

Round 7

Brad Fischer • Charlotte Maher • Adam Silverman • Kristin Strey

Tossups

(1) **Soubrettes sing in this vocal range. Operatic performers in this vocal range include Montserrat Caballé, whose famous roles included the title character of (*) *Turandot*.** Performances in this vocal range, which commonly include coloratura passages with wide leaps and trills, were routinely mangled by Florence Foster Jenkins. For ten points, name this female vocal range that is higher than alto and the highest in an SATB choir.

ANSWER: soprano (accept additional information, such as operatic soprano or coloratura soprano)

(2) **Chaplain and photographer Francis Browne documented this ship's stops at Cherbourg and Queenstown after it initially departed from Southampton. Architect Thomas Andrews diagnosed the (*) "mathematical certainty" that awaited this ship on the morning of April 15th once six of its compartments had flooded. Edward Smith died while captaining, for ten points, what "unsinkable" ocean liner that, in 1912, sank after striking an iceberg?**

ANSWER: RMS Titanic

(3) **A leader of this country asked the newspaper *Yedioth Ahronoth* to hire more favorable journalists in exchange for a law that would hurt a competing paper. An alliance of the Yamina and Yesh Atid parties ousted this country's prime minister as he was on trial for bribery and fraud. (*) Likud leader Benjamin Netanyahu once led, for ten points, what Middle Eastern country that claims the Palestinian territories of the West Bank and Gaza Strip?**

ANSWER: Israel (accept State of Israel; accept Medinat Yisrael)

(4) **Shorthand electron configurations are written using these elements. The first compound containing one of these elements was synthesized by Neil Bartlett in 1962. These elements have full (*) valence shells, meaning they satisfy the octet rule without forming covalent bonds; as a result, these members of group 18 are unreactive. For ten points, name these elements on the right-hand side of the periodic table, including helium and neon.**

ANSWER: noble gases (accept inert gases; accept group 18 or group 8 until "18" is read; prompt on "gases")

(5) **This book's protagonist gets "a helluva headache all of a sudden" while explaining why he flunked Oral Expression to his former teacher, Mr Antolini. The idea that Jane Gallagher is dating (*) Stradlater upsets this book's protagonist, leading to a fistfight and an expulsion from Pencey Prep. The world is full of "phonies" according to the protagonist of, for ten points, what novel about wayward teenager Holden Caulfield, written by J.D. Salinger?**

ANSWER: The Catcher in the Rye

(6) **This ritual’s traditional *kahiko* style is set to chanting. Hi’iaka [hi-ee-AH-ka] performed this ritual to appease Pele, who herself performed this ritual upon finding an island where she was safe from her sea goddess sister. Laka is the goddess of this ceremonial action, which was (*) banned by Christian missionaries. Shell necklaces, grass skirts, and leis are traditionally worn during performances of, for ten points, what type of dance with ritual significance in Hawaii?**

ANSWER: hula dancing (prompt on “dancing;” prompt on descriptions of “Hawaiian dancing”)

(7) **Hyperbolic geometry assumes a non-unique form of this property. Because the cosine of zero is one, two vectors with this property have a dot product equal to the product of their magnitudes. Graphs in “y equals m x plus b” form have this property if the values of (*) m are equal. In three dimensions, either “skew,” “intersecting,” or this term will describe a pair of lines. For ten points, name this mathematical adjective that describes two lines that never intersect.**

ANSWER: parallel (prompt on descriptions of “going in the same direction”)

(8) **The epicenter of this event was at 137 DeKoven Street, and it took place on the same day as a deadlier event of the same type in Wisconsin. A pumping station and water tower on (*) Michigan Avenue were among the few buildings to survive this event. Anti-Irish discrimination likely fueled the myth that Mrs O’Leary’s cow kicked over a lantern to begin, for ten points, what 1871 disaster that destroyed thousands of wooden buildings in a large Illinois city?**

ANSWER: Great Chicago Fire of 1871

(9) **A character in this play offers columbine, rue, and daisies to a group gathered at Elsinore, but says that violets “withered all when [her] father died.” This play’s title character says “frailty, thy name is woman” when his mother (*) Gertrude marries his uncle Claudius, and duels Laertes, the brother of Ophelia, over the death of Polonius. For ten points, name this play by Shakespeare in which the title prince of Denmark tries to avenge his father’s death.**

ANSWER: Hamlet (accept The Tragedy of Hamlet, Prince of Denmark)

(10) **Although this kingdom includes pathogens like *Aspergillus* and *Candida*, it is also the source of antibiotics like cephalosporin. The simplest eukaryotic model organisms are probably in this kingdom’s (*) *Saccharomyces* genus. The *Ascomycota* phylum in this kingdom includes their spore-forming, sac-like species, such as yeast. For ten points, name this kingdom of eukaryotes that also includes truffles and mushrooms.**

ANSWER: Fungi (accept fungus)

(11) **The Cowpens design for this object includes a twelve-point circle with a center point. The former Elizabeth Griscom is legendarily credited with designing the “first” of these items. One of these objects that measures roughly thirty-by-thirty-two feet inspired the poem (*) “Defence of Fort McHenry” by Francis Scott Key. “The Star-Spangled Banner” was written about, for ten points, what emblem of the United States that currently has fifty stars and thirteen stripes?**

ANSWER: American flag (accept the Star-Spangled Banner before read; accept Old Glory; prompt on “Stars and Stripes”)

(12) **This quantity is constant in an incompressible fluid. Hydrostatic pressure equals little g times height times this quantity. Specific gravity is a non-dimensional form of this quantity, for which osmium has the highest value among the elements.** (*) Neutron stars have an incredibly high value for this quantity, and a solid object will float if its value of this quantity is less than the liquid's. For ten points, name this physical quantity that is equal to mass over volume.

ANSWER: density (accept mass density)

(13) **This author gained popularity with novels like *The Minister's Wooing* and *Dred: A Tale of the Great Dismal Swamp*, but became known as the person who “started [a] great war” with a novel in which Ophelia is ordered to educate Topsy. In a novel by this author, the title man saves little** (*) Eva from drowning, but is killed on the orders of Simon Legree when he is sold by the St Clare family. For ten points, name this American abolitionist author of *Uncle Tom's Cabin*.

ANSWER: Harriet Beecher Stowe

(14) **This artist confesses “I was fed up with the fantasy” and says “yesterday I would have run away / and I don't know why” in a song that describes a man who calls her “Melly.” In 2022, this singer performed with** (*) James Madison's crystal flute and sang about needing a “sentimental man or woman to pump me up” in the debut single from her album *Special*. For ten points, name this American pop singer of “2 Be Loved (Am I Ready)” and “About Damn Time.”

ANSWER: Lizzo (accept Melissa Viviane Jefferson)

(15) **In a painting by this artist, mountains in the foreground are dominated by a gray, cloudy sky, a hollyhock flower, and a ram's head. Photographer Alfred Stieglitz was married to this artist, who often argued against critics who thought her paintings of red** (*) lilies and black irises had sexual connotations. *Jimson Weed* was painted by, for ten points, what American artist who is best known for her paintings of cow skulls and flowers?

ANSWER: Georgia O'Keeffe (accept Georgia Totto O'Keeffe)

(16) **An artificial hill was built in this city's Jingshan Park. The Grand Canal begins in this city before flowing through Tianjin to the Bohai Sea. This city's modern name was coined in the Ming dynasty to differentiate it from its** (*) southern counterpart. “The Bird's Nest” is the nickname of a National Stadium in this city, the first to host both Winter and Summer Olympics. Guangzhou [gwang-joh] and Shanghai are the two Chinese cities more populous than, for ten points, what capital city of China?

ANSWER: Beijing (accept Peking) (“Beijing” means “Northern Capital”, as opposed to “Nanjing”, which means “Southern Capital.”)

(17) **This holiday begins on Dhanteras and ends with Bhai Duj, which celebrates the relationship between siblings. Celebrations during this festival commemorate the defeat of the demon Narakasura and the return home of** (*) Sita and Rama in the Ramayana. Offerings are given to Lakshmi during this holiday to celebrate the fiscal new year in autumn. For ten points, name this Hindu holiday celebrated with diya lamps, nicknamed the festival of lights.

ANSWER: Diwali (accept Divali; accept Deepavali)

(18) **In 2010, this country’s leader, René Preval, escaped without injury when the National Palace collapsed in an earthquake that killed over 100,000 people. In July 2021, over two dozen mercenaries carried out the assassination of (*) Jovenel Moïse, this country’s president. The Duvalier family led this country as despots for much of the 20th century. The island of Hispaniola is shared by the Dominican Republic and, for ten points, what French-speaking Caribbean nation whose capital is Port-au-Prince?**

ANSWER: Haiti (accept Republic of Haiti; accept Repiblik d Ayiti; accept République d’Haiti)

(19) **Vera Rubin studied the rotation of these objects. These objects are classified by a “tuning fork” diagram that places their lenticular type between two extremes. The Small and Large (*) Magellanic Clouds are examples of these objects located within the Virgo Supercluster. Conventionally, these objects’ shapes are either elliptical, like Centaurus A, or spiral, like Andromeda. For ten points, name these massive collections of stars, such as our own Milky Way.**

ANSWER: galaxies (accept specific types, such as elliptical galaxy or spiral galaxy)

(20) **The protagonist of this literary work meets the ghosts of Anticlea and Elpinor after visiting the island of Aeaea [ah-EE-ah], and ignores a warning against eating sacred cattle. This work’s narrator’s meetings with (*) Circe and the cyclops Polyphemus delay his return to Penelope and Telemachus in Ithaca. For ten points, name this epic poem attributed to Homer in which the title Greek hero spends twenty years trying to get home from the Trojan War.**

ANSWER: the Odyssey (accept Odysseia)

Bonuses

(1) Answer the following about the work of American poet Maya Angelou, for ten points each.

In a poem by Angelou, a “free” one of these animals “dips his wing / in the orange sun rays / and dares to claim the sky,” while a “caged” one of the animals “sings of freedom.”

ANSWER: bird (accept the caged bird; accept the free bird; accept I Know Why the Caged Bird Sings)

In addition to the poem “Caged Bird,” Angelou also wrote the book *I Know Why the Caged Bird Sings*, which is one of these works. It describes her life to the age of seventeen.

ANSWER: autobiography (accept memoir; prompt on “biography;” prompt on “nonfiction”)

Angelou read another of her poems, “On the Pulse of Morning,” at the inauguration of this U.S. president.

ANSWER: Bill Clinton (accept William Jefferson Clinton)

(2) This biologist “invented” the “auto-sexing chicken,” which apparently make it easier for breeders to classify them as male or female. For ten points each,

Name this British scientist whose important work on industrial agriculture is mostly dwarfed by his frankly self-explanatory “square” diagram that predicts the probability of how Mendelian genes are inherited.

ANSWER: Reginald Punnett

Punnett squares are pretty useless in practice due to gene linkage, an effect first described by this American scientist. He is reviled by biologists today for his efforts in making the pesky fruit fly a model organism.

ANSWER: Thomas Hunt Morgan

Fly-hating biologists would probably prefer to work with Punnett squares and these plants, Gregor Mendel’s favorite vegetables to study, because they are easy to see and don’t move.

ANSWER: pea plants

(3) Louis Farrakhan convened the Million Man March on this city in 1995, 32 years after another civil rights march on this city “for Jobs and Freedom.” For ten points each,

Name this city where Martin Luther King delivered his “I Have a Dream” speech in front of the Lincoln Memorial on the National Mall.

ANSWER: Washington, D.C. (accept DC; accept District of Columbia)

In summer 1932, an “army” of veterans marched on Washington to demand early payment of this reward for their World War I service. Herbert Hoover’s administration ordered the veterans removed by force; that didn’t exactly help his re-election campaign, but Congress did eventually make these payments early, in 1936.

ANSWER: military bonus certificates (accept Bonus Army; do not accept descriptions or synonyms)

The first group to picket the White House in DC was this movement of suffragettes, led by Alice Paul. The popular name of this group refers to their unusual protesting tactic.

ANSWER: Silent Sentinels (accept Sentinels of Liberty)

(4) Many of the harshest victims of the 2008 financial crisis had taken out this specific type of product, as opposed to a more stable, “fixed” type. For ten points each,

Name this financial instrument that, like the “fixed” type, is typically used for home purchases. This product, however, may “balloon” after an introductory period.

ANSWER: **adjustable-rate mortgages** (accept **ARM**; accept **variable-rate mortgage**; accept descriptive answers like “a **mortgage** where the interest **rate can change**,” prompt on “mortgage,” “loan,” or “home loan”)

A mortgage is a secured loan because the house purchased with the money serves this purpose. This term generally refers to any property used to secure a loan; if you don’t pay back a loan, the lender has the right to seize this.

ANSWER: **collateral**

A thousand dollar loan may ultimately cost a borrower more than two thousand dollars to pay back; the extra money is the interest, while this term refers to the original thousand dollars that is paid back.

ANSWER: **principal**

(5) The COVID pandemic created a boom in these “virtual” restaurants, such as “Pasqually’s” and “It’s Just Wings.” For ten points each,

Give this term for a restaurant that operates via delivery and pick-up, typically only via online ordering. Many of these businesses share cooking space with a real restaurant; for example, “It’s Just Wings” sells wings out of the back of a Chili’s.

ANSWER: **ghost kitchens**

Some ghost kitchen franchises aren’t tied to specific restaurants, like the burger chain developed by this YouTube star, whose real name is Jimmy Donaldson.

ANSWER: **Mr. Beast** (accept **MrBeast Burger**)

Scott Cawthon is developing a “Freddy Fazbear’s” ghost kitchen that will deliver this food. That’s fitting one of the earliest COVID-response ghost kitchens, Pasqually’s, sells wings and this food from within Chuck E. Cheese restaurants, which inspired the *Five Nights at Freddy’s* series.

ANSWER: **pizza**

(6) In a poem about this insect, the speaker wishes for the gift “to see ourselves as others see us” and calls this bug a “crowlan ferlie.” For ten points each,

Name this parasitic insect, the subject of a poem by Robert Burns that discusses “Seeing One on a Lady’s Bonnet at Church.”

ANSWER: louse (accept lice; accept To a Louse, On Seeing One on a Lady’s Bonnet at Church)

In another poem by Burns, this small rodent is called a “wee, sleeket, cowran, tim’rous beastie.” The poem reflects that “the best laid plans of” these animals “and men / oft go awry.”

ANSWER: mouse (accept mice; accept To a Mouse, On Turning her up in her Nest, with the Plough, November 1785)

Robert Burns called the louse a “crowlan ferlie” and the mouse a “tim’rous beastie” because he often wrote in the common dialect of this country, his home nation, which merged with England in 1707 to form Great Britain.

ANSWER: Scotland (accept Scottish; do not accept or prompt on “United Kingdom” or “UK”)

(7) Anne Bonny and Mary Read were among the women who “pled the belly” to have their executions for this crime delayed. For ten points each,

Name this crime whose “Golden Age” in the late 1600s and early 1700s included extensive buccaneering in the Caribbean Sea.

ANSWER: piracy (accept descriptions of “being a pirate”)

Captain Henry Morgan was one of several pirate leaders based in this island’s village of Port Royal. After an earthquake in 1692, Port Royal was largely abandoned, and Kingston became this island’s major port city.

ANSWER: Jamaica

This island, which is shaped somewhat like a turtle shell off the north shore of Haiti, was a pirate haven throughout the Golden Age.

ANSWER: Tortuga

(8) This structure was built by Ismail and his father, and is the focus of the qibla [kee-blah]. For ten points each,

Name this cuboid, black shrine inside the Masjid al-Haram.

ANSWER: Kaaba (accept al-Ka’bah)

Believers circle the Kaaba during this holy pilgrimage, which all Muslims who are able-bodied and financially able must perform once in their life.

ANSWER: Hajj (accept, but do not otherwise reveal, pilgrimage to Makkah or pilgrimage to Mecca)

During the Hajj, Muslims visit holy sites in and around this Saudi Arabian city, where the Masjid al-Haram is.

ANSWER: Makkah (accept Mecca)

(9) Camille Saint-saëns [san-sawn]'s musical suite *The Carnival of the Animals* includes a movement for solo cello named for this bird. For ten points each,

Name this graceful water bird. In a ballet named for this bird's "Lake," the evil sorcerer Rothbart casts a spell to transform a princess into this bird.

ANSWER: swan (accept Le cygne)

The ballet *Swan Lake* is by this composer, who also wrote *The Nutcracker*.

ANSWER: Pyotr Ilyich Tchaikovsky

In *Swan Lake*, Rothbart's spell affects this princess. The dancer who plays this princess usually also plays the black swan, Odile [oh-deel].

ANSWER: Odette

(10) The term "homogenization" technically refers to any technique by which these mixtures are broken up and re-dispersed. For ten points each,

Name these mixtures in which small particles, usually solids, are suspended in a "continuous" phase, usually a liquid, without precipitating.

ANSWER: colloids (prompt on "suspensions")

In practice, homogenization nearly always refers to a step in the production of this beverage, a colloid of fat globules suspended in water.

ANSWER: milk

Homogenization can temporarily prevent a colloid from displaying the Tyndall effect, which occurs when the insoluble particles do *this* to incoming light. The Rayleigh form of this physical process also explains why the sky is blue.

ANSWER: scattering (accept scatter light)

(11) This country is traditionally divided into three regions, including its portion of southwestern Silesia and Moravia. For ten points each,

Name this Central European country that, in 2016, officially changed its English name to remove the word "Republic." For most of the twentieth century, this country was unified with Slovakia.

ANSWER: Czechia (accept Czech Republic; do not accept or prompt on "Czechoslovakia")

This city on the Danube is the capital of Czechia [cheh-kee-ah].

ANSWER: Prague

The name of this largest region of Czechia was the common English name of the country for centuries. This region's name inspires a term commonly used to describe artists uninterested in traditional social conventions.

ANSWER: Bohemia (accept Bohemians)

(12) Poets are known for addressing profound concepts like love and this concept. For ten points each,

Name this concept that is personified in an Emily Dickinson poem that begins, “Because I could not stop for [this concept], he kindly stopped for me.” In the poem, this concept guides the speaker to her grave.

ANSWER: **Death** (accept Because I could not stop for **Death**)

Exact term required. An A.E. Houseman **[HOOS-man]** poem called “To a [this person], Dying Young” memorializes one of these people, who is carried “shoulder-high” in his coffin, the same way he had been carried in celebration on “the day [he] won [his] town the race.”

ANSWER: **athlete** (accept To an **Athlete**, Dying Young)

This sonnet by Wilfred Owen is indirectly about the death of millions, but more directly describes the death of great European civilizations with the outset of World War I.

ANSWER: **1914**

(13) A common mistake for beginning geologists and quizbowl players is the difference between this process and weathering, in which a rock is broken apart or otherwise changed. For ten points each,

Name this natural process in which material is moved from one place and deposited somewhere else.

ANSWER: **erosion** (accept word forms like **erode**)

Weathering may break a rock down into pebbles, dust, or sand; when the material is then transported via erosion, it is called this. One of the three major classes of rocks is formed by the collection and cementation of this material.

ANSWER: **sediment** (accept **sedimentary** rocks)

When a glacier erodes the landscape, the pebbles and rocks that the glacier picks up are called till; the till is eventually deposited into piles, which are given this name.

ANSWER: **moraines**

(14) In the mid-1700s, this country’s feuding political factions, the Hats and the Caps, disagreed on whether to re-take Old Finland. They did re-invade, and they lost even more Finnish territory to Russia. For ten points each,

Name this Scandinavian country that lost its king, Charles XII, in a 1718 attack on its western neighbor, Norway.

ANSWER: **Sweden** (accept **Swedish** Empire; accept **Stormaktstiden**)

Sweden was subdued by a Russian-led alliance in this 1700-1721 war, which basically ended Sweden as an imperial power.

ANSWER: **Great Northern** War

After the Great Northern War’s crucial 1709 Battle of Poltava, Charles XII fled to the protection of the Ottoman Empire, which refused Russian calls to perform this action. Today, some jurisdictions that oppose the death penalty will refuse to perform this action for criminals who would face execution in the requesting country.

ANSWER: **extradition** (accept word forms like **extradite**; prompt on descriptions of “returning someone to another country”)

(15) Conic sections are described by a value called eccentricity, which is somewhere between zero and one for an ellipse, but is exactly zero for this shape. For ten points each,

Name this shape that is graphed by the general equation “ x squared plus y squared equals r squared”, where r is typically a given number.

ANSWER: circle

The circle graphed by the specific equation “ x squared plus y squared equals 1” has its center at this point.

ANSWER: (0,0) [zero, zero] (accept the origin)

After circles and ellipses, a parabola has an eccentricity of exactly one, and this fourth standard conic section has an eccentricity of greater than one.

ANSWER: hyperbolas

(16) This god accepts half of the dead killed in battle in his mead-hall, Valhalla. For ten points each,

Name this Norse “All-Father,” the chief of the gods and father of Thor.

ANSWER: Odin (accept Wotan)

Odin owns one of these weapons named Gungnir. Pierced with one of these weapons, Odin hung from the World Tree for nine days, pierced by one of these weapons, to gain knowledge.

ANSWER: spear

Odin hung himself from the World Tree after giving his eye to drink from this giant’s well, which also granted him knowledge of the runes.

ANSWER: Mimir (accept Mim)

(17) A harmonic oscillator is an object that, when it moves away from its natural position, experiences a force that acts to restore it to that position. For ten points each,

Grandfather clocks feature these harmonic oscillators, which naturally hang straight down and swing from left to right.

ANSWER: pendulums

When the harmonic oscillator is this type of compressible coil, then the formula for the restoring force is called Hooke’s Law.

ANSWER: springs

A harmonic oscillator may be simple, in which the only force acting on it is the restoring force, or it may have this feature, in which another force counters the restoring force and reduces the oscillation.

ANSWER: damping (accept word forms and additional information, like damped oscillator)

(18) The Stanza della Segnatura is one of a series of apartment rooms that Pope Julius II had decorated with frescoes by this artist from Urbino. For ten points each,

Name this Italian Renaissance master who painted *La Disputa*.

ANSWER: **Raphael** (accept Raffaello **Sanzio** da Urbino; accept **Raphael** Rooms)

This massive fresco, in which Raphael painted ancient scholars like Plato and Aristotle, lies on the opposite wall from *La Disputa*.

ANSWER: The **School of Athens** (accept **Scuola di Atene**)

Raphael didn't explain who everyone in *The School of Athens* was, but scholars agree that this mentor of Plato and victim of hemlock poisoning wears green in the middle-left of the fresco.

ANSWER: **Socrates**

(19) This author wrote about the fictional town of Macondo in the short story "Leaf Storm," and returned to it in a novel about the Buendía family. For ten points each,

Name this Colombian author of the novels *Chronicle of a Death Foretold* and *One Hundred Years of Solitude*.

ANSWER: Gabriel **García** Márquez (prompt on "Márquez")

García Márquez wrote in the Magical Realist style, contrasting realistic scenes with supernatural events. In *One Hundred Years of Solitude*, the Buendía family's downfall culminates in the birth of a baby with the tail of one of these farm animals.

ANSWER: **pig**

In another magical realist work, García Márquez described "A Very Old Man with" an enormous pair of these body parts, which make a group of villagers think he is an angel.

ANSWER: **wings** (accept A Very Old Man with Enormous **Wings**)

(20) The population of the Taino people crashed in the years following contact with this man. For ten points each,

Name this explorer and slaver whose first of four expeditions across the Atlantic Ocean set sail in 1492.

ANSWER: Christopher **Columbus** (accept Cristobal **Colón**)

The genocide perpetrated by Columbus and other Spanish colonizers was documented and opposed by this Bishop of Chiapas, the first man to be appointed "Protector of the Indians."

ANSWER: Bartolomé de **Las Casas**

Some DNA studies have suggested that, after assaulting the Native Americans they encountered, Columbus' men introduced Europe to this sexually transmitted disease, caused by *pallidum* bacteria.

ANSWER: **syphilis**