

# Stateline Juniors 2024

## Game 2

### Buzz-In Round

- 1) What last name appears in the title of a 2024 movie that stars Cole Sprouse as a Victorian zombie resurrected in the 1980s? This last name is shared by the title scientist of an 1818 novel in which he brings an undead "Creature" to life.

Answer: Frankenstein (accept Lisa Frankenstein; accept Victor Frankenstein)

- 2) Name the U.S. president who discussed the creation of the Tennessee Valley Authority in the second of his Fireside Chats, a series of radio talks in which he discussed the New Deal during the Great Depression.

Answer: Franklin D. Roosevelt (both underlined portions required; accept FDR; prompt on "Roosevelt" alone)

- 3) What winter holiday celebrates the Maccabees' victory over the Seleucid Empire with latkes and a nine-night lighting of menorah candles, the "festival of lights" in Judaism?

Answer: Hanukkah (accept Chanukah; prompt on "Festival of Lights" before it is read)

- 4) Name the literary character who, in a novel by Neil Gaiman named for her, confronts the Other Mother and refuses to sew buttons into her eye sockets.

Answer: Coraline (accept Coraline Jones; prompt on "Jones")

- 5) The Balmer series shows spectral lines from what element, a combustible gas that is the lightest element on the periodic table? This element has the chemical symbol H.

Answer: hydrogen (accept H before it is read)

- 6) What human organ includes Broca's area, the corpus callosum, the pineal gland, the medulla oblongata, and the cerebrum, all of which are protected by the cranium?

Answer: brain

- 7) Name the novel in which Becky Thatcher gets lost in McDougal's Cave, where hidden gold is later recovered by Huckleberry Finn and the title boy.

Answer: The Adventures of **Tom Sawyer**

- 8) What state's Joshua Tree National Park protects part of the Mojave Desert in an area east of Palm Springs, Anaheim, and Los Angeles?

Answer: **California**

- 9) What kind of song's "king," John Philip Sousa, wrote songs of this type called "Semper Fidelis," "Liberty Bell," and "Stars and Stripes Forever" to help military parades walk in time?

Answer: **march** (accept military **marches**)

- 10) Name the Roman deity who was painted being blown to shore on a seashell while covering herself with her long, blonde hair in a Botticelli painting named for the *Birth* of this love goddess.

Answer: **Venus** (accept **Venere**; accept The **Birth of Venus** or **Nascita di Venere**; do not accept "Aphrodite")

- 11) Saint Anthony Falls is the only major waterfall on what river that briefly flowed backward because of the 1811 New Madrid earthquake? This river normally runs along the west side of Illinois toward the Gulf of Mexico.

Answer: **Mississippi** River

- 12) What ancient civilization was made up of city-states like Rhodes and Corinth, and was the site of the Peloponnesian War between Sparta and Athens?

Answer: ancient **Greece** (accept **Heliás**)

- 13) The equation " $x^2 + y^2 = 4$ " graphs what shape, which is defined by its center and its radius, and whose area formula is " $\pi r^2$ "?

Answer: **circle**

14) Oleum is a fuming "super" type of what kind of chemical compound that is defined by Bronsted and Lowry as being able to donate a proton to a solution, unlike a base?

Answer: **acid**

15) What video game character is mentored by Kamek; is the guardian of Wendy, Iggy, and Ludwig; and appears as a fire-breathing, spiky-shelled enemy in many Mario games?

Answer: **Bowser** (accept King **Bowser**; accept King **Kuppa**; accept Daimao **Kuppa**)

16) What crop, whose bolls are the target of pests called weevils, had its processing revolutionized by Eli Whitney's "gin," a machine that fueled the growth of slavery in the American south?

Answer: **cotton**

17) Pileus and arcus are low-lying types of what meteorological objects, suspensions of droplets or crystals in the atmosphere that can also be classified as cirrus or nimbus?

Answer: **clouds**

18) What country, which controls Gotland island in the Baltic Sea, is home to the city of Malmö, is on the west shore of the Gulf of Bothnia across from Finland, and has capital Stockholm?

Answer: Kingdom of **Sweden**

19) What punctuation mark can be used to begin a list; when describing a passage from the Quran or Bible, between the numbers indicating the book and verse; or between two halves of a mathematical ratio?

Answer: **colon**

20) What war is the setting of a novel in which Henry Fielding is hit with a rifle to gain the title *Red Badge of Courage*? In the novel, Henry becomes a flag-bearer for the Union army during this war.

Answer: **Civil War** (accept American **Civil War**)

## Volleyball Round

- 1) Evaporation and what process are the two main ways in which liquid turns into a gas? For water, this process typically happens at 100 degrees Celsius.

Answer: **boiling** (accept word forms)

- 2) What Greek god created an unbreakable golden net to trap his wife with her lover because he was the god of the forge and smithing?

Answer: **Hephaestus**

- 3) "The Fox and the Grapes" and "The Ant and the Grasshopper" are two of the many fables attributed to what ancient Greek writer of fables?

Answer: **Aesop**

- 4) A karyotype displays a complete set of what biological objects, of which humans have 23 pairs that contain our DNA?

Answer: **chromosomes**

- 5) As Secretary of the Treasury, Alexander Hamilton established the First U.S. one of these institutions that administer loans and hold money that can be insured by the FDIC.

Answer: **bank** (accept First **Bank** of the United States)

- 6) A dagger whose blade was made from a meteorite was found in the tomb of what "boy pharaoh" of Egypt, a tomb that was famously discovered by Howard Carter in 1922?

Answer: King **Tut** (accept **Tutankhamun**; accept **Tutankhaten**)

- 7) "Hallucinations," in which chatbots spit out inaccurate information, are evidence of errors in what kind of technology that can learn from large language models and appears to think for itself?

Answer: **A.I.** (accept **artificial intelligence**)

- 8) Name the L.M. Montgomery novel in which the title red-haired orphan girl goes to live with Matthew and Marilla Cuthbert in the title colorful home on Prince Edward Island.

Answer: Anne of Green Gables

- 9) Nancy Grace Roman, James Webb, and Edwin Hubble are all namesakes of an orbiting type of what scientific instruments that can be used to see very long distances?

Answer: space telescopes (accept specific telescopes like James Webb Space Telescope)

- 10) The sculptures *Gattamelata* and *David*, both created by Donatello, are made of what metal alloy also used by Auguste Rodin?

Answer: bronze

- 11) The mnemonic "HOMES" can help you remember the names of what set of five bodies of water? Four of these bodies of water, including Erie, are on the border of the United States and Canada.

Answer: Great Lakes (prompt on "lakes")

- 12) What American singer released the Billboard #1 country song "Texas Hold 'Em" after teasing her new album in a Verizon commercial during Super Bowl 58?

Answer: Beyoncé (accept either underlined part of Beyoncé Giselle Knowles-Carter; prompt on "Bey" or "Queen Bey")

- 13) What English monarch's reign included the loss of her territories in Kenya in 1963 and Hong Kong in 1997?

Answer: Elizabeth II (prompt on "Elizabeth")

- 14) Transcendental numbers, like  $\pi$  and  $e$ , are a subset of what larger class of numbers that can *not* be written as a fraction?

Answer: irrational number(s) (Listen carefully: do not accept "rational" numbers.)

- 15) The John Milton poem "When I Consider How my Light is Spent" concerns his experience with this physical impairment, which is also experienced by Marie-Laure in the novel *All the Light We Cannot See*.

Answer: blindness (accept descriptions of being unable to see; accept On His Blindness)

## **Lightning Round**

The categories are...

- 1) How Many Legs?
- 2) Mythical Greek Monsters
- 3) Soccer Leagues Around the World

## How Many Legs?

How many legs, or major limbs used for movement, do the following animals usually have? Tails do not count in this lightning round.

- 1) Octopus.

Answer: **eight**

- 2) Komodo dragon.

Answer: **four**

- 3) Starfish.

Answer: **five**

- 4) Snow crab and other "true crabs."

Answer: **ten**

- 5) Harvestman, which is an arachnid but not a spider.

Answer: **eight**

- 6) Number of legs you would expect from the name "millipede."

Answer: one **thousand**

Note: Although most millipedes have fewer than 400 legs, a "true" millipede with 1,306 legs was discovered in 2021.

- 7) European adder.

Answer: **zero** (accept descriptions like **none**)

- 8) Serval.

Answer: **four**

- 9) Woodlouse, including the "roly-poly."

Answer: **fourteen**

- 10) Mexican mole lizard, which uses its small limbs to tunnel.

Answer: **two**

## Mythical Greek Monsters

Name some monsters from Greek myths.

- 1) Three-headed guard dog of Hades.

Answer: **Cerberus**

- 2) Snake-haired Gorgon.

Answer: **Medusa**

- 3) Half-man, half-bull from Crete.

Answer: **minotaur**

- 4) Many-headed monster killed by Heracles.

Answer: **hydra**

- 5) Riddle-obsessed lion with the head of a woman.

Answer: **sphinx**

- 6) Half-bird, half-woman who sang sailors to their deaths.

Answer: **siren** (do not accept "mermaid")

Note: Sirens were sometimes depicted as half-fish rather than half-bird.

- 7) Half-lion, half-eagle treasure guardians.

Answer: **griffin**

- 8) Sea monster who lived across a channel from Scylla.

Answer: **Charybdis**

- 9) Half-snake, half-woman whose husband was Typhon.

Answer: **Echidna**

- 10) A lion with a snake's tail and a goat's head on its back.

Answer: **chimaera**



## Soccer Leagues Around the World

Given the name of a soccer league and one or two of its teams, name the country.

- 1) MLS: Chicago Fire

Answer: **US** (accept **USA**; accept either underlined portion of **United States** of **America**)

- 2) Premier League: Liverpool

Answer: **England** (accept Great **Britain**; prompt on "United Kingdom" or "UK")

- 3) La Liga: Real Madrid

Answer: **Spain** (accept Kingdom of **Spain**; accept Reino de **España**)

- 4) Bundesliga: Bayern Munich

Answer: **Germany** (accept Federal Republic of **Germany**; accept Bundesrepublik **Deutschland**)

- 5) Liga MX: Guadalajara

Answer: **Mexico** (or United **Mexican States**; accept Estados Unidos **Mexicanos**)

- 6) Ligue 1: Lyon and Marseille

Answer: **France** (accept **French** Republic; accept La **France**; accept République **française**)

- 7) Serie A: Napoli and AC Milan

Answer: **Italy** (accept **Italian** Republic; accept Repubblica **Italiana**)

- 8) Superliga: FC Copenhagen

Answer: **Denmark** (accept **Danmark**)

- 9) Premier League: Zenit Saint Petersburg

Answer: **Russia** (accept **Russian** Federation; accept **Rossiya** or **Rossiyskaya** Federatsiya)

- 10) Premier League: Shakhtar Donetsk

Answer: **Ukraine** (accept **Ukraina**)

## Final Challenge

- 1) The 1911 discovery of what object disproved J.J. Thomson's plum pudding model, instead suggesting that this object was orbited by negatively-charged electrons?

Answer: atomic **nucleus**

- 2) In what novel does Calpurnia take her employer's children to church, where they learn that Tom Robinson has been falsely accused by Bob Ewell and is being defended in court by Atticus Finch? This is the first published novel by Harper Lee.

Answer: **To Kill a Mockingbird**

- 3) What city, where the Great Hall of the People and the Forbidden City palace complex flank Tiananmen Square, is the capital city of China?

Answer: **Beijing**

- 4) In what region will you find Badwater Basin, the lowest point in the US? This region in the Mojave Desert of California is often called the hottest place on Earth.

Answer: **Death Valley** (accept **Death Valley** National Park; prompt on "Mojave Desert" until it is read; prompt on "California" until it is read)

- 5) What phenomenon, whose "brood" type is performed by cuckoo birds in other birds' nests, is a type of symbiosis in which one organism harms its host?

Answer: **parasite** (accept **parasitism**)

- 6) What sport can use a jacket called a lamé to detect when the body of a competitor has been touched by a sabre, épée, or foil, which are the three types of blades used to duel in this sport?

Answer: **fencing** (accept specific types, including sabre **fencing**, épée **fencing**, or foil **fencing**)

- 7) The Pont du Gard is a bridge that also serves as what type of infrastructure, built by the Romans to supply a city with fresh water?

Answer: **aqueduct**

- 8) All entries except the main diagonal of an identity matrix are filled by what number? This number is the additive identity and is the only real number that is neither positive nor negative.

Answer: zero

- 9) John Slidell, an envoy to Britain from what country, was captured by the US in the Trent Affair? This country ceased to exist shortly after Robert E. Lee's surrender at Appomattox in 1865.

Answer: Confederate States of America (accept the Confederacy; prompt on "the South")

- 10) Name the Shakespeare play in which Polonius is accidentally killed by the title character, who tries to prove that his uncle Claudius killed his father, the former king of Denmark.

Answer: Hamlet (accept The Tragedy of Hamlet, Prince of Denmark)

- 11) What Greek god was accompanied by Phobos and Deimos, the personification of panic and fear, when he led troops to battle as the Greek god of war?

Answer: Ares

- 12) What musical work by Beethoven, nicknamed "Choral," adds the lyric "Oh Friends, not these sounds" to its setting of the Friedrich Schiller poem "Ode to Joy?"

Answer: Beethoven's Ninth Symphony (accept Ludwig van Beethoven's Symphony Number Nine in d minor)

- 13) What type of conic section is indicated by an eccentricity greater than one? This shape is broken into two curves, unlike a parabola.

Answer: hyperbola

- 14) In what novel does a "red weed" spread across England while tripods with "heat rays" decimate humanity to colonize Earth for Martians? It was written by H.G. Wells.

Answer: The War of the Worlds

15) In what Canadian province, which includes the mouth of the Saint Lawrence River, do citizens in Saint-Jean-sur-Richelieu and Montreal speak the official language of French?

Answer: Quebec

16) Leydig cells primarily produce what hormone? This hormone affects aggression and muscle mass; is produced in the testicles; and is the primary male sex hormone.

Answer: testosterone (prompt on "T")

17) What city in Oceania contains a building on Bennelong Point that was designed by Jorn Utzon to look like sails on this city's harbor? This city's opera house is an Australian icon.

Answer: Sydney (accept Sydney Opera House)

18) The Rayleigh-Jeans catastrophe concerned what type of radiation, which has less energy than X-rays and is on the opposite end of the visible spectrum from infrared?

Answer: ultraviolet radiation (accept UV radiation)

19) Botany Bay was "discovered" by what English captain, whose HMS *Endeavour* was not used for his fateful third voyage, which ended with his death in Hawai'i?

Answer: James Cook

20) Name the Victor Hugo novel in which Sister Gudule's daughter is kidnapped as a baby and given the name Esmeralda, and in which Claude Frollo raises Quasimodo to be the bellringer of the title Paris Cathedral.

Answer: The Hunchback of Notre Dame (accept Notre-Dame de Paris)