

## Round 6

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

### Tossups

(1) **The speaker of this poem believes that his visitor’s “only stock and store / caught from some unhappy master” is the response to his question “is there balm in Gilead?” This poem’s title figure taps on a window to be let in, and perches “upon a (\*) bust of Pallas,” evidently never to leave. The speaker tries to forget about a “radiant maiden” named Lenore, but is tormented by the title bird, who repeatedly caws “nevermore.” For ten points, name this poem by Edgar Allen Poe.**

ANSWER: The Raven

(2) **While visiting this state, Katharine Bates wrote the poem that eventually became “America the Beautiful.” Mount Elbert is the tallest peak in this state, whose official flower, the blue (\*) columbine, was discovered during the first ascent of a mountain discovered by Zebulon Pike. Over 50 “fourteeners,” or mountains over 14,000 feet tall, are found in, for ten points, what “Mile High” state in the Rockies with capital Denver?**

ANSWER: Colorado

(3) **One of these devices with a length of 994 millimeters can be used to measure a second. The precession of one of these devices proved that the Earth rotates, according to (\*) Foucault [foo-koh]. These devices exhibit simple harmonic motion at small angles, and Christian Huygens [hoy-gens] used these devices to make more accurate clocks. For ten points, name this device consisting of a mass suspending from a pivot, from which it swings back and forth.**

ANSWER: pendulum (prompt on “(simple) harmonic oscillator” before “simple harmonic” is read)

(4) **The name of this food is screamed by Bill Raftery after clutch basketball shots. One of these vegetables is cut, breaded, and deep-fried to the tune of 1,900 calories in an (\*) Outback Steakhouse appetizer. Rather than cakes or parfaits, this food is the preferred metaphor for the hidden nature of ogres, according to Shrek. *Clickhole* and *The AV Club* are produced by a satirical news outlet named for, for ten points, what tear-inducing vegetable?**

ANSWER: onions

(5) **The first person to understand this man’s teachings was Kaundinya, who became the first arhat and was one of this man’s Five Companions. This man’s cousin Ananda recorded the Sutta Pitaka [soo-tah pee-tah-kah], part of the (\*) Pali Canon [”polly” canon], for this man, who sat under a Bodhi tree and preached about the Eightfold Path and the Four Noble Truths. For ten points, name this religious leader, born Siddhartha Gautama, who founded a meditative Indian religion.**

ANSWER: Gautama Buddha (accept Siddhartha Gautama before it is read)

(6) Congress, in need of tax revenue, weakened this policy with the Cullen-Harrison Act, which raised an important limit from 0.5% to 3.2%. The Volstead Act effectively began this period, though (\*) speakeasies and bootleggers broke the law. It ended with the 1933 ratification of the 21st Amendment and Franklin Roosevelt's quip "I think this would be a good time for a beer." For ten points, name the period of American history when alcoholic beverages were banned.

ANSWER: Prohibition (accept descriptions of the banning of alcoholic beverages before it is read)

(7) A sample is vaporized and becomes this type of species for use in mass spectrometry. In an electrolytic solution, these species will collect at the anode and (\*) cathode. Carbonate is a polyatomic example of these species with a minus-two charge. Plasma consists of these particles at high temperatures. For ten points, give this term for a chemical species created when electrons are removed or added to a neutral atom or molecule.

ANSWER: ions (accept anions and/or cations)

(8) In this novel, a house in which all clocks have been stopped at 8:40 is inhabited by an old woman in a wedding dress. The protagonist of this novel shows kindness to a prisoner in a (\*) graveyard, and that man later becomes the protagonist's secret benefactor. Abel Magwitch is scorned by the protagonist who loves Estella in, for ten points, what novel about Pip Pirrip written by Charles Dickens?

ANSWER: Great Expectations

(9) This empire's history is depicted in the Mendoza Codex and Florentine Codex, and it engaged in a ritualistic, melee-only form of combat known as a Flower War. Invaders of this empire fled its capital during La Noche Triste [no-chay tris-tay], shortly after they executed its leader, (\*) Montezuma. A triple alliance of Tlacopan, Texcoco [tesh-koh-koh], and Tenochtitlan [teh-nohsh-TEET-lon] grew into, for ten points, what empire that was based in modern-day Mexico until it was conquered in 1521 by Hernan Cortes?

ANSWER: Aztec empire

(10) In one painting by this artist, a trio of satyrs play with a joust as its owner reclines next to the goddess of love. Another work by this painter of *Venus and Mars* features a blindfolded cupid pointing an arrow towards three dancing girls. (\*) Orange blossoms fall from the cloak of Zephyr as a servant rushes up to clothe a woman rising from a seashell in a work by, for ten points, what Italian Renaissance painter of *Primavera* and *Birth of Venus*?

ANSWER: Sandro Botticelli

(11) Thousands of protesters in this city marched from Vyšehrad [vish-eh-rahd] Cemetery toward Wenceslas Square before police trapped and attacked them. In 1968, Soviet tanks rolled into this city to put down Alexander (\*) Dubček's [doob-check's] liberalization efforts, ending an era known as this city's "Spring." This city remained a capital after the 1993 breakup that made Bratislava the capital of Slovakia. For ten points, name this capital city of the Czech Republic.

ANSWER: Prague

(12) A 1975 experiment studied failures of this phenomenon in deep sea divers upon resurfacing, using a word list. The idea that this phenomenon is context-dependent suggests that test performance should increase by listening to the (\*) same music while studying and taking a test. George Miller joked that most people can only hold seven or so ideas during a short-term type of, for ten points, what process of storing and retrieving information that is hindered by amnesia?

ANSWER: memory (accept word forms like remembering)

(13) A writer in this language wrote about Your pursuit of Ludmilla in *If on a winter's night a traveller*. This language of *Six Characters In Search of an Author* was also used to tell about Federigo serving his prized falcon to (\*) Monna Giovanna, a story that was part of a work about people fleeing the Black Plague, *The Decameron*. For ten points, name this language of Calvino, Pirandello, and Boccaccio.

ANSWER: Italian (accept Italiano)

(14) One of these objects discovered by Wilhelm Tempel was visited by the *Deep Impact* mission. These bodies originate from the Oort cloud or the Kuiper [kye-per] belt, depending on the length of their period. As these bodies (\*) approach the Sun, solar heating creates a mini-atmosphere, called a coma, and a trail of gas and dust often visible from Earth. For ten points, name these “dirty snowballs” that may travel in regular elliptical orbits, such as a 76-year orbit made by one named for Edmond Halley.

ANSWER: comets

(15) Johann Schübler published a set of six of this man's late chorales. This composer died while writing a set of contrapuntal works on a single, D minor theme; that work includes four canons and 14 fugues. This prolific organist was mostly (\*) forgotten as a composer until his *Mass in B Minor* was revived by Felix Mendelssohn. For ten points, name this German composer of *The Art of Fugue*, the *Well-Tempered Clavier*, and the *Brandenburg Concertos*.

ANSWER: Johann Sebastian Bach

(16) In polar coordinates, this shape is graphed by “theta equals 1.” Euclid's second postulate notes that these objects can be created by extending another type of object, both of which he described as “breadthless.” In three-dimensional space, these objects are (\*) skew if they fail to intersect but don't lie in the same plane. For ten points, name this one-dimensional geometric figure that, unlike a ray or segment, extends infinitely in both directions.

ANSWER: line (do not accept “line segments” or “rays”)

(17) In this series of novels, Eustace and Jill travel from Experiment House to the title land, where the gods Bacchus and Silenus help the father of Rillian reclaim his throne. In a novel from this series, Mr Tumnus does not surrender a “Daughter of Eve” to the (\*) White Witch, allowing her and the other Pevensie children rule from Cair Paravel with the help of the lion Aslan. *Prince Caspian* and *The Lion, the Witch, and the Wardrobe* are from, for ten points, what series of fantasy novels by C.S. Lewis?

ANSWER: The Chronicles of Narnia

(18) **Gluconeogenesis finishes in this organelle's lumen. In muscle cells, a similarly-named analog to this organelle stores and releases calcium ions. This organelle is bound to the nuclear envelope, and like the (\*) Golgi body, it consists of flattened sacs or tubes called cisternae. For ten points, name this eukaryotic cell organelle that transports proteins and, depending on whether ribosomes are present on its surface, is classified as "rough" or "smooth."**

ANSWER: **endoplasmic reticulum** (accept **ER**; accept rough and/or smooth **ER**; prompt on "sarcoplasmic reticulum" after "muscle" is read)

(19) **This political party's 1860 election was disrupted by the walk-out of the Fire-Eaters. In the 1830s, William Leggett led this party's "Locofoco" faction, which was a response to this party's ruling class in (\*) Tammany Hall. This party was born from the Andrew Jackson branch of the 1828 split of an original party led by Jefferson and Madison. For ten points, name this American political party that opposed the Whigs and, later, the Republicans.**

ANSWER: **Democratic Party** (accept word forms like **Democrats**)

(20) **This deity was the mother of Ourea and Pontus, and was born alongside Eros. This goddess asked her son to castrate her husband, leading to the birth of the Furies. This goddess hid her children, including the cyclopes, inside herself to protect them from her husband (\*) Uranus, and helped her daughter, Rhea, save Zeus from Cronos. For ten points, name this Greek deity who arose out of Chaos at the beginning of time and gave birth to the Titans, the Greek personification of "Mother Earth."**

ANSWER: **Gaia** (accept **Gea**)

## Bonuses

(1) Nikolai Milyutin organized *zemstva* for these people after Alexander II carried out their emancipation in 1861. For ten points each,

Name these Russian peasants.

ANSWER: serfs

Alexander II was one of these Russian leaders. This position was abolished in 1917, shortly before the last of these rulers, Nicholas II, was executed.

ANSWER: tsar of Russia

Serfs fleeing bondage often joined groups of these people, peasant soldiers often conscripted by the tsar. Leaders of these people included Ivan Mazepa and Yemelyan Pugachev.

ANSWER: Cossacks

(2) Deities who performed the same function as this group of goddesses included the Norns of Norse mythology and the Parcae of Roman mythology, since all three groups spun and cut threads representing human destiny. For ten points each,

Name this group of goddesses, usually represented as the women Clotho, Lachesis, and Atropos, who governed the birth, life, and death of mortals.

ANSWER: Fates (accept Moirai)

This Greek princess gave a thread to Theseus to help him navigate the Labyrinth and kill the Minotaur. Theseus later abandoned this daughter of Minos, and she became the wife of Dionysus.

ANSWER: Ariadne

This mythological cloth-weaver was transformed into a spider after she challenged Athena to a weaving contest.

ANSWER: Arachne

(3) Answer the following about British poetry for children, for ten points each.

A.A. Milne wrote the poems “The Friend” and “Us Two” about this character, a stuffed friend of Christopher Robin.

ANSWER: Winnie-the-Pooh (accept Winnie-the-Pooh; accept Pooh Bear; accept Edward Bear)

This author wrote the collection *Appley Dapply's Nursery Rhymes* and stories for children about Jemima Puddle-Duck, Mrs. Tiggy-Winkle, and Squirrel Nutkin.

ANSWER: (Helen) Beatrix Potter

This author wrote that there was “never a name to go down to fame / compared with that of Toad” in a poem about the owner of Toad Hall, the main character of this author's *The Wind in the Willows*.

ANSWER: Kenneth Grahame

(4) For ten points each, answer the following about the Horn of Africa.

Cape Hafun, the easternmost point of Africa, is in this country on the Horn.

ANSWER: **Somalia**

The Gulf of Aden, north of Somalia, is connected to this sea by the Bab-el-Mandeb. This sea separates Egypt and Sudan from Saudi Arabia, and was legendarily parted by Moses.

ANSWER: **Red** Sea

Ethiopia enjoyed a coastline on the Red Sea until the independence of this country in 1993.

ANSWER: **Eritrea**

(5) This artist depicted car crashes in his *Death and Disaster* series. For ten points each,

Name this American Pop artist who made silkscreens of celebrities like Mao Zedong and Marilyn Monroe. He often worked out of his Pittsburgh studio, known as The Factory.

ANSWER: Andy **Warhol**

Warhol gained fame for his many pictures of this company's Soup Cans.

ANSWER: **Campbell's**

Warhol also experimented in film. In this film by Warhol, his lover John Giorno performs the title action for over five continuous hours.

ANSWER: **Sleep**

(6) The 2014 Nobel Prize in Physics went to a team of Japanese scientists who got these devices to emit blue light. For ten points each,

Identify these circuit components that allow current to travel in only one direction. The light-emitting type of these devices, or LEDs, are commonly used in electronics.

ANSWER: (light-emitting) **diodes**

Diodes work due to a p-n junction composed of these materials. The efficiency of this type of material is improved by adding impurities in a process called doping.

ANSWER: **semiconductors**

This element is the most common base of semiconductors. It appears between carbon and germanium in the periodic table and has atomic symbol Si.

ANSWER: **silicon**

(7) This man sees the spirits of Paolo and Francesca da Rimini blown apart by wild winds for the crime of having an affair while they were alive. For ten points each,

Name this author, who investigates the divisions of the Christian afterlife in his *Divine Comedy*.

ANSWER: Dante Alighieri

Dante follows the poet Virgil through nine circles of punished sinners in this first portion of the *Divine Comedy*.

ANSWER: Inferno

In *Inferno*, the third circle of Hell is devoted to the punishment of this deadly sin. Sufferers guilty of this sin are stuck blindly in freezing mud and guarded by Cerberus to prevent them from indulging their desires.

ANSWER: gluttony

(8) This politician, a four-term governor and four-time failed Presidential candidate, is the most recent third-party candidate to earn Electoral College votes, doing so in 1968. For ten points each,

Name this politician who “stood in the schoolhouse door” in 1963 to stop his state’s flagship university from admitting James Hood and Vivian Malone.

ANSWER: George Wallace

Wallace’s “stand in the schoolhouse door” was a short-lived attempt to fulfill his pledge for this concept “now,” “tomorrow,” and “forever.” Public schools in the U.S. were prevented from doing this by *Brown v. Board of Education*.

ANSWER: segregation (accept “segregation now, segregation tomorrow, segregation forever”; accept additional information, like segregating public schools; accept equivalent descriptions, like not integrating)

Wallace’s plea for eternal segregation was made in his 1963 inaugural address as this state’s governor. Two years later, Martin Luther King led a civil rights march in this state from Selma to its capital, Montgomery.

ANSWER: Alabama

(9) In the nineteenth century, actors began playing the Shakespearean character of Shylock sympathetically, portraying him as a wronged but proud man, rather than a vindictive and villainous moneylender. Answer some questions about Shylock and the play in which he appears, for ten points each.

Before the noblewoman Portia has Shylock sentenced to be converted to Christianity, he is a member of this religion, and would therefore have been forced to live separately in a ghetto in Shylock's hometown.

ANSWER: **Judaism** (accept word forms like **Jewish** faith)

Shylock appears in this play by Shakespeare, in which he lends money to a man hoping to fund Bassanio's trip to marry Portia. Shylock demands "a pound of flesh" in this play after learning that several ships full of the title man's goods have sunk before reaching an Italian city.

ANSWER: The **Merchant of Venice** (accept The **Jew of Venice**)

The merchant of Venice is this antisemitic man, who helps Bassanio marry Portia and helps Lorenzo marry and convert Shylock's daughter, Jessica, to Christianity.

ANSWER: **Antonio**

(10) This producer of *The Unbreakable Kimmy Schmidt* co-hosted the Emmys for three years with her former co-anchor, Amy Poehler. For ten points each,

Name this creator and star of *30 Rock* and author of *Bossypants*.

ANSWER: Tina **Fey**

Tina Fey's character, Ms. Norbury, gets offended when Damian calls joining the Mathletes "social suicide" in this 2004 film. Fey also wrote this film, which starred Lindsay Lohan as Cady Heron.

ANSWER: **Mean Girls**

Tina Fey and Amy Poehler co-anchored *Weekend Update* on *Saturday Night Live*, where Fey earned high marks for her 2008 impression of this former Alaska governor.

ANSWER: Sarah **Palin**



(11) Bureaucratic failures and personal inexperience made Cyril Radcliffe's job - drawing the border between these two countries - highly controversial, and it led to immense violence. For ten points each,

Name these two countries that were formed in the August 1947 partition of the British Raj. The Radcliffe Line is still the border between these two countries.

ANSWER: **India and Pakistan** (accept in either order; prompt if only one country is given; do not accept references to Bangladesh)

The creation of separate states for India and Pakistan was the primary goal of a political party led by Muhammad Ali Jinnah based in this religion's ideology. As the partition was planned and carried out, refugees of this religion fled Indian territory for Pakistan, while Hindu and Sikh refugees fled Pakistani territory for India.

ANSWER: **Islam**

This non-violent leader for Indian independence opposed the creation of a separate Muslim state. Five months after the partition, a Hindu nationalist assassinated him in New Delhi.

ANSWER: **Mahatma** (or **Mohandas**) **Gandhi**

(12) To construct one of these pictures, the number of valence electrons in question must be counted and placed appropriately, usually on outer atoms before central atoms. For ten points each,

Name these diagrams, which show how bonding atoms in a molecule share their electrons or keep lone pairs. They are named for their inventor, a 20th century American chemist.

ANSWER: **Lewis dot** diagrams (structures, formulas, etc.; prompt on dot diagrams)

This "rule," helpful when checking Lewis dot diagrams, notes that most elements bond to create valence shells with eight electrons.

ANSWER: **octet** rule

Helium doesn't follow the octet rule; its valence shell naturally has this many electrons.

ANSWER: **two**

(13) This leader's party suffered surprising defeats to the upstart AfD and the Social Democrats in local elections in September 2016. For ten points each,

Name this leader of the Christian Democratic Union, a former chemist who is often cited as the most powerful woman in the world.

ANSWER: Angela Merkel

Angela Merkel has served as the Chancellor of this country, the largest economy in Europe, since 2005.

ANSWER: Germany

The AfD, or Alternative for Deutschland, formed in April 2013 in reaction to Merkel's stance on this issue. Merkel has threatened to force a member country, led by Alexis Tsipras, out of the EU over this issue. Description acceptable.

ANSWER: problems with Greece's economy (accept any general description of the bailout of Greece's economy, requiring Greek austerity measures, etc.; prompt on partial answers)

(14) After being baptized by John, Jesus went out into the desert and fasted for forty days and nights. For ten points each,

Name this figure who tried to tempt Jesus to turn stones into loaves of bread to feed himself and to jump from the top of the Temple in Jerusalem.

ANSWER: Satan (accept equivalent terms like the devil)

This modern Christian celebration lasts for the forty days leading up to the celebration of Easter. During this time, Christians fast or "give something up" in memory of Jesus's forty-day fast.

ANSWER: Lent

During his temptation, Jesus cited scriptures recorded while the Israelites wandered for forty years in the desert after their expulsion from Egypt. At the end of their wandering, this successor to Moses and victor at the siege of Jericho led the Israelites into the promised land of Canaan.

ANSWER: Joshua son of Nun (accept Yehoshua ben Nun; accept Yeshua ben Nun; accept Yashua ibn Nun)

(15) Like a few related operations, the definition of this operation requires that the base be a positive number. For ten points each,

Name this mathematical operation that repeats multiplication, often described in terms of “raising a number to a power.”

ANSWER: exponentiation (accept word forms)

Finding the reciprocal of a number can be considered an exponentiation problem; for example, one over three is equal to three raised to this power.

ANSWER: negative one (accept negative first power)

This operation is the inverse of exponentiation, and likewise must have a positive base. If the base of this operation is 10, it's described as “common;” if the base is  $e$ , this operation is “natural.”

ANSWER: (common and/or natural) logarithm (accept word forms; prompt on log)

(16) After a devastating tragedy in this novel, Billy Pilgrim hears a bird saying, “poo-tee-weet?” For ten points each,

Name this work in which Billy Pilgrim is kept as a prisoner of war in an abandoned meathouse during the firebombing of Dresden, and believes that he has become “unstuck in time” and put on display in an alien Tralfamadorian zoo.

ANSWER: Slaughterhouse-Five, or The Children's Crusade: a Duty-Dance with Death

*Slaughterhouse-Five* was written by this American author of satirical novels like *Cat's Cradle* and *Breakfast of Champions*.

ANSWER: Kurt Vonnegut, Jr.

In this short story by Vonnegut, the title seven-foot-tall character escapes from prison after refusing to be handicapped to make him “average.” He is shot by Diana Moon Glampers after he frees a ballerina and dances with her on live television in this story.

ANSWER: Harrison Bergeron

(17) Vasopressin causes this organ to reabsorb more water, increasing the concentration of urine. For ten points each,

Name this pair of bean-shaped abdominal organs that filters the blood, regulates electrolyte concentrations, and produces urine.

ANSWER: kidneys

These glands rest on top of the kidneys. They produce steroids like aldosterone and cortisol, as well as a hormone that mediates the fight or flight response.

ANSWER: adrenal glands (accept suprarenal glands; do not accept adrenaline)

These functional units of the kidneys contain a renal corpuscle and a renal tubule for filtering blood.

ANSWER: nephrons

(18) This daughter of Powhatan was captured and held for ransom by Samuel Argall near Jamestown. For ten points each,

Name this Native American woman who died in England in 1617, shortly after meeting King James.

ANSWER: Pocahontas (accept Matoaka; accept, but do *not* otherwise reveal, Rebecca Rolfe)

This colonist claimed that Pocahontas saved his life by throwing herself in front of his executioner. During Jamestown's "Starving Time," this leader ordered that "he that does not work, shall not eat."

ANSWER: John Smith

In 1614, a year after taking the name Rebecca, Pocahontas married this other colonist, an early tobacco farmer.

ANSWER: John Rolfe

(19) This material may be washed away by surface runoff or through rills or gullies. For ten points each,

Name this material that provides nutrients and supports plant roots. Depending on its components, it may be classified as clay, sand, or silt.

ANSWER: soil (prompt on dirt)

The two primary forces of soil erosion are water and this other natural process. This aeolian process is more erosive during dry weather.

ANSWER: wind (erosion)

Bare soil may be protected by installing this material, a layer of living grass. It was once a common building material, especially for roofs, and is now most commonly installed on new lawns or athletic fields.

ANSWER: sod (accept turf)

(20) Michael Haydn heavily inspired this work's finale, which includes a A-B-D-C theme, a rapid "tumbling" theme, and three other musical subjects in its monumental final section. For ten points each,

Name this final symphony by Mozart, nicknamed for a Roman god.

ANSWER: Symphony Number 41 in C Major, "Jupiter", Köchel 551 (accept any or all of the three underlined options).

The finale of the "Jupiter" symphony combines five themes into a brief section of this contrapuntal musical form, in which multiple voices imitate a subject at different pitches. Michael Haydn and J.S. Bach are known for their work in this form.

ANSWER: fugue (accept fugato)

One of the five themes in the "Jupiter" symphony is an ascending six-note figure whose fourth note features this ornamentation, a rapid alternation between the printed note and a tone higher. In sheet music, this style is indicated by the abbreviation "tr" or a short wavy line.

ANSWER: trill (do not accept tremolo)