is pulled by two goats that are eaten and resurrected each time. He will kill Jörmungandr and take nine steps before dying from its venom.

*Answer*: **Thor**

[10] This leader of the fire giants of Muspelheim will kill Frey and destroy the world with fire, which few humans and deities escape.

*Answer:* **Surt** or **Surtr** [10] It is said that this god constantly watches for the start of Ragnarok and will signal its onset by blowing the Gjallarhorn [GYAL-AR-HORN]. He and Loki will kill each other in battle.

 *Answer*: **Heimdall**

1. After getting his finger “rastled” the main protagonist in work exclaims “the damned little cuss!” and Kentuck is later found dying after the North Fork. For ten points each:

[10] Name this short story about Cherokee Sal’s child.

*Answer*: **“The Luck of Roaring Camp”**

[10] This author wrote “The Luck of Roaring Camp” and about the expulsion of four “immoral” people in his story, “The Outcasts of Poker Flat.”

*Answer*: Bret **Harte**

[10] Most of Harte’s works concern miners in this state, which is also the setting of Raymond Chandler’s *The Big Sleep*.

*Answer*: **California**

1. Muslim cavalry was successfully repelled by a series of square defensive formations, ultimately halting Abdul Rahman. For ten points each:

[10] Name this battle that took place between the Umayyad army and the Frankish-Burgundians forces, effectively ending the Muslim expansion into Western Europe.

*Answer*: Battle of **Tours** [accept Battle of **Poitiers**]

[10] This man led the Franks to victory at the Battle of Tours and earned the nickname “the Hammer.”

*Answer*: Charles **Martel**

[10] Charles Martel originally came to the aid of Odo, duke of this province in France. Charlemagne later proclaimed his son Louis I as king of this province.

*Answer:* **Aquitaine**

1. The Federal Reserve achieves its stable money mandate by ensuring a low, steady rate of this phenomenon. For 10 points each:

[10] Name this economic phenomenon in which the general price level rises and the value of currency falls over time.

*Answer*: **inflation**

[10] Stagflation cast the veracity of this relation into doubt. This relation asserts that there is an inverse relationship between the inflation rate and the unemployment rate.

*Answer*: **Phillips** Curve

[10] Under this theory of money, the general price level is held to be directly proportional to the money supply. This theory’s algebraic formulation was developed by Irving Fisher.

*Answer*: **quantity** theory of money

1. The peaks produced in this technique typically represent the number and distribution of hydrogens on organic molecules. For ten points each:

[10] Name this lab technique which is used to identify the makeup of compounds based on the apparent spins and vibrations of a given sample.

*Answer*: **n**uclear **m**agnetic **r**esonance spectroscopy

[10] This type of spectroscopy is based on absorption and has units of inverse centimeters. It uses light that is one wavelength longer than visible light.

*Answer:* **infrared** or **IR**

[10] This spectroscopic phenomenon is due to light or radioactive waves changing trajectory after hitting smaller particles. This phenomenon explains why the sky is blue.

*Answer*: **Rayleigh scattering** [prompt on elastic scattering]

1. For ten points each, name these conflicts between Native Americans and settlers:

[10] A namesake war beginning in 1636 led to Massachusetts Bay, Plymouth, and Saybrook colonies almost exterminating this tribe in modern-day Connecticut.

*Answer*: **Pequot**s

[10] Also known as the Pueblo Revolt, this uprising in the Southwestern United States saw a large-scale native resistance to Spanish colonizers and their missionaries. It was a led by a Tewa spiritualist who sought to preserve the Pueblo religion.

*Answer*: **Pope**’s Rebellion [pronounced “po-pay” but give it to them if they say “pope”]

[10] This Jackson Administration era war was fought with between the British Band and the United States in Illinois and Michigan Territories. It is named for the leader of the British Band, and Abraham Lincoln’s only military service was in this war.

*Answer*: **Black Hawk** War

1. One of his paintings depicts a murdered French revolutionary leader who lies slain in his bathtub. For ten points each:

[10] Name this painter of the *Death of Marat*.

*Answer*: Jacques Louis **David**

[10] David spent most of his time as the court painter for this French ruler. David famously depicted this ruler crossing the Alps on a white horse.

*Answer:* **Napoleon** Bonaparte

[10] This other famous artist of *La Grand Odalisque* and *The Apotheosis of Homer* likewise painted several portraits of Napoleon, including one of him “on his Imperial Throne” and another as a “First Consul.”

*Answer*: Jean Auguste Dominique **Ingres**

1. One work in this language recounts the numerous saints and holy sites in the namesake city of Durham. For ten points each:

[10] Name this language early Germanic language used to write “Caedmon’s Hymn” and *The Battle of Maldon*.

*Answer*: **Old English** or **Anglo-Saxon**

[10] This epic poem is one of the oldest works written in Old English; it follows the titular Geatish hero who comes to the aid of Hrothgar, King of the Danes.

*Answer*: **Beowulf**

[10] In “The Dream of the Rood,” this object shares its point of view of Christ’s crucifixion with the narrator.

*Answer*: the **cross**

1. Despite being inland, many lakes possess high saline content. For ten points each, name some of these salty lakes:

[10] This highly salty lake lies on the border of Jordan and Israel. Its name comes from the fact that its high salinity prevents plants and animals from living in its waters.

*Answer*: **Dead** Sea

[10] Despite its name, this other salty Asian lake has been rapidly shrinking over the last forty years. Found in Kazakhstan, this lake’s name roughly translates to “sea of many islands.”

*Answer*: **Aral** Sea

[10] Though not as salty as the Dead Sea or Aral Sea, this other body of water in Northern Venezuela is brackish because of its close proximity to the Caribbean. It is often considered the largest lake in South America.

 *Answer*: Lake **Maracaibo**

1. These are offset by quotation marks and they are often encoded using ASCII. For ten points each:

[10] Name this type of data used to store text on a computer.

*Answer*: **string**s

[10] A plus sign can be used in Java to perform what task? It is the linking of two independent strings.

*Answer*: **concatenation**

[10] Strings are null-terminated in this programming language. This programming language was developed by Dennis Ritchie at Bell Labs.

*Answer*: **C** (do not prompt on or accept “C++”)

1. This poem hopes the addressee can “dream but not make dreams your master.” For ten points each:

[10] Name this poem of conditional statements addressed to the poet’s son. It ends with the lines “Yours is the Earth and everything that’s in it,/ And-which is more-you’ll be a Man, my son!”

*Answer*: **“If”**

[10] This author of “If” also wrote “The White Man’s Burden” and *Just So Stories*.

*Answer*: Rudyard **Kipling**

[10] This other Kipling poem details the exploits of the titular Indian water carrier who suffers a fatal wound at the poems end, prompting the narrator to say “you are a better man than I am.”

*Answer*: **“Gunga-Din”**

1. Answer some questions about death and what comes after. For ten points each:

[10] This Greek deity, was sometimes called “Khthonios” because of his possible origin as a god of the underworld. In some stories he conducts dead souls to Erebus when he’s not busy delivering messages.

*Answer*: **Hermes**

[10] Hermes, Anubis, and Charon are examples of this category of mythological characters, that escort the dead to the afterlife. This category literally means “guide of souls”

*Answer*: **psychopomp**

[10] Another popular psychopomp is Papa Legba, a loa from this syncretic religion.

*Answer*: **Voodoo** or **Voudun**

1. For ten points each, name some popular Nestle candy bars:

[10] This candy bar consists of multilayered wafers covered in milk chocolate. It is believed by some that the onset of the Second World War brought about its easily shareable shape.

*Answer*: **Kit-Kat**

[10] This other Nestle candy is made of chocolate nougat, peanuts, and caramel. Despite popular belief, its name comes from Grover Cleveland’s daughter rather than the name of a famous Yankee slugger.

 *Answer*: **Baby Ruth**

[10] Composed of chocolate, caramel, and rolled in crisped rice, this candy bar was named after a series of game shows. Its slogan is “That’s Rich!”

 *Answer*: **100 Grand Bar**

1. This location was once home to a gun battery called Fort Gibson. For ten points each:

[10] Name this island in New York City through which thousands of immigrants from Europe were processed.

*Answer*: **Ellis Island**

[10] The first immigrant to be processed at Ellis Island was Annie Moore, who came from this country. Signs infamously proclaimed that immigrants from this country “need not apply.”

*Answer*: **Ireland**

[10] Many Italian and Jewish immigrants in New York died in this disaster because factory owners had barred the doors to the workspace.

*Answer*: **Triangle Shirtwaist** Fire

1. It was first proposed by Stephen Jay Gould and Niles Eldredge, and explanations for this theory include stabilizing selection and koinophilia. For ten points each:

[10] Name this evolutionary theory, which states that speciation occurs in rapid intervals rather than through phyletic gradualism.

*Answer*: **punctuated equilibrium**

[10] In the theory of punctuated equilibrium, most species remain in this state, a form of relative constancy with little genetic drift. When a selective pressure is then introduced, a species exits this condition and begins to change of a few generations.

*Answer*: **stasis**

[10] Punctuated equilibrium occurs according to this process, in which one species splits off into two distinctly different species. It is contrasted with anagensis, in which species gradually accumulate new defining traits over time.

 *Answer*: **cladogenesis**

1. This collection of poems expresses the speaker’s desire for “A Book of Verses underneath the Bough/ A Jug of Wine, a Loaf of Bread – and Thou.” For ten points each:

[10] Name this collection of poems that was translated from Persian by Edward Fitzgerald.
*Answer:* *The* ***Rubaiyat***

[10] Name this poet who wrote *The Rubaiyat,* he was also a mathematician and astronomer.
*Answer:* Omar **Khayyam**

[10] The poems in *The Rubaiyat* are of this type, with four lines and an AABA rhyme scheme.
*Answer:* **quatrains**

1. One member of this group, Arthur Honneger, composed an orchestral work inspired by a train known as *Pacific 231.* For ten points each:

[10] Name this numerically titled group of composers, that also included Louis Durey and Francis Poulenc.

*Answer*: **Les Six**

[10] Several members of Les Six collaborated on a ballet known as *Jeans Fan* with this other French composer who is known for his orchestration of Mussorgsky’s *Pictures at an Exhibition* as well as the piano piece *Gaspard de la nuit*.

*Answer*: Maurice **Ravel**

[10] The predecessors of Les Six was a group of French composers organized by this man, a self-proclaimed phonometrician and “gymnopedist.”

 *Answer*: Erik **Satie**