# Round 2 

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## Tossups

(1) A poem by William Blake asks one of these animals, "did he who made the Lamb make thee?" and describes this animal "burning bright / in the forests of the night." Another of these animals discovers he doesn't like ( ${ }^{*}$ ) honey, thistles, or acorns shortly after moving to the Hundred Acre Woods. For ten points, name this big cat, a stuffed one of which has a misspelled name and loves bouncing in A.A. Milne's Winnie-the-Pooh.
ANSWER: tigers (accept The Tyger; accept Tigger after "honey" is read)
(2) This man disclosed loans from his parents in a speech that became nicknamed for a cocker spaniel. In 1973, this man spoke at Disney World, declaring "I'm (*) not a crook;" a year later, after a "smoking gun" tape was released, he wrote a letter to Henry Kissinger resigning his office. Gerald Ford succeeded and pardoned, for ten points, what US President who was embroiled in the Watergate scandal?
ANSWER: Richard Milhous Nixon
(3) This orchestral instrument plays the opening "Promenade" theme of Mussorgsky's Pictures at an Exhibition, and several of them play the rising notes C-G-C to open Strauss's Also Sprach Zarathustra. This (*) valved instrument is commonly used to play "Taps." The cornet and bugle are relatives of, for ten points, what highest-pitched brass instrument?
ANSWER: trumpet (accept bugle or cornet before they are read)
(4) The Power of a Point theorem concerns the distance of a point from one of these figures. The equation $\boldsymbol{x}$ squared plus $\boldsymbol{y}$ squared equals $\boldsymbol{r}$ squared, where $\boldsymbol{r}$ is a real number, will (*) graph one of these shapes, which are defined as all points that are the same distance from one point. For ten points, name this shape whose area formula is pi times the square of its radius.
ANSWER: circle
(5) These structures can undergo events classified as Plinian or Strombolian. These structures can cause lahars, which are very quick, wet mudslides, and can release pahoehoe [pa-hoh-ay-hoh-ay]. These natural structures can launch tephra and (*) superheated gas in a pyroclastic flow down their sides. For ten points, name these geologic features that, when pressures rise in underground magma chambers, may explosively erupt.
ANSWER: volcanoes
(6) This work suggests that all history is "the history of class struggles," and discusses the opposing classes of $(*)$ bourgeoisie [BOO'r-jwah-zee] and proletariat. A new ideology based on workers owning the means of production is described in, for ten points, what revolutionary pamphlet by Friedrich Engels and Karl Marx that inspired the politics of Soviet Russia?
ANSWER: The Communist Manifesto (accept The Manifesto of the Communist Party; accept Manifest der Kommunistischen Partei)
(7) This soldier was declared a martyr by Pope Callixtus III. Saint Michael is a patron saint of France in part because this soldier had visions of Saints Michael, Margaret, and Catherine telling (*) her to escort the Dauphin [doh-FAN] to Reims [rehm], which required her to lift the English siege of Orleans [or-lay-on]. French armies in the Hundred Years' War rallied behind, for ten points, what peasant girl who was burned at the stake?
ANSWER: Saint Joan of Arc (accept Jeanne d'Arc; accept Saint Joan; prompt on "Joan" or "Jeanne")
(8) This man Drafted a charter of peace between the Peoples of the Book during the Hijra. in the Cave of Hira, this Seal of the Prophets was told to (*) "Recite!" by the angel Jibreel. To escape persecution, this man led his followers to Medina from Mecca after he received the revelation of the Quran. For ten points, name this Final Prophet, the founder of Islam.
ANSWER: Muhammad (prompt on the "Prophet" until "Seal of the Prophets" is read)
(9) A character in this novel who obsesses over the memory of Rosy Rosenthal's shooting, Meyer Wolfsheim, refuses to attend the funeral of this novel's title character. (*) George Wilson shoots the title man in this novel after Tom pretends not to know that the yellow car that ran over Myrtle was driven by Daisy Buchanan. Nick Carraway narrates, for ten points, what novel by F. Scott Fitzgerald?
ANSWER: The Great Gatsby
(10) A gradient of these particles powers the ATP synthase enzyme. By the Bronsted-Lowry definition, bases are acceptors of these particles, whose concentration is measured on the $\mathbf{~}^{*}$ ) pH scale. A hydrogen ion is equivalent to, for ten points, what particle that determines the atomic number of elements, a positively charged particle found in the nucleus of atoms?
ANSWER: proton (accept $\underline{\mathbf{H}^{+}}$; accept hydrogen ion before it is read; do not prompt on "hydrogen" or "H" alone)
(11) A 1956 revolution in this country targeted Fulgencio Batista and was supported by Che Guevara. A leader of this country finally transferred power to his brother, (*) Raúl, in 2006. The U.S. strengthened an embargo against this country following a 1962 crisis over missiles placed here by the Soviets. For ten points, name this country that was led by Fidel Castro from Havana.

ANSWER: Republic of Cuba
(12) One of these animals, Tamiu, was entombed with Prince Djhutmose. The Book of the Dead describes Ra as one of these animals biting the serpent Apep, a tribute to these animals' defense of Egyptian (*) grain storage. Though she originally had the head of a lion, a goddess with the head of this animal guarded mothers and was called Bast. For ten points, name these domestic animals revered by ancient Egyptians for their skill at hunting rats and mice.
ANSWER: cat (accept common nicknames like kitty-cat or pussy-cat; accept felines; accept felis catus or felis $\underline{\text { silvestris catus; }}$, accept Egyptian wildcat or felis $\overline{\text { silvestris lybica; accept mau; do not accept or prompt on "lion" }}$ or "lioness")
(13) A novel from this modern country follows the adventures of one hundred and eight outlaws and is called Water Margin. In another novel from this home country of Dream of the Red Chamber, Buddha traps (*) Sun Wukong under a mountain. Journey to the West is from this country, whose Romance of the Three Kingdoms focuses on the warring states of Wei, Shu, and Wu. The Four Classics are novels from, for ten points, what large Asian country?

ANSWER: China (accept Zhongguo; accept People's Republic of China; accept Zhonggua Renmin Gongheguo)
(14) In Ted Maiman's first functional example of these devices, the gain medium, where population inversion was achieved, was a ruby crystal. These devices use stimulated emission to create a coherent (*) beam of light at a single wavelength, allowing a tighter focus than a traditional lamp. Optical disk drives read data off DVDs by using, for ten points, what type of device that emits a colored beam of light?
ANSWER: lasers
(15) This city's NFL team wasted a 2014 first round pick on Johnny Manziel [man-zell]. In a 2017 trade, this city's NBA team received Isaiah Thomas from Boston in exchange for (*) Kyrie [kye-ree] Irving, who helped this city come back from being down three-to-one against Golden State in the 2016 NBA Finals. LeBron James played eleven seasons in, for ten points, what city where the NFL's Browns and NBA's Cavaliers play in northern Ohio?
ANSWER: Cleveland (accept Cleveland Browns; accept Cleveland Cavaliers)
(16) A gold and ivory sculpture of this god by Phidias holds Nike in his right hand and sits on a throne. A statue of this god in the Temple at (*) Olympia was one of the Ancient Wonders of the World. A French artist added a raised arm holding a thunderbolt to a Smyrnan statue of, for ten points, what sky god, the head of the Greco-Roman pantheon?
ANSWER: Zeus (accept Zeus at Olympia or Olympian Zeus; accept Jupiter de Smyrne or Jupiter of Smyrna)
(17) The Paseo de la Reforma runs through this city, which sinks about a meter every year due to the drainage of the basin of Lake Texcoco [tesh-koh-koh]. The (*) ancient ruins of Tenochtitlan [teh-nohk-teet-lahn] were replaced by the construction of, for ten points, what largest North American city, the capital of the southern neighbor of the USA?
ANSWER: Mexico City (accept Ciudad de Mexico)
(18) Guttation is caused by the movement of this substance at night. The cohesion-tension model explains the movement of this substance through tracheids and vessel elements. Stomata are closed to prevent the loss of this substance by (*) transpiration, and a central vacuole stores most of this substance in a plant cell. The xylem transports, for ten points, what liquid that enters plants through the roots?
ANSWER: water (accept $\underline{\mathbf{H}_{2} \mathbf{O}}$ )
(19) This speech resolves that "these dead here shall not have died in vain." This short speech ends by describing a (*) "government of the people, by the people, for the people," and it was given to commemorate a Pennsylvania battle. For ten points, name this November 1863 speech by Abraham Lincoln that begins, "Four score and seven years ago."
ANSWER: Gettysburg Address (accept descriptions like Lincoln's speech at Gettysburg)
(20) The narrator of this work loses her roommate Margot when Dr Dussel moves into the Annex. This work's narrator writes that 'in spite of everything, I believe [...] people are truly good at heart" only days before its author was taken to (*) Bergen-Belsen, where she died at the age of fifteen. Entries addressed to "Kitty" comprise, for ten points, what journal written by a Jewish girl hiding in Amsterdam from Nazis?
ANSWER: The Diary of a Young Girl (accept The Diary of Anne Frank; accept Anne Frank: The Diary of a Young Girl; accept Het Achterhuis, Dagboekbrieven 14 Juni 1942-1 Augustus 1944; accept descriptions like Anne Frank's diary; prompt on partial answers like "Anne Frank" or "diary")

## Bonuses

(1) A current theory states that these objects emit thermal radiation that slowly decreases their size until they disappear. For ten points each,

Name these massive, dense objects formed from supernovas. Their gravitational pull is strong enough to absorb light.

## ANSWER: black holes

This invisible barrier, defined by the Schwarzschild radius, is the boundary within which nothing can escape the black hole's gravity. At this point, the escape velocity is equal to the speed of light.
ANSWER: event horizon (prompt on horizon)
This scientist proposed the theory of disappearing black holes and is the namesake of the radiation that causes black holes to evaporate. This author of A Brief History of Time, died in 2018 after living with ALS for decades.

## ANSWER: Stephen Hawking (accept Stephen William Hawking)

(2) In some legends, the crew of this ship included Atalanta and Theseus, and they were led by a hero who lost a sandal while helping a disguised Hera cross a river. For ten points each,

Name this ship, whose crew sailed to Colchis to help their leader fulfill a quest and take the throne of Pelias.

## ANSWER: Argo

The Argo was captained by this Greek hero, who was helped by the sorceress Medea in his quest.

## ANSWER: Jason (accept Iason)

To retake the throne that Pelias had stolen from him, Jason led the Argonauts on a quest to obtain this object from Colchis.

ANSWER: golden fleece (prompt on partial answers like "fleece")
(3) Name these performers who were at the 2019 Lollapalooza, for ten points each.

This pop singer headlined Lollapalooza with the first live performance of her new song "Boyfriend," which she followed up with performances of "Break Up with Your Girlfriend, I'm Bored" and "7 Rings."

ANSWER: Ariana Grande-Butera
This rapper, the star of the TV show Atlanta, headlined Lollapalooza with his hit "This is America."
ANSWER: Childish Gambino (accept Donald Glover)
This trio of brothers made their Lolla debut with their hits "100 Bad Days" and "Sober Up." They rose to fame when their song "Weak" made the Billboard Top 100.
ANSWER: AJR
(4) This story's protagonist is depressed by receiving an invitation to Minister Ramponneau's party, but is cheered up when her husband uses money he had saved for a rifle to pay for her new dress instead. For ten points each,

Name this short story in which Mathilde Loisel [mah-teeld l'wah-zell] borrows the title piece of jewelry from Madame Forestier and then spends ten years working to replace it after losing it at the dance.
ANSWER: The Necklace (accept The Diamond Necklace; accept La parure)
"The Necklace" is by this French writer, whose other short stories include "Ball of Fat," "Useless Beauty," and "The Horla."

ANSWER: Guy de Maupassant (accept Henri René Albert Guy de Maupassant)
In "The Horla," an unnamed narrator keeps a diary of his strange experiences with an unseen monster that feeds off of his life energy during the night, and compares the Horla to one of these legendary creatures that survive by drinking blood.

ANSWER: vampires
(5) Eliza Lucas Pinckney revolutionized this colony's agricultural industry by promoting indigo as a cash crop. For ten points each,

Name this southern US state where the abolitionist Grimké sisters, Sarah and Angelina, were born in Charleston.

## ANSWER: South Carolina

Emily Geiger is known as South Carolina's heroine of the Revolutionary War for bravely riding a message from Nathanael Greene to this Patriot militia leader. This man was honored as the namesake of a fort in Charleston Harbor where, in 1861, the opening shots of the Civil War were fired.
ANSWER: Thomas Sumter (accept Fort Sumter) (Editor's note: Geiger got captured and had to eat the note! And she still delivered the message!)

Secret abolitionist and South Carolina native Mary Boykin Chesnut wrote a diary and memoir of the Civil War, including the opening shots at Fort Sumter and her experiences with this Confederate President, whom her husband had served as an aide.
ANSWER: Jefferson Davis (accept Jefferson Finis $\underline{\text { Davis) }}$
(6) This quantity depends in large part on the material of an object; rubber is an insulator and will have a typically high value for this quantity. For ten points each,

Name this quantity that measures opposition to flowing electric current. This quantity is measured in ohms.
ANSWER: resistance
At very low temperatures, some materials can lose all electrical resistance, a property given this name. The 1972 Physics Nobel was awarded to Bardeen, Cooper, and Schrieffer for developing BCS theory explaining this property.
ANSWER: superconductors (accept word forms like superconductivity; do not prompt on "conductor")
Superconductivity was first observed at 4.2 Kelvin, a value very near this lowest possible temperature, where vibrational motion theoretically stops.
ANSWER: absolute zero (prompt on "zero Kelvin")
(7) In one story by this author, books are considered illegal and are burned by firemen. For ten points each,

Name this American science fiction author of Something Wicked This Way Comes and Dandelion Wine.
ANSWER: Ray Bradbury (accept Ray Douglas Bradbury)
In this dystopian novel by Bradbury, Guy Montag flees his home and job as a fireman to help save books instead of burning them.

## ANSWER: Fahrenheit 451

Many of Bradbury's speculative short stories about space exploration are collected in this work, named for its themes of colonization of an inhabited extraterrestrial world.
ANSWER: The Martian Chronicles
(8) This region has been governed by Hamas since 2007, when it pushed Fatah out of power and ended a unity government that administered this region and the West Bank. For ten points each,

Name this coastal strip of land, roughly ten miles wide, along the eastern Mediterranean Sea. This strip of land is claimed by the State of Palestine, a claim disputed by a neighboring country.

## ANSWER: Gaza Strip

This country controls almost all entry and exit from the Gaza Strip, bordering it on the south, east, and north. This country withdrew its army from Gaza in 2005, but continues to blockade it with Egypt.

## ANSWER: State of Israel

Egypt controlled the Gaza Strip from 1949 to June 1967, when Israel captured it as part of this short war.
ANSWER: Six-Day War (accept Third Arab-Israeli War)
(9) For ten points each, answer the following about lesser-known Constitutional amendments.

The 12th Amendment changed the procedure by which this body determines the winner of presidential and vice presidential elections.
ANSWER: Electoral College
The 23rd Amendment doesn't qualify as "lesser-known" in this geographic location, whose residents were given the right to vote in presidential elections by the amendment.
ANSWER: Washington, D.C. (accept D.C.; accept District of Columbia)
This amendment, ratified in just over three months in 1971, changed the voting age to eighteen years old.
ANSWER: 26th Amendment to the U.S. Constitution
(10) The binomial coefficients are commonly arranged in a diagram that takes this shape and is named for a French mathematician. For ten points each,

Name this shape, whose row of "one, two, one" is used to generate the next row of "one, three, three, one," which is used to generate the next row of "one, four, six, four, one," and so on.

## ANSWER: Pascal's triangle

Every number in a row of Pascal's triangle is used twice in the additions needed to create the next row of the diagram. As a result, the sum of all the numbers in any row of Pascal's triangle will always be this type of even number.

ANSWER: powers of two (accept equivalent descriptions related to raising two to various powers; do not accept "square numbers")

The digits in the first several rows of Pascal's triangle appear to be powers of this two-digit number; for example, 121 is this number squared.
ANSWER: 11
(11) In a novel by this author, investigator Porfiry Petrovich and Sonya Marmeladova try to persuade Raskolnikov to confess to the murders he has committed. For ten points each,

Name this Russian author, who also wrote novels like Notes from the Underground and The Idiot, and who wrote about Ivan, Alexei, and Dmitri in The Brothers Karamazov.

ANSWER: Fyodor Mikhailovich Dostoevsky
Raskolnikov eventually confesses to murdering a pawnbroker and her sister and is exiled to Siberia in this novel by Dostoevsky.

## ANSWER: Crime and Punishment (accept Prestupleniye i nakazaniye)

Raskolnikov commits his crime in this Russian city on the Neva River. Alexander Pushkin wrote The Bronze Horseman about a statue of Peter the Great in this city, which has also been called Petrograd and Leningrad.

ANSWER: Saint Petersburg (accept Sankt Peterburg; accept Piter)
(12) This composer wrote an unfinished rondo nicknamed "Rage Over a Lost Penny", which Anton Diabelli finished after his death. For ten points each,

Name this composer who wrote thirty-three piano variations on a waltz by Diabelli between 1819 and 1823. His piano bagatelle "Für Elise" was not published before his 1827 death, and he was nearly completely deaf when he composed his ninth and final symphony.
ANSWER: Ludwig van Beethoven
Two of these works written by Beethoven for solo piano are nicknamed "Pathétique" and "Waldstein." This musical form, which generally has an exposition, development, and recapitulation, is named from the Italian for "to play," as opposed to a cantata, "to sing."
ANSWER: (piano) sonata
Some sonatas have one of these ending sections following the recapitulation. In sheet music, a vertical oval with a plus-shaped crosshair tells the musician to skip to this section.
ANSWER: coda (accept codetta)
(13) While these animals can move very small distances in their larval state, they are entirely sessile as adults. For ten points each,

Name these simple, asymmetrical invertebrates that belong to the phylum Porifera. They are attached to the seafloor and consume nutrients via filtering.

## ANSWER: sponges

Some sponges can reproduce asexually via this process in which an organism develops a growth of cells that will break off to form another organism. This process is also used by hydras.

## ANSWER: budding

Another sessile organism that uses budding for reproduction is this invertebrate in the class Anthozoa. As polyps, these animals form colonies called reefs.

ANSWER: corals (accept coral reefs)
(14) A letter written to this man in 1934 proclaims "Even if my business hasn't been strictly legal, it don't hurt anything to tell you what a fine car you got in the V-8." For ten points each,

Name this American industrialist whose company introduced its first V-8 car in 1932, five years after it discontinued its landmark Model T.
ANSWER: Henry Ford
The aforementioned letter was written by the male half of this couple, who became famous bank robbers in a gang with Henry Methvin and W.D. Jones before being killed in an ambush in 1934. First names are acceptable.

ANSWER: Bonnie and Clyde (accept Bonnie Elizabeth Parker and Clyde Chestnut Barrow)
Bonnie and Clyde were killed in this state, having planned a rendezvous with other members of their gang in Bienville Parish. A posse planned the ambush in the nearby city of Shreveport in this state.
(15) A supernatural being challenges this king's knights in the Medieval poem Sir Gawain and the Green Knight. For ten points each,

Name this legendary king from the British Isles, who became king after pulling a sword from a stone. This man married Queen Guinevere and gathered his knights at the Round Table.
ANSWER: King Arthur Pendragon
The mysterious and supernatural Green Knight who challenges Sir Gawain in the poem does so on the orders of this witch, Arthur's sister, a diabolical sorceress who wants to frighten Queen Guinevere to death.
ANSWER: Morgana le Fay (accept either underlined name; accept Morgant; accept Morguin; accept Morgain)
Sir Gawain and the Green Knight is usually believed to be the work of an unknown poet who also wrote this religious poem. This poem, based on the vulgate Bible of the time, is named for a precious gem "of great price" that has been lost by this poem's narrator.

## ANSWER: Pearl

(16) Give the following about the island of New Guinea, for ten points each.

The island of New Guinea is separated from this continent to its south by the Torres Strait.

## ANSWER: Australia

If your definition of island excludes Australia, New Guinea is the world's second largest island, roughly half the size of this Danish autonomous territory northwest of Iceland.

## ANSWER: Greenland (accept Kalaallit Nunaat)

The country of Papua New Guinea occupies the east half of the island; the west half of the island is the Papua province of this country. This country also controls the world's most populous island, Java.
ANSWER: Republic of Indonesia
(17) This artist's younger brother, Theo, was an art dealer and often helped support this artist, who struggled to sell his paintings during his life. For ten points each,

Name this artist who painted a billiard table in The Night Café and depicted a wild, swirling sky inspired by his time in a mental asylum in the painting Starry Night.

ANSWER: Vincent van Gogh (accept Vincent Willem van Gogh)
Despite the later popularity of Starry Night, van Gogh thought that this painting was his best work. In this painting, five poor people huddle around a table, leaning over a plate of the title food.
ANSWER: The Potato Eaters (accept De Aardappeleters)
In a more lighthearted painting that was likely a mockery of the teaching practices of the Royal Academy, van Gogh painted one of these things with a lit cigarette in its mouth.
ANSWER: skeleton (accept skull; accept Skull of a Skeleton with Burning Cigarette; accept Kop van een skelet met brandende sigaret; prompt on "human")
(18) The invention of this device in the fifteenth century led to a widespread increase in literacy rates throughout Europe, just as it did two centuries earlier in Korea. For ten points each,

Name this invention whose movable type allowed for the mass production of books and other works.
ANSWER: printing press (prompt on "press")
This German goldsmith is credited with inventing the printing press in Europe.
ANSWER: Johannes Gutenberg (accept Johannes Gensfleisch)
Gutenberg's first mass-printed work was a version of this text with forty-two lines to a page.
ANSWER: Gutenberg Bibles (accept Latin Bible; accept Vulgate)
(19) One of these beings was born from the left eye of her father, Izanagi [ee-zah-nah-gee], and is the older sister of Susano [soo-sah-noh]. For ten points each,

Name these beings, the gods and supernatural spirits that are honored at shrines in Japan.
ANSWER: kami [kah-mee]
There are thought to be over eight million kami [kah-mee] in this animistic Japanese religion, whose shrines often include torii [toh-ree] gates.

This kami, the ancient goddess of the sun, is the most powerful deity in Shinto and is traditionally considered to be the ancestor of the imperial family.
ANSWER: Amaterasu [ah-mah-tay-rah-soo] (accept Amaterasu-oomikami [ah-mah-tay-rah-soo oh-oh-mee-kahmee]; accept Oohirume-no-muchi-no-kami [oh-oh-hee-roo-may-no-moo-chee-no-kah-mee])
(20) Aqua regia is a mixture of two compounds that can dissolve several precious metals. For ten points each, Aqua regia is a mix of two of these compounds at a ratio of one part nitric to three parts hydrochloric.
ANSWER: acids (accept nitric acid; accept hydrochloric acid)
Aqua regia is known for its ability to dissolve platinum and this precious metal with chemical symbol Au [spell it]. ANSWER: gold

Aqua regia was commonly used by practitioners of this, a medieval precursor to chemistry that sought to transmute base metals into gold.
ANSWER: alchemy (accept word forms like alchemist)

