## Round 3

## First Half

(1) A scandal called "Squidgygate" involved this figure, who walked through a minefield in Angola. This former royal underwent a highly-publicized divorce from her husband, the Prince of Wales, in (*) 1996. Her death in the Pont de l'Alma tunnel was found not to be caused by pursuing paparazzi. For ten points, name this first wife of Prince Charles, an English princess who was killed in a 1997 car crash.

ANSWER: Diana, Princess of Wales (prompt on Di)
(1) This man attempted to take power during the Beer Hall Putsch. For ten points each,

Name this dictator who ruled Germany until his suicide in 1945.
ANSWER: Adolf Hitler
The failed Beer Hall Putsch took place in this German city.
ANSWER: Munich
Once Hitler's Nazi Party gained power, it maintained order with this secret police, a one-time subunit of the SS created by Hermann Göring.

ANSWER: Gestapo (or Geheime Staatspolizei)
(2) In 2014, during this man's annual question and answer television marathon, Edward Snowden asked him if this leader's country stores private communications. This leader, who supported a 2013 bill banning the rainbow flag and authorized the annexation of (*) Crimea in 2014, traded the roles of Prime Minister and President in 2008 and 2012 with Dmitry Medvedev. For ten points, name this former KGB officer, the current President of Russia.

ANSWER: Vladimir Putin
(2) John Maynard Keynes argued that this quantity goes through natural cycles of highs and lows and that the government should intervene to keep this rate low during recessions, when it tends to rise. For ten points each,

Name this economic quantity that represents the amount of people trying, but unable, to find work.
ANSWER: unemployment rate
The Phillips Curve describes the inverse relationship that unemployment has with this quantity, the general increase in the price of goods over time.

ANSWER: inflation
The goals of this central bank of the U.S. include maximizing employment and keeping inflation under control. Janet Yellen currently chairs this organization.

ANSWER: Federal Reserve (System)
(3) This literary work's protagonist hangs from a fig tree to avoid the pull of the whirlpool Charybdis. In this work, Calypso's lover ties himself to his ship's mast to resist the (*) sirens' call, and he claims to be "nobody" to trick a cyclops while on his way back to Ithaca. For ten points, name this epic poem by Homer about a Greek hero's ten-year voyage home from the Trojan War.

ANSWER: The Odyssey
(3) This poems begins, "Once upon a midnight dreary," and its speaker can't forget about Lenore. For ten points each,

Identify this poem whose narrator asks the title bird "is there balm in Gilead?" The title bird perches itself "upon a bust of Pallas" and replies, "Nevermore."

ANSWER: The Raven
This American author of "The Raven" wrote about a maiden who lives "in a kingdom by the sea" in "Annabel Lee."

ANSWER: Edgar Allan Poe
This Poe poem describes objects that "tinkle, tinkle, tinkle / In the icy air of night!" Poe also described the "rhyming and the chiming" of this poem's title musical objects.

ANSWER: The Bells
(4) The man who invented this piece of laboratory equipment worked with Peter Desaga to design lab lighting for the University of Heidelberg. This equipment creates a non-luminous, soot-less single (*) heat source by allowing oxygen through throat holes and pushing gas through a needle valve, and it is ignited with a flint striker. For ten points, name this piece of lab equipment used for heating, named after a German chemist.

## ANSWER: Bunsen burner

(4) This form of dementia is believed to be triggered by malfunctioning tau proteins in the brain. For ten points each,

Name this neurodegenerative disease, whose early stages are marked by memory loss and are often indistinguishable from the normal process of aging.

ANSWER: Alzheimer's disease
Alzheimer's disease, like arthritis and diabetes, is this type of persistent condition, contrasted with acute diseases.

ANSWER: chronic diseases
If tau protein accumulation is not the cause of Alzheimer's, it may be the buildup of these amyloid beta deposits. In dentistry, this term also refers to a filmy mass that attaches to teeth and, if not controlled via brushing and flossing, can form tartar or allow the creation of cavities.

ANSWER: plaque (accept senile plaque or dental plaque)
(5) This god lives on Mount Kailash and he holds a drum when he is represented as the dancing god Nataraja. This god drank the poison Halahala, which turned his throat blue, and his (*) third eye burns everything it sees. This god rides the bull Nandi and is the father of the elephant-headed god, Ganesha, with his consort, Parvati. For ten points, the Hindu Trimurti consists of Brahma, Vishnu, and what destroyer god?

ANSWER: Shiva (or Siva)
(5) This mythological realm contains Tartarus and Elysium. For ten points each,

Name this Greek underworld, which shares its name with the god who rules it.
ANSWER: Hades
Hades contains this river, whose water makes people invulnerable. Achilles' mother held him by his heel while she bathed him in this river.

ANSWER: Styx
The entrance to the underworld is guarded by this creature, who is usually represented as a three-headed dog.

ANSWER: Cerberus
(6) In 1967, Benoit Mandelbrot noted that this mathematical quantity does not exist for Great Britain, an idea called the coastline paradox. For a regular hexagon with radius 1 unit, this quantity is 6 units. The analogous quantity for three-dimensional shapes is the (*) surface area, and circles and ellipses have, rather than this quantity, a circumference. For ten points, give this term for the length of the path around a two-dimensional shape.

ANSWER: perimeter (accept circumference before "hexagon")
(6) The Super Bowl temporarily suspended its use of this system for its golden anniversary - apparently, because nothing says "loser" like "I won Super Bowl L". For ten points each,

Name this numeral system, notably used in inscriptions on the Colosseum, in which the letter C represents one hundred.

ANSWER: Roman numerals
Grandfather clocks often use a set of four Is to indicate the numeral for 4 , but in proper Roman numerals, this two-letter form represents 4.

ANSWER: IV
In the traditional seven-letter Roman numeral system, large numbers like 5,000 can be formed by writing the numeral for 5 with a vinculum, which is this type of marking. In geometry, writing this with relation to the letters "AB" indicates the line segment connecting A and B.

ANSWER: a bar above the letters (accept any description of writing a line on top of the letters or Roman numerals)
(7) This artist painted a self-portrait in St Bartholomew's flayed skin in a fresco called The Last Judgement, and used scaffolding to paint The Creation of Adam. This Italian sculpted the Virgin Mary cradling Jesus in (*) Pièta, and created a marble sculpture of a relaxed young man with a slingshot resting on his shoulder. For ten points, name this Italian artist who sculpted David and painted the Sistine Chapel ceiling.

ANSWER: Michelangelo di Lodovico Buonarroti Simon (accept either underlined name)
(7) One of these musical works was used as the theme song to Monty Python's Flying Circus, and according to legend, playing another one of these works in an actual circus is code to evacuate. For ten points each,

Name this genre of music that uses a regular rhythm, often to allow military formations to walk in time.
ANSWER: march
This American "March King" composed the "Stars and Stripes Forever," "Washington Post," and "Liberty Bell" marches.

ANSWER: John Philip Sousa
While the "Washington Post" march was written in $6 / 8$ [six-eight] time, "The Stars and Stripes Forever" was instead written in this time signature in which the half note receives one beat.

ANSWER: $\underline{\mathbf{2} / \mathbf{2}}$ time (or cut time)

## Halftime

The categories are ...

1. Literary Locations
2. Presidential Jobs
3. Periodic Table
4. Prophecies

Literary Locations
What novel is set in...
(1) a Transylvanian castle ruled by a vampire?

ANSWER: Dracula
(2) the Emerald City and a countryside terrorized by the Wicked Witch of the West?

ANSWER: The Wizard of $\underline{\mathrm{Oz}}$ (accept The Wonderful Wizard of $\mathbf{O z}$ )
(3) a business owned by Willy Wonka that is toured by the holders of five golden tickets?

ANSWER: Charlie and the Chocolate Factory
(4) a deserted island where children such as Ralph and Piggy crash land?

ANSWER: Lord of the Flies
(5) a farm on Prince Edward Island which is home to Matthew and Marilla Cuthbert?

ANSWER: Anne of Green Gables
(6) the ancestral manor Thrushcross Grange and the title home of Heathcliff?

ANSWER: Wuthering Heights

Presidential Jobs
Which American president was formerly...
(1) a Supreme Commander of Allied Forces in World War II?

ANSWER: Dwight "Ike" Eisenhower
(2) a successful peanut farmer before becoming a Georgia state senator?

ANSWER: James "Jimmy" Carter
(3) a judge in Jackson County, Missouri, and a Vice President under FDR?

ANSWER: Harry Truman
(4) a law professor at the University of Chicago?

ANSWER: Barack Obama
(5) Director of the CIA 25 years before his son became President?

ANSWER: George H.W. Bush (accept George Bush, Senior; accept Bush 41)
(6) Secretary of Commerce under President Coolidge?

ANSWER: Herbert Hoover

## Periodic Table

Answer these questions about the periodic table.
(1) What is the atomic symbol for oxygen?

ANSWER: $\mathbf{O}$
(2) The periodic table is ordered by what quantity, which is 6 for carbon?

ANSWER: atomic number (accept number of protons in the nucleus)
(3) Common table salt is a compound of chlorine and what alkali metal in the first group of the periodic table?

ANSWER: sodium (or $\underline{\mathrm{Na}}$ )
(4) What second-furthest-right group on the periodic table contains iodine and fluorine?

ANSWER: halogens (or Group 17)
(5) What Russian developed the first periodic table?

ANSWER: Dmitri Mendeleev [men-dell-ay-ehv]
(6) The elements in that first periodic table were organized in increasing values of this quantity.

ANSWER: atomic mass (accept mass number; accept weight in place of mass)

## Prophecies

What Abrahamic prophet...
(1) received messages from a burning bush?

ANSWER: Moses (or Moshe or Musa)
(2) received the Quran from the angel Jibreel?

ANSWER: Muhammad
(3) foretold the coming of Christ and baptized him in the Jordan River?

ANSWER: Saint John the Baptist (prompt on "John")
(4) translated the Book of Mormon from a pair of golden plates?

ANSWER: Joseph Smith, Jr
(5) interpreted the writing on the wall and survived a den of lions?

ANSWER: Daniel (or Danel)
(6) was taken to heaven in a chariot of fire in front of his disciple, Elisha?

ANSWER: Elijah

## Second Half

(1) After two of this man's ambassadors were shaved, and another beheaded, this man launched a brutal campaign against the Khwarezmid [k'war-ehz-mid] Empire. This man's successor established Karakorum as the capital of his empire after a disagreement between (*) Chagatai and Jochi, another two of this man's sons. Ogedei succeeded, for ten points, what ruler who united the Mongol tribes as the first Khan?

ANSWER: Genghis Khan (accept Chingus Khan; or Temujin)
(1) This event took place near a grassy knoll in Dallas on November 22, 1963. For ten points each,

Lyndon B. Johnson became President after what event, in which John Connally was wounded and the 35th President was killed?

ANSWER: assassination of John Fitzgerald Kennedy (or of JFK)
John F. Kennedy was killed by this man, a former Marine and defector to the Soviet Union, who fired three shots from the Texas School Book Depository.

ANSWER: Lee Harvey Oswald
While being escorted out of police headquarters two days later, Lee Harvey Oswald was killed by this nightclub owner.

ANSWER: Jack Leon Ruby (or Jack Leon Rubenstein)
(2) In one of this author's novels, Proginoskes helps Calvin O'Keefe save a child prodigy from a genetic disorder. A Wind in the Door and A Swiftly Tilting Planet, are sequels to this author's novel in which Mrs (*) Who, Mrs Which, and Mrs Whatsit use a tesseract to bend space-time and help Charles Wallace and his sister, Meg Murry, save their scientist father. For ten points, name this American author of $A$ Wrinkle in Time.

ANSWER: Madeleine L'Engle
(2) This novel is often contrasted with its author's novel White Fang, as White Fang transforms from a wolf to a dog, and this novel's protagonist transforms from a dog to a wolf. For ten points each,

Name this novel in which the dog Buck kills Yeehat Indians to avenge the death of his owner Jack Thornton.

ANSWER: The Call of the Wild
This American author wrote Call of the Wild.
ANSWER: Jack London
Many of Jack London's stories, including the short story "To Build a Fire," are set in Alaska and this Canadian region, which was the site of the Klondike Gold Rush.

ANSWER: Yukon Territory
(3) The Great Plain of the Koukdjuak is dominated by this biome, where birds like the arctic tern migrate to this biome's marshes. This biome is virtually treeless because of its low rainfall and short growing season. Plants cannot grow deep (*) roots in this biome because of the layer of permafrost under the topsoil, so this biome is dominated by lichens. For ten points, name this biome with Alpine, Arctic, and Antarctic varieties, often located near taigas.

ANSWER: tundra
(3) For ten points each, answer the following about what happens when the Sun shines on a green leaf.

We see the leaf as green because some of the light has undergone this phenomenon and bounced off of the leaf. Mirrors exhibit the specular form of this phenomenon, in which a wave approaches and leaves the surface at equal angles.

ANSWER: reflection
When chlorophyll pigments in plants reflect only green light, this phenomenon occurs to all other wavelengths of visible light; that is, the energy at non-green wavelengths enters the leaf.

## ANSWER: absorption

When light is absorbed in photosynthesis, these quantized particles of light enter the cell, triggering electron transfer within chlorophyll.

ANSWER: photons
(4) In January 2015, Twitter users proposed that this musician would make Paul McCartney famous after they collaborated on the song "Only One." In a charity appearance with Mike Myers after Hurricane Katrina, this man declared that (*) "George Bush doesn't care about black people." In 2014, Pitchfork announced the "best album of the decade so far" was this man's My Beautiful Dark Twisted Fantasy. For ten points, name this rapper of Yeezus who released The Life of Pablo on Tidal in 2016.

ANSWER: Kanye Omari West (accept either underlined name)
(4) Identify some World War II developments related to popular sweet treats, for ten points each.

This soda company, headquartered in New York, adopted its red, white, and blue logo in 1941 to show support for American troops in World War II.

ANSWER: Pepsi-Cola
These candy-coated chocolates were sold only to the military in World War II, since they "melt in your mouth, not in your hand" and allowed servicemen to carry them easily in their rations.

ANSWER: M\&M's
"D Ration" chocolate issued to the military in World War II was designed by the founder of this chocolate company.

ANSWER: Hershey Chocolate Company (accept Hershey's)
(5) This character first appears as an infant in The Little White Bird, and he adopts Jane as his mother after Wendy Darling grows up. This character saves Tiger Lily in Mermaid Lagoon, and spares Mr (*) Smee when he battles pirates while saving the Lost Boys in Neverland. For ten points, J. M. Barrie wrote about this flying boy, who is aided by Tinkerbell in his struggles with Captain Hook.

ANSWER: Peter Pan (accept either underlined name)
(5) Identify the following literary devices from the Robert Burns poem "My Love is Like a Red, Red Rose," for ten points each.

The poem compares the speaker's love to a "red, red rose" and "a melodie / that's sweetly play'd in tune" using this type of figurative language. Unlike a metaphor, this type of figurative language uses "like" or "as" to make a comparison.

ANSWER: simile
The opening line of "My Love is like a Red, Red Rose" uses this literary device, in which the first consonant of several words is the same.

ANSWER: alliteration (prompt on "consonance")
The poem's speaker claims, "I will love thee still, my dear / 'til a' the seas gang dry." This is an example of what literary device, in which something is drastically overstated to emphasize a point?

ANSWER: hyperbole
(6) These structures are covered by the sepal. Types of these organs are classified as dicots or monocots, and they fall away as the receptacle and ovule in angiosperms grow into (*) fruit. The stamen and pistil are the male and female structures found in these plant organs, which contain pollen or nectar to attract pollinators like bees. For ten points, name these colorful parts of plants, which are composed of petals.

ANSWER: flowers (prompt on "petals" before it is read)
(6) Mixtures of a solid and a liquid can be separated by physical processes. For ten points each,

A dissolved solid can be recovered from a liquid by this process, in which the mixture is heated and the solvent becomes a vapor, leaving the solid behind.

ANSWER: boiling
After boiling, the solvent vapors can flow through a condenser surrounded by cold water to re-form the liquid in this process. This process can also be used to separate two mixed liquids if they have different boiling points.

ANSWER: distillation (accept word forms)
If the solid has been precipitated out, one can use this method, using special paper and a Buchner [byook-ner] funnel, to separate the solid and the liquid.

ANSWER: filtration (accept word forms describing use of a filter)
(7) This man took a stance against Jews in his newspaper The Dearborn Independent, leading to him being quoted in Adolf Hitler's writings. The heavily criticized Edsel was produced by this man's company. He attracted workers by doubling his wages to five (*) dollars per day, and he pioneered the use of an assembly line to produce the Model T. For ten points, name this American who founded a namesake motor company that rivals General Motors.

ANSWER: Henry Ford
(7) Sir George Pearce authorized a "war" against these animals to aid Australian farmers. For ten points each,

Name this second-largest flightless bird in the world, after the ostrich.
ANSWER: emus (accept (Great) Emu War)
Many soldiers in the Emu War had previously served as part of this World War I unit, which fought at Gallipoli. The name of this unit references both Australia and New Zealand.

ANSWER: $\underline{\text { ANZAC ( }}$ (or Australian and New Zealand Army Corps)
Mustafa Kemal's forces defeated the ANZAC troops in the Gallipoli campaign, which was fought in this modern-day country with capital Ankara.

ANSWER: Republic of Turkey

## Extra Question

Only read if you need a backup or tiebreaker!
(1) This term, derived from the Greek for "wanderer," describes creatures that are not nektonic or benthic. "Mero" ones only belong to this group of animals when they are larval, and "phyto" ones include cyanobacteria, or blue-green (*) algae. They travel in water columns because they are too small to swim against currents. For ten points, name these tiny organisms that provide much of the diet of krill and, indirectly, baleen whales.

ANSWER: plankton (do not accept "krill")

