

## 2015 SAGES: Spring Academic Game for Elementary Students

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# Round 9

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1. COMPUTATION: A scientist needs to know where his rat ends up on a big sheet of graph paper. The rat starts in the first quadrant at the point (3,4), then walks straight up 4 spaces, and then turns right and crawls another 2 spaces. For 10 points, the scientist finds the rat at what point on the graph paper?

ANSWER: (5,8) [*pronounced “five comma eight” or just “five, eight”*]

2. This book begins with the main character receiving silver from a kind bishop. Later in this book, that character lifts a cart to rescue a man, although this makes Javert suspicious. The daughter of Fantine is adopted by Jean Valjean in, for 10 points, this book by Victor Hugo featuring Marius and his relationship with Cosette.

ANSWER: *Les Misérables*

3. In this 2014 Stephen Sondheim musical film, a childless couple must gather items to break a witch’s spell. One character in this film steals coins and a harp and sings about “Giants in the Sky.” Two princes sing of their “Agony” in this film on a waterfall. For 10 points, name this movie starring Anna Kendrick as Cinderella.

ANSWER: *Into the Woods*

4. This process occurs when molecules break free of their fixed positions and slide past one another. When sublimation happens, this process is skipped. Ice does this above 32 degrees Fahrenheit. For 10 points, what is the process by which a solid becomes a liquid?

ANSWER: melting

5. Along with John Jay and Alexander Hamilton, this man wrote the *Federalist Papers*. Since he drafted it, this man is called the “Father of the Constitution.” For 10 points, name this fourth U.S. president, who fled the White House with his wife Dolly during the War of 1812.

ANSWER: James Madison

6. This painting was stolen from the Louvre in 1911. The background of this painting contains a curvy road leading to the title figure. The woman in this painting has her hands crossed with no visible eyebrows and a famous half--smile. For 10 points, name this painting by Leonardo da Vinci.

ANSWER: *Mona Lisa* [accept *La Gioconda*]

7. One scale for measuring this quantity is named Rankine. It represents the average kinetic energy of molecules in a system. Another scale for this quantity places freezing water at 32

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degrees; that scale is named Fahrenheit. For 10 points, name this quantity that can be measured by a thermometer.

ANSWER: temperature

8. Widows and orphans occur when only one line of these things starts or ends a page of text. These things may be set apart from one another by a blank line or by indenting the beginning of each one of these. For 10 points, name these blocks of text that consist of related sentences.

ANSWER: paragraphs

9. A newton is one of these units accelerated at one meter per second. The IPK is an international prototype of this unit, about the size of a golf ball. This unit is approximately equal to 2.2 pounds at Earth's gravity, or about 1 liter of water near freezing. For 10 points, name this unit of mass equal to 10 hectograms.

ANSWER: kilogram [prompt on kilo]

10. Thutmose III was one of these rulers from the New Kingdom. These rulers wore a red and white double crown symbolizing the Lower and Upper parts of the land they controlled. Famous holders of this title included Hatshepsut and Rameses the Great. For 10 points, name this title held by the ruler of Ancient Egypt.

ANSWER: pharaoh

11. This body of water contains the Ottawa Islands, part of the territory of Nunavut. The only active port on this body of water is Churchill, located in the province of Manitoba. For 10 points, name this very large Canadian bay which was named for an explorer who was marooned in this bay.

ANSWER: Hudson Bay

12. This author has created trilogies called *Titanic*, *Everest* and *Island*. His contributions to *The 39 Clues* series include *The Emperor's Code*. This author's Monday Night Football series was adapted into the TV show *The Jersey*. For 10 points, name this author of *The Sixth Grade Nickname Game* and *No More Dead Dogs*.

ANSWER: Gordon Korman

13. Secret talks between the US and this country were held in Vatican City in 2013. In 2014, Alan Gross was released from a Havana prison in this country. American visitors can now bring back popular cigars from this country. For 10 points, name this country led by Raul Castro.

ANSWER: Republic of Cuba

14. The first person to be assigned one of these was John Sweeney. One of these belonging to Todd Davis is printed on advertisements for his company LifeLock. They contain nine numbers in groups of three, two and four. For 10 points, name these ID numbers used by a federal agency.

ANSWER: Social Security Numbers [accept SSN]

15. The only confirmed footprint of this dinosaur is in New Mexico. One specimen of this dinosaur is nicknamed Sue. Some debate exists over whether this theropod was a scavenger or a fierce predator. For 10 points, name this large, powerfully-jawed carnivorous dinosaur with tiny arms.

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ANSWER: Tyrannosaurus rex [accept T. rex]

16. COMPUTATION: Jonathan needs to know how much area will be covered by a square concrete patio around his pool. If the entire area of the pool plus the concrete is 64 square feet, and the pool measures 6 feet on each side, Jonathan will need, for 10 points, how many square feet of concrete?

ANSWER: 28 square feet of concrete

17. This composer's first opera *A Guest of Honor* is considered lost, and his opera *Treemonisha* was not well received. This composer moved to Sedalia, Missouri, in 1894, where he published his first popular ragtime song. For 10 points, name this composer of "Maple Leaf Rag."

ANSWER: Scott Joplin

18. Seabed gouging may happen when these objects drift into shallow water. These objects are produced by calving. The US Navy spent much of 1912 patrolling the water for these floating objects. For 10 points, name these floating objects which may have broken off from glaciers.

ANSWER: icebergs

19. The man who committed this crime had escaped from the Missouri State Penitentiary by hiding in a bread truck. The victim was in Memphis to support striking sanitation workers. For 10 points, name this crime committed by James Earl Ray against a popular civil rights leader.

ANSWER: assassination of Reverend Martin Luther King, Jr. [accept any answer indicating the killing of Rev. King]

20. The main character of this book has two siblings who write under the pseudonyms Peter and Demosthenes. That main character, whose real name is Andrew, had worked with his Jeesh to defeat the Formics in this book. For 10 points, name this science fiction book by Orson Scott Card.

ANSWER: Ender's Game

TB. These people's code of conduct is called vinaya. They are allowed to eat food from dawn to 12 noon only, which has to be formally offered directly into their hands. Many of these people practice daily meditation while living in a monastery. For 10 points, name these devotees of the Buddhist religion.

ANSWER: Buddhist monks

## BONUSES

1. The Supreme Court declared this legal in the case *Korematsu v. U.S.* For 10 points each:

[10] Name this imprisonment of members of a specific ethnic group during World War II.

ANSWER: **internment** of **Japanese**-Americans [accept equivalents that describe the forced imprisonment of Japanese-Americans during World War II]

[10] Executive Order 9066, authorizing internment, was issued by this president in 1942.

ANSWER: **Franklin Delano Roosevelt** [accept **FDR**; prompt on **Roosevelt**]

[10] At the time, J. Edgar Hoover was the leader of this U.S. agency, focused on domestic intelligence gathering and law enforcement, that helped to spy on Japanese-Americans.

ANSWER: **Federal Bureau of Investigation** [accept **FBI**]

2. This musical note is drawn as a filled-in notehead with a stem and no flag. For 10 points each:

[10] Name this note that is played twice as long as an eighth note.

ANSWER: **quarter** note

[10] In a time signature, a four on the bottom (such as 4/4) means that the quarter note gets this many beats.

ANSWER: **one**

[10] A series of three notes played equally across the space of two beats is known by this name.

ANSWER: **triplet**

3. The Köppen system classifies regions of Earth based on this characteristic, such as ‘humid subtropical.’ For 10 points each:

[10] What term describes the average weather conditions of a place over time?

ANSWER: **climate**

[10] This is the term for particular gases that cause increased warmth in the atmosphere, such as methane and carbon dioxide.

ANSWER: **greenhouse** gases

[10] We can estimate the carbon dioxide concentration from past climates by finding bubbles trapped in these frozen samples which were drilled from glaciers.

ANSWER: **ice cores** [prompt on **ice**]

4. COMPUTATION: Nolan is building a doghouse in the shape of a square pyramid. For 10 points each:

[10] How many vertices does the doghouse have?

ANSWER: **five**

[10] How many edges does the doghouse have?

ANSWER: **eight**

[10] What name is given to the vertex at the top of the pyramid at which the triangular faces meet?

ANSWER: **apex**

5. For 10 points each, answer these questions about an epic poem.

[10] This poem is named for its main character, a warrior come to protect Hrothgar's mead-hall.

ANSWER: **Beowulf**

[10] The mead hall is under attack by this monster. This monster's mother attacks the hall also, but both are defeated by Beowulf.

ANSWER: **Grendel**

[10] The poem *Beowulf* was written in this language, spoken in England during the Middle Ages.

ANSWER: **Old English** [or **Anglo-Saxon**; prompt for more information on **English** by itself]

6. A museum named for this river in Dubuque, Iowa, features the *William M. Black* steamboat. For 10 points each:

[10] This North American river's headwaters are at Lake Itasca, Minnesota.

ANSWER: **Mississippi** River

[10] This other river meets the Mississippi in St. Louis after passing by Jefferson City in its namesake state.

ANSWER: **Missouri** River

[10] In 1811, this natural event near New Madrid, Missouri, caused the Mississippi to temporarily flow backwards.

ANSWER: **earthquake**

7. This document originally contained 39 separate provisions, though only 10 were ratified. For 10 points each:

[10] Name this set of 10 amendments added to the U.S. Constitution in 1791.

ANSWER: **Bill of Rights**

[10] The whole set of 39 possible amendments was drafted in 1789 by this founding father who would later serve as president.

ANSWER: James **Madison**

[10] This amendment in the Bill of Rights protects an American's right to own firearms.

ANSWER: **2nd** amendment

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8. Small stone walls in some vineyards help collect water used for this agricultural procedure.

For 10 points each:

[10] Name this procedure of artificially adding water to soil for growing crops.

ANSWER: **irrigation** [accept word forms such as **irrigating**]

[10] This part of a plant absorbs water and nutrients from the soil.

ANSWER: **roots**

[10] Ancient Egyptians irrigated their fields and added nutrients by waiting until the Nile River did this, which it did on an annual basis.

ANSWER: **flooded** [accept equivalents such as **overflowed its banks** or **spilled onto the land**]

9. This video hosting website is owned by Google. For 10 points each:

[10] Name this website, home to popular channels such as PewDiePie and Tyler Oakley.

ANSWER: **YouTube.com**

[10] Before 2010, YouTube video playback required this plug-in from Adobe.

ANSWER: **Flash**

[10] YouTube video “likes” often pause at this number while new likes are being verified as legitimate.

ANSWER: **301** likes

10. In this book by Veronica Roth, Tris realizes the strange truths about her dystopian world. For 10 points each:

[10] This first book in a series sees Tris meet Four, a leader of Dauntless. Both characters can be described by this book’s title.

ANSWER: **Divergent**

[10] Those who are Divergent show aptitude for more than one of these groups, such as Dauntless and Erudite.

ANSWER: **factions**

[10] Tris was not born into Dauntless, but into this faction who runs the government due to their selflessness.

ANSWER: **Abnegation**

11. After this man descended from Mount Sinai, he destroyed a golden calf that his brother had made. For 10 points:

[10] Name this Israelite who received the Ten Commandments while on Mount Sinai who led his people out of slavery in Egypt.

ANSWER: **Moses** [or **Moshe**]

[10] The story of Moses is told in this book of the Torah, which follows the book of Genesis. It is the second book of the Old Testament.

ANSWER: Book of **Exodus**

[10] This man, Moses’ brother, was anointed as high priest by Moses. His sons Nadab and Abihu were killed when he was anointed as high priest.

ANSWER: **Aaron**

12. COMPUTATION: Jonah needs to know when his turkey will be done cooking. The recipe says to roast the bird in the oven for two and a half hours. Jonah starts cooking at 1 PM. For 10 points each:

[10] At what time when the turkey will finish cooking?

ANSWER: 3:30 PM [or 15:30]

[10] At what time will the turkey be halfway finished cooking?

ANSWER: 2:15 PM [or 14:15]

[10] After the turkey is finished cooking, Jonah needs to cook three other dishes, each of which take thirty-five minutes to cook. When will the last dish be finished cooking?

ANSWER: 5:15 PM [or 17:15]

13. Materials with zero resistance are called “super” ones of these. For 10 points each:

[10] Electricity flows easily in what materials, in contrast to insulators?

ANSWER: conductors

[10] This metal with symbol Cu only has one electron in its outer shell which makes it a very effective conductor.

ANSWER: copper

[10] Pure water is not a conductor by itself, but adding these chemicals such as salt, potassium or calcium will facilitate conduction.

ANSWER: electrolytes

14. This book won its author and illustrator the 1964 Caldecott medal. For 10 points each:

[10] In this book, the main character is sent to bed hungry and then becomes ruler of a magical island jungle.

ANSWER: *Where the Wild Things Are*

[10] That main character is this boy, who enjoys wearing a wolf costume.

ANSWER: Max

[10] The book was written by this Jewish-American, who also illustrated the *Little Bear* series.

ANSWER: Maurice Sendak

15. The Bhagavad Gita and the Vedas are major texts from this religion, and eating cattle is taboo for followers of this religion. For 10 points each:

[10] Name this religion, the largest in India and the world’s third largest in terms of numbers of followers.

ANSWER: Hinduism

[10] The Hindu Trimurti is made up of this many gods. The Christian trinity contains this number of aspects of God.

ANSWER: three

[10] The Trimurti consists of Shiva, Brahma, and this four-armed preserver god. This god’s avatars, or appearances on Earth, include Rama and Krishna.

ANSWER: Vishnu

16. This U.S. president launched the Great Society program. For 10 points each:

[10] Name this U.S. president who took the presidency upon John F. Kennedy's death in 1963.

ANSWER: Lyndon Baines Johnson [accept LBJ; prompt on Johnson]

[10] This other president with the same last name also followed a president who had been assassinated.

ANSWER: Andrew Johnson [prompt on Johnson]

[10] Although not the president, Jeh [“jay”] Johnson currently holds this Cabinet position where he leads the newest department in the executive branch.

ANSWER: Secretary of Homeland Security

17. COMPUTATION: Elise needs to build a frame for a very strange mirror shaped like a regular pentagon. She knows that each side of the mirror is 20 centimeters long. For 10 points each:

[10] In centimeters, what is the perimeter of the pentagon?

ANSWER: 100 centimeters

[10] If Elise draws a design on the mirror by drawing lines from one corner of the pentagon to another and without any of the lines crossing each other, into how many triangles can she split the pentagon?

ANSWER: three triangles

[10] Using the fact that the pentagon consists of three triangles, what is the sum in degrees of the measures of the interior angles of the pentagon?

ANSWER: 540 degrees

18. In a Grammy-winning song by this artist, “these nights never seem to go to plan.” For 10 points each:

[10] This artist's first album, *In the Lonely Hour*, features “I’m Not The Only One”.

ANSWER: Sam Smith

[10] Smith sang the vocals on this track by Disclosure with lyrics like “now I’ve got you in my space.”

ANSWER: “Latch”

[10] Smith was chosen to sing the theme song, “Writing’s on the Wall,” for the newest movie about this British secret agent.

ANSWER: James Bond [accept the movie title, Spectre]

19. For 10 points each, answer these questions about languages related to English.

[10] This language, spoken in Stockholm, is familiar to many visitors to IKEA stores.

ANSWER: Swedish language

[10] The region of Flanders in Belgium is primarily home to speakers of this language, also spoken in Suriname and Aruba.

ANSWER: Dutch language

[10] A dialect of Dutch called Afrikaans is spoken primarily in these two African countries near the Cape of Good Hope. Name either one for points.

ANSWER: South Africa or Namibia

20. Arnold Sommerfeld was nominated for of these 81 times and never won. For 10 points each:



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[10] These annual scientific awards were named after a Swedish inventor.

ANSWER: **Nobel** Prize in Physics

[10] The first Nobel in Physics was given to Wilhelm Roentgen, who discovered this kind of radiation that is commonly used to look for broken bones.

ANSWER: **X-rays**

[10] Alfred Nobel invented this explosive, which is made of nitroglycerin and stabilizers in a stick connected to a fuse or electrical cable.

ANSWER: **dynamite**

TB. This song's tune comes from "To Anacreon in Heaven," a common British tune. For 10 points each:

[10] Name this song used as the American national anthem.

ANSWER: *The **Star-Spangled Banner***

[10] *The Star-Spangled Banner* was written by this man while sitting on a ship in Baltimore Harbor.

ANSWER: Francis Scott **Key**

[10] Key was in Baltimore Harbor for the siege of Fort McHenry during this war between the United States and Great Britain.

ANSWER: **War of 1812**