Round 5

# First Half

(1) **To gain this position, a ruler converted to Catholicism, supposedly saying that his new capital city was “well worth a Mass.” A civil war known as the Fronde broke out against this position when its holder was only ten years old and power was instead held by Anne of Austria and** (\*) Cardinal Mazarin. Another holder of this position was executed nine months before his wife, Marie Antoinette, also met the guillotine. For ten points, name this royal position, held for 72 years by Louis XIV.

ANSWER: **King of France** (accept **monarch of France**; prompt on partial answers, like “king” or “ruler of France;” do not accept Queen of France)

(1) This river is known as the Chang Jiang, which appropriately translates as “Long River;” its common name in the West actually refers just to a lower section beginning at Nanjing. For ten points each,

Name this river, on which the Three Gorges Dam was built.

ANSWER: **Yangtze** River

The Yangtze is the longest river in this country, the most populous country in Asia and, indeed, the world. ANSWER: People’s Republic of **China**

The Yangtze River drains into the East China Sea; this large city of more than 24 million people lies on the Yangtze’s delta.

## ANSWER: **Shanghai**

**(2) This number is multiplied by i in the exponent in Euler’s [oiler’s] identity, often cited as the most beautiful formula in mathematics. This number is multiplied by (\*)** four-thirds, as well as the cube of the radius, in the formula for the volume of a sphere. This constant is defined as the ratio between the circumference and diameter of any circle. For ten points, name this mathematical constant approximately equal to 3.14.

ANSWER: **pi**

(2) For ten points each, give the following about non-linear functions.

A polynomial is linear if its degree is greater than this number. Put another way, a function can graph a line only if the highest exponent is this value.

ANSWER: **1**

If the degree is 2, as in y equals a x squared plus b x plus c, the polynomial is this type of function. A namesake, commonly memorized formula can find the roots of that function.

ANSWER: **quadratic** (function, polynomial, formula, etc.)

The functions studied in this branch of mathematics, like sine and cosine, are definitely not linear; they’re periodic waves instead.

ANSWER: **trig**onometry (accept word forms, like **trig**onometric functions)

(3) **One holder of this position stutters “N-not that you n-need it, eh?” when explaining this job to the protagonist in the Leaky Cauldron. This position has been reassigned annually since Tom (\*)** Riddle was denied this job, and its holders have included Barty Crouch, Dolores Umbridge, and Gilderoy Lockhart. For ten points, name this educational position at Hogwarts that teaches wizards like Harry Potter how to protect themselves from evil magic.

ANSWER: **Defense Against the Dark Arts Professor** at Hogwarts (prompt on partial answers)

(3) The fictional historian “Diedrich Knickerbocker” describes a local legend about this man, who must race back each morning to reach the grave where most of him is buried.

For ten points each, Name this literary character, the ghost of a Hessian soldier who rides around Sleepy Hollow searching for his head in an early American short story.

## ANSWER: The **Headless Horseman**

In the short story “The Legend of Sleepy Hollow,” Brom Bones warns this long-legged schoolteacher about the Headless Horseman, who abducts this man as he leaves Katrina von Tassel’s house.

ANSWER: **Ichabod Crane** (accept either underlined name)

“The Legend of Sleepy Hollow” is by this American author, who included both that story and “Rip van Winkle” in The Sketchbook of Geoffrey Crayon.

ANSWER: Washington **Irving**

(4) **One composer from this country built an opera house at Bayreuth [bye-royt] to host his own works. This country names a 19th century Requiem written using the (\*)** Luther Bible instead of a Latin text. A composer born in what is now this country was commissioned by a Margrave to write the Brandenburg Concertos. The Ring Cycle was composed in, for ten points, what home country of Richard Wagner [vahg-ner], Johann Sebastian Bach, and Johannes Brahms?

ANSWER: **Germany**

1. This material is commonly used in religious buildings like mosques and churches, since metal salts give this material a variety of vibrant colors. For ten points each,

Name this translucent artistic material. When this material is used to create windows that show patterns or religious scenes.

ANSWER: **stained glass** (prompt on “art glass”)

Gothic cathedrals often contain one of these massive stained glass windows, whose pattern of concentric segments mimic the petals of a namesake flower.

ANSWER: **rose** window (accept **Catherine** window)

This artist worked primarily with stained glass, and used his copper foil framing technique to create church windows, jewelry, and stained glass lampshades.

ANSWER: Louis Comfort **Tiffany**

1. **In Aztec mythology, Quetzalcoatl was a serpent covered in these objects, and one of these objects representing the goddess Ma’at was weighed against the (\*)** hearts of the dead in Egyptian mythology. Daedalus stuck these objects together with wax to escape from Crete. For ten points, Icarus fell out of the sky after the sun’s heat made what objects fall out of his wings?

ANSWER: **feather**s

1. This journey is one of the Five Pillars of Islam, and must be completed at least once by all able-bodied Muslims. For ten points each,

Name this pilgrimage to the home city of the prophet Muhammad.

ANSWER: the **Hajj**

The Hajj is a pilgrimage to this city in Saudi Arabia, where Muslims walk around the Ka’aba, which Muslims must face when praying.

ANSWER: **Mecca**

The Ka’aba was built by this early prophet, the father of Ismail. This man is also a patriarch of Judaism and Christianity, in which he is better remembered as the father of Isaac.

ANSWER: **Ibrahim** (accept **Abraham**)

1. **One of these works promoted secular education and was edited by Jean d’Alembert and Denis Diderot during Enlightenment-era France. Pliny the Elder’s Naturalis (\*)** Historia is an early example of these works. Another of these works published a 32,000 page edition in 2010 and is now maintained online. For ten points, name these reference works that summarize information, such as one labeled Britannica and an online one named Wikipedia.

ANSWER: **encyclopedia** (prompt on reference works before mentioned)

1. A common joke about this fighting force, circa 1944, noted that white planes were American and black planes were the RAF; if you saw no planes, that was this force. For ten points each,

Name this air force that participated in World War II-era blitzkrieg warfare as part of the Wehrmacht

[vair-makt].

ANSWER: **Luftwaffe** (prompt on descriptions of the (Nazi) German air force)

In 1940, the Luftwaffe were unable to bombard this country into submission, primarily due to the fantastic defense of its RAF, or Royal Air Force.

ANSWER: **U**nited **K**ingdom (or Great **Britain**; accept Battle of **Britain**; accept **England**)

In recognition of the outstanding performance of the RAF during the Battle of Britain, this British Prime

Minister remarked “Never, in the field of human conflict, was so much owed by so many to so few.”

ANSWER: Sir Winston **Churchill**

1. **This organ includes the organ of Corti, as well as three small bones called the hammer, anvil, and stirrup. Within this organ, the semicircular canals control (\*)** balance and a spiral-shaped chamber called the cochlea controls its primary function. The tympanic membrane, often described as a “drum,” is found in the outer section of, for ten points, what organ whose failure leads to deafness?

ANSWER: **ear** (accept **cochlea** before it is said; accept inner **ear**; accept outer **ear** only after “outer” is

said)

(7) An unsolved “heating problem” about this region asks why it is so much hotter than the Sun’s surface below. For ten points each,

Name this aura that surrounds stars, including our Sun. This term is the Latin for “crown.”

ANSWER: **corona** (accept **corona**l heating problem)

The corona is made up of this phase of matter, made up of highly ionized particles with far more energy than gaseous particles.

ANSWER: **plasma**

The corona is easily seen, even by the protected naked eye, during these events, in which the Moon passes between the Sun and the Earth.

ANSWER: (total) solar **eclipse**

# Sixty Second Rounds

The categories are ...

1. Fahrenheit 451
2. Battle of Gettysburg
3. Skin
4. Portraits

## Fahrenheit 451

In the novel Fahrenheit 451, who or what is...

1. the novel’s author, who also wrote the sci-fi collection The Martian Chronicles?

ANSWER: Ray Douglas **Bradbury**

1. the profession of the protagonist, whose job is to burn books?

ANSWER: **fireman**

1. the name of the protagonist, who grows disillusioned by book burnings and goes into exile?

ANSWER: **Guy Montag** (accept either underlined name)

1. the teenaged, intellectual girl who befriends the protagonist and is killed by a car?

ANSWER: **Clarisse McClellan** (accept either underlined name)

1. the synthetic creatures that hunt down fugitives like the novel’s protagonist?

ANSWER: **Mechanical Hound** (accept **metal dog**; prompt on “hound” or “dog”)

1. the process by which a group of exiles led by Granger preserve the books being destroyed?

ANSWER: **memorizing** them (accept word forms like **memorization**; accept descriptions like

“committing them to **memory**”)

## Battle of Gettysburg

Name the...

1. American war in which the battle, a loss for the Confederacy, took place.

ANSWER: American **Civil** War

1. U.S. state where the battle took place, a little south of Harrisburg.

### ANSWER: **Pennsylvania**

1. U.S. President who delivered an address dedicating a Soldiers’ Cemetery at Gettysburg four months after the battle.

ANSWER: Abraham **Lincoln**

1. phrase that opens that address, describing the time passed since the signing of the Declaration of Independence.

### ANSWER: **Four score and seven years** ago

1. Union general who defeated Robert E. Lee at Gettysburg after replacing Joseph Hooker.

ANSWER: George Gordon **Meade**

1. failed Confederate assault on the last day of the battle, a charge that failed to break Union lines on Cemetery Ridge.

ANSWER: **Pickett**’s Charge

## Skin

Name the...

1. Keratin-based filaments that cover mammalian skin, especially on a human scalp.

ANSWER: **hair** (accept **fur**)

1. Keratin-based structures that cover the skin of reptiles and fish.

ANSWER: **scale**s (accept **scute**s)

1. Bird that names a type of “bump” that covers the skin as a response to a cold shock or other stimulus.

ANSWER: **goose** (accept **goose**bumps, **goose**flesh, **goose**pimples, etc.)

1. Secretion made by sudoriferous glands in mammalian skin, especially in human armpits.

ANSWER: **sweat**

1. Vitamin synthesized in the skin as a response to sunlight.

ANSWER: Vitamin **D**

1. Outer layer of skin, the primary barrier against dangerous microbes, which is not fed by blood vessels.

ANSWER: **epidermis** (do not prompt or accept dermis)

## Portraits

Name the...

1. iconic portrait of a woman with an enigmatic smile, created by Leonardo da Vinci.

ANSWER: **Mona Lisa** (accept La **Gioconda**)

1. artist who painted a Self Portrait with Bandaged Ear, as well as Starry Night.

ANSWER: Vincent Willem **van Gogh**

1. piece of jewelry that names a Johannes Vermeer portrait of a young girl in a blue and yellow head scarf.

### ANSWER: **pearl earring** (accept **Girl with a Pearl Earring**)

1. color worn by a boy in a Gainsborough portrait, and by Picasso’s Old Guitarist.

ANSWER: **blue** (accept **Blue Boy**)

1. last name of a Flemish merchant painted by Jan van Eyck [yon van IKE] alongside his green-clad wife.

ANSWER: **Arnolfini** (accept The **Arnolfini Wedding** or The **Arnolfini Portrait**; accept Giovanni **Arnolfini** and his bride)

1. subject of a series of Rubens portraits, a female member of a Florentine banking family.

ANSWER: **Marie di Medici**

# Second Half

(8) **This language was used to write The House of the Spirits and Twenty Love Poems and a Song of Despair, works by Isabel Allende [ah-YEN-day] and Pablo Neruda, two (\*)**

Chilean writers. A novel in this language follows the adventures of Sancho Panza, a squire to a delusioned “knight,” and was written by Miguel de Cervantes. For ten points, name this language used to write Don Quijote.

ANSWER: **Spanish** (accept **español**)

(8) The fantastic creatures that inhabit this world include a singing Mock Turtle, a Lizard named Bill, and a hookah-smoking Caterpillar. For ten points each,

Name this magical world that Alice visits in the novels of Lewis Carroll.

## ANSWER: **Wonderland**

This animal resident of Wonderland offers Alice nonexistent wine at a “mad tea party” with a Dormouse and the Mad Hatter.

## ANSWER: **March Hare**

Alice is directed to the March Hare’s tea party by this grinning creature, which has the ability to fade away to invisibility.

## ANSWER: **Cheshire Cat**

(9) **Due to the Rocky Mountains rain shadow, the largest American example of this ecosystem has few trees and moderate rainfall. Fire removes trees from this ecosystem but fails to clear most of its plant life, a mix of (\*)** grasses with fibrous roots that create a tough, matted layer of soil called sod. Much of this ecosystem was cleared by European colonists for farming. Voles, bison, and coyotes are common in, for ten points, what biome of grassland in the Great Plains of the U.S.?

ANSWER: **prairie** (prompt on (Great) Plains before mentioned; prompt on grassland before mentioned; prompt on savannah)

(9) This quantity is measured by anemometers, which often consist of a set of four sideways cups in an x-shape, which spin faster when this quantity is higher. For ten points each,

Name this quantity, which was measured at over 230 miles per hour on New Hampshire’s Mount Washington in 1934.

ANSWER: **wind speed** (accept equivalents; prompt on wind alone)

In 1805, a British naval officer set up and named this scale, which classifies wind speed on a 0 to 12 system.

ANSWER: **Beaufort** scale

A wind speed rating 12 on the Beaufort scale is reserved for winds over 73 miles per hour, generally caused by these cyclonic storms in the Atlantic Ocean. The Saffir-Simpson scale uses a five-category system to classify these storms.

ANSWER: **hurricane**s (do not accept other terms, like typhoons or tropical storms)

(10) **Types of this concept include cyclical, which changes based on the season or on the natural business cycle, structural, in which a changing industry needs fewer (\*)** workers, and frictional, in which a worker is “between” jobs. This concept peaked in the US near 25% during the Great Depression. For ten points, name this economic concept that measures how many people are out of work.

## ANSWER: **unemployment** rate

(10) Give the following about the Battle of Puebla for ten points each.

The Battle of Puebla took place during an invasion of this North American country, which was triggered by Benito Juarez suspending payments to a European country.

ANSWER: **Mexico**

This European nation, then led by Napoleon III, invaded Mexico.

ANSWER: **France**

Mexico’s victory at the Battle of Puebla is recognized on this holiday. This holiday has evolved into a general celebration of Mexican culture, especially in the United States.

ANSWER: **Cinco de Mayo** (accept any answer relating to the **Fifth of May**)

(11) **In 2014, Google released a low-cost version of this technology titled Google Cardboard, which competed with Samsung’s more traditional Gear. Capcom released a demo for Resident Evil 7, titled (\*)** KITCHEN, which used this technology. Games made exclusively for this technology include Job Simulator: The 2050 Archives. Headsets and motion controls are a key part of, for ten points, what immersive video game technology used in the Oculus Rift?

## ANSWER: **virtual reality** (accept **VR**)

(11) Sean Paul’s patois [pah-twah] dialect on a 2016 remix of this song confused more than few Twitter users who questioned why the word “gold” had two syllables. For ten points each,

Name this song, whose chorus notes “I don’t need dollar bills to have fun tonight” while praising the cost-effectiveness of dancing.

## ANSWER: **Cheap Thrills**

“Cheap Thrills” is sung by this Australian singer of “Chandelier.”

ANSWER: **Sia** (accept Sia **Furler**)

Sean Paul’s patois dialect is also known as the creole of this island, Sean Paul’s birthplace. Other musicians born on this Caribbean island include Bob Marley.

ANSWER: **Jamaica**

(12) **Sydney Chapman discovered the cyclical process by which this compound is regenerated. This compound is produced when (\*)** ultraviolet radiation interacts with a far more common two-atom compound, though man-made CFCs have disrupted that process. For ten points, name this compound consisting of three atoms of oxygen that forms a protective layer of the Earth’s atmosphere.

ANSWER: **ozone** (accept **O**3; prompt on oxygen before said)

(12) Symptoms of these events include nausea, fatigue, sweating, shortness of breath, and chest pain, though women often experience that pain differently than men. For ten points each,

Give this common term for a medical crisis officially known as a myocardial infarction.

## ANSWER: **heart attack**

Victims of heart attacks are encouraged to immediately take this medicine, which can be derived from willow leaves and bark. Excedrin combines this drug with caffeine and acetaminophen.

ANSWER: **aspirin**

Specifically, aspirin helps during a heart attack by stopping these tiny blood cells from clotting the blood. ANSWER: **platelet**s (or **thrombocyte**s)

(13) **This short story’s protagonist accepts an invitation from Minister Georges Rampouneau and his wife after persuading her husband to spend 400 francs on a dress. Jeanne Forestier lets Madame Loisel choose from her collection in this short story by** (\*) Guy de Maupassant. For ten points, name this short story in which Mathilde works for ten years to pay for a replacement for the title piece of jewelry, only to learn that the original was fake.

ANSWER: The **Necklace** (accept The **Diamond Necklace**; accept La **Parure**)

(13) This writer died after hiding in a secret annex in Amsterdam. For ten points each,

Name this writer, whose only work was published as The Diary of a Young Girl after World War II.

ANSWER: Anne **Frank** (accept Anneliese Marie **Frank**)

Anne Frank died in the Bergen-Belsen concentration camp after a long imprisonment at Auschwitz during this Nazi operation that sought to exterminate or enslave the Jewish population.

## ANSWER: **Holocaust**

Unlike Anne Frank, Elie Wiesel, who was imprisoned in Auschwitz and Buchenwald, survived the Holocaust and recorded his experiences in this book.

ANSWER: **Night** (accept La **Nuit**)]

(14) **After this country’s King Haakon VII was forced to flee to England by the Nazis, Vidkun Quisling led a puppet government in this country. This country’s coastal landscape is marked by hundreds of (\*)** glacier-cut grooves called fjords [fyords]. The 14th century Kalmar Union consisted of Denmark, Sweden, and, for ten points, what Scandinavian country whose capital is Oslo?

ANSWER: **Norway**

(14) This country gained its independence through the Evian Accords. For ten points each:

Name this North African country that gained its independence from France following a bloody civil war.

Answer: **Algeria**

France also colonized this island nation that is separated from mainland Africa by the Straight of Mozambique.

Answer: **Madagascar**

The French Congo bordered this other European country’s Congo Free State, which it established under its King Leopold II.

Answer: **Belgium**

# Extra Question

Only read if you need a backup or tiebreaker!

(15) **This man, at the age of 73, reportedly swam the Yangtze at a record-breaking 8-minute-mile pace. During the Long March, this man became a national hero, allowing him to seize power upon arriving at Shaanxi. This man’s mausoleum is contained within** (\*) Tiananmen Square, near a gate featuring a giant portrait of this man. The Little Red Book collects the sayings of, for the point, what first Chairman of the People’s Republic of China?

ANSWER: **Mao** Zedong

(15) This condition, whose duration is called gestation, can be highly dangerous if it is ectopic. For ten points each,

Name this condition that, for humans, lasts roughly 9 months, often divided into trimesters.

ANSWER: **pregnancy** (accept word forms)

In the early stages of pregnancy, a fertilized embryo attaches to the wall of this organ, in which the fetus develops. In ectopic pregnancies, the embryo attaches outside this organ.

ANSWER: **uterus** (accept **womb**)

Most ectopic pregnancies occur when the embryo implants in a Fallopian tube, but in rare cases, the embryo may attach to one of these egg-producing organs.

ANSWER: **ovary**