## Round 9

## First Half

(Tossup 1) After moving to Detroit, this person served as secretary to John Conyers. After her death, this person became the first woman to lie in honor in the Capitol Rotunda. This woman's most famous action occurred when she rejected a request by (*) bus driver James Fred Blake to move to another seat. For the point, name this African-American woman who played a key role in the Montgomery Bus Boycotts.

ANSWER: Rosa Parks
(Bonus 1) This man was stabbed with a letter opener by Izola Curry while at a book signing in Harlem. FTP:
[Part A] Name this man, whose house was bombed by segregationists in 1956. He was also monitored by the FBI's COINTELPRO program, which spied on "subversive" individuals.
ANSWER: Martin Luther King Jr.
[Part B] In 1963, King gave this famous speech on the steps of the Lincoln Memorial. The title phrase of this speech was said in response to a cry from Mahalia Jackson
ANSWER: I Have a Dream speech
[Part C] King also led a march from this city to Montgomery. That march saw Bull Connor's police force use high-pressure hoses against protesters on the Edmund Pettis Bridge during 'Bloody Sunday'.

## ANSWER: Selma

(Tossup 2) In a story by this author, a young girl becomes jealous of Sharon Lipschutz who sat with an older man while he played piano. Seymour Glass shoots himself in this author's story (*) "A Perfect Day for Bananafish." In his most famous work, the protagonist visits a merry-go-round with his younger sister Phoebe. For ten points, name this author who included Holden Caulfield in his The Catcher in the Rye.

ANSWER: Jerome David Salinger
(Bonus 2) This work was thought to be based on the life of Alexander Selkirk. For ten points each,
[Part A] Name this work about a title shipwrecked sailor who is marooned on an island he calls the island of despair.

## ANSWER: Robinson Crusoe

[Part B] This companion of Robinson Crusoe is named after the day of the week in which he first appeared. ANSWER: Friday
[Part C] Robinson Crusoe was written by this English author.
ANSWER: Daniel Defoe
(Tossup 3) This quantity is the linearly related to the effective nuclear charge divided by the square of the radius in the Allred-Rochow scale, while the most common measurement of this quantity uses the (*) Pauling scale. The difference between this quantity between two atoms determines whether they form an ionic or covalent bond. For ten points, name this value in chemistry that measures how much an atom attracts electrons.
ANSWER: electronegativity
(Bonus 3) Like the asteroid belt, this region largely lies in the plane of the solar system, however instead of rocky objects, this region consists of objects made of various ices. For ten points each,
[Part A] Identify this region of our solar system extending about 20 AUs [ay-yous] from the orbit of Neptune.
ANSWER: Kuiper Belt [kai-per]
[Part B] The largest object so far discovered in the Kuiper Belt is this object which was discovered by Clyde Tombaugh in 1930.

## ANSWER: Pluto

[Part C] The only space probe to study objects in the Kuiper Belt was this one, which reached Pluto in 2015, and flew by the binary object Ultima Thule in early 2019.

## ANSWER: New Horizons

(Tossup 4) This function's namesake law denotes the relationship between two angles of a triangle with this function applied and the lengths of the opposing sides and it is derived from the law of Sines. The Maclaurin series for this function begins with the coefficients (*) $1,1 / 3,2 / 15$ and $17 / 315$. This function's derivative is secant squared. For ten points, name this trigonometric function equal to opposite over adjacent, or sine over cosine.
ANSWER: Tangent (Accept $\underline{\text { tan }}$ )
(Bonus 4) If these objects are one-to-one, then they have inverses, and these mathematical objects give a unique output for every input, for ten points each.
[Part A] Name these objects that can be visualized on a graph and are often written in the form "y equals f of $x$."

## ANSWER: functions

[Part B] The set of all inputs to a function is known by this term. All the values in this space map to all the values in the range.

## ANSWER: domain

[Part C] Since every input in a function's domain gives a unique output, every function passes this test. It is named after a geometric figure with an undefined slope.
ANSWER: vertical line test (prompt on partial answer)
(Tossup 5) This artist depicted drunk soccer fan who breaks the window of a diner with a chair in his parody of Nighthawks. This artist created a mural depicting a boy crouched at a sewing machine making British flags in Slave Labour. This artist's (*) Girl with Red Balloon first appeared on a wall in the South Bank of London. For ten points, name this anonymous British graffiti artist known for feuds with King Robbo.
ANSWER: Banksy
(Bonus 5) One work in this genre features the right hand playing rapid triplets exclusively on black keys. For 10 points each:
[Part A] Name these types of works that include "Black Key." Other works of this type by a Polish composer are nicknamed "Aeolian Harp" and "Revolutionary."
ANSWER: Etudes
[Part B] This Romantic-era Polish composer wrote the aforementioned "Black Key" etude. His other works include "Raindrop" prelude and Fantaisie Impromptu.
ANSWER: Frederic Francois Chopin
[Part C] In addition to writing many polonaises, Chopin also composed over 50 of these Polish dances in $3 / 4$ time. This dance usually includes a heavy third beat accent.

## ANSWER: Mazurka

(Tossup 6) This philosopher outlined his ideas for a peaceful society in his Perpetual Peace. "All bachelors are unmarried males" is a statement put forward as an example of this man's idea of an "a priori" truth. This man called enlightenment (*) "man's emergence from his self-imposed immaturity," and discussed the limits of metaphysics in his Critique of Pure Reason. For ten points, name this German author of Groundwork of the Metaphysics of Morals.
ANSWER: Immanuel Kant
(Bonus 6) This man proposed a currency called the Bancor. For ten points each,
[Part A] Name this British economist, the author of The General Theory of Employment, Interest and Money. He is the namesake of a school of economic thought.
ANSWER: John Maynard Keynes
[Part B] John Maynard Keynes was a specialist in this branch of economics, which Keynesian economics is part of. This branch deals with the performance of economies as a whole and is contrasted with Microeconomics.
ANSWER: Macroeconomics
[Part C] John Maynard Keynes was a graduate of this British university, the rival of Oxford.
ANSWER: Cambridge University
(Tossup 7) In this book, one character was cursed for "spilling his seed on the ground" after making love to Tamar. Another character dreams of a ladder to Heaven en route to Haran after his brother (*) Esau vowed to kill him for stealing his birthright. This book tells of the binding of Esau's father, whom Abraham was supposed to sacrifice to God. For ten points, name this book about the prehistory of Israel, the first book in the Holy Bible.

## ANSWER: Genesis

(Bonus 7) Zoroastrianism is one of, if not the oldest monotheistic religion in the world. For ten points each, name these entities or beliefs within Zoroastrianism.
[Part A] Name this Iranian prophet who lends his name to Zoroastrianism.
ANSWER: Zoroaster
[Part B] Zoroastrianism was practiced widely in the Sassanid Empire, which had its home in this region which became most of this modern-day country.

ANSWER: Iran
[Part C] Name this creator and sole god of Zoroastrianism, contrasted with the evil god Angra Mainyu.

## ANSWER: Ahura Mazda

(Tossup 8) Six generals in this country were killed during the 30 September Movement which led to the destruction of the PKI. In 1975, another leader of this country launched Operation Lotus, the invasion of Timor Leste. This country won its independence from the (*) Dutch under the leadership of nationalist leaders Hatta and Sukarno. For ten points, name this Southeast Asian country once ruled by Suharto with capital Jakarta.

## ANSWER: Indonesia

(Bonus 8) During this conflict, fierce dogfights took place at MIG Alley. For ten points each,
[Part A] Name this conflict in which an American-led UN force fought communist forces on a namesake Asian peninsula. The city of Seoul changed hands several times during this conflict.

## ANSWER: Korean War

[Part B] This city, the capital of North Korea, was the target of the largest air raid of the Korean War. ANSWER: Pyongyang
[Part C] This man led North Korea during the Korean War. This "Great Leader" was the father of Kim Jong Il.
ANSWER: Kim Il Sung

## Sixty-Second Rounds

The categories are ...

1. Baseball in Literature
2. 20th Century Africa
3. Halogens

Baseball in Literature
Relating to baseball in literature, name the...
(1) State in which "the great DiMaggio" from The Old Man and the Sea played for the Yankees.

ANSWER: New York
(2) 1940s war during which the Mundys give up their ballpark to the US Army in Philip Roth's Great American Novel.
ANSWER: World War II
(3) Ernest Thayer poem in which there was "no joy in Mudville" when the title character "struck out."

ANSWER: Casey at the Bat
(4) Poet of "The Red Wheelbarrow" who wrote about a crowd watching baseball "moved uniformly by a spirit of uselessness."
ANSWER: William Carlos Williams
(5) Bernard Malamud novel about Roy Hobbs and his bat "Wonderboy."

ANSWER: The Natural
(6) Author who wrote about Reuven Malter's baseball injury in his "The Chosen."

ANSWER: Chaim Potok

## 20th Century Africa

Name the...
(1) Country home to the pyramids once led by Gamal Abdel Nasser and Anwar Sadat.

ANSWER: Egypt
(2) East African country who leaders have included Jomo and Uhuru Kenyatta.

ANSWER: Kenya
(3) Country where Nelson Mandela led the ANC and overthrew the Apartheid.

ANSWER: South Africa
(4) Country which Muammar Gaddafi led from Tripoli.

ANSWER: Libya
(5) Country where the death of President Habyarimana started a namesake genocide of Tutsis by Hutus. ANSWER: Rwanda
(6) Country with capital Harare which experienced hyperinflation under the leadership of Robert Mugabe. ANSWER: Zimbabwe

Halogens
Name the...
(1) CAS group number halogens belong to.

ANSWER: 7
(2) Products halogens form when reacting with a metal, a common example of which includes sodium chloride.
ANSWER: Salt
(3) The type of gases that halogens are located to the left of in the periodic table.

ANSWER: Noble gases
(4) Toxic, pale yellow gas, whose ion is found often in toothpaste

ANSWER: Fluorine
(5) Symbol used to denote halogen atoms, also used for a type of radioactive ray.

ANSWER: X
(6) Rarest naturally occurring element in the Earth's crust, a halogen whose most stable isotope has a mass number of 210 .
ANSWER: Astatine

## Second Half

(Tossup 9) At the end of this work, a pair of figures walk "hand in hand, with wandering steps and slow." A character in this poem observes concludes that it's "Better to reign in Hell than serve in Heaven." In this poem, whose purpose is (*) "to justify the ways of God to man," Michael expels Adam and Eve from Eden. For ten points, name this epic about the fall of Satan, Adam, and Eve by John Milton.

## ANSWER: Paradise Lost

(Bonus 9) In this novel, Kristoforas dies from food poisoning. For ten points each,
[Part A] Name this novel in which the Lithuanian immigrant Jurgis Rudkus faces terrible working conditions in the US meatpacking industry.
ANSWER: The Jungle
[Part B] The Jungle was written by this American journalist who also publicized the issue of Yellow Journalism in The Brass Check
ANSWER: Upton Sinclair
[Part C] The Jungle was set in this most populous city in the American Midwest.
ANSWER: Chicago
(Tossup 10) Richard Feynman appeared on television to explain an incident involving one of these objects by immersing a small object in a cold glass of water. Boeing built two specialized 747 aircraft to carry these objects. One of these objects was destroyed after a piece of $(*)$ foam insulation broke a heat shield, while another disintegrated after an O-ring failed. For ten points, name these vehicles, such as Columbia and Challenger, that carried astronauts.
ANSWER: space shuttles (prompt on Challenger, Columbia, Atlantis, Discovery, Endeavour, or Enterprise)
(Bonus 10) There are six types of simple machines that make work easier. For ten points each,
[Part A] Name this type of simple machine that is composed of a wheel and an axle. Moving a flag up and down a pole uses this type of simple machine.
ANSWER: pulley
[Part B] This measure is used to assess the performance of simple machines. It is defined as the ratio of the force produced by a machine to the force applied to it.
ANSWER: mechanical advantage
[Part C] Adding two or more simple machines together yields this other type of machine. For example, a wheelbarrow is this type of machine, since it is made up of a wheel and an axle.
ANSWER: compound machine
(Tossup 11) Indigenous owners of this site protect it by following Tjukurpa law code. Bob Hawke approved a 1983 plan forbidding climbing at this site. This site is paired with Mount Olga, or Kata Tjuta, in the name of a national park. The Pitjantjatjara Anangu people care for this (*) inselberg, located 200 miles southwest of Alice Springs. Named after a Premier of South Australia, for ten points, name this sandstone formation in Northern Territory.
ANSWER: Ayers Rock [accept Uluru]
(Bonus 11) Unter den Linden passes through this city's Mitte district. For ten points each,
[Part A] Name this capital city of Germany.
ANSWER: Berlin
[Part B] Berlin is home to this famous landmark, a large gate built by Frederick William II.
ANSWER: Brandenburg Gate (Accept Brandenburger Tor)
[Part C] This building in Berlin is the meeting place of the Bundestag. Norman Foster designed a glass dome for this structure which famously suffered a fire in 1933.
ANSWER: Reichstag
(Tossup 12) This empire believed that the Fifth Age begun when a small, boil covered god sacrificed himself and jumped into a sacrificial flame. This empire's capital was built where an eagle was seen perched on a cactus holding a rattlesnake in its talons. The patron god of this empire's capital was (*) Huitzilopochtli, and it also worshipped a feathered serpent. Quetzalcoatl was part of the myth system of, for ten points, what empire based in modern-day Mexico with capital Tenochtitlan?

ANSWER: Aztecs
(Bonus 12) The Nordic world was full of different realms and fantastic structures, including a bridge that was made out of this.
[Part A] The bridge between Midgard and Asgard, the Bifrost Bridge, was made out of this object, a colorful phenomenon usually appearing after a rainstorm.
ANSWER: Rainbow
[Part B] Name this immense mythical tree which connects the Nine Worlds.
ANSWER: Yggdrasil
[Part C] Name this Nordic realm primarily of ice and cold, the abode of the goddess Hel.
ANSWER: Niflheim
(Tossup 13) This novel's protagonist studies Italian to prepare for a tourist he meets in a cathedral. A priest in this novel discusses a parable of a man who waits outside a door to gain entrance to the law. The protagonist of this work asks the painter (*) Titorelli for advice. This novel's protagonist is stabbed to death "Like a dog!" Josef K. is arrested for an unknow crime in, for ten points, what novel by Franz Kafka?
ANSWER: The Trial [accept Der Prozess
(Bonus 13) In this work, striking banana plantation workers are massacred by the Colombian army. For ten points each,
[Part A] Name this work which follows generations of the Buendia family in the town of Macondo.
ANSWER: One Hundred Years of Solitude
[Part B] One Hundred Years of Solitude was written by this Colombian author who also wrote The Autumn of the Patriarch
ANSWER: Gabriel Garcia Marquez
[Part C] Florentino and Fermina fall in love but eventually break off their engagement in this Gabriel Garcia Marquez work. Urbino is a doctor committed to eradicating cholera in this work.
ANSWER: Love in the time of Cholera
(Tossup 14) This man wrote "Infantry Attacks", a military textbook whose attention granted him to command the bodyguard battalion. Upon the Landing on Normandy, this man proposed to counter Allied forces at the coast, but was turned down by his superiors including Gerd von Rundstadt. This man's alleged involvement in an $\left(^{*}\right.$ ) assassination attempt prompted Hitler to force him to commit suicide. For ten points, name this Nazi German general, who was famed as the Desert Fox.
ANSWER: Erwin Rommel
(Bonus 14) This emperor threw prisoners into the dead sea to test its buoyancy. For ten points each,
[Part A] Name this Roman emperor who founded the Flavian dynasty. He was succeeded by his sons Titus and Domitian.
ANSWER: Vespasian
[Part B] Vespasian started the construction of this oval amphitheatre in the centre of Rome. It was frequently used for gladiatorial contests and other public spectacles.
ANSWER: Colosseum (Accept Flavian Amphitheatre)
[Part C] Vespasian came to power at the end of the Year of the Four Emperors, which begun with the suicide of this last Julio-Claudian emperor who fiddled while Rome burnt.
ANSWER: Nero
(Tossup 15) Ramon y Cajal proposed a "doctrine" stating that these cells are discrete. The "mirror" type of these cells activates when an animal acts and observes another animal performing the same act. Saltatory conduction occurs in these cells when action potentials jump over $\left({ }^{*}\right)$ myelin sheath. The soma, dendrites, axon, and axon terminals make up these cells. For ten points, name these cells that are found in the brain.
ANSWER: neurons
(Bonus 15) Proteases such as pepsin and thrombin use water to break down these bonds. For ten points each:
[Part A] Name this type of covalent bond formed from a condensation reaction between carboxylic acid and amine functional groups, often inside the large ribosomal subunit.
ANSWER: peptide bonds
[Part B] These organic compounds are linked together using peptide bonds during translation. They are the building blocks of proteins.

ANSWER: amino acids
[Part C] The amino acid cysteine has a thiol side chain, which includes an atom of this element with symbol S. One gas containing this element has a foul smell of rotten eggs.
ANSWER: sulfur (accept $\underline{\mathbf{S}}$ )
(Tossup 16) In this work's first movement, instruments play col legno, or with the wood of the bow; that movement contains a repeated ostinato in $5 / 4$ time. A door closes on a female chorus in this work's seventh and final movement. British folk tunes like (*) "I Vow to Thee, My Country" are quoted in this work. This work's title entities are described as "the Mystic" and "the Bringer of War." For ten points, name this Gustav Holst suite with movements depicting Mars and Jupiter.
ANSWER: The Planets
(Bonus 16) Golden rays can be seen behind the two central figures of this sculpture. For ten points each, [Part A] Name this sculpture featuring a swooning nun and an angel with a spear located Santa Maria Della Vittoria. This sculpture depicts an episode described by Teresa of Avila.
ANSWER: The Ecstasy of St Theresa
[Part B] The Ecstasy of Saint Teresa was created by this Italian Sculptor who also created The Rape of Proserpina.
ANSWER: Gian Lorenzo Bernini
[Part C] Bernini created many of these water features in Rome. One of these include a copy of an Egyptian Obelisk and represents four major rivers.
ANSWER: Fountains

## Tiebreakers

(Tossup 17) One account of this event notes that it began when a deaf man named Black Coyote ignored instructions to give up a rifle. It was carried out by the 7th Cavalry of James Forsythe against a group who mistakenly believed (*) "ghost shirts" would make them bulletproof. Spotted Elk died on the Pine Ridge Reservation in South Dakota in, for ten points, what December 1890 event where the US Army massacred over 150 Lakota Sioux?
ANSWER: Wounded Knee Massacre (or Battle of Wounded Knee)
(Bonus 17) The Hartford Convention spelled the end of this political party, ten years after the death of one of its most vocal members, Alexander Hamilton. For ten points each,
[Part A] Name this early American political party. It shares its name with a series of "Papers," written by Hamilton with James Madison and John Jay, that argued in favor of the U.S. Constitution.

ANSWER: Federalist Party (accept the Federalist Papers)
[Part B] The only President elected as a Federalist was this rival of Thomas Jefferson, who defeated him in the Election of 1800 .
ANSWER: John Adams (prompt on Adams; do not accept John Quincy Adams)
[Part C] The Federalists lost plenty of public support after the signing of Jay's Treaty with this foreign power.
ANSWER: Kingdom of Great Britain (accept England; do not accept mentions of the United Kingdom (of Great Britain and Northern Ireland))

