Playoff Round 1

First Half

(1) A series of these things are named for Gliese 581 and were highly scrutinized because some of them may be in the Goldilocks zone. The (*) Kepler mission searches for these things and has discovered over 1,000 of them. In February 2017, seven of these things were discovered orbiting TRAPPIST-1. For ten points, name these celestial bodies, of which our Solar System has eight, including Earth.

ANSWER: <u>planets</u> (accept <u>exoplanets</u> and descriptions of <u>planets</u> outside our Solar System before "Solar System" is read)

(1) Carriers of certain genetic disorders are free of symptoms, as a single working copy of the gene in question is enough to prevent some diseases. For ten points each,

Give this term for genetic conditions that arise in genotypes without a dominant allele.

ANSWER: (autosomal) recessive

This recessive genetic disorder stunts growth and causes sweat to be overtly salty. This disorder, abbreviated CF, is somewhat common among Europeans.

ANSWER: cystic fibrosis

Cystic fibrosis fills these organs with a thick mucus, causing difficulty breathing and often leading to pneumonia.

ANSWER: lungs

(2) Edgar Degas [day-GAH] used human hair in a sculpture of one of these people "of fourteen years." Toulouse-Lautrec's paintings of the Moulin Rouge show these people performing the (*) can-can, and in another Degas painting, a group of these people practice in tutus. For ten points, name these performers who move rhythmically to music.

ANSWER: <u>dancers</u> (accept <u>ballerinas</u> until "Moulin Rouge" is read; after "Moulin Rouge" is read, anti-prompt on "ballerina" by asking "could you be less specific?"; accept <u>Little Dancer of Fourteen</u> Years or La petite danseuse de quatorze ans)

(2) For ten points each, give the following about celebratory music.

As of 2015, this 8-bar song by Patty and Mildred Hill is no longer under restrictive copyright protection, and can thus be sung as freely in movies and television as it can at your own annual party.

ANSWER: Happy Birthday To You

Sir Edward Elgar's *Pomp and Circumstance* march was played at one of these ceremonies in 1905, honoring Elgar's honorary doctorate degree; the piece is now traditionally played at these educational celebrations.

ANSWER: <u>graduation</u> ceremonies (accept equivalents, like <u>commencement</u> ceremonies; accept elaborations mentioning any type of school)

This composer of *Messiah* wrote coronation anthems for King George II of Britain, including *Zadok the Priest*, which has been used at every British coronation since.

ANSWER: George Frederic Handel

(3) A presepe, a tradition associated with this holiday, was established by St Francis of Assisi, who used a cave to depict the nativity. This holiday is the first day of twelve that lead up to Epiphany, and this holiday is preceded by (*) Advent. In modern times, this holiday is celebrated with gift-giving and decorated trees. For ten points, name this Christian holiday that celebrates the birth of Jesus on December 25.

ANSWER: Christmas Day

(3) This god was one of the children of Geb and Nut. For ten points each,

Name this green-skinned Egyptian god of the dead.

ANSWER: Osiris (accept Usiris; accept Aser)

Osiris became the god of the underworld after this god, Osiris's brother, tricked him into being trapped inside a box. Afterward, this god dismembered Osiris and scattered his body parts across Egypt.

ANSWER: Set (or Seth; accept Setesh, Sutekh, or Suty)

This daughter of Geb and Nut, the sister-wife of Osiris, put thirteen of Osiris's fourteen parts back together, allowing him to father this goddess's son, Horus, and become king of the dead.

ANSWER: Isis (accept Aset; accept Ese)

(4) After this man was asked to trade his captured son for Friedrich Paulus, this man responded "I will not trade a marshal for a lieutenant." This man consolidated his power with the Great (*) Purge and the exile and murder of Leon Trotsky. This member of the Big Three met with the other Allied leaders, Winston Churchill and Franklin Roosevelt, at Yalta. For ten points, name this leader of the Soviet Union in World War II.

ANSWER: Joseph Vissarionovich Stalin (accept Josef Besarionis Jughashvili)

(4) This body includes more than 1,450 members in two houses, one of which is selected by popular election and one of which is appointed from the nobility. For ten points each,

Name this legislative body of the United Kingdom.

ANSWER: <u>Parliament</u> (accept elaborations, like UK <u>Parliament</u>, British <u>Parliament</u>, etc.; prompt, but do not otherwise reveal, responses of "Houses of Lords and Commons" in either order; do not accept or prompt if only one of those houses is named)

Name either the lower or upper house of British Parliament.

ANSWER: House of Commons and/or Lords

The Houses of Parliament have been attacked several times in history, including a failed 1605 plot to set off barrels of gunpowder stockpiled under the House of Lords. The plot failed when this man was captured while guarding the gunpowder.

ANSWER: Guy Fawkes

(5) This collection includes a story in which one of King Arthur's knights learns what women want, and one in which three brothers try to cheat death, as told by a Pardoner. On the way to the shrine of Thomas Becket, this collection's characters stop at the (*) Tabard Inn and trade stories in Middle English. For ten points, name this collection by Geoffrey Chaucer, which is presented as the stories that the Wife of Bath, a Knight, and other pilgrims tell each other.

ANSWER: The Canterbury Tales

(5) This poem's speaker suspects that his "little horse must think it queer / to stop without a farmhouse near" when the speaker wants to watch the "woods fill up with snow." For ten points each,

Name this poem, which takes place "on a Snowy Evening" during which the speaker "has miles to go" before he sleeps.

ANSWER: **Stopping by Woods** on a Snowy Evening

"Stopping by Woods on a Snowy Evening" is by this American poet with a chilly surname. This author also wrote about a pair of paths that "diverge in a yellow wood" in "The Road Not Taken."

ANSWER: Robert Lee Frost

In another Frost poem, the speaker contemplates two methods of world destruction, and concludes that, while fire is very damaging, "for destruction" this cold substance "is also great / and would suffice."

ANSWER: ice (accept Fire and Ice)

(6) Causes of this disease may include problems with acetylcholine synthesis and the creation of "tau-tangles." The build-up of beta-amyloid plaques in the (*) brain is also blamed for this disease, though the root cause is believed to be genetic. Speech problems, confusion, and memory loss are symptoms of, for ten points, what common form of dementia that affects more than five million Americans over the age of 65?

ANSWER: **Alzheimer**'s disease (prompt on dementia before mentioned)

(6) This body was surrounded by Panthalassa, a superocean. For ten points each,

Name this body, which broke apart beginning roughly 175 million years ago. This landmass was the most recent instance of the Earth's continents, as we know them, having been connected in one supercontinent.

ANSWER: Pangaea

These preserved remains of animals and plants can provide evidence for Pangaea's existence. For example, mineralized bones of the mesosaurus have been found in South Africa and Argentina.

ANSWER: fossils

Pangaea's breakup occurred when this smaller supercontinent broke off from Laurasia. This landmass included modern South America, Africa, and the Indian subcontinent.

ANSWER: Gondwanaland

(7) A John Trumbull work named for this document shows the Committee of Five in front of Charles Thomson. This document shows the "sufferance of the colonies" by listing the actions of (*) George III. The second section of this document states that "all men are created equal." John Hancock imposed a large signature upon, for ten points, what document which established American's intent to break away from the British Empire?

ANSWER: The Declaration of Independence

(7) This country funded Vasco da Gama's expedition, which became the first European sea venture to reach India, and it colonized what are now the African countries of Mozambique and Angola. For ten points each,

Name this European country, which also ruled Macau from 1557 to 1999, when it gave control to China.

ANSWER: Portgual

The Portuguese colony of Macau lies about 40 miles west of this former British colony, which was returned to China in 1997. This autonomous territory, now a prominent financial center, is governed by the "one country, two systems" policy.

ANSWER: Hong Kong

Macau and Hong Kong sit on the delta of a river named for this precious object. They can be farmed from oysters for use as jewelry.

ANSWER: **pearl**s (accept **Pearl** River)

Sixty Second Rounds

The categories are ...

- 1. Rudyard Kipling
- 2. Chief Justices
- 3. Birds
- 4. A "Cow-Eyed" Goddess

RUDYARD KIPLING

In the works of English author Rudyard Kipling, who or what is...

(1) the title of his collection of short stories about a "man-cub" growing up in the wilds of India?

ANSWER: The $\mathbf{Jungle}\ \mathbf{Book}$

(2) the name of that "man-cub," who is raised by wolves with the help of the panther Bagheera?

ANSWER: Mowgli

(3) the wise old bear who also helps raise the "man-cub?"

ANSWER: Baloo

(4) the arrogant tiger who wants to control the jungle by killing the "man-cub?"

ANSWER: Shere Khan

(5) the kind of animal that Toomai keeps, and that Hathi, the keeper of Law, is?

ANSWER: Indian elephant

(6) the devious python that hypnotizes Bagheera and the bear until they are freed by the "man-cub?"

ANSWER: Kaa

CHIEF JUSTICES

Name the...

(1) American judicial body led by the Chief Justice, according to Article 3 of the Constitution.

ANSWER: Supreme Court of the United States

(2) Maximum number of associate justices who can serve with the Chief Justice at any given time.

ANSWER: 8

(3) Current Chief Justice, who succeeded William Rehnquist in 2005.

ANSWER: John Roberts

(4) First Chief Justice of the U.S. and co-author of the Federalist Papers.

ANSWER: John **Jay**

(5) Longest-serving Chief Justice in history, whose decision in *Marbury v. Madison* established judicial review.

ANSWER: John Marshall

(6) Former Governor of California who wrote the unanimous opinion in 1954's $Brown\ v.\ Board\ of\ Education.$

ANSWER: Earl Warren

BIRDS

Name the...

(1) Tropical birds, including macaws, known for intelligence and ability to imitate human speech.

ANSWER: parrots

(2) Type of passerine bird whose beaks were studied by Darwin in the Pacific?

ANSWER: (Darwin's) finches (accept, but do not otherwise reveal, Galapagos finches)

(3) Island group where Darwin studied those birds?

ANSWER: Galapagos Islands

(4) Relative of the ostrich that is the largest bird native to Australia.

ANSWER: emus

(5) Oceanic bird that has the largest wingspan of any bird.

ANSWER: great albatross

(6) North American bird, similar to a mourning dove, whose population of billions was eradicated in the 19th century.

ANSWER: passenger pigeon (prompt on pigeon)

A "COW-EYED" GODDESS

In relation to a "cow-eyed" Greek goddess, who or what is...

(1) the goddess's name? She was the wife of Zeus.

ANSWER: Hera

(2) the goddess's son with Zeus, who was the Greek god of war?

ANSWER: Ares

(3) the goddess's deformed son, who was made the god of blacksmithing?

ANSWER: Hephaestus

(4) the goddess's mother, who saved Zeus from being eaten by Cronos?

ANSWER: Rhea

(5) the brightly-colored bird who was the goddess's symbol?

ANSWER: **peacock** (accept **peafowl**)

(6) the prince who judged that Aphrodite was more beautiful than the goddess in a dispute over a golden apple?

ANSWER: Paris of Troy

Second Half

(8) This novel begins with a theft at Judge Miller's house. Hal, Charles, and Mercedes die in this novel when they try to cross a frozen river, leaving the protagonist with Thornton, who is killed by native Americans in the (*) Yukon. For ten points, name this Jack London novel in which Buck stops being a sled dog to become the leader of a wolf pack, contrasted with White Fanq.

ANSWER: The Call of the Wild

(8) This character was loosely inspired by the real-life story of Alexander Selkirk, who was marooned in the South Pacific. For ten points each,

Name this title character of a 1719 novel by Daniel Defoe. He is shipwrecked near Trinidad, but survives nearly 30 years before being rescued.

ANSWER: Robinson Crusoe (accept either or both names)

Several years into his ordeal, Robinson Crusoe saves this escaped native, then teaches him English and converts him to Christianity. Crusoe names this man for the day of the week on which he was found.

ANSWER: Friday

Until he escaped, Friday was held prisoner by natives who planned to subject him to this deadly fate. Other literary characters who plan to do this to their prisoners include the witch in "Hansel and Gretel."

ANSWER: <u>eat</u> him/them (accept any reasonable equivalent description; accept answers relating to cannibalism)

(9) The founder of this restaurant chain, Mike Ilitch, secretly paid for Rosa Parks' apartment for over a decade after she was robbed in 1994. Ilitch, who died in February 2017, owned this restaurant chain as well as the Detroit Tigers and Red Wings. This restaurant, which advertised using the catchphrase (*) "Pizza! Pizza!", now offers "Hot-n-Ready" carryout pizzas. For ten points, name this national pizza chain represented by a Roman mascot.

ANSWER: Little Caesars

(9) Answer some questions about the NFL's most explosive 2016 rookies for ten points each.

The top two vote-getters for Offensive Rookie of the Year were Ezekiel Elliot and Dak Prescott, the running back and quarterback for this NFL team. Prescott won the award for his performance replacing Tony Romo.

ANSWER: Dallas Cowboys (accept either underlined portion)

This San Diego Charger defensive end won Defensive Rookie of the Year, despite a contractual dispute and an injury causing him to miss his first four games.

ANSWER: Joey Bosa

Ezekiel Elliot and Joey Bosa both played for this Midwest college football powerhouse. In the 2016 playoffs, this rival of Michigan lost 31 to 0 against the eventual champion Clemson Tigers.

ANSWER: The **Ohio State** University (accept **OSU**)

(10) This city's Sidi Yahya, Djinguereber [jing-ah-ray-ber] Mosque, and University of Sankore served as a vital madrassah system. In 1324, Mansa Musa brought this city into his empire, but it declined in the 17th century as other trade routes grew and its scholars left. By the 19th century, European travel societies offered prizes for (*) adventurers who returned with information about this city. For ten points, name this city in Mali, most commonly known for being allegedly impossible to reach.

ANSWER: Timbuktu

(10) The Lorelei rock lies on the bank of this river and, according to legend, was home to a siren who caused ships on this river to crash. For ten points each,

Name this European river that forms borders between Switzerland and three other countries. Its mouth is on the North Sea.

ANSWER: Rhine River

The Rhine also forms part of the border between France and this country, whose capital is Berlin.

ANSWER: Germany

The Rhine passes near this region of southwest Germany. This mountainous forest is home to the source of the Danube River.

ANSWER: Black Forest

(11) According to a false legend, this man's doctoral work is responsible for the standard that vodka be made with 40% alcohol. This man introduced the prefixes eka- and dvi- to indicate his predictions for new (*) elements, one of which was later confirmed to be germanium; those predictions were placed in holes where no known element would fit. For ten points, name this 19th-century Russian chemist who devised the first periodic table of the elements.

ANSWER: Dmitri Mendeleev

(11) This material is brittle when cold and easily deformed when warm, so it's usually cured or subjected to other treatments before it can be used in car tires. For ten points each,

Name this isoprene-based material harvested from tropical trees.

ANSWER: rubber

Rubber can be made more durable by this process, developed by Charles Goodyear in the 19th century.

ANSWER: vulcanization (accept word forms)

The most common method of vulcanization involves treating the rubber with compounds of this element at high temperatures. This element appears just below oxygen in group 16 of the periodic table and has atomic symbol S.

ANSWER: sulfur

(12) Three days after England took this action, a prominent advocate for it named William Wilberforce died. In 1981, Mauritania became the last country to take this action, while Brazil did this via the (*) Golden Law in 1888. William Lloyd Garrison advocated for this action with his newspaper *The Liberator*. For ten points, name this action, partially accomplished in the U.S. by Abraham Lincoln's Emancipation Proclamation.

ANSWER: <u>ending slavery</u> (accept word forms and equivalents, such as <u>freeing slaves</u>; prompt on abolition and word forms; prompt on emancipation before mentioned)

(12) The "Silent Sentinels" protested for this cause in front of the White House in 1917; some of them were arrested, went on a hunger strike in prison, and were subjected to force feeding and beatings. For ten points each,

Name this political goal sought by suffragettes like Elizabeth Cady Stanton and achieved by a Constitutional amendment that was ratified in 1920.

ANSWER: women's right to vote

This Constitutional amendment guaranteed women's suffrage throughout the U.S.

ANSWER: 19th Amendment

This activist died in 1906, well before the amendment passed. In 1872, this figure was arrested for voting in Rochester, New York, her hometown; she refused to pay the \$100 fine.

ANSWER: Susan B. Anthony

(13) This two-dimensional shape is defined as having an eccentricity between 0 and 1. As long as a and b aren't equal, this shape can be graphed by the equation a x squared plus b y squared equals 1. This conic section features two (*) focuses, rather than a single central point as seen in a circle. A long string pinned in two places can trace out, For ten points, what shape, similar to an oval, that is the path taken by planets orbiting the Sun?

ANSWER: ellipse

(13) This term is often used in trigonometry to describe equations that are true, no matter what values are input for the variables. For ten points each,

Give this mathematical term. It's more commonly learned in algebra as a number that doesn't affect other numbers, like 0 within addition.

ANSWER: identity (accept trigonometric identity, additive identity)

This number is the multiplicative identity, because any number times this number equals the original number.

ANSWER: 1

Numbers aren't the only things to have identities; these rectangular arrays of numbers can also be multiplied, and can therefore have an identity - but only if it's a perfect square shape.

ANSWER: matrix (accept word forms and elaborations, like square matrices)

(14) These works were judged at a festival called the City Dionysia, whose 5th century BC winners included Aeschylus [esk-uh-luss]. A set of three of these works by (*) Sophocles tell the story of Oedipus [ed-ih-pus]. These literary works involve a group called a chorus that provides narration and often wear masks. For ten points, name this type of performance, classified into comedy and tragedy, involving ancient Greek actors.

ANSWER: ancient Greek plays (accept tragedy; accept comedy before Sophocles is read)

(14) Robert Burns wrote about one of these objects "that's newly sprung in June." For ten points each,

Name this flower. Burns writes that "my love is like a red, red" one of these flowers. Another poem declares that "he that dares not grasp the thorn" should never seize this flower.

ANSWER: rose (accept My Love is Like a Red, Red Rose)

This man wrote "I have seen roses damasked red and white / but no such roses see I in her cheeks" in the sonnet "My mistress' eyes are nothing like the sun." This man's signature Elizabethan sonnets also include "Shall I compare thee to a summer's day?"

ANSWER: William Shakespeare

Robert Herrick's poem "To the Virgins, to Make Much of Time" begins by commanding the young to "gather ye rosebuds while ye may," and is a classic example of this poetic movement, whose name is Latin for "seize the day."

ANSWER: carpe diem

Extra Question

Only read if you need a backup or tiebreaker!

(15) This shape names a coordinate system that pairs the polar coordinates r and theta with a z-coordinate for height. The surface area of one of these shapes is found by adding a pair of "pi r squared" terms and a "2 pi r h" term, and the volume of this shape is exactly three times that of a (*) cone with the same height and radius. For ten points, name this geometric shape, commonly composed of a rectangular side wrapped around two circular bases, as constructed in soup cans.

ANSWER: cylinder (accept word forms, such as cylindrical (coordinates))

(15) Give the following about blowing things up *scientifically* for ten points each.

This type of redox reaction involves an oxidant reacting with a fuel, often creating smoke and fire. This process takes place internally in car engines.

ANSWER: combustion (accept internal combustion engine)

Complete combustion involves enough oxygen to react with the fuel completely; when hydrocarbons like methane, or CH_4 , undergo complete combustion, these two common gases are the only products.

ANSWER: <u>carbon dioxide and water</u> (or $\underline{CO_2}$ and $\underline{H_2O}$; accept in either order; prompt if only one given)

Combustion can occur spontaneously if a material self-heats beyond the ignition point; this commonly occurs with hay, coal, and deposits of this lustrous mineral often known as fool's gold.

ANSWER: iron **pyrite**