

## Round 2

Brad Fischer • Clare Keenan • Alec Krueger • Lauren Onel • Noah Prince  
Allison Salach • Zohra Sattar • Kristin Strey • Tyler Vaughan

### Tossups

(1) **This biome is home to most members of the genus *Phyllobates*, which includes batrachotoxin-generating frogs. This biome is home to the scarlet (\*) macaw, and although these biomes can be temperate, as in the Pacific Northwest, they are usually tropical. Numerous undiscovered species live 100 feet high in the canopy in, for ten points, what biome where numerous species of tall trees thrive, thanks to abundant precipitation?**

ANSWER: (tropical) rainforest

(2) **In a novel by this author, Rosemary Hoyt comes between the protagonist and his wife, Nicole Diver, who is based on this author's wife, Zelda. In another novel by this author, the narrator breaks up with (\*) Jordan Baker after discovering that she cheated at golf, and the narrator's West Egg neighbor has an affair with Daisy Buchanan. For ten points, name this author of *Tender is the Night* and *The Great Gatsby*.**

ANSWER: F(rancis) Scott (Key) Fitzgerald

(3) **This religion's philosophy accounts for four ashrama, or life-stages; in the last stage of life, believers in this religion may become sadhus. Puja in this religion consists of welcoming a deity or spirit as a guest, and may include offerings of ghee. This religion's (\*) Trimurti includes a preservation god whose consort is Lakshmi. The Ganges River is holy to, for ten points, what Indian religion whose primary gods are Vishnu, Brahma, and Shiva?**

ANSWER: Hinduism (accept word forms like Hindu faith)

(4) **This leader's policies were protested by the Lincolnshire Rising. Thomas Cromwell helped this man dissolve his country's monasteries, beginning two years after his 1534 Act of Supremacy made him the head of the (\*) Church of England. This man broke with Rome thanks in part to Pope Clement VII's refusal to grant him an annulment. For ten points, name this English king from the House of Tudor who married Catherine of Aragon, Anne Boleyn, and four other women.**

ANSWER: Henry VIII (prompt on "Henry")

(5) **Definitions for one type of this economic concept include M0 and M1. In quantitative easing, the Federal Reserve lowers the yield of Treasury notes and increases this quantity for money. On a graph of price vs. quantity, this quantity's curve slopes upward, since more (\*) production will occur at higher prices. For ten points, name this economic concept, the amount of a good that can be produced, often compared against a good's demand.**

ANSWER: supply (accept money supply; prompt on money until it is read)

(6) **Vault complexes were discovered in this material in the 1980s and are still of unknown utility. A gap junction connects this material between two cells, allowing ion transfer. Nutrients are delivered by the “streaming” of this material around plant cells. (\*) Glycolysis takes place in this material, in which ribosomes can float. For ten points, name this gel-like material within a cell that includes organelles and is surrounded by the cell membrane.**

ANSWER: cytoplasm (accept cytosol)

(7) **Three weeks after this man won re-election, his opponent, the editor of the *New York Tribune*, died. This man ran with Henry Wilson during his re-election campaign instead of incumbent Vice President Schulyer (\*) Colfax, who was under investigation for taking bribes from a railroad construction company, Credit Mobilier [moh-beel-ee-AY]. For ten points, name this winner of the 1872 and 1868 Presidential elections, a popular former Civil War general.**

ANSWER: Ulysses S. Grant

(8) **On this show, Benny is shot by a social worker after feeding what he thinks is a young boy, and Joyce tries to communicate with Will by chopping through the walls of her home. Barb Holland disappears at a party she attends with Nancy Wheeler on this show, in which Dustin, a boy with (\*) cleidocranial dysplasia [KLYE-doh-”cranial” dis-PLAY-zhah], is one of a group of boys who are told about the Upside-Down by an Eggo-loving, psychokinetic girl named Eleven. For ten points, name this 1980s-nostalgia mystery show produced by Netflix.**

ANSWER: Stranger Things

(9) **In Jean Sibelius’ symphony of this number, the horns play a swan call. In a movement of this number, the *idée fixe* [ee-day feex] becomes a “vulgar dance tune” during a “Witches’ Sabbath;” that movement ends (\*) Hector Berlioz’s *Symphonie Fantastique*. Beethoven’s symphony of this number opens with a “short-short-short-long” motif. For ten points, give this number of flats in the key signature of D-flat major and number of performers in Franz Schubert’s *Trout Quintet*.**

ANSWER: five (accept fifth symphony, fifth movement, etc.)

(10) **In a poem by this man, the Butcher and Beaver hear the call of the Jubjub bird. “’Twas brillig, and the slithy toves / did gyre and gimble in the wabe” in a poem by this author of “The Hunting of the Snark,” who wrote about a hero who uses a (\*) “vorpal sword” in a story told by Humpty-Dumpty. In a novel by this man, a little girl finds food and drinks that change her size, and meets the Cheshire Cat and the Mad Hatter after following a White Rabbit. For ten points, name this author of “Jabberwocky” and *Alice’s Adventures in Wonderland*.**

ANSWER: Lewis Carroll (accept Charles Lutwidge Dodgson)

(11) **Robert Yates kept detailed notes of this meeting, despite his opposition to its goals. This meeting’s discussions were to be kept secret and were moderated by George Washington. At this meeting, Roger Sherman proposed a (\*) compromise between the Virginia and New Jersey plans that balanced the interests of large and small states. For ten points, name this 1787 meeting that replaced the Articles of Confederation with a newly written “supreme law” of the United States.**

ANSWER: Constitutional Convention

(12) A character in this work has a son named Reizei [ray-zay] with his step-mother, whose niece he kidnaps and eventually marries. This work's protagonist falls in love with Yugao [yoo-gow], who is killed by the spirit of one of his mistresses. This novel's title character falls in love with Lady (\*) Fujitsubo [foo-jee-tsoo-boh] due to her resemblance to his mother. For ten points, name this Heian-era [hay-on era] Japanese novel by Murasaki Shikibu [moo-rah-sah-kee shee-kee-bo] about the adventures of an egotistical "shining" prince.

ANSWER: The Tale of Genji (accept Genji Monogatari)

(13) Formulas useful in this branch of mathematics include product-to-sum conversions and the double angle formulas, and the unit circle can illustrate how the Pythagorean identities work. Functions used in this branch of mathematics often prefer inputs of (\*) radians, rather than degrees. For ten points, name this branch of mathematics, named from the Greek for its primary focus of measuring triangles, in which special functions like sine and cosine are used.

ANSWER: trigonometry

(14) This man's *Rope* disguises reel changes with clever panning. Tippi Hedren debuted in a film by this man inspired by a Daphne du Maurier story. A wheelchair-bound photographer is convinced that his neighbor's wife has been (\*) murdered in another film by this man, who used screeching violins in a scene where Marion Crane is stabbed to death in the Bates Motel's shower. For ten points, name this director of films like *The Birds*, *Rear Window*, and *Psycho*.

ANSWER: Alfred Hitchcock

(15) This deity blinded Tiresias for siding against her in an argument and tempted Paris with control of Europe and Asia. After Argus was killed, this goddess placed his eyes in the tail of her sacred bird, the (\*) peacock. This mother of Hephaestus took revenge on Leto for having children with her husband, the king of Olympus. For ten points, name this Greek goddess of marriage and wife of Zeus.

ANSWER: Hera (prompt on Juno until "Greek" is read)

(16) In 1838, France demanded outrageous damages from this country's government after a French pastry shop was looted by soldiers. During the ensuing Pastry War, a general from this country lost his leg, then had it buried with military honors; that injury came in a failed raid on the occupied fort city of (\*) Veracruz. For ten points, name this country which celebrates an 1865 victory against the French at Puebla on Cinco de Mayo and was often led by Santa Anna.

ANSWER: Mexico (accept United Mexican States or Estados Unidos Mexicanos)

(17) The discovery of this concept was assisted by Galileo's ball-rolling experiment which, without friction, would have continued horizontally forever. One definition of this concept notes that, under zero net external force, an object will experience (\*) constant velocity. The rotational analogue of mass is known as the "moment of" this quantity. Newton's first law defines, for ten points, what concept that describes an object's resistance to changes in its motion?

ANSWER: inertia

(18) **In a story by this author, Gerda’s tears melt an ice shard in Kai’s heart, which allows him to escape the title character. In another story recorded by this man, a child tells the title ruler that he is naked. In addition to “The (\*) Snow Queen” and “The Emperor’s New Clothes” this man wrote about a girl who gives up her voice to marry a prince at the risk of turning into sea foam. For ten points, name this Danish recorder of folk tales like “The Little Mermaid.”**

ANSWER: Hans Christian Anderson

(19) **Canadian soldiers launched a failed amphibious raid on this body of water at Dieppe. Cities on this body of water include Le Havre, Calais [kah-lay], Brighton, and Dover, whose sheer white cliffs sit on the shoreline of this body of water. In 1994, a (\*) Eurostar train tunnel underneath this body of water was opened. The islands of Jersey, Guernsey, and the Isle of Wight lie in, for ten points, what channel that separates France from the island of Britain?**

ANSWER: English Channel (accept English Channel after “channel” is read; accept The Channel before “channel” is read)

(20) **These compounds are used to treat fats in saponification, or soap-making; such examples of these chemicals include sodium hydroxide. According to the Bronsted-Lowry definition, these substances (\*) accept hydrogen ions, and according to the Lewis definition, they donate electron pairs. Litmus paper is turned blue by, for ten points, what type of bitter, slippery chemical compound that has a pH value greater than 7 and that can neutralize acids?**

ANSWER: bases (prompt on “hydroxides” before it is read)

## Bonuses

(1) In a play named for this girl, she purchases a potion to make herself appear to be dead for a few days, leading her husband to kill himself in despair. For ten points each,

Name this thirteen-year-old girl who kills herself when she discovers that Romeo has committed suicide over her apparent corpse.

ANSWER: Juliet Capulet (prompt on “Capulet”)

This babbling comic character has cared for Juliet since birth, and helps the couple communicate with each other and with Friar Laurence.

ANSWER: Juliet’s Nurse

Before he declares that Juliet “[teaches] the torches to burn bright,” Romeo protests that “the all-seeing sun / ne’er saw [this woman’s] match.” This woman is Capulet’s niece, whom Romeo hopes to see at the party where he meets Juliet.

ANSWER: Rosaline

(2) Albrecht Dürer’s “unfolding” problem questions whether it is possible to create one of these objects that can’t be constructed in three dimensions from a two-dimensional net. For ten points each,

Give this term for a three-dimensional solid that has flat faces and straight edges that meet at vertices. These figures are the three-dimensional analog of polygons.

ANSWER: (convex) polyhedrons (accept polyhedra)

Dürer’s conjecture only asks about convex polyhedra, because there exist examples of this other type of polyhedron that have no net. For a polygon, this term applies if a line segment can be drawn starting and ending within the shape, but which passes outside the shape for some time.

ANSWER: concave polyhedra (accept concave polygons)

A cross is the most famous of the eleven distinct nets for this polyhedron, a three-dimensional solid with six square faces.

ANSWER: cube (accept hexahedron)

(3) The Thule people were ancestors of this ethnic group, displacing the Dorset culture shortly before the Little Ice Age broke the Thule into separate communities. For ten points each,

Name this ethnic group of indigenous North Americans who live throughout the Arctic. Like the Yupik of Russia, these people have been classified as Eskimo, a term now often considered derogatory.

ANSWER: Inuit people

The Inuit live in Alaska, Greenland, and this country, the second largest by area in the world.

ANSWER: Canada

This newest Canadian territory was separated from the Northwest Territories in 1999. Its name translates to “our land” in Inuktitut, a primary Inuit language.

ANSWER: Nunavut

(4) In 1890, a prominent artist bought a house and garden in this village, where a few hundred residents live and thousands of tourists visit today. For ten points each,

Name this small town in the north of France, near where the Seine meets the river Epte. The artist’s estate in this town includes a Japanese-style footbridge over an oft-painted pond.

ANSWER: Giverny [zhee-vayr-nee]

This French impressionist artist’s estate at Giverny is now a popular museum attraction.

ANSWER: Claude Monet [mo-nay]

Monet completed dozens of paintings of these aquatic flowers and pads in his ponds at Giverny.

ANSWER: water lilies (accept Nymphéas; prompt on “lilies”)

(5) For ten points each, answer the following about a group of chemical elements.

This purplish solid element is essential in preventing hypothyroidism and goiter.

ANSWER: iodine (accept I)

At standard conditions, this element is a greenish-yellow gas. Like fluorine, it forms a diatomic compound rather than existing as free atoms; unlike fluorine, it is commonly used in swimming pools as a disinfectant.

ANSWER: chlorine (accept Cl)

Iodine, chlorine, and fluorine are three members of this 17th group of the periodic table, found just to the left of the noble gases.

ANSWER: halogens

(6) The Pacific archipelago that became this state was once known as the Sandwich Islands. For ten points each, Name this 50th United State.

ANSWER: Hawai'i

This capital and largest city of Hawai'i is found on Oahu, not the big island of Hawai'i.

ANSWER: Honolulu

This resort beachfront neighborhood of Honolulu, found just northwest of Kapiolani National Park and Diamond Head, is known for its excellent surf.

ANSWER: Waikiki Beach

(7) For ten points each, answer the following about the rock label Fueled by Ramen.

Fueled by Ramen is distributed by Atlantic Records, who signed this Hayley Williams-fronted band in 2005, but gave them to Ramen for PR purposes. This band's self-titled 2013 album includes "Still Into You."

ANSWER: Paramore

This band's self-released *Regional at Best* album caught the attention of numerous labels; they signed with Ramen in 2012 and released singles like "Tear in My Heart" and the ubiquitous "Stressed Out" from their album, *Blurryface*.

ANSWER: Twenty One Pilots

Ramen artist The Front Bottoms released a 2010 music video for a song about one of these objects "on the wall of my room. These objects also title a song in which Karen O sings "Wait! They don't love you like I love you."

ANSWER: Maps

(8) This man collected most of his data using naked-eye observations; it's not that his prosthetic nose made telescopy difficult, he just died before Galileo's work was widespread. For ten points each,

Name this Danish astronomer who tried to unify the theories of heliocentrism and geocentrism. His most important contribution may have been his mentoring of, and collaboration with, a German astronomer.

ANSWER: Tycho Brahe

This assistant of Brahe used Brahe's data to support his hypotheses from *Mysterium Cosmographicum*. After Brahe's death, this German published a collected set of three laws of planetary motion.

ANSWER: Johannes Kepler

Kepler's first law of planetary motion dictates that planets move in orbits of this shape, focused around the Sun and a second point in space.

ANSWER: ellipse (accept word forms, like elliptical orbit)

(9) This poet called dead people “the meek members of the Resurrection” who sleep under “Rafter of Satin and Roof of Stone” in “Safe in their Alabaster Chambers.” For ten points each,

Name this reclusive “Belle of Amherst,” whose more cheerful poetry describes “A narrow Fellow in the Grass.”

ANSWER: Emily Elizabeth **Dickinson**

In this depressing poem, Dickinson describes a carriage ride with Immortality and the title concept, with whom she sees “the School, where Children strove / at Recess – in the Ring.”

ANSWER: **Because I Could not Stop For Death**

In yet another depressing Dickinson poem, the speaker says a sickroom is like “the Stillness in the Air - / Between the Heaves of Storm,” and hears this animal “buzz – when I died.”

ANSWER: **fly**

(10) This group of over 40,000 marchers organized in Washington D.C. in summer 1932, but was turned away by the Army, killing two protesters. For ten points each,

Name this group of World War I veterans who demanded early payment of service certificates that were to mature in 1945.

ANSWER: **Bonus Army** (accept the **Bonus Expeditionary Force**)

This U.S. President ordered Douglas MacArthur to break up the Bonus Army’s camps.

ANSWER: Herbert **Hoover**

The Bonus Army’s economic desperation came in the midst of this 1930s economic downturn, the worst of the 20th century. Like many others during this time period, the Bonus Army lived in a makeshift housing camp nicknamed “Hooverville.”

ANSWER: **Great Depression**

(11) This god made King Minos’s wife obsessed with a bull so she would give birth to the Minotaur. For ten points each,

Name this Greek god of the sea, the brother of Hades and Zeus.

ANSWER: **Poseidon** (do not accept “Neptune”)

Poseidon’s consort was this sea-nymph, who was the mother of Poseidon’s son Triton.

ANSWER: **Amphitrite** [am-fih-TRY-tee]

With Aethra, Poseidon was also one of the two fathers of this hero, who defeated the Minotaur and tried to abduct Persephone with the help of Pirithous.

ANSWER: **Theseus**



(12) This work's composer, Sir Edward Elgar, was serenaded with it in 1905 as he received an honorary doctorate degree from Yale. For ten points each,

Name this musical piece that is traditionally played at the Last Night of the Proms concert and at American graduation ceremonies.

ANSWER: **Pomp & Circumstance** March (No. 1)

Sir Edward Elgar was born in this country, which celebrates his work by playing *Pomp and Circumstance* at the Proms in London.

ANSWER: **England** (accept United **K**ingdom, Great **Britain**, etc.)

The Proms are held in this London concert hall, named in honor of a 19th century British royal.

ANSWER: Royal **Albert** Hall

(13) The last sale of a complete one of these books was in 1978, when it sold for over \$2 million since only forty-nine of these books are known to exist. For ten points each,

Name this type of religious text created in the 1450s, noted for their beauty and careful craftsmanship. Most pages in these works have forty-two lines of black or red script.

ANSWER: **Gutenberg Bibles** (accept equivalents; prompt on partial answers)

The Gutenberg Bibles were produced on these devices, whose movable type mechanics were invented by Gutenberg.

ANSWER: **printing press**

Gutenberg invented the printing press in Mainz, which was then a Free Imperial City in this empire, first ruled by Charlemagne.

ANSWER: **Holy Roman** Empire (accept **HRE**; do not accept or prompt on Roman Empire)

(14) These particles come in six flavors, including charm and strange. For ten points each,

Name these subatomic particles with charge values of either positive two-thirds or negative one-third times the charge of an electron.

ANSWER: **quarks**

Quarks are components of this class of particles, which includes baryons and mesons. A large collider of these particles was built by CERN near Geneva, Switzerland.

ANSWER: **hadrons** (accept Large **Hadron** Collider)

Quarks are observed via the study of hadrons, because they have this property and thus are confined to grouping within a hadron. In optics, this concept is additively combined, such that the three primary hues of visible light merge together to create white.

ANSWER: **color** (accept **color** charge)

(15) In this novel, the horse groom Hippolyte has his leg amputated after an attempt to fix his clubfoot fails. For ten points each,

Name this novel in which Emma, the title woman, has affairs with Rodolphe Boulanger [roo-DOLF boo-long-ZHAY] and Léon Dupuis [lay-ON doo-PWEE], before eventually committing suicide.

ANSWER: **Madame Bovary**: Province Manners (accept **Madame Bovary**: Moeurs de province)

Madame Bovary's husband, Charles, performs Hippolyte's surgery and amputation, since he is a member of this profession.

ANSWER: **doctors** (accept reasonable equivalents like **medical** professionals)

*Madame Bovary* is by this French author of *Sentimental Education* and *A Simple Heart*.

ANSWER: Gustave **Flaubert**

(16) A surface of lapis lazuli "as brilliant as the sky" appeared at this location when god revealed himself to the Hebrew elders. For ten points each,

Name this mountain, where God gave instructions for the building of the Tabernacle while his presence hung about this mountain "like a cloud."

ANSWER: Mount **Sinai** (accept Har **Sinai**; accept Mount **Horeb**; accept **Jabal Musa**; prompt on "Musa")

After giving instructions on Mount Sinai for the Tabernacle, God gave Moses stone tablets displaying these core laws of Abrahamic religions.

ANSWER: **Ten Commandments** (accept **Decalogue**; prompt on "Commandments")

While Moses received the Ten Commandments on Sinai, his brother Aaron oversaw the construction of this false idol, which angered Moses so much that he smashed the Commandments and had to get a second copy.

ANSWER: **golden calf** (prompt on "golden idol" or "calf" alone; prompt on "golden cow" or "golden bull")

(17) These bryophytes are traditionally held to grow on the north sides of trees, favoring sunlight; in reality, they seek the damp side. For ten points each,

Name these flowerless plants which often grow on the surface of rocks or trees.

ANSWER: **mosses**

Like all bryophytes, mosses lack this woody tissue, which strengthens xylem.

ANSWER: **lignin**

Bryophytes produce these haploid structures in the gametangia for asexual reproduction. They have hard shells and are flung from the plant, offering a method of survival in harsh conditions.

ANSWER: **spores**

(18) This religious leader, with Henry Vane and John Wheelwright, argued for a “covenant of grace,” triggering the Antinomian Controversy. For ten points each,

Name this Puritan leader who was banished from the Massachusetts Bay Colony, which she prophesied would suffer greatly.

ANSWER: Anne **Hutchinson** (accept Anne **Marbury**)

After being banished, Hutchinson assisted Roger Williams in the founding of this other New England colony, which is now the smallest U.S. state.

ANSWER: **Rhode Island** and Providence Plantations

Prior to the controversy, Hutchinson provided spiritual guidance in the Massachusetts Bay Colony while serving in this profession, assisting pregnant women deliver their children.

ANSWER: **midwife** (do not accept or prompt on doctor, physician, etc.)

(19) At the end of *Fahrenheit 451*, Guy Montag joins a group of exiles who preserve literature by memorizing it. Answer the following about some of the works they choose to remember for ten points each.

The chapters of this book are spread among various people on the east coast. This book was written by transcendentalist Henry David Thoreau while he lived self-sufficiently “in the woods.”

ANSWER: **Walden**; or, Life in the Woods

The leader of the exiles, Granger, remembers *The Republic*, a work by this ancient Greek philosopher who was the student of Socrates and the teacher of Aristotle.

ANSWER: **Plato**

Guy Montag remembers the lines “To everything there is a season,” “a time to build up and a time to break down” from this biblical book that follows Proverbs.

ANSWER: Book of **Ecclesiastes** (accept **Koheleth**)

(20) Name some stories that focus on a certain facial feature, for ten points each.

This author wrote a story about Major Kovalyov, whose title facial feature decides to run away and live on its own in “The Nose.” This Russian author also wrote “The Overcoat” and *Dead Souls*.

ANSWER: Nikolai Vasilievich **Gogol**

This author of *Haroun and the Sea of Stories* and *The Satanic Verses* wrote a novel in which Saleem Sinai is born at the moment of India’s independence with an enormous and very sensitive nose, titled *Midnight’s Children*.

ANSWER: (Sir Ahmad) Salman **Rushdie**

This puppet from a novel by Carlo Collodi is created by Geppetto, and experiences a sudden growth of his nose every time he lies. This character also appeared in a Disney cartoon adaptation in which he ultimately becomes a real boy.

ANSWER: **Pinocchio**

