Round 9

Waleed Ali ・Alston Boyd ・Brad Fischer ・Clare Keenan ・Alec Krueger ・Mike Laudermith
Elissa Pape ・Anna Phillips ・Allison Salach ・Andrew Salij ・Kristin A. Strey ・Tyler Vaughan
Morgan Venkus ・Mike Withey ・Michael H. Wong

Tossups

1. **The background of this painting may have been inspired by the eruption of Krakatoa, accounting for the swirling red sky. In this painting, a pair of shadowy people walk alongside a railing on a hill overlooking a fjord. This work focuses on a (*)** bald figure holding his hands to his face while his mouth stretches open to make the title sound. For 10 points, name this painting by Norwegian artist Edvard Munch [moonk].
Answer: The **Scream** of Nature (accept **Skrik**; accept Der **Schrei** der Natur)

2. **Twenty-five episodes of this show featured performances by Julia Collins, and this show was originally hosted by Art Fleming. The author of the book *Brainiac* and this show's top grossing champion, (*)** Brad Rutter, were defeated by Watson, a computer, in 2011. Ken Jennings has the most wins on this game show, whose format includes three "daily doubles." For 10 points, name this quiz show hosted by Alex Trebek.
Answer: **Jeopardy!**

3. **This man declared he would "not accept if nominated" during the election of 1884. During one campaign, soldiers made this man's "neckties" out of railroads; that campaign ended with this man's (*)** Christmas gift to Abraham Lincoln, which consisted of guns, cotton, and the city of Savannah, Georgia. For 10 points, name this Union general who led a "March to the Sea" during the Civil War.
Answer: William Tecumseh **Sherman**

4. **In natural units, this quantity's square is the difference between the squares of energy and momentum. Units of this physical property include "electronvolts over c squared" and "daltons." Objects with this property have (*)** inertia and can interact with each other via gravity. This property is equal to force divided by acceleration. For 10 points, name this property that is divided by volume to find density, and that is often measured in grams.
Answer: **mass** (accept **inertial mass** until "inertia" is read; accept **gravitational mass** until "gravity" is read; prompt on "inertial" or "gravitational" mass after they are read, accept **Planck mass**; do not accept or prompt on "weight")

5. **In this novel, Fleur-de-Lys [flure duh LEE] is frightened by Djali's ["jolly's"] spelling trick. A woman recognizes that her daughter Agnes has grown up as a Roma girl named Esméralda in this novel. Phoebus is the captain of the guards in this novel, which focuses on a conflict between (*)** Archdeacon Frollo and Quasimodo [kwah-see-moh-doh], a church bell-ringer. For 10 points, name this novel by Victor Hugo about a Parisian cathedral.
Answer: The **Hunchback of Notre Dame** (accept **Notre Dame** de Paris)

6. **In this mountain range, accountant-turned-fugitive James "Bismarck" Hammes avoided capture by hiking for six years on a trail that extends from Springer Mountain to Mount Katahdin. Mount Mitchell is this range's highest peak, and this range includes the (*)** Piedmont and Blue Ridge subranges in Virginia and North Carolina. For 10 points, name this mountain range that extends from Georgia to Maine.
Answer: **Appalachian** Mountains

7. **An equation governing these substances is modified by the constants "a" and "b," which represent attraction and volume of particles. The van der Waals equation modifies the namesake law of a type of these substances, which is formed by combining (*)** Boyle's and Charles' laws. The equation "P V equals N R T" describes the "ideal" type of this state of matter. For 10 points, name this state of matter, in which molecules are spaced farther apart than in a liquid.
Answer: ideal **gas**

8. **This man's Continental System targeted Great Britain. Despite winning the Battle of Borodino, this man was forced to retreat from Russia. This commander was defeated at the Battle of (*)** Waterloo and, as a result, was exiled to St Helena. For 10 points, name this French emperor who engulfed Europe in his namesake wars.
Answer: **Napoleon** Bonaparte (accept **Napoleon I**; do not accept Napoleon III)

9. **This creature was tamed after Athena gave a golden bridle to one of Poseidon's sons, and this creature was born when blood from Medusa's severed head fell into the sea. (*)** Bellerophon died after this creature bucked when he attempted to fly this animal up Mount Olympus. For 10 points, name this winged horse from Greek mythology.
Answer: **Pegasus**

10. **In this author's first novel, Zeebo defends two children against Lula in First Purchase Church. In one of this author's works, Miss Maudie mocks Stephanie Crawford when she claims to have seen a man who leaves trinkets in a tree for (*)** Jem and his sister. This author's recent second novel concerns the adult Jean Louise, who returns to Maycomb, Alabama to visit her father, Atticus Finch. For 10 points, name this late author of *Go Set a Watchman* and *To Kill a Mockingbird*.
Answer: (Nelle) Harper **Lee**

11. **The competitive exclusion principle prevents two of these groups from occupying the same "niche." The allopatric model led to different traits between these groups of rodents on each side of the Grand Canyon, and different (*)** beak shapes help differentiate the many versions of these groups of finches in the Galapagos. A classification more specific than genus is, for 10 points, what title subject of a book by Darwin about their *Origin*?
Answer: **species**

12. **In response to the "axe murder incident," Operation Paul Bunyan was launched against this country. While fighting against this country, UN forces advanced to the Yalu River after landing at (*)** Inchon but were forced to retreat. For 10 points, name this country that is separated from its southern neighbor by a demilitarized zone and led by Kim Jong-un.
Answer: **North Korea** (accept **D**emocratic **P**eople's **R**epublic of **K**orea; accept **Choson** Minjujuui Inmin Konghwaguk; prompt on "Korea")

13. **In this novel, Mr Charrington struggles to remember the words to "Oranges and Lemons." O'Brien pretends to be in the Brotherhood in this novel, but is revealed to be a member of the** (*) Thought Police when he sends Julia and Winston to be tortured in the Ministry of Love. For 10 points, name this George Orwell novel about a dystopian society run by the mysterious Big Brother.

Answer: **Nineteen Eighty-Four**

14. **Many members of this group left the Church of England during the "Great Ejection", and one member of this group coined the term "City upon a Hill" in his sermon** *A Model of Christian Charity.* **During the Free Grace controversy, (*)** Anne Hutchinson's opposition of John Winthrop led to her expulsion from this group. The Massachusetts Bay Colony was founded by, for 10 points, what group of Protestants named for their desire to cleanse the church?

Answer: **Puritan**s (prompt on protestants)

15. **Sergei Prokofiev's** *Lieutenant Kije* **suite opens with a soft trumpet, then a very soft entrance by this instrument with flute. This instrument plays the triplet-heavy rhythm in the ostinato backing to Ravel's (*)** *Bolero*. This percussion instrument has no pitch, but a strainer can tighten or loosen namesake wires inside it. For 10 points, name this type of drum, used with tom-toms and bass drums in a standard drum set.

Answer: **snare drum** (prompt on "drum")

16. **Kerry Emanuel has tracked a 25-year increase in the force of these events, and the Mariners' 1-2-3 rule estimates the error in predicting their paths. The Saffir-Simpson scale rates the intensity of these events, which inflict damage with (*)** storm surges. For 10 points, name these tropical cyclones with wind speeds above 75 miles per hour, which are given names like Sandy and Katrina.

Answer: **hurricane**s (accept **tropical cyclone** before mentioned; prompt tropical storm)

17. **In 2015, Anthony Doerr's** *All the Light We Cannot See* **won this prize, for which Joyce Carol Oates was also nominated. Robert Frost, Eugene O'Neill, and Robert Sherwood share the record for the most of these (*)** prizes in literature, with four each. For 10 points, name this American literary award, founded in 1917 by a newspaper magnate.

Answer: **Pulitzer** Prize for Fiction

18. **Jean-Baptiste Say and Sir Thomas Gresham name two laws used in this field of study. One thinker used this study to predict the damaging effects of the Treaty of Versailles; that man, John Maynard Keynes, also wrote** *The General Theory of* **(*)** *Employment, Interest, and Money*. For 10 points, name this social science that studies the production of goods and services on both micro- and macro- levels.

Answer: **economics**

19. **This type of triangle features an angle with a negative value for cosine. It is impossible to inscribe more than one square in this type of triangle. The Pythagorean Theorem doesn't apply to these triangles, as c squared would be (*)** larger than a squared plus b squared. The circumcenter lies outside of, for 10 points, what type of triangle featuring an angle larger than 90 degrees?

Answer: **obtuse** triangle (do not accept or prompt anything else)

20. **This man blessed Ephraim before Manasseh and had a wrestling match at Peniel. He placed the children of his wife Leah in front of (*)** Rachel when introducing his family to his brother, Esau. For 10 points, name this biblical father of twelve sons, including Levi and Joseph, whom God named Israel.

Answer: **Jacob** (accept **Ya'akov**; accept **Israel** or **Yisrael** before "Israel" is read)

Bonuses

1. For 10 points each, answer the following about stone constructions in China.
[10] This defensive fortification, built to protect China from Mongol invasion, isn't really visible from space.
Answer: **Great Wall** of China
[10] The emperor Qin Shi Huangdi [chin shee hoo-ong dee] had this collection of thousands of clay sculptures built and buried with him.
Answer: **Terracotta Army** (prompt on "army")
[10] The Songyue Monastery is home to the oldest stone one of these multi-tiered towers, used for worship in Taoist and Buddhist traditions.
Answer: **pagoda** (do not accept "stupa")

2. In this novel the "tall soldier" Jim Conklin, is in the 304th regiment with the protagonist. For 10 points each,
[10] Name this novel about Henry Fleming, a Union soldier who feels guilty for not taking care of the "tattered man" after fleeing from battle.
Answer: The **Red Badge of Courage**
[10] *The Red Badge of Courage* takes place during this war. Peyton Farquhar, the protagonist of Ambrose Bierce's "An Occurrence at Owl Creek Bridge," is hung for helping the Confederates during this war.
Answer: The United States **Civil War** (accept **War Between the States**)
[10] *The Red Badge of Courage* is by this American author, who also wrote *The Open Boat*.
Answer: Stephen **Crane**

3. Postmodern Jukebox takes modern songs, and performs them as if they were written in another era. Name some songs that they have covered, for 10 points each.
[10] Postmodern Jukebox covered this Carly Rae Jepsen song in ragtime style. The lines "Hey, I just met you / And this is crazy / But here's my number" precede the title phrase of this song.
Answer: **Call Me Maybe**
[10] PMJ used New Orleans jazz dirge style to cover "Sweet Child O' Mine," a song by this band, who also sang "Welcome to the Jungle."
Answer: **Guns 'n Roses**
[10] Several PMJ songs were included in the game *Bioshock Infinite*, including a cover of this Tears for Fears song, in which "Everybody Wants to" do the title action.
Answer: Everybody Wants to **Rule the World**

4. This document opens its preamble with the words "We the People." For 10 points each,
[10] Name this document that was created in 1787 to replace the Articles of Confederation.
Answer: United States **Constitution**
[10] The ratifying of the Constitution was supported by this series of essays written by John Jay, James Madison, and Alexander Hamilton.
Answer: The **Federalist** Papers
[10] Opposition to the Constitution was led by this Virginian politician who famously claimed "give me liberty or give me death!"
Answer: Patrick **Henry**

5. This system of the body can be divided into the peripheral and central components. For 10 points each,

[10] Name this system that initiates movement by transmitting signals to the muscles.

Answer: **nervous** system

[10] The central nervous system consists of the brain and this bundle of nerves and tissue, which is protected by vertebrae.

Answer: **spinal cord** (prompt on spine; do not accept backbone)

[10] Each nerve cell consists of multiple dendrites that lead to a soma which passes signals to this long, slender fiber. This section of a neuron is often studied in squid where it can be 1 millimeter thick.

Answer: **axon**

6. Mimir's well of wisdom lies below this tree. For 10 points each,

[10] Name this Norse "world tree," from which Odin hung for nine days and nights.

Answer: **Yggdrasil**

[10] In Norse myth, Yggdrasil [IG-drah-zill] will be one of the only things to survive Ragnarök, also known as "the twilight of the gods." Ragnarök is this type of event, similar to the Christian apocalypse.

Answer: **end of the world** (accept other descriptions like **end time**s)

[10] Ragnarök will come about because of a war between the Norse gods and these creatures, led by Loki. Angrboda, a wife of Loki, was one of these strong creatures.

Answer: **Jötunn** (accept **jötnar**; accept frost **giant**s)

7. Archaeologists still debate whether the pulley or this device was more important in constructing the pyramids of Giza. For 10 points each,

[10] Name this simple machine, also called a ramp, that decreases the force needed to lift an object by moving it over a greater distance.

Answer: **inclined plane**

[10] Dividing the weight of an object by the force needed to move it up an inclined plane yields this quantity, a measure of how well a machine enhances the performance of its user. In general, this quantity is the ratio of resistance force to effort force.

Answer: ideal **mechanical advantage**

[10] Dividing actual mechanical advantage by ideal mechanical advantage gives this quantity, the percentage of input work available for output. This term describes how effective a system is at doing work.

Answer: **efficiency** (accept word forms like **efficient**)

8. Answer the following about Shakespeare's poetry, for 10 points each.

[10] Shakespeare's name is sometimes given to the "Elizabethan" style of these poems; that style is contrasted with the Italian style named for Petrarch. These poems have fourteen lines.

Answer: **sonnet**s (accept Elizabethan or Shakespearean **sonnet**s; accept Italian or Petrarchan **sonnet**s)

[10] One of Shakespeare's sonnets asks if the speaker could "compare thee" to a day in this season, saying "thou art more lovely and more temperate."

Answer: **summer** (accept Shall I Compare Thee to a **Summer**'s Day?)

[10] "Shall I Compare Thee to a Summer's Day," like many of Shakespeare's poems, is addressed to a "Fair Youth," but another group of his sonnets were written for a mysterious "Dark Lady," about whom Shakespeare writes, "My mistress' eyes are nothing like" this celestial object.

Answer: the **sun** (accept My Mistress' Eyes are Nothing Like the **Sun**)

9. This painting's subject looks out at the viewer from a black backdrop and wears a white-collared golden dress. For 10 points each,

[10] Name this painting of a young woman, who wears a blue and yellow headdress. This work is titled after the shining white piece of jewelry that hangs down to the subject's collar.

Answer: **Girl with a Pearl Earring**

[10] This painter created *Girl With a Pearl Earring* and a misty painting of his hometown, *View of Delft*.

Answer: Johannes **Vermeer** (accept Jan or Johan **Vermeer**)

[10] Vermeer was a painter from this northern European nation with capital at Amsterdam.

Answer: Kingdom of the **Netherlands** (accept **Dutch** Republic)

10. These vortexes commonly touch down in their namesake "alley" in the central United States. For 10 points each,

[10] Name these rotating columns of air that are rated using the enhanced Fujita scale.

Answer: **tornado**es

[10] Tornadoes are spawned by these large, rotating thunderstorms that produce a "hook echo" on radar.

Answer: **supercell**s (accept **mesocyclone**s)

[10] When tornados pass over a sea or lake they become this type of aquatic vortex, which may cause fish to rain down from the sky.

Answer: **waterspout**

11. Lady and Ghost are "dire" ones of these animals that appear in *A Song of Ice and Fire*. For 10 points each,

[10] Name these wild animals. In a story by the Grimm brothers, one of these animals destroys the homes of three little pigs.

Answer: **wolves** (accept **wolf**; accept **canis lupus** lupus)

[10] Natty Bumppo is called a "wolf in the skin of a dog" in this second novel in James Fenimore Cooper's *Leatherstocking Tales*. This novel is named for Chingachgook, the final member of a Native American tribe.

Answer: The **Last of the Mohicans**

[10] Ulrich von Gradwitz and Georg Znaeym [GAY-org ZNYM] are trapped under a fallen tree and resolve their differences, only to be terrorized by the title wolves, in what short story by Saki?

Answer: The **Interlopers**

12. In 2015, this democratic socialist surprised pundits by speaking at the evangelical Liberty University. For 10 points each,

[10] Name this candidate for the 2016 Democratic Presidential nomination, whose candidacy was supported by fellow New Englander Elizabeth Warren.

Answer: Bernard "Bernie" **Sanders**

[10] Sanders serves as an independent Senator from this state, the first state to join the Union that wasn't one of the thirteen original colonies.

Answer: **Vermont**

[10] In August 2015, a Sanders campaign rally in Seattle was interrupted by protesters from this civil rights movement.

Answer: **Black Lives Matter** (accept **#blacklivesmatter**; do not accept "#alllivesmatter" or "All Lives Matter")

13. In August 2015, researchers at the University of Washington found just the fifteenth in a series of these pictures. For 10 points each,

[10] Give this term for periodically repeating tilings of the plane using shapes that do not overlap or leave gaps.

Answer: **tessellation** (accept word forms like **tesselate**)

[10] Tessellations involving triangles, squares, or hexagons are easy; the Washington researchers' fifteenth tessellation uses these five-sided polygons.

Answer: **pentagon**

[10] You cannot tile the plane with regular pentagons because this number, the measure of each of the internal angles of a regular pentagon, is not a divisor of 360.

Answer: **108** degrees

14. This quantity is measured by a metronome and can be described as andante or largo. For 10 points each,

[10] Name this measure of the speed of music, usually given in beats per minute.

Answer: **tempo** (accept **tempi**)

[10] This tempo, from the Italian for "cheerful," indicates that a piece of music should be played quickly and brightly.

Answer: **allegro**

[10] A piece's tempo marking often appears at the beginning of the work, where this marking also appears. This indicates the number of beats in a measure and which note receives the beat.

Answer: **time signature**

15. This city's effective mayor, Carlos Lacerda, was the target of an assassination attempt on its Rua Tonelero. For 10 points each,

[10] Name this former capital of Brazil, the second largest city in Brazil after Sao Paulo.

Answer: **Rio** de Janeiro

[10] The Rua Tonelero is in this wealthy Rio neighborhood, famous for its 2.5 mile long beach.

Answer: **Copacabana**

[10] Rio contains a thirty-meter-tall landmark sculpture depicting this figure as "the Redeemer," with arms outstretched.

Answer: **Christ** the Redeemer

16. Water's value for this quantity is seven, meaning that it is relatively neutral. For 10 points each,

[10] Give this term, the measure of how acidic or basic a substance is.

Answer: **pH**

[10] Name this class of acids that lose all of their hydrogen ions, making them more effective than their weak counterparts.

Answer: **strong** acids

[10] Strong acids include nitric acid, hydrochloric acid, and this acid, which is produced in the contact process that is used in lead-acid batteries.

Answer: **sulfuric** acid

17. This event increased tensions that had been diminished due to the Peace of Saint-Germain-en-Laye. For 10 points each,

[10] Name this event that began with the assassination of Gaspard de Coligny. This event, named for an apostle, was a series of attacks on Huguenots by Catholic mobs.

Answer: **St. Bartholomew's Day Massacre** (accept **Massacre de la Saint-Barthelemy**)

[10] Catherine, the queen mother at the time of the St. Bartholomew's Day Massacre, was a member of this family. Leaders of this Italian banking family included Lorenzo the Magnificent.

Answer: de **Medici**s

[10] The Medici family were native to this Italian city, where they held major influence. After attempting to kill Lorenzo, the Pazzi family were exiled from this city.

Answer: **Florence**

18. Robert Lebrun falls in love with the protagonist of this novel. For 10 points each,

[10] Name this novel, in which Edna Pontellier cheats on Léonce with Alcée Arobin after returning from her vacation to Grand Isle.

Answer: The **Awakening**

[10] *The Awakening* was written by this Louisiana author of "The Storm" and "Désirée's Baby."

Answer: Kate **Chopin** (accept Katherine **O'Flaherty**)

[10] In *The Awakening*, Edna carries out this action by swimming out into the Gulf of Mexico. Virginia Woolf performed this action by filling her pockets with stones and walking into the River Ouse.

Answer: **suicide** (accept descriptions like **kill**ing one**self**; accept **drown**ing)

19. This politician wrote a book with the chapters "Disaster deferred" and "The power to pollute" which examined the Chevrolet Corvair. For 10 points, each,

[10] Name this Lebanese-American who wrote *Unsafe at Any Speed*, a perennial presidential candidate.

Answer: Ralph **Nader**

[10] Ralph Nader's 1996 and 2000 President campaigns were as a candidate for this party. This party, named for their focus on environmentalism, has representation in over 30 states.

Answer: **Green** Party of the United States

[10] Ralph Nader was accused of "spoiling" the 2000 Presidential Election for this Democratic candidate, a former-vice president who lost to George W. Bush.

Answer: Albert Arnold **Gore**, Jr. (accept **Al Gore**)

20. This religion's messengers of God include Moses, Jesus, Muhammad, Buddha, Krishna, and, more recently, the Báb ["bob"]. For 10 points each,

[10] Name this monotheistic religion that believes in the unity of all religions. This religion follows the Book of Certitude and was founded by Bahá'u'lláh [ba-HAH-oo-LAH].

Answer: **Baha'i** Faith (accept **Baha'i**ism)

[10] The founder of the Baha'i Faith, Bahá'u'lláh, was born in this modern middle eastern nation, once known as Persia.

Answer: Islamic Republic of **Iran**

[10] Baha'i defines this concept as the condition of being close to God in the afterlife. This happy version of the afterlife is sometimes portrayed as being in the clouds and full of angels.

Answer: **heaven** (accept **paradise**)