

## 2015 SAGES: Spring Academic Game for Elementary Students

tournament written by Alex Dzurick, Audrey Bush, Matt Chalem, James Collier, David Dennis, Charles Hang, Sam Haynes, Spencer Johnson, Jason Loy, Ryan Kennedy, Jared Lockwood, Jack Miller, Luke Schuster & Belle Stanfield

# Round 4

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1. COMPUTATION: Brandon's mom just did his laundry and he wants to know how much money she washed. In his pockets were a 5 -dollar bill, two 1 dollar bills, 2 quarters, a nickel, and 3 pennies. Adding the values for these, Brandon can calculate, for 10 points, what amount of money that got washed?

ANSWER: \$7.58

2. In one story concerning this fairy tale character, her tears are able to cure a blinded prince. A deal is made to trade this girl for ransom, stolen by her parents, with a neighboring enchantress. For 10 points, name this Brothers Grimm fairy tale character that is called to "let down your hair."

ANSWER: Rapunzel

3. This band had two videos nominated for Duo Video of the Year at the 2014 CMT Music Awards; their video for "Round Here" won. Nelly collaborated with this band on a track that says "baby, you a song." For 10 points, name this band that released "This Is How We Roll" and "Cruise."

ANSWER: Florida-Georgia Line

4. This particle's charge was discovered in Millikan's oil drop experiment. The movement of this particle causes electricity. This particle orbits around the nucleus of an atom. For 10 points, name this tiny, negatively charged particle sometimes contrasted with neutrons and protons.

ANSWER: electrons

5. In 1939, a letter written by Leo Szilard warned that Germany might be producing these things. One of them was tested in Alamogordo, New Mexico, under the code name Trinity. For 10 points, name these weapons that were dropped on Hiroshima and Nagasaki during World War II.

ANSWER: atomic bombs [accept nuclear bombs, atomic weapons or nuclear weapons]

6. This monument is surrounded by the Y and Z Holes. It was built during the 2000s BC in what is today Wiltshire. This monument is made of a circular series of holes, some of which contain large rocks. Since 1905, the Ancient Order of Druids has been using this monument. For 10 points, name this Neolithic monument in England.

ANSWER: Stonehenge

7. COMPUTATION: A quarterback needs to know the distance to the goal line. His team caught the kickoff ball on their own 30- yard line and then ran for 20 yards. He could add those

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distances together and then subtract from 100 yards to find, for 10 points, what distance to the goal line?

ANSWER: 50 yards [The team ends up on the 50-yard-line.]

8. This prefix by itself is a unit of heat energy, about 100,000 Btus. This prefix is in the name of an atmospheric layer that is very hot compared to its surroundings. When combined with geo, it describes heat from the ground. For 10 points, name this Greek prefix that means “heat”.

ANSWER: **therm-** [accept **thermo-** or **thermal**]

9. Graupel is one form of this process, as is virga, which evaporates before reaching the ground. During monsoon season, this process may happen often and be very severe. When this process rarely occurs in an area, it can cause a drought. For 10 points, name this process with types such as rain, snow and hail.

ANSWER: **precipitation**

10. This government moved its capital to Richmond in 1861, although it was never recognized as an independent country. Its vice president was Alexander Stephens, and its president was Jefferson Davis. For 10 points, name this group of states that seceded from the Union prior to the U.S. Civil War.

ANSWER: the **Confederate States of America** [accept the **Confederacy**]

11. The Sahel is the southern border of this region. Large areas of sand dunes called ergs make up part of this region. The Nile River Valley is one of the only places plants can grow in this region. For 10 points, name this African region, the largest hot desert on Earth.

ANSWER: **Sahara** Desert

12. This author wrote *The Silmarillion*. In one of his novels, Thorin Oakenshield leads a group of dwarves to take back the Lonely Mountain. That novel by this author sees Gollum lose the One Ring to Bilbo Baggins. For 10 points, name this author whose novels include *The Hobbit* and *The Lord of the Rings* series.

ANSWER: J.R.R. **Tolkien** [or John Ronald Reuel **Tolkien**]

13. One official in this competition is Jacques Bailly, who also won this competition in 1980. This competition has aired on ESPN since 1994. In 2013 vocabulary tests were added to this event. For 10 points, name this event where the letters in a word must be given in the correct order.

ANSWER: Scripps **National Spelling Bee**

14. During this event, people created Hoovervilles, small towns of shacks and cardboard boxes. A stock market crash in 1929 caused this event, which led to large unemployment. For 10 points, name this economic crash during the 1930s, which FDR’s New Deal tried to fix.

ANSWER: **Great Depression**

15. The largest species in this class of animals is the Chinese giant salamander, and like reptiles, they have three-chambered hearts and are cold-blooded. They are named for their ability to live on both land and water. For 10 points, name this class of animals which includes frogs and toads.

ANSWER: **amphibians**

16. A linear equation has only one of this kind of number. In an equation, any number multiplied by this kind of number is called its coefficient. A single number added or subtracted from this

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kind of number is called a constant. For 10 points, give this term for unknown quantities in an equation.

ANSWER: variables

17. Frédéric Auguste Bartholdi designed this statue that was dedicated on October 28, 1886. This statue represents Libertas, the Roman goddess of freedom. A poem on its base says “give me your tired, your poor.” For 10 points, name this copper statue, a gift from France to the United States.

ANSWER: The Statue of Liberty [accept Liberty Enlightening the People]

18. The first satellite to have these attached was Vanguard 1. Crystalline silicon versions of these are being replaced with thin-film versions, such as a 550 megawatt farm of these in Arizona. These devices work by using sunlight to move electrons. For 10 points, name these renewable energy devices.

ANSWER: solar panel [accept photovoltaic panel, solar cell or photovoltaic cell; prompt for more information on PV]

19. The “takings clause” in this amendment to the U.S. Constitution sets out the rules for eminent domain. Another portion of this amendment establishes the grand jury process for federal courts. For 10 points, name this amendment that someone might “plead” to avoid self-incrimination.

ANSWER: fifth amendment to the U.S. constitution [accept five]

20. A five year old named Sweetie Pie invites the main character of this book to her birthday party. The librarian Miss Franny and a woman named Gloria tell stories to Opal about her mother. For 10 points, name this book about a girl and her dog, named after the grocery store where he was found.

ANSWER: *Because of Winn-Dixie*

TB. The Greek gods created this woman to be the wife of Epimetheus as a trick to seek revenge on Prometheus. When this woman opened a gift from Zeus, the only thing left behind was hope. For 10 points, name this woman whose namesake “box” unleashed thousands of evil spirits on the earth.

ANSWER: Pandora

**BONUSES**

1. This US state has been the center of many racial issues throughout American history. For 10 points each:

[10] Name this state, once home to competing pro- and anti-slavery governments in Lecompton and Topeka.

ANSWER: **Kansas**

[10] The anti-slavery Jayhawkers often fought against “Border Ruffians” led by William Quantrill from this neighboring state.

ANSWER: **Missouri**

[10] Later in history, this Supreme Court case out of Kansas declared segregated schools to be unconstitutional.

ANSWER: **Brown** v. *Board of Education of Topeka*

2. After her brother breaks the title object of this ballet on Christmas Eve, Clara is devastated. For 10 points each:

[10] Name this ballet, in which Clara is named one of the new rulers of the Land of Sweets.

ANSWER: *The* **Nutcracker**

[10] In the Land of Sweets, Clara gets to watch the dance of this character who ruled in the prince’s absence.

ANSWER: **Sugar Plum Fairy**

[10] *The Nutcracker*’s music was written by this Russian composer who also wrote the *1812 Overture*.

ANSWER: Pyotr (Peter) Ilyich **Tchaikovsky**

3. This planet’s moon Ganymede is larger than Mercury. For 10 points each:

[10] This largest planet in the solar system is twice as big as all the other planets combined. It also has a Great Red Spot.

ANSWER: **Jupiter**

[10] Ganymede and three other moons of Jupiter were discovered by this Italian scientist who was sent to prison in 1633 for his belief in the idea that the Earth orbits the sun.

ANSWER: **Galileo Galilei** [accept either underlined portion]

[10] Galileo is also famous for dropping balls with various masses from the top of this Italian building.

ANSWER: Leaning **Tower of Pisa**

4. COMPUTATION: Mark's pizza was cut into 3 pieces, and Mark needs to find the inside angle of the largest piece. One piece is 60 degrees. For 10 points each:

[10] If the other two pieces are the same size, what is the inside angle of each of those pieces?

ANSWER: 150 degrees

[10] What fraction of Mark's pizza does the smallest piece consist of? Give your answer in lowest terms.

ANSWER: 1/6

[10] If the pizza's area is 750 square inches, what is the area of the smallest piece of Mark's pizza in square inches?

ANSWER: 125 square inches

5. Using the right punctuation marks can help your writing be more understandable. For 10 points each:

[10] This punctuation mark with "Oxford" or "serial" types can be used to separate items in a list.

ANSWER: comma

[10] Using just a comma to separate two independent clauses results in this kind of incorrect sentence.

ANSWER: run-on sentence

[10] To fix a run-on sentence, you can replace the comma with this punctuation mark which looks like a comma with a period above it.

ANSWER: semicolon

6. This group of universities was named for the plants that often grew on its members' walls. For 10 points each:

[10] Name this group of eight American universities on the east coast that includes Harvard and Yale.

ANSWER: Ivy League

[10] This state is home to Ivy League member Princeton University as well as its state university, Rutgers.

ANSWER: New Jersey

[10] This man served as president of Princeton from 1902 to 1910 before being elected U.S. president in 1912.

ANSWER: Woodrow Wilson

7. In trying to escape from the capital of this empire, Spanish soldiers experienced La Noche Triste [*la no-chay tree-stay*]. For 10 points each:

[10] Name this empire, led by Montezuma, which was conquered by Hernan Cortes in 1521.

ANSWER: Aztec empire

[10] Soldiers and explorers of the New World like Cortes and his men are often known by this Spanish word that translates to "conqueror."

ANSWER: conquistadors [or conquistadores]

[10] The capital of the Aztec empire was this city. Today, this city's ruins make up part of central Mexico City.

ANSWER: Tenochtitlan

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8. Companies that extract and sell these include BP and Shell. For 10 points each:

[10] Give the term for non-renewable fuel sources, such as coal and natural gas, that are made primarily of ancient dead plants and animals.

ANSWER: fossil fuels

[10] This liquid fossil fuel can be converted into products such as plastics or gasoline.

ANSWER: petroleum [or crude oil]

[10] Burning fossil fuels releases this gas, which is called dry ice when it is frozen into a solid.

ANSWER: carbon dioxide [accept CO<sub>2</sub>]

9. On January 25, Bill Nye said that rubbing these objects could not cause them to become illegal. For 10 points each:

[10] What piece of sports equipment must be between 12.5 and 13.5 psi to be used in a game?

ANSWER: (American) footballs [accept answers that include additional correct information such as NFL footballs]

[10] This quarterback was suspended for four games for deflating footballs in the AFC championship, but had that suspension overturned.

ANSWER: Tom Brady

[10] Brady plays for this AFC team which won Super Bowl XLIX.

ANSWER: New England Patriots [accept either underlined portion]

10. In this novel, a blue-eyed girl applies for release after struggling to become the next Receiver. For 10 points each:

[10] Name this Lois Lowry novel about Jonas and the title character who trains him.

ANSWER: *The* Giver

[10] Jonas is set to receive memories of the time before this condition, which removed pain and emotion.

ANSWER: sameness

[10] Near the end of the novel, Jonas leaves the community with this baby, who had been staying with his family.

ANSWER: Gabriel

11. This composer's works include *Semper Fidelis*. For 10 points each:

[10] Name this composer who also wrote *The Stars and Stripes Forever*.

ANSWER: John Philip Sousa

[10] Sousa created this instrument named for him, a variation on the tuba that can project sound over a band.

ANSWER: sousaphone

[10] *Semper Fidelis* is the official march of this branch of the American armed forces.

ANSWER: United States Marine Corps [accept Marines]

12. COMPUTATION: Emily is cutting a board that is five yards long. For 10 points each:

[10] How many feet long is the board?

ANSWER: 15 feet

[10] If she cuts the board into four equal pieces, how many inches long is each piece?

ANSWER: 45 inches

[10] If it takes one third of an hour for Emily to sand one of the four pieces, how many minutes will it take her to sand the entire original board?

ANSWER: 80 minutes

13. This term comes from the names of two Greek gods. For 10 points each:

[10] Give this term for an organism that has both male and female organs.

ANSWER: hermaphrodite

[10] Some hermaphrodites can undergo this process by themselves. Some organisms can do this asexually, such as by budding.

ANSWER: reproduction [accept word forms like reproducing]

[10] Sexual reproduction involves special cells called gametes. In humans, gametes have 23 of these strands of DNA instead of the 46 present in most human cells.

ANSWER: chromosomes

14. In this book, Billy Coleman goes on a hunt for the “ghost coon” with the Pritchard boys. For 10 points each:

[10] Name this book where Billy’s companions are named Old Dan and Little Ann.

ANSWER: *Where the Red Fern Grows*

[10] Old Dan and Little Ann are this kind of animal, as is Old Yeller.

ANSWER: dog

[10] Old Yeller becomes infected with this disease while saving his family from an infected wolf.

ANSWER: rabies

15. This man’s friends Eliphaz, Bildad, and Zophar encouraged him to curse God for his misfortune. For 10 points each:

[10] Name this Old Testament character who remained faithful to God after his house collapsed, his children died, and his livestock were killed.

ANSWER: Job

[10] This figure asked God for permission to tempt Job.

ANSWER: Satan [or the Devil]

[10] In the Old Testament, Job directly precedes this book of poetry. Tradition says that the 23<sup>rd</sup> chapter of this book was written by David and begins, “The Lord is my Shepherd; I shall not want.”

ANSWER: Book of Psalms



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16. People killed during this war included the Egyptian king Memnon. For 10 points each:

[10] Name this ten-year war described in the *Iliad* which ended with the use of a wooden horse.

ANSWER: Trojan War

[10] The war began with the kidnapping of this woman by Paris. She was married to Menelaus at the time.

ANSWER: Helen (of Troy)

[10] A famous quotation from *Doctor Faustus* wonders if this body part of Helen's is the one that launched a thousand ships.

ANSWER: her face [The quote is "Was this the face that launch'd a thousand ships?"]

17. This medical procedure typically involves the use of adjuvants to help create an immune response. For 10 points each:

[10] Name this procedure where someone is exposed to a weak virus to give them immunity.

ANSWER: vaccination [accept inoculation; accept word variations such as vaccine, getting vaccinated, etc.]

[10] Some people believe that vaccines are unsafe because they contain small amounts of thimerosal, which contains this metal element.

ANSWER: mercury

[10] The MMR vaccine protects against mumps, rubella and this other disease with a recent outbreak in California.

ANSWER: measles

18. The last names of the two main characters on this television show are Flynn and Fletcher. For 10 points each:

[10] Name this animated show on the Disney Channel featuring the voices of Thomas Sangster and Vincent Martella.

ANSWER: Phineas and Ferb

[10] Sangster plays Jojen Reed on this often violent HBO series based on George R.R. Martin novels.

ANSWER: Game of Thrones

[10] Sangster also played this character in the film adaptations of *The Maze Runner* and *The Scorch Trials*.

ANSWER: Newt

19. This character knows that a Civil War sword is fake because it says Bull Run instead of Manassas. For 10 points each:

[10] Name this boy detective from Idaville, the son of the police chief.

ANSWER: Encyclopedia (Leroy) Brown

[10] This character, Encyclopedia's best friend and business partner, often helps him solve crimes.

ANSWER: Sally Kimball [accept either underlined name]

[10] Those crimes sometimes involve local bully Bugs Meany and his gang with this name.

ANSWER: Tigers

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20. This substance is known as the universal solvent. For 10 points each:

[10] Name this substance that expands when frozen, making it possible for fish to survive in frozen lakes.

ANSWER: **water** [accept **H<sub>2</sub>O**]

[10] The fear of water, or “hydrophobia,” was another name for this disease often transmitted by wild animals.

ANSWER: **rabies**

[10] Give the name for the area of land drained by a particular stream or river.

ANSWER: **watershed**

TB. This branch of the government carries out laws and is led by the president. For 10 points each:

[10] Name this branch of government that can issue namesake ‘orders’ with the force of law.

ANSWER: **executive** branch

[10] The three branches of government have oversight of one another in a system commonly known by this three word phrase.

ANSWER: **checks and balances**

[10] The leaders of many departments of the executive branch form this group that advises the president.

ANSWER: **Cabinet**