## 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 10

1. To attack these vehicles, depth charges were developed, while convoys were used to protect against them. One of these had earlier sunk the *Lusitania*, pressuring the the US to enter World War I. For 10 points, name this vehicle, the German type of which was called the U-Boat, which attack ships from underwater.

ANSWER: <u>submarine</u>s [accept <u>Unterseeboot</u>en or <u>U-Boat</u>s before mentioned]

2. This musical suite's orchestration calls for a glass harmonica, but usually a glockenspiel is used instead. Some of its movements include "Aviary," "Kangaroos" and "Aquarium," but the best -known is a cello solo named "The Swan." For 10 points, name this suite by Camille Saint -Saens.

ANSWER: Carnival of the Animals

- 3. This chart was developed by Dmitri Mendeleev and it can be divided into four "blocks". This chart includes a group called actinides. The items in this chart are put in order based on their atomic number. For 10 points, name this chart that includes potassium, iron, and hydrogen. ANSWER: **periodic table** of the elements
- 4. COMPUTATION: Colton is trying to memorize the winning scores of Super Bowls and needs to know which number Super Bowl was written X-I-V *[pronounce as letters]*, which was won by the Steelers. He knows that X is the Roman numeral for 10, and V for 5. For 10 points, which Super Bowl was played in 1979?

ANSWER: <u>14</u>

- 5. This author's book *Nothing But the Truth* centers on Philip Malloy's suspension for humming the National Anthem. In a trilogy by this author, Asta's Son finds out that his real name is Crispin. For 10 points, name this author of *The True Confessions of Charlotte Doyle* and *Poppy*. ANSWER: <u>Avi</u> [accept Edward Irving <u>Wortis</u>]
- 6. This river's headwater is a glacial stream on Nevado Mismi. The largest city along this river is Manaus *[man-owse]*. Portuguese explorers were the first to travel the whole length of this river, around 4,000 miles, from Brazil to Peru. For 10 points, name this river in South America. ANSWER: **Amazon** River [accept Rio **Amazonas**]
- 7. This state was home to the notoriously brutal Confederate POW camp at Andersonville. During the Civil War, a general ordered his troops in this state to destroy everything that could be used for war. For 10 points, name this state where Sherman's March to the Sea happened between its cities of Savannah and Atlanta.

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ANSWER: Georgia

8. A rill is a shallow channel created by water during this process. Terracing can slow down this process on a hillside, while removing trees can speed up this process, as the roots can no longer hold onto the soil. For 10 points, name this process of transporting material by wind or water. ANSWER: **erosion** 

- 9. This is the number of neutrons in a hydrogen atom and is one of the two possible binary digits. This temperature on the Celsius scale corresponds to 32 Fahrenheit. This is the number of moons that orbit Mercury. For 10 points, the coldest possible temperature is known as absolute *this*. ANSWER: **zero**
- 10. This character's arrival is followed by Teresa's. He becomes friends with Chuck, who dies in an attempt to save this character's life. This character is the first to spend a whole night in The Maze. For 10 points, name this central character in *The Maze Runner*, a friend of Newt's who figures out how to escape The Glade.

ANSWER: <u>Thomas</u> [accept <u>Tom</u> or <u>Tommy</u>; prompt on <u>Greenie</u>]

11. This place is the setting of the poem "Paradise Lost" by John Milton. Mormons believe that this place is located in Jackson County, Missouri. God placed a special tree and a serpent in this place. For 10 points, name this place where Adam and Eve disobeyed God after eating a piece of Forbidden Fruit.

ANSWER: The Garden of Eden

12. COMPUTATION: Martha wants to get rid of all of her black shirts, but not the ones with stripes. She has 20 total shirts, and 3/4 of those are black, and 1/3 of the black shirts have stripes. For 10 points, Martha can multiply twice and then subtract to find what number of unstriped black shirts she is getting rid of?

ANSWER: 10 shirts [Fifteen shirts are black, but 5 of them have stripes.]

- 13. Cyanobacteria create glucose through this biological process. Organisms that use this process consume carbon dioxide and release oxygen. This process takes place in chloroplasts, many of which are found in leaves. For 10 points, in what process do plants use sunlight to make energy? ANSWER: **photosynthesis**
- 14. The main character of this book is concerned that her father's girlfriend, Margaret Cadaver, is a murderer. During a road trip to Idaho in this book, the main character's Gram encourages her to tell stories about Phoebe. For 10 points, name this book centering on Sal's experiences to find her mother.

ANSWER: Walk Two Moons

15. This mountain's highest peak, Mytikas, was known as Pantheon in ancient times. One myth says that this mountain formed after the gods defeated the Titans. Some gods who lived here include Poseidon and Zeus. For 10 points, name this mountain, the home of the gods in Greek mythology.

ANSWER: Mount Olympus

- 16. This country planned to invade the UK in Operation Sea Lion. Hermann Göring led the Wehrmacht, this country's armed forces, during the early 1940s. For 10 points, name this country whose Luftwaffe air force executed the Blitz on London during World War II. ANSWER: Nazi Germany [accept Third Reich or German Reich]
- 17. The two major types of these devices are reaction and impulse. The steam versions of these were once used to spin a ship's propellor. One type named for Francis spins its blades using water and is common in hydroelectric power plants. For 10 points, name this spinning device that is often connected to a generator.

ANSWER: turbine

18. This BBC show features episodes titled "A Study In Pink" and "The Blind Baker." This series' co--star Martin Freeman plays Doctor Watson. This series is based on stories by Sir Arthur Conan Doyle. For 10 points, name this British television show starring Benedict Cumberbatch.

Answer: <u>Sherlock</u> [do not accept additional words such as "Holmes" or "The Adventures of", as they are not part of the show's title]

19. In 2015, Lindsey Graham said that words in this language that begin with *al*- are "bad news," even though *al* is this language's word for *the*. This language, written from right to left, gave English words such as algebra, assassin and coffee. For 10 points, name this language in which the Quran is written.

ANSWER: Arabic language

20. The capital letters T and Y have the vertical form of this property. American crossword puzzles typically have the rotational form of this property. For 10 points, name this mathematical property in which a shape is exactly the same on both sides of a line called an "axis of *this property*."

ANSWER: **symmetry** [accept word forms such as **symmetrical**]

TB. The US House of Representatives can begin this process if they suspect "treason, bribery, or other high crimes and misdemeanors." The first US President to undergo this process was Andrew Johnson. For 10 points, name this process where an official is accused of wrongdoing and could be removed from office.

ANSWER: impeachment

## **BONUSES**

1. The lawyer Atticus Finch defends Tom Robinson in this novel. For 10 points each:

[10] Name this novel set in Maycomb, Alabama, featuring the reclusive character Boo Radley.

ANSWER: To Kill a Mockingbird

[10] The main character of *To Kill a Mockingbird* is this girl, Atticus' daughter and a friend to Dill.

ANSWER: (Jean Louise) "Scout" Finch [accept either underlined name]

[10] Atticus and Scout were created by this author who was friends with Truman Capote. It is said that she based her character Dill on Capote.

ANSWER: Harper Lee

2. COMPUTATION: Edwin wants to know how much he is saving each week for his trip. Every week he earns 24 dollars, and plans to save one third of that amount. For 10 points each:

[10] How much Edwin save per week?

ANSWER: \$8.00

[10] If Edwin needs \$200 for his trip, for how many weeks does he need to save before he takes the trip?

ANSWER: 25 weeks

[10] If Edwin decides to save half of his earnings for his trip, how many fewer weeks would he need to work before he takes his trip? Assume that he can only work full weeks.

ANSWER: 8 fewer weeks

3. Over 80% of the colonists in this city died during the Starving Time. For 10 points each:

[10] This city was established in 1607 in what is now Virginia and named for an English king.

ANSWER: <u>Jamestown</u>, Virginia [accept <u>James Fort</u>]

[10] Jamestown colonists wiped out neighboring communities of Native Americans led by this chief, the father of Pocahontas.

ANSWER: Chief **Powhatan** 

[10] This uprising in 1676 burned Jamestown to the ground, due to unhappiness with the protection offered by the Virginia colony.

ANSWER: Bacon's Rebellion

4. This artist was also a scientist who created sketches of early flying machines. For 10 points each:

[10] Name this artist who created *The Vitruvian Man*, a drawing of a man with outstretched arms and legs.

ANSWER: Leonardo da Vinci

[10] One of da Vinci's most famous works is this one, depicting a meal Jesus had with his disciples.

ANSWER: The Last Supper

[10] This Surrealist painter of melting clocks in his *The Persistence of Memory* also painted a work called *The Sacrament of the Last Supper*.

ANSWER: Salvador Dalí

5. These investments are often described using ticker symbols, like "AAPL" for Apple. For 10 points each:

[10] Give the term for investments that represent ownership in a company which may be divided into shares.

ANSWER: **stock**s [or **equity**]

[10] Stocks may be divided into two tiers: common, and this other kind of stock that pays its holders before common stock.

ANSWER: **preferred** stock

[10] The regular payments made to holders of common and preferred stock are known by this name.

ANSWER: dividends

6. For 10 points each, name these Hans Christian Andersen stories.

[10] This fairy tale focuses on a character who is having a hard time sleeping due to an oddly placed vegetable.

ANSWER: The **Princess and the Pea** 

[10] This tale sees the main character save a prince from drowning before she meets a Sea Witch.

ANSWER: The Little Mermaid

[10] This story tells of a bird who is having a hard time fitting in until he catches his reflection and sees he has become a beautiful swan.

ANSWER: The **Ugly Duckling** 

7. This 2014 song is from the singer's album "My Everything." For 10 points each:

[10] Name the Ariana Grande song with the ungrammatical line "Now that I've become who I really are."

ANSWER: "Break Free"

[10] Grande collaborated with this German DJ on "Break Free." His second album, *True Colors*, came out in 2015.

ANSWER: Zedd [accept Anton Zaslavski]

[10] Zedd helped write the Selena Gomez song "I Want You to Know" along with Ryan Tedder, the lead singer of this band.

ANSWER: OneRepublic

8. A lunar one of these events can only occur during a full moon. For 10 points each:

[10] Name this event that blocks light from reaching an astronomical object such as a moon or planet.

ANSWER: eclipse

[10] During a solar eclipse, what is blocking the sunlight from reaching the Earth?

ANSWER: the moon

[10] During some solar eclipses, this ring of plasma surrounding the sun is still visible from Earth.

ANSWER: solar corona

- 9. The leader of this group, Abu Bakr al-Baghdadi, proclaimed himself to be caliph *[CAL-if]* in June of 2014. For 10 points each:
- [10] Name this terrorist organization in the Middle East, usually named for the places it operates.

ANSWER: <u>ISIL</u> or <u>Islamic State</u> in Iraq and the Levant [accept many variations, including <u>ISIS</u> {<u>Islamic State</u> in Iraq and Syria} or <u>Da'ish</u> or <u>DAESH</u>]

[10] The group has killed a number of Americans with this profession, including James Foley and Steven Sotloff, who worked for *Time*.

ANSWER: **journalist**s [accept equivalents such as **reporter**s; accept variations such as **journalism** or **reporting**]

[10] Those deaths are often accomplished by this brutal method on videos released by ISIL. ANSWER: **behead**ing [accept equivalents such as **decapitation** or chopping one's **head off**]

10. This body of water's largest island is Sicily. For 10 points each: [10] Name this sea located between Europe and Africa.

ANSWER: Mediterranean Sea

[10] This strait, located between Spain and Morocco, is generally considered to be the western end of the Mediterranean.

ANSWER: Strait of Gibraltar

[10] Sicily and the nearby island of Sardinia belong to this country on the Mediterranean.

ANSWER: **Italy** 

11. Words of this kind include squish, tweet and splat. For 10 points each:

[10] Someone on your team just buzzed, and the word "buzz" is an example of this kind of word which imitates a sound.

ANSWER: onomatopoeia

[10] The word onomatopoeia comes from this language. Aristophanes wrote a play in this language featuring the onomatopoeia "bre-ke-kex koax koax" called *The Frogs*.

ANSWER: (Ancient) Greek

[10] This blue character on Sesame Street makes the onomatopoeic noise "om nom nom" while eating his favorite treats.

**ANSWER: Cookie Monster** 

12. Organizing all the living creatures on the planet is hard. For 10 points each:

[10] The study of classifying and naming living things by their shared characteristics is known as this.

ANSWER: taxonomy

[10] This taxonomic rank comes between kingdom and class. Some examples include arthropods and mollusks.

ANSWER: **phylum** [accept **phyla**]

[10] Living things all have unique names for these *two* taxonomic ranks, the most specific of the major categories. An example is "Homo sapiens" for humans.

ANSWER: **genus** and **species** [prompt on a partial answer]

13. This painting was stolen from Oslo, Norway, during the 1994 Winter Olympics. For 10 points each:

[10] Name this 1893 painting of man performing the title action on a bridge against an orange sky.

ANSWER: The Scream

[10] The Scream was painted by this Norwegian artist of Madonna and The Sick Child.

ANSWER: Edvard Munch [pronounced "moonk"]

[10] Munch may have been inspired to make the sky orange by the 1883 eruption of this Indonesian volcano, although no one can be sure.

ANSWER: Krakatoa

14. All right triangles that do not also have a 45° angle are this type of triangle. For 10 points each:

[10] Name this type of triangle that has no pairs of congruent sides.

ANSWER: scalene

[10] For this type of triangle, all three sides are congruent. Its area can be found by squaring the length of a side, multiplying the result by the square root of 3 and dividing by 4.

ANSWER: equilateral triangle or equiangular triangle

[10] Each interior angle in an equilateral triangle has a measure of this many degrees.

ANSWER: 60 degrees

15. Most of this nation was first unified by Chandragupta Maurya. For 10 points each:

[10] Name this country, formerly ruled by the Mughal Empire, with capital at New Delhi.

ANSWER: Republic of India

[10] India gained its independence in 1947 from this colonial power, who had gained control after the Sepoy Mutiny against this country's East India Company.

ANSWER: <u>United Kingdom</u> [accept Great <u>Britain</u> or <u>England</u>]

[10] Also in 1947, India split from this majority-Muslim country to its northwest. Later this country became home to Malala Yousafzai.

ANSWER: Pakistan

- 16. This author's book *Under the Dome* was adapted into a CBS TV show in 2013. For 10 points each:
- [10] Name this science fiction and horror author who wrote *The Dark Tower* series.

ANSWER: Stephen King

[10] King's first novel was about this title character, a bullied girl who discovers her telekinetic powers.

ANSWER: Carrie

[10] This work by King about the Stanley Hotel was adapted into a horror film starring Jack Nicholson.

ANSWER: The Shining

17. There are two of these devices on top of Mauna Kea in Hawaii. For 10 points each:

[10] Name these devices that allow an observer to see very far away, usually into space.

ANSWER: optical <u>telescope</u> [accept <u>reflecting telescope</u> or <u>reflector telescope</u>]

[10] A telescope named for James Webb is set to replace this telescope, launched into orbit in 1990.

ANSWER: **Hubble** Space Telescope

[10] Telescopes use either mirrors or these curved pieces of glass to focus their images. These things may be convex or concave.

ANSWER: lenses

18. This scientist took a class from Carl Sagan while studying at Cornell. For 10 points each:

[10] Name this scientist who is most famous for his TV show where he plays a nerdy "science guy".

ANSWER: Bill Nye (the Science Guy)

[10] Nye invented a multicolored one of these devices for use on Mars missions; these devices tell the time by using shadows.

ANSWER: sundials

[10] Nye debated this creationist at the Creation Museum in 2014.

ANSWER: Ken Ham

19. This holiday celebrates the success of the revolt of the Maccabees against Antiochus IV, and children traditionally play with a *dreidel* during this celebration. For 10 points each:

[10] Name this nine-day Jewish observance that takes place in November or December, sometimes called the Festival of Lights.

ANSWER: **Hanukkah** [or **Chanukah**]

[10] During Hanukkah, celebrants typically light this object, a candelabrum with nine branches.

ANSWER: menorah

[10] A common dish eaten during Hanukkah is the latke, a pancake made out of this food.

ANSWER: potato

20. This woman was convicted in 1872 for illegally voting, but refused to pay the fine. For 10 points each:

[10] Name this champion of women's suffrage who was featured on the 1979 one dollar coin.

ANSWER: Susan B. Anthony

[10] Anthony was one option in a campaign to replace this president on the US twenty-dollar bill with a woman.

**ANSWER: Andrew Jackson** 

[10] The winner of that campaign was this Underground Railroad conductor; it is yet to be seen if she will actually appear on any currency.

ANSWER: Harriet Tubman

TB. For waves, this quantity is equal to velocity divided by wavelength. For 10 points each:

[10] Name this quantity that describes how often an event occurs, measured in Hertz.

ANSWER: frequency

[10] This technology which emits waves with higher frequency than humans can hear is often used to create images of fetuses in the womb.

ANSWER: ultrasound

[10] The frequency of a musical note is usually described by this five-letter word.

ANSWER: pitch