# Replacements <br> Brad Fischer •Mike Laudermith • Kristin Strey $\bullet$ Tyler Vaughan 

## Tossups

(1) In a work by this poet, the speaker meets St Bernard in the Empyrean, which he reaches by following his lost love, Beatrice [bay-ah-tree-shay]. A character created by this author climbs up the frozen body of Lucifer to reach Mount (*) Purgatory in a long poem in which he is led by Virgil through nine circles of punishment. For ten points, name this Italian poet who made himself a character exploring the Catholic afterlife in the Divine Comedy, a set of poems that begins with Inferno.
ANSWER: Dante Alighieri (accept either underlined name)
(2) In the aftermath of this event, troops were forced to withdraw to Castle Island despite promises made by Thomas Hutchinson. John Adams claimed that "facts are stubborn things" while defending this event's perpetrators. Henry Pelham created a depiction of this event which was then copied and attributed to (*) Paul Revere. Crispus Attucks was killed during the opening volley of this event. For ten points, name this 1770 event in which British soldiers opened fire on a crowd in Massachusetts.
ANSWER: Boston Massacre (accept The Incident on the King Street)
(3) Hellworth and McClung produced a "pulsed" one of these devices using Q-switching. One of these devices nicknamed Shiva, was fitted with neodymium glass and failed to ignite its target reaction even with twenty (*) beamlines. The "fiber" ones of these devices use total internal reflection to transmit a coherent photon stream produced by the stimulated emission of radiation. For ten points, name these devices that produce a colored beam of light.
ANSWER: LASER (accept light amplification by stimulated emission of radiation)
(4) The giant Hrym is destined to use one of these objects made of human nails, Naglfar, at Ragnarök. One of these objects built by the sons of Ivaldi, Skith-blath-nir, was big enough to hold all the gods and could travel anywhere and always have a good (*) wind. The goddess Nanna was reunited with her husband, Baldr, after joining him on one of these objects, which were used for medieval burials in Norway and Sweden. For ten points, name these objects used by Norsemen to navigate fjords and oceans.
ANSWER: ship (accept boat; accept longboat)
(5) In the first of these two movies, Donny Osmond was replaced with Jackie Chan's singing for Cantonese and Mandarin covers of the song "Nanzihan." The more recent of these films came under fire for filming in Xinjiang [shin-jyang] near Ouiger [wee-gurr] (*) internment camps, and for cutting the songs that appeared in the first of these movies, such as "Reflection" and "I'll Make a Man Out of You." For ten points, give the name shared by a pair of Disney films depicting a fictionalized account of a legendary Chinese warrior.
ANSWER: Mulan
(6) This instrument introduces the melody in Edvard Grieg's Morning Mood, and plays chromatic scales to open Claude Debussy's Prelude to the (*) Afternoon of a Faun. With the clarinets, this instrument plays off-beat grace notes through the second strain of The Stars and Stripes Forever. This instrument is played by blowing across the embouchure [OM-boo-shoor] while it is held horizontally. For ten points, name this single-reed woodwind instrument that is larger than the piccolo.
ANSWER: flutes (accept transverse flutes; accept concert flutes)
(7) A politician from this state was jokingly known as the "Senator from Pendergast." In this state's 2018 Senate election, incumbent Democrat Claire McCaskill was defeated by Josh Hawley. (*) Harry Truman represented this state in the Senate, and his Presidential library was built in this state's city of Independence, the starting point of the Oregon Trail. For ten points, name this midwestern state that is home to Jefferson City and Saint Louis.

ANSWER: Missouri
(8) This structure was proposed to explain the continuous strata of South Africa's Karoo region with that of the Santa Catarina region in Brazil. Alfred Wegener proposed the existence of this landmass while describing continental drift. (*) Panthalassa surrounded this landmass, which formed from the collision of ancient continents that became Gondwana-land and Laurasia, and broke up to form our modern continents two hundred million years ago. For ten points, name this ancient supercontinent whose name means "all earth."

## ANSWER: Pangaea

(9) Quine described three classes of these concepts, including "antinomies" as well as "veridical" and "falsidical" ones. Averroes created one of these statements about a stone to understand (*) omnipotence. A set of these statements named for Zeno of Elea include one in which an arrow is always at rest after being shot, and one in which Achilles loses a race to a tortoise. For ten points, name these logical conundrums that seem self-contradictory.
ANSWER: paradoxes
(10) In a short story by this author, the title creature dies of exhaustion after transforming into Tom LaFarge, Lavinia Spaulding, and other dead people. An automated house continues to function in a nuclear wasteland in another story by this author. (*) One of this author's protagonists is reported by his wife, Mildred, for reciting a poem. The fireman Guy Montag appears in a novel by this author of "There Will Come Soft Rains." For ten points, name this author of the science fiction classics The Martian Chronicles and Fahrenheit 451.
ANSWER: Ray Bradbury (accept Ray Douglas Bradbury)
(11) The structure of a class of these compounds is represented with Haworth projections. Tollens' reagent can detect aldehyde and one of these compounds, alpha-hydroxy ketone. One of these compounds is added to a protein in (*) glyco-sylation. Starches are formed from simple ones of these compounds, which are divided into mono- and di-saccharides. For ten points, name these carbohydrates, like lactose and sucrose, that taste sweet.
ANSWER: sugars (accept disaccharides or monosaccharides before "mono" is read; prompt on "carbohydrates")
(12) This novel's protagonist is given the name Quinbus Flestrin, and explores Balnibarbi, a country underneath the floating island of Laputa. In this novel, the title man flees to Blefescu after he is charged for putting out a fire with his urine in the country of (*) Lilliput. This novel's title character is kept as a pet in Brobdingnag, where the grass is as tall as trees. For ten points, name this novel by Jonathan Swift in which the title doctor travels to fictional countries populated by giants and six-inch-tall people.
ANSWER: Gulliver's Travels (accept Travels into Several Remote Nations of the World, In Four Parts, by Lemuel Gulliver, First a Surgeon, and then a Captain of Several Ships)
(13) During a battle, this city was saved by a timely charge led by John III Sobieski [John the third soh-bee-ess-kee] and his Winged Hussars. A massive force under Suleiman the Magnificent failed to take this city during a 1529 siege, a loss that ended the $\left(^{*}\right)$ Ottoman invasion of Europe. This city, the seat of the Hapsburg monarchy, served as a dual capital with Budapest after an 1867 compromise with Hungary. In 1938, Nazi Germany absorbed this capital city during the Anschluss, the annexation of this city's home country. For ten points, name this capital of Austria.
ANSWER: Vienna
(14) An enlarged version of this sculpture was created by Henri Lebossé to be placed outside the Panthéon in Paris. This sculpture was originally called The Poet, and was designed to sit under The Three Shades to represent (*) Dante considering the people he wrote about in Inferno as part of its artist's larger work, The Gates of Hell. For ten points, name this sculpture created by Auguste Rodin that shows a seated man leaning forward and resting his chin on his hand.
ANSWER: The Thinker (accept Le penseur; accept The Poet before it is read)
(15) The Nipigon River drains into the largest of these bodies of water, which is connected to the others through the Soo Locks. Two of these bodies of water are joined by the Straits of Mackinac [mack-ih-naw]. One of these bodies of water (*)"never gives up her dead" in a Gordon Lightfoot song about the sinking of the Edmund Fitzgerald between Wisconsin and Detroit. For ten points, name this group of five enormous bodies of freshwater between the U.S. and Canada, including Michigan, Superior, and Erie.
ANSWER: Great Lakes (accept Lake Superior before "these bodies" is read)
(16) In C++ [see plus plus] and many other programming languages, the index of an array begins at this number. This is the number of elements in the intersection of two (*) disjoint sets, and this value is the cardinality of the empty set. In Boolean logic, this number represents "false." The additive identity is, for ten points, what smallest natural number, the only integer that is neither positive nor negative?

ANSWER: zero
(17) The current holder of this position received a tiara made of Ohrid pearls in 2016. This figure uses a seal with two crossed keys, and wears the Ring of the Fisherman in reference to the first of these men, (*) Saint Peter. White smoke is released from the Sistine Chapel when a conclave of cardinals elects this Bishop of Rome. Francis is the current holder of, for ten points, what religious position that governs the Catholic church from the Vatican?
ANSWER: popes (accept papas; accept Bishop of Rome before it is read; prompt on "bishop" before it is read)
(18) Cuba's top predator was once a giant, terrestrial one of these animals that have asymmetrical ear holes to determine prey direction. The genus Athene contains these animals, which use serrated feathers for noiseless flight and can $\left({ }^{*}\right)$ rotate their necks two hundred seventy degrees. These birds regurgitate fur-and-bone pellets that are often dissected by students. For ten points, name these nocturnal birds of prey that have "horned," "screech," and "barn" species.
ANSWER: owls (prompt on "bird" before it is read)
(19) In this short story, Judith Cardenier unknowingly tells her father that his wife "broke a blood-vessel" while arguing with a peddler while the title man was away with the "crew of the Half-moon." A sound "like distant peals of (*) thunder" in this story is actually a group of ghosts playing ninepins, who keep the title man away from his home during the American Revolution. For ten points, name this Washington Irving short story in which the title Dutch villager falls asleep for twenty years.
ANSWER: Rip Van Winkle
(20) A leader of this country, who had helped overthrow Farouk I [the first], moved several temples as part of the construction of the Aswan High Dam, and fought a war with the UK, France, and Israel after trying to nationalize the Suez Canal. Gamal Abdel (*) Nasser and Ramses II [the second] have led this country, where Napoleon's troops legendarily damaged the Great Sphinx of Giza. For ten points, name this country where Anwar Sadat was assassinated in Cairo.

ANSWER: Egypt (accept Arab Republic of Egypt; accept Gomhoreyyet Masr el-'Arabeyya; accept Jumhuriyat Misr al-'Arabiyah)

