

Round 11

Lilly Chavez • Brad Fischer • James Fischer • Mike Laudermith • Jessica Markley
Sophie Netzel • Cooper Roh • Kristin Strey • Ethan Strombeck • Lana Kay Tutterow
Tyler Vaughan • Justin Zhang

Tossups

(1) **During Expedition 16 in 2008, Peggy Whitson became the first female commander of this place, one section of which is owned by Roscosmos. In 2015, Scott Kelly became the first American to spend a full consecutive (*) year at this place. The first private commercial flight to this place was completed in 2012 by Elon Musk's *Dragon*. Roughly sixteen orbits are completed each day by, for ten points, what currently manned satellite?**

ANSWER: International Space Station (accept ISS)

(2) **This writer described being raped by Mr Freeman at age eight in an autobiography whose title is derived from the Paul Laurence Dunbar poem "Sympathy." This poet says that she persists "from a past that's rooted in pain" in the poem (*) "Still I Rise." In 1993, this poet recited "On the Pulse of Morning" at Bill Clinton's inauguration. The title animal sings for "Freedom" in a poem by, for ten points, what African-American author of "I Know Why the Caged Bird Sings?"**

ANSWER: Maya Angelou (accept Marguerite Annie Johnson)

(3) **According to an impossible legend, after this thinker heard blacksmith hammers, he discovered the mathematical relationships behind musical tuning. A ten-dot triangle was sacred to the followers of this thinker, who supposedly drowned a man who discovered an (*) irrational number. For ten points, name this ancient Greek philosopher who names a theorem about the side lengths of right triangles, commonly written as a squared plus b squared equals c squared.**

ANSWER: Pythagoras of Samos (accept Pythagorean theorem after "theorem" is read)

(4) **This queen's marriage was confirmed with the equality motto "Tanto monta, monta tanto." This ruler of Castile persecuted Jews with the Alhambra decree, expelling them from her land, and defeated the Muslim kingdom of Granada to end the (*) Reconquista; those actions earned this queen and her husband the titles of Catholic Monarchs. For ten points, name this Spanish queen who jointly ruled with Ferdinand of Aragon and sponsored Columbus' first voyage.**

ANSWER: Isabella I (accept Isabella of Castile)

(5) **In Secwepemc [shech-weh-pemsh] stories, this mythic figure's hair became wila lichen when it got stuck in a tree. In another story, this figure's grandson becomes the first horse in North America. This mythic figure vows to spread mischief in the world after he helps the Earth Maker sing it into existence, likely in reference to his namesake animal's (*) howl. Stories in the American southwest describe, for ten points, what Native American trickster god who took the shape of a common wild canine?**

ANSWER: Coyote (accept Coyotl; accept Sk'elep)

(6) TV writer David Simon blamed a surge in this city's murder rate on state's attorney Marilyn Mosby, who charged police officers with manslaughter in 2015 after the reckless driving of a police van severed the spine of an unlawfully arrested man. In May 2019, this city's mayor, Jack Young, announced that its government (*) computer system was hacked by ransomware. The death of Freddie Gray triggered violent protests in, for ten points, what most populous city in Maryland?

ANSWER: Baltimore

(7) Many antibiotics contain a beta-lactam ring of this many atoms. The stannic cation [cat-eye-on] of tin has this size charge, and potassium is the first element with electrons in this energy level. Silicon has this many valence electrons, a molecule of butane has this many (*) carbon atoms, and there are this many atoms in tetraphosphorus. For ten points, give this atomic number of beryllium and number of corners in a square planar molecule.

ANSWER: four

(8) This man lamented “It is well that war is so terrible, or we should grow too fond of it” at the Battle of Fredericksburg, where his troops defended against Ambrose Burnside's attacks. This man led the militia that ended John (*) Brown's raid, and his family home was seized and converted into Arlington National Cemetery during the Civil War. For ten points, name this general who, on April 9th, 1865, surrendered his Confederate army at Appomattox to Ulysses S. Grant.

ANSWER: Robert E. Lee (accept Robert Edward Lee)

(9) A composer from this country used poems by a foreigner, Walt Whitman, for his *Sea Symphony* and wrote a *Fantasia* on a theme by a much earlier composer from this country, Thomas Tallis. This is the home country of Ralph Vaughan (*) Williams [RAFE vawn Williams] and the composer of the *Enigma Variations*, who had one of his *Pomp and Circumstance Marches* modified for a 1902 coronation. For ten points, name this home country of Sir Edward Elgar, who was knighted by King Edward VII.

ANSWER: United Kingdom of Great Britain and (Northern) Ireland (accept UK; accept Great Britain; accept England)

(10) In a novel titled for this condition, the doctor's wife kills the King of Ward 3 and is the only character not affected by this condition, which is compared to “falling into a milky sea.” The sonnet “When I Consider How My (*) Light is Spent” describes a poet with this medical condition, which suddenly strikes an entire town in a Portuguese novel. John Milton may have had a detached retina that caused, for ten points, what condition that titles a José Saramago novel about people losing their eyesight?

ANSWER: blindness (accept descriptions like being blind or being unable to see; accept unexplained or mysterious blindness; anti-prompt on “detached retina” before it is read by asking the player to be less specific; anti-prompt on “glaucoma”)

(11) **Congressman Charles Wilson pushed to covertly supply this country with Stinger missiles in Operation Cyclone. The Saur Revolution installed a socialist regime in this country, leading to an ill-fated 1979 Soviet invasion that was countered by its mujahideen [moo-jah-hih-deen]. In the wake of the (*) September 11th attacks, a US-led NATO coalition invaded, for ten points, what country that was liberated by the 2001 ousting of the Taliban from its capital, Kabul?**

ANSWER: Islamic Republic of Afghanistan

(12) **In 2014, the NBA forced the sale of this team when owner Donald Sterling was recorded making racist remarks. This team gave the Boston Celtics a draft pick to acquire head coach Doc Rivers, and in 2017, they acquired Patrick Beverly and Lou Williams from the (*) Houston Rockets for star point guard Chris Paul. Paul George and Kawhi Leonard [kah-wye Leonard] play for, for ten points, what basketball team that shares the Staples Center with the Los Angeles Lakers?**

ANSWER: Los Angeles Clippers (prompt on “Los Angeles” or “LA”)

(13) **A character in this novel, James, disagrees on the subject of a treatise written by his son titled “The Truth of Native Crime.” In this novel, Mr Carmichael takes a case “pro deo,” and a character referred to as “umfundisi” receives a letter from (*) Msimangu about his sister Gertrude. Arthur Jarvis is murdered by Absalom, prompting Stephen Kumalo to travel to Johannesburg in this novel. For ten points, name this South African novel by Alan Paton.**

ANSWER: Cry, the Beloved Country

(14) **This religion’s scripture is the basis for the *Divine Principle* by Sun Myung Moon, who founded a “Unification” movement that administers mass weddings in which couples seek to reverse original sin. Matteo Ricci spread this religion to (*) China in the early 1600s; the first European embassy allowed into the Forbidden City was Ricci’s Jesuit mission. Toyotomi Hideyoshi ordered the executions of twenty-six members of, for ten points, what religion whose martyrs were crucified in Japan?**

ANSWER: Christianity (accept any denomination, including Protestantism and Catholicism)

(15) **After Paris, this city holds the second largest collection of works by Auguste Rodin in a museum on Benjamin Franklin Parkway, which is also the location of Robert Indiana’s *LOVE* sculpture. This is the largest city downriver from Trenton on the (*) Delaware River, which separates this city from Camden, New Jersey. This city’s Rittenhouse Square was designed by William Penn. The Liberty Bell is displayed in, for ten points, what largest city in Pennsylvania?**

ANSWER: Philadelphia

(16) **Evidence for this property in giant marine reptiles is seen in the rapid bone growth of fossil plesiosaurs. Tuna achieve sudden bursts of speed because their muscular system has this property. A high percentage of brown fat helps infants maintain this property, which is upset during a (*) fever. This property is observed in birds and mammals, but not in amphibians. For ten points, name this property with which animals can maintain a constant internal temperature.**

ANSWER: warm-bloodedness (accept homeothermy or homeothermic; accept endothermy or endothermic; accept answers like keeping a constant body temperature before “constant” is read)

(17) **Blue-clothed men crouch in three different areas on this artwork. The title phenomenon of this work frames a background that contains a mountain whose name titles the thirty-six-painting series this work belongs to. This work's title phenomenon has claw-like edges that threaten three (*) boats in this example of *ukiyo-e* [oo-kee-yoh-ay] art. For ten points, name this Japanese woodblock print, part of a series of *Views of Mount Fuji* created by Hokusai [hoh-koo-sah-ee], which shows a tsunami.**

ANSWER: The Great Wave Off Kanagawa (accept The Wave; accept Kanagawa-oki nami ura)

(18) **The 1895 Supreme Court case *Pollock v. Farmers' Loan and Trust* struck down this policy, but a 1913 Constitutional amendment made it legal. Florida and Nevada are two of seven states that don't use this policy, whose introduction reduced the importance of (*) tariffs for federal government revenue. The Sixteenth Amendment authorized, for ten points, what type of tax that is reported on IRS Form 1040 ["ten forty"] and which taxes money made by the taxpayer?**

ANSWER: income tax (prompt on "tax")

(19) **A poet with this last name claimed to love "purely, as they turn from praise," and "freely, as men strive for right." Another poet with this last name wrote about a duke who complains of "a heart too soon made glad." A poet with this last name opened a poem by asking (*) "How do I love thee? Let me count the ways." For ten points, give the last name of the poets who wrote *Sonnets from the Portuguese* and *My Last Duchess*, a married couple named Elizabeth and Robert.**

ANSWER: Browning (accept Elizabeth Barrett Browning or Robert Browning)

(20) **In information theory, more information means more uncertainty and more of this quantity, which is one approach used to disprove the Maxwell's Demon thought experiment. Gibbs free energy is equal to enthalpy minus temperature times this quantity. The Second (*) Law of Thermodynamics states that, in an isolated system, this quantity always increases. For ten points, name this quantity, usually denoted with an S, that represents the degree of disorder in a system.**

ANSWER: entropy (accept S before it is read)

Bonuses

(1) The sign language used by this group is considered severely endangered, with less than forty native speakers worldwide. For ten points each,

Name this ethnic group that is indigenous to the arctic regions of Greenland and North America. They are known for their use of kayaks and dog sleds in transportation and hunting.

ANSWER: Inuit (prompt on “Eskimo”)

Many of the Inuit people live in Nunavut, a territory in this country, which separates Alaska from the contiguous United States.

ANSWER: Canada

Following years of murders of Inuit and other indigenous Canadian women, this current prime minister of Canada declared the crimes a genocide in 2019 and pledged to take action.

ANSWER: Justin Trudeau (prompt on “Trudeau”)

(2) These institutions may be subject to a “reserve requirement,” limiting the amount of their deposits that can be used in their lending business. For ten points each,

Name this type of institution that generally profits on the difference in interest rates between the loans it provides and the savings deposits it holds.

ANSWER: commercial banks

Most commercial banks in the United States are members of this central banking system and must hold their deposits at one of its twelve regional banks across the country. Jerome Powell is the current Chair of this system.

ANSWER: Federal Reserve System

The reserve requirement is also known as the ratio of this concept, a measurement of how easily an asset can be sold without losing value. Stores that are going out of business may have sales named for this concept, since they are trying to convert their remaining inventory into cash.

ANSWER: liquidity (ratio) (accept word forms like liquidation sale)

(3) At the end of *Moby Dick*, Ishmael floats to safety on one of these objects that Queequeg builds when he believes he is going to die. For ten points each,

Name this object. In another novel, one of these objects is built by Cash for his mother, Addie Bundren, while her family plans to take her to be buried in Jefferson, Mississippi.

ANSWER: coffin

Cash and his siblings Darl, Jewel, Vardaman, and Dewey Dell help their father, Anse, take Addie’s body to Jefferson for burial in this novel.

ANSWER: As I Lay Dying

As I Lay Dying is by this American author of *Light in August* and *Absalom, Absalom!*

ANSWER: William Cuthbert Faulkner

(4) In this novel, Homais [oh-MAY] expands his medical business after he discredits Charles by tricking him into performing a difficult clubfoot operation that results in an amputation. For ten points each,

Name this novel by Gustave Flaubert in which the title woman, Charles's wife Emma, becomes unsatisfied with her marriage and pursues affairs with Léon and Rudolphe.

ANSWER: Madame Bovary

Emma Bovary carries out her affair with Léon while pretending to take lessons to learn to play this keyboard instrument.

ANSWER: piano

When her affair with Léon sours, Emma tries to fill her life with reckless purchases that ultimately bankrupt her family. In desperation, she purchases this substance from Homais's shop, claiming she needs to kill some rats, and drinks it to commit suicide.

ANSWER: arsenic (prompt on "poison" or "rat poison")

(5) This structure is located on Bennelong Point in its city's harbor. For ten points each,

Name this iconic structure designed by Jorn Utzon [yorn uht-son]. This building's roof consists of overlapping white concrete "shells" that resemble sails.

ANSWER: Sydney Opera House (accept descriptions like the opera house in Sydney, Australia)

This Finnish architect was a judge in the competition that selected Utzon's design for the Sydney Opera House, though he is better known for designing the Gateway Arch in St Louis.

ANSWER: Eero Saarinen

Saarinen also designed the TWA Flight Center in one of these large buildings in New York named for John F. Kennedy. He also designed an international one of these buildings in Washington named for John Foster Dulles.

ANSWER: airports

(6) 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

(7) The Treaty of Kanagawa was negotiated by an American naval officer with this surname. For ten points each, Give this surname shared by Commodore Matthew, who modernized the U.S. Navy in the nineteenth century, and Oliver Hazard, who was given the title “Hero of Lake Erie.”

ANSWER: Perry (accept Matthew Calbraith Perry and/or Oliver Hazard Perry)

Matthew Perry sailed into Tokyo Bay to negotiate the Treaty of Kanagawa with this island nation.

ANSWER: Japan (accept Nippon or Nihon)

Oliver Hazard Perry gained his title during this war, which included the burning of Washington D.C. This war ended with the Treaty of Ghent shortly before this war’s final Battle of New Orleans.

ANSWER: War of 1812

(8) Physicist Murray Gell-Mann, who passed away in May 2019, proposed the theoretical model for these particles and coined their name from a passage in James Joyce’s *Finnegan’s Wake*. For ten points each,

Name this type of elementary particle. They are “glued” together by gluons to form particles like protons and neutrons.

ANSWER: quarks

Quarks are the building blocks of these sub-atomic particles, which include protons and neutrons. Europe’s CERN operates the LHC, a “Large” collider of these particles.

ANSWER: hadrons (accept Large Hadron Collider)

Quarks are distinguished by this property, which comes in six different types: up, down, top, bottom, charm, and strange.

ANSWER: flavors

(9) A character in this work loses his entire kingdom in a dice game. When he plays again, his entire family is forced to live in exile for twelve years. For ten points each,

Name this Hindu epic told by Vyasa that focuses on the Kurukshetra [koo-rook-shay-trah] war between the Kauravas [kaw-rah-vahs] and the Pandavas [pan-dah-vahs]. The Bhagavad Gita is a section of this epic work.

ANSWER: Mahabharata [mah-hah-bah-rah-tah]

In the Mahabharata, this eighth avatar of the god Vishnu serves as the charioteer and companion to the Pandava prince Arjuna.

ANSWER: Krishna

Krishna helps Arjuna marry Draupadi by giving him the opportunity to participate in a shooting contest. In the contest, Draupadi’s potential husbands must shoot the eye of a moving one of these animals that swims on the ceiling, without looking at it.

ANSWER: fish

(10) Definitions of this region sometimes include the archipelago of Tierra del Fuego [fway-go]. For ten points each,

Name this relatively low population region of southern South America whose name refers to the native “giants” that European explorers met during a sixteenth century expedition.

ANSWER: **Patagonia**

Patagonia, being at the southern end of South America, is a region shared by Chile and this much larger country that borders Chile on the east.

ANSWER: **Argentina** (accept **Argentine** Republic)

The name “Patagonia” was coined during this man’s 1520 expedition to circumnavigate the world, which he did not survive. This man names the strait separating Tierra del Fuego from Argentina’s mainland.

ANSWER: Ferdinand **Magellan** (accept Strait of **Magellan**)

(11) Upon announcing evidence of tiny changes in this radiation, George Smoot noted its importance by saying “if you’re religious, it’s like looking at God.” For ten points each,

Name this type of very faint radiation that is found throughout outer space at a color temperature of 2.726 Kelvin. Studies of this radiation are vital in cosmology.

ANSWER: **cosmic microwave background** radiation (accept **CMBR**; prompt on partial answers)

Cosmic microwave background radiation is a remnant of this event, which is theorized to have happened roughly thirteen point eight billion years ago at the beginning of the universe.

ANSWER: **Big Bang**

The cosmological principle, an important assumption in Big Bang theory, includes the idea that on a large scale, the universe is the same for all observers, a property given this name. This term, from the Greek for “same kind,” is also used in physical science to describe mixtures that are the same throughout.

ANSWER: **homogeneous** (accept word forms, like **homogeneity**)

(12) One of these statements is often used to judge whether three side lengths can form a triangle. For ten points each,

Give this term for a mathematical relationship, like “less than” or “greater than,” that compares things that have different values.

ANSWER: **inequality** (accept triangle **inequality**; do not accept or prompt on “equality” or “equation”)

The triangle inequality is commonly written as a strict inequality - that is, as “less than” instead of “less than or equal to” - because if the two short side lengths add up to equal the longest side length, the triangle is degenerate and the three “corners” of the supposed triangle actually have this property.

ANSWER: **collinear** (accept descriptions that describe that the three points all lie on the same **line**)

The degenerate triangle has this value for its area. This is also the area of any degenerate conic section, such as the intersecting lines seen in the degenerate hyperbola.

ANSWER: **zero**

(13) This volunteer paramilitary wing of the National Fascist Party was structured similarly to the ancient Roman Army. For ten points each,

Name this fascist militia group often referred to by the color of their clothing. In October 1922, this group marched on the capital, causing King Victor Emmanuel III to replace Prime Minister Luigi Facta with the man supported by this group.

ANSWER: **Blackshirts** (accept **Milizia Volontaria per la Sicurezza Nazionale** or **MSVN**; accept **squadristi**)

The Blackshirts were loyal to this fascist dictator, who they called Il Duce [eel DOO-chay].

ANSWER: Benito **Mussolini** (accept Benito Amilcare Andrea **Mussolini**)

Benito Mussolini was the dictator of this European country, which joined Nazi Germany and Japan as an Axis power in World War II.

ANSWER: **Italy** (accept **Italian** Republic)

(14) One species of this type, the bladder trap, uses a vacuum mechanism to catch water fleas. For ten points each,

Give this term that describes plants like the sundew and Venus flytrap, which catch small prey as a source of nourishment. This term is far more commonly applied to animals like lions.

ANSWER: **carnivorous** (accept word forms like **carnivores**; accept **meat-eaters**; prompt on “predator”)

Carnivorous plants often grow in environments where the soil lacks this nutrient, a vital component of both proteins and nucleic acids. Rhizobia “fix” this nutrient in the root nodules of some plants.

ANSWER: **nitrogen** (accept **nitrate**; accept **N** or **N₂**)

This type of carnivorous plant uses a rolled leaf to hold a pool of digestive juice into which insects fall, drown, and get dissolved.

ANSWER: **pitcher** plants

(15) This poet wrote “Anecdote of the Jar” and a poem in which “among twenty snowy mountains / the only moving thing / was the eye of the blackbird.” For ten points each,

Name this twentieth-century American poet of “Disillusionment of Ten O’Clock” and “Thirteen Ways of Looking at a Blackbird.”

ANSWER: Wallace **Stevens**

A Wallace Stevens poem titled for the “Emperor” of this dessert begins “Call the roller of big cigars [...] and bid him whip / in kitchen cups concupiscent curds” of this cold dessert for a wake.

ANSWER: **Ice Cream** (accept The **Emperor of Ice Cream**)

Another Wallace Stevens poem is set on and named for this day of the week, when an unnamed woman has a religious experience despite not attending church.

ANSWER: **Sunday** (accept **Sunday Morning**)

(16) This legendary figure journeyed to the Cedar Forest to fight Humbaba. For ten points each,

Name this hero who, in a namesake Mesopotamian epic, kills the Bull of Heaven after refusing to become Ishtar's consort. In revenge for the death of the Bull of Heaven, the gods kill Enkidu, this man's friend.

ANSWER: Gilgamesh

Feeling vulnerable after Enkidu's death, Gilgamesh seeks out Utnapishtim [oot-nah-peesh-teem] to learn the secret to achieving this status. After learning that Utnapishtim cannot give him this gift, Gilgamesh instead seeks out a plant that can restore his youth.

ANSWER: immortality (accept descriptions like never dying)

Before Gilgamesh can use the plant, it is stolen by one of these animals, which sheds its skin as it makes its getaway.

ANSWER: snake (accept serpent)

(17) This poet wrote about a man who "In Xanadu did [...] a stately pleasure-dome decree," and about a man who saw his crew die while "a thousand thousand slimy things / lived on; and so did I." For ten points each,

Name this English Romantic poet of "Kubla Khan" and a poem in which a sailor is cursed for killing an albatross.

ANSWER: Samuel Taylor Coleridge

In Coleridge's poem *The Rime of the Ancient Mariner*, the albatross's curse makes the Mariner's ship run out of this resource, causing the Mariner to say that this substance was "everywhere / nor any drop to drink."

ANSWER: water (accept saltwater; accept fresh water or drinking water)

In one of his poems, Coleridge hailed this man, his neighbor and fellow poet, as a "Sage Bard." This man added *The Rime of the Ancient Mariner* to his poetry collection *Lyrical Ballads*, and wrote "The Prelude," "Tintern Abbey," and "I Wandered Lonely as a Cloud."

ANSWER: William Wordsworth

(18) In a sealed container, the reaction of carbon monoxide and hydrogen gas to form methanol will reach equilibrium. For ten points each,

Equilibrium is only possible for this type of reaction, written with a double-headed arrow, in which reactants become products while products turn back into reactants at the same time.

ANSWER: reversible reaction

Since its change in enthalpy is negative, the reaction can be described with this term, meaning it releases heat into the surroundings.

ANSWER: exothermic reaction

A change in temperature, pressure, or reactant concentration will shift the equilibrium according to this principle named for a French chemist.

ANSWER: Le Chatelier's [le SHAT-lee-ay's] principle

(19) Answer the following about the “Axis of Evil,” for ten points each.

The phrase “Axis of Evil” was coined by this US President in the 2002 State of the Union address, given just months after the 9/11 attacks.

ANSWER: George Walker Bush (prompt on “Bush;” prompt on “George Bush;” prompt on “G Bush;” do not accept “George H.W. Bush” or “George Herbert Walker Bush”)

The Axis of Evil consisted of three countries: North Korea, Iraq, and this neighbor of Iraq, which has been led by its Supreme Leader, Ayatollah Khamenei, since 1989.

ANSWER: Islamic Republic of Iran (accept Persia)

Months later, this controversially aggressive US diplomat argued that Cuba, Libya, and Syria were rogue states that deserved attention “beyond” the Axis of Evil. This man served as National Security Advisor from April 2018 to September 2019.

ANSWER: John Bolton

(20) Give the following about the illustrious history of the trombone in classical music, for ten points each.

An early trombone solo appears in the *Tuba Mirum* section of this composer’s *Requiem*, which was left unfinished at his death. This composer also wrote the *Jupiter Symphony*.

ANSWER: Wolfgang Amadeus Mozart

This Russian composer, a member of the Mighty Five, wrote a Trombone Concerto in B-Flat Major but is better known for works like the *Russian Easter Festival Overture* and “The Flight of the Bumblebee.”

ANSWER: Nikolai Rimsky-Korsakov

Rimsky-Korsakov’s *Trombone Concerto* uses this kind of ensemble for accompaniment. This kind of ensemble, which is commonly assembled in American middle and high schools, has no string instruments and includes saxophones, unlike an orchestra.

ANSWER: wind band (accept wind ensemble; accept elaborations, like military band)