

Stateline Juniors 2024

Game 3

Buzz-In Round

- 1) Name the novel in which the Arkenstone is buried with Thorin Oakenshield after the Battle of the Five Armies. Bilbo Baggins takes a journey out of the Shire in this novel by J.R.R. Tolkien.

Answer: The **Hobbit**

- 2) Name the musical instrument for which Johann Sebastian Bach wrote his *Toccatà and Fugue in D minor*, which uses this instrument's keyboard and pedals.

Answer: **organ** (accept pipe **organ**; accept church **organ**)

- 3) What politician's memoir *Dreams from My Father* describes his early life in Hawaii before he became a senator for Illinois and then the forty-fourth U.S. president?

Answer: Barack **Obama** (accept Barack Hussein **Obama II**)

- 4) Gerunds behave like what part of speech by using a word that is usually a verb to represent the action as a "thing?" This part of speech has "common" and "proper" types and can describe an object.

Answer: **noun**

- 5) Name the god whose wife, Sigyn, helped him endure the punishment he received for causing the death of Baldr in his role as the Norse trickster god.

Answer: **Loki** (do not accept or prompt on "Utgard-Loki")

- 6) What city is home to the decommissioned Battersea Power Station, found just near Chelsea Bridge over the River Thames in England?

Answer: **London**

Note: Battersea Power Station is now a protected landmark and redeveloped into a shopping center.

- 7) What disease is commonly treated with metformin; is diagnosed with an A1C test; and has a Type 2 that is characterized by low insulin levels and high blood sugar?

Answer: **diabetes** (accept **diabetes** mellitus; accept Type 2 **diabetes**)

- 8) What Olympic sport has been dominated by Katie Ledecky, with six individual Olympic gold medals, and Michael Phelps, with 13, in events like the 400-meter freestyle and 100-meter butterfly stroke?

Answer: **swimming**

Note: Phelps specialized in short races of various styles; Ledecky specializes in long-distance freestyle.

- 9) What adjective describes a pair of angles that share only one point and are opposite each other across two intersecting lines, as well as any line with an undefined slope, such as the y-axis?

Answer: **vertical** (accept **vertical** angles and/or **vertical** lines)

- 10) The Pecora Commission investigated the start of what period, which is commonly thought to have started on "Black Thursday" - October 24th, 1929 - with an 11% drop in stock prices?

Answer: **Great Depression** (accept answers related to the **stock market crash** of 1929)

- 11) Name the Italian Renaissance artist of *The Madonna of the Rocks* who sketched human proportions in *Vitruvian Man* and painted the Mona Lisa.

Answer: **Leonardo da Vinci** (accept either underlined portion)

- 12) What rock has varieties called lignite and anthracite and formed from the decay of algae and forests in the Carboniferous period? This carbon-based rock is often burned as fuel.

Answer: **coal** (do not accept or prompt on "charcoal")

- 13) In what U.S. state could you drive north from Metropolis on the Ohio River to the Cahokia Mounds and Starved Rock State Park before eventually reaching Chicago or Rockford?

Answer: **Illinois**

14) Name the American author of *And to Think that I Saw it on Mulberry Street*, who used only fifty unique words to write the book *Green Eggs and Ham*.

Answer: Doctor **Seuss** (accept Theodore "Ted" Seuss **Geisel**)

15) What astronomical objects are charted on the Hertzsprung-Russell diagram, whose main sequence charts supergiants like Betelgeuse and yellow dwarfs like Earth's sun?

Answer: **star** (accept **sun** before it is read; accept (red) supergiant **stars**; accept (yellow) dwarf **stars**)

16) Name the TV show in which Rose McIver plays Sam, a woman whose near-death experience allows her to see Sasappis, Thor, and Flower, the title spirits who haunt her house?

Answer: **Ghosts**

17) What people, who made up the Great Heathen Army that carried out an 865 CE invasion of Britain, sailed in longships from Scandinavia and didn't *actually* wear horned helmets while they fought?

Answer: **Vikings** (accept **Berzerkers**; prompt on "Norsemen," "Scandinavians," or similar)

18) What country in the United Kingdom, includes the southern town of Lockerbie, the far northern Orkney Islands, and the major central cities of Glasgow and Edinburgh, well north of its border with England?

Answer: **Scotland** (accept **Alba**)

19) The Devonian Period is called the "Age" of what animals, which may be classified as "bony," "cartilaginous," or "jawless," and includes finned species like sharks but not whales?

Answer: **fish** (accept **fishes**)

20) What literary character feels pain like knives in her feet after she makes a deal with a witch in a story by Hans Christian Anderson, in which she trades her fins for human legs?

Answer: The **Little Mermaid** (accept Den **lille havfrue**)

Volleyball Round

- 1) Name the epic poem, attributed to Homer, in which a Greek hero's journey home from the Trojan War is interrupted by encounters with sirens, the monsters Scylla and Charybdis, and the witch Circe.

Answer: the **Odyssey** (accept **Odysseia**)

- 2) What franchise's 2024 video game *Outlaws* is a single player action-adventure game set in the same universe as the games *Empire at War* and *The Clone Wars: Jedi Alliance*?

Answer: **Star Wars** (accept **Star Wars** Outlaws; accept **Star Wars**: Empire at War; accept **Star Wars**: The Clone Wars - Jedi Alliance)

- 3) What kind of rock is formed by the extreme heat of volcanic activity, unlike sedimentary or metamorphic rocks?

Answer: **igneous** rock

- 4) Thales' Theorem concerns what type of line segment, which is the longest chord of a circle at a length of twice the radius?

Answer: **diameter** (Thales' Theorem notes that if you draw a triangle inscribed in a circle, and the longest side is the diameter, it must be a right triangle.)

- 5) The code of bushido was followed by what warriors, a class of nobility that existed from the medieval era to the 19th century in Japan?

Answer: **samurai** (prompt on "swordsmen," "soldiers," or similar answers)

- 6) An Ernest Lawrence Thayer poem about what sport chronicles the sad defeat of the "Mudville nine" when "mighty Casey" strikes out swinging?

Answer: **baseball** (the poem is "Casey at the Bat")

- 7) A so-called "man-cub" named Mowgli is raised by a wolf pack in rural India, and learns the laws of the animal kingdom from Baloo the bear in what novel by Rudyard Kipling?

Answer: The **Jungle Book**

- 8) What white marble mausoleum was built in Agra, India in the 17th century as a tomb for Mumtaz, the wife of Mughal Emperor Shah Jahan?

Answer: **Taj Mahal**

- 9) What policy was announced by Abraham Lincoln shortly after the Battle of Antietam, and established that all southern slaves were free?

Answer: **Emancipation Proclamation** (accept Proclamation **95**)

- 10) What musical note's minor key is the key of Beethoven's fifth symphony? This note's major key has no sharps or flats, and can be played on a piano using only white keys.

Answer: key of **C** (accept **C** major; accept **C** minor; do not accept or prompt on "C sharp" or "C flat")

- 11) In 2024, what artist covered "Jolene" and "Blackbird," alongside the singles "16 Carriages" and "Texas Hold 'Em," on the country and Americana-inspired album *Cowboy Carter*?

Answer: **Beyoncé** (accept Beyoncé Giselle **Knowles**-Carter) (In addition to the cover of "Jolene," Dolly Parton appears on the album, and Paul McCartney's original guitar part is the backing track for Beyoncé's fantastic cover of "Blackbird.")

- 12) Odysseus claimed that his name was "nobody" to fool Polyphemus, who was what kind of mythical creature?

Answer: **cyclops** (accept **cyclopes**)

- 13) Name the last queen of the Tudor dynasty, who said she had "the heart and stomach of a king" in a speech given before her troops defended England from the Spanish Armada.

Answer: **Elizabeth I** (prompt on "Elizabeth")

- 14) Mycorrhizae are symbiotic relationships between plant roots and what kingdom of living things that reproduce through spores?

Answer: **fungus** (accept **fungi**)

- 15) What physical quantity is similar to speed except that it has both magnitude and direction, meaning it describes the rate of an object's movement and its direction?

Answer: **velocity**

Lightning Round

The categories are...

- 1) Anatomy of Tiny Creatures
- 2) Roman Gods and Goddesses
- 3) Baseball Teams

Anatomy of Tiny Creatures

Name the following body parts of insects or spiders.

- 1) Front-most section of an insect's three-part body.

Answer: **head**

- 2) Organ that pumps blood, just like in humans.

Answer: **heart**

- 3) Sensory organ on the front of insects, nicknamed "feelers."

Answer: **antennae**

- 4) Sensory organ: spiders have eight, and it is "compound" in insects.

Answer: **eye**

- 5) Support structure on the outside of the body like a shell.

Answer: **exoskeleton**

- 6) Breathing organ; spiders have a "book" type.

Answer: **lung** (accept book **lung**)

- 7) Middle section of an insect's three parts.

Answer: **thorax**

- 8) Back section of an insect's three parts.

Answer: **abdomen**

- 9) Organ that emits spider silk.

Answer: **spinneret**

- 10) Top leg section, which shares its name with the largest human bone.

Answer: **femur**

Roman Gods and Goddesses

Given the Greek deities with whom they were associated, name the following Roman gods and goddesses.

1) Zeus, god of the sky.

Answer: **Jupiter**

2) Hera, queen of the gods.

Answer: **Juno**

3) Poseidon, god of the sea.

Answer: **Neptune**

4) Aphrodite, goddess of love.

Answer: **Venus**

5) Hermes, the messenger god.

Answer: **Mercury**

6) Athena, the goddess of wisdom.

Answer: **Minerva**

7) Artemis, goddess of the hunt.

Answer: **Diana**

8) Hephaestus, god of the forge.

Answer: **Vulcan**

9) Hestia, goddess of the home.

Answer: **Vesta**

10) Demeter, goddess of the harvest.

Answer: **Ceres**

Baseball Teams

Given a player who was on the 2024 Opening Day roster and some additional info, name the following Major League Baseball teams. Note that you can answer with the geographic name or team name, unless the city has multiple MLB teams, in which case we'll prompt you.

- 1) Seiya Suzuki, with home games at Wrigley Field.

Answer: Chicago **Cubs** (prompt on "Chicago")

- 2) Eloy Jimenez, with home games ten miles away from Wrigley on the South Side.

Answer: Chicago **White Sox** (prompt on "Chicago")

- 3) Rafael Devers, with home games at Fenway Park in Massachusetts.

Answer: **Boston Red Sox**

- 4) Shohei Ohtani, who moved across town from the Angels.

Answer: Los Angeles **Dodgers** (prompt on "Los Angeles" and/or "LA")

- 5) Vladimir Guerrero, Jr., the only MLB team in Canada.

Answer: **Toronto Blue Jays**

- 6) Top prospect Jackson Chourio; the only MLB team in Wisconsin.

Answer: **Milwaukee Brewers**

- 7) Aaron Judge, often called a "Bronx Bomber."

Answer: New York **Yankees** (prompt on "New York" and/or "NY")

- 8) Nolan Arenado and Paul Goldschmidt, at home in Busch Stadium.

Answer: **St. Louis Cardinals**

- 9) Julio Rodriguez, in the Pacific Northwest.

Answer: **Seattle Mariners**

- 10) Ronald Acuña, Jr., who was injured when they beat the Astros in the 2021 World Series.

Answer: **Atlanta Braves**

Final Challenge

- 1) What river, which meets the much darker Rio Negro near the city of Manaus, has the largest discharge volume of any river in the world and is crossed by no permanent bridges in the South American rainforest?

Answer: Amazon River (accept Solimões River)

- 2) What facility had a New Safe Confinement built in 2016 to protect a massive concrete sarcophagus that was built in 1986 after its Number Four reactor violently exploded in Ukraine?

Answer: Chernobyl Nuclear Power Plant (accept ChNPP; accept Vladimir Lenin Nuclear Power Plant)

- 3) What term did Alexander Calder use to describe his work *Lobster Trap and Fish Tail*, since it was a hanging sculpture whose pieces could be moved by air currents?

Answer: mobiles

- 4) What Egyptian god was worshiped at Cynopolis, the "city of dogs," judged the weighing of the feather of Ma'at in the underworld; and was often portrayed with a jackal's head?

Answer: Anubis (accept Anpu or Inpu)

- 5) An early 2024 craze for what product attracted negative attention to the maker of these reusable cups when it was revealed that they were sealed with a lead [led]-containing material?

Answer: Stanley cups (accept other descriptions like Stanley reusable drinkware)

- 6) What man used a Henry Pelham drawing as a model for his own engraving of the Boston Massacre, and helped William Dawes warn colonial forces at Lexington that "the British [were] coming?"

Answer: Paul Revere

- 7) An eccentricity of 1 indicates what mathematical shape, which is the trajectory of both a comet that can only pass by Earth once and of a cannonball fired into the air?

Answer: parabola

- 8) What English author created the characters Professor Challenger, Inspector Lestrade, Professor Moriarty, and Doctor John Watson, who lives at 221B Baker Street with the "consulting detective" Sherlock Holmes?

Answer: Sir Arthur Conan **Doyle**

- 9) What property changes when phenolphthalein is added to a solution to indicate acidity? Cone cells in the human eye can detect this property in shades of red, green, and blue.

Answer: **color** (accept **color** change; in the first sentence, prompt on descriptions like "it turns pink")

- 10) Give the title adjective that describes both an unnamed Black narrator created by Ralph Ellison and a scientist named Griffin who, in a similarly-named Robert Louis Stevenson novel, drinks a potion that makes him un-see-able.

Answer: **Invisible** (accept **Invisible Man** or The **Invisible Man**)

- 11) What subatomic particle determines an element's atomic number; makes up the nucleus alongside neutrons; and has a positive charge, unlike electrons?

Answer: **protons**

- 12) What country controls the island province of Jeju, includes highly developed cities like Incheon and Busan, and guards a nearly 200-mile long Demilitarized Zone against its northern neighbor?

Answer: **South Korea** (accept **Republic of Korea**; accept **ROK**; prompt on "Korea;" do not accept or prompt on "Democratic People's Republic of Korea" or "North Korea")

- 13) Name the Shakespeare play in which Titinius kills himself after finding the body of Cassius during the Battle of Philippi, and Mark Antony pays tribute to Brutus, who helps kill the title Roman statesman.

Answer: **Julius Caesar** (accept The Tragedy of **Julius Caesar**)

- 14) Somatic cells, but not germ cells, undergo what form of cell division that produces two new cells, unlike the four cells produced in meiosis?

Answer: **mitosis** (do not accept or prompt on "meiosis")

15) In what poem does Robert Burns apologize that "Man's dominion / Has broken Nature's social union" with the title creature, since "The best laid schemes o' [the title creatures] an' Men" often go awry?

Answer: **To a Mouse** (accept **To a Mouse**, On Turning her up in her Nest, with the Plough, November 1785)

16) What phase change, which takes place after boiling in a distillation flask, is seen when water vapor forms droplets on the outside of a cold glass on a hot day?

Answer: **condensation**

17) The term "aleph null" describes the smallest form of what mathematical concept? In algebra, this concept describes the end behavior of the equation "y equals x squared," because as x gets larger, y grows without limit.

Answer: **infinity** (accept **infinite** cardinality and/or positive **infinite** end behavior)

18) What city, where the Palazzo Vecchio was once the outdoor home of Michaelangelo's *David*, is home to the Uffizi art gallery and is the capital of Tuscany in Italy?

Answer: **Florence** (accept **Firenze**)

Note: *David* is now held indoors at another art museum, the Galleria dell'Accademia.

19) What explorer was the first European to sail to Mombasa, having rounded the Cape of Good Hope in South Africa? This Portuguese explorer then became the first European to sail to India.

Answer: Vasco da **Gama**

20) Name the Russian composer who wrote ballet adaptations of *Sleeping Beauty* and *Romeo and Juliet* after the initial failure of his first ballet, *Swan Lake*.

Answer: Pyotr Ilyich **Tchaikovsky**