1. Maria, on this celestial body, consist of basaltic plains and do not reflect as much light as their terrae counterparts. Daedalus, a notable crater on this body, is found on the far side. This body also has the power to influence and cause tides. Its surface gravity is only 17 percent of that on Earth. What is this satellite, also known as "luna," and often represented as a crescent?

Answer: The Moon

2. Arguably the first artist to become a mass media superstar after World War II, one of her paintings, *The Fourth of July* was a gift to President Eisenhower and still hangs in the White House. Her much copied folk art style was completely self-taught. Born Anna Mary Roberston, who is this American artist who sold her first paintings when she was nearly 80 years old?

Answer: Grandma Moses (Accept early Anna Mary Roberston)

3. He was 2007's *Time* Person of the year for leading his country out of chaos and into stability. In May 2008 he became Prime Minister, and made headlines for his country's actions in South Ossetia and its retaliation against Georgia. Sarah Palin suggested that he might "rear his head" in Alaska, if we're not careful. Who is this former president and current prime minister of Russia?

Answer: Vladimir Putin

4. 2<sup>nd</sup> Kings 14:25 mentions that he was born in the town of Gath Hepher about five miles from Nazareth. His most famous story is also described in the Koran, although it does not mention a worm biting a plant root or the city of Ninevah. Who is this Old Testament prophet best known for surviving a sailing trip during which he was swallowed by a great fish?

Answer: Jonah

5. Although history books usually report five deaths from this event, a 17 year-old shipwright's apprentice Christopher Monk languished from his wounds for 10 years before dying in 1780. The most famous person killed during it was a mulatto man named Crispus Attucks. What was this 1770 event, famously depicted by Paul Revere, in which British troops fired on a group of civilians in Boston?

Answer: Boston Massacre

6. Math Calculation: Susan is a climatologist and wants to determine the range of the amount of rainfall that Maui gets per year. Over the past five years the amount of rainfall has been 83 inches, 77 inches, 135 inches, 132 inches, and 97 inches. If she wishes to determine the range she must subtract the minimum amount of rain from the maximum amount of rain. If the maximum rain over the past 5 years was 135 inches and the minimum was 77 inches, what is the range?

Answer: 58 inches

7. They are filled with membrane systems called thylakoids, often arranged into stacks called grana, which are necessary for ATP synthesis. The Calvin cycle take place in the stroma of these organelles. Pigments in them absorb blue and red wavelengths which gives plant parts containing these organelles a green color. Name this plant organelle where photosynthesis occurs.

Answer: Chloroplasts

8. It has, very roughly, 43 quintillion possible positions. Erik Akkersdijk is the official world record holder for solving one in 7.08 seconds at the 2008 Czech Open. Patented in 1975 by a Hungarian sculptor and professor, what is this maddening multi-colored toy that can be solved by either a number theory student or someone with a few hundred years to kill?

Answer: Rubik's Cube

9. The Weird sisters predict and guide much of the action in this play when they tell the title character that he will be king and prophesize that Banquo will begin a line of kings. The main character then kills Duncan, and his wife attempts to cover it up beginning their tragic fall. What is this Shakespearean tragedy known as "The Scottish Play?"

Answer: Macbeth

10. He distinguished himself in mathematics as a youth, which lead him to study artillery in military school. Although teased about his Italian accent, because he was an outsider, he survived the French Revolution. Two days after his marriage to Josephine, he led a successful invasion of Italy beginning his storied military career. Who was this man who crowned himself emperor in 1804 and conquered much of Europe before his 1815 defeat at Waterloo?

Answer: Napoleon Bonaparte (Accept either name) or Napoleon I

### HALFTIME (2 Minutes)

- 11. No one in the town sees the main character of this story again after his encounter at the bridge, but rumor had it that he became a lawyer and a judge. At the end of this story, the old women of Tarry Town still believe the ghost of a Hessian soldier appeared that night, but Brom Bones laughed knowingly when the story was retold. What is this Washington Irving short story featuring Ichabod Crane and the Headless Horseman? Answer: "The Legend of Sleepy Hollow"
- 12. Math Calculation: Svetlana lives in a state in which speeders are fined 15 dollars for each mile per hour over the speed limit. She was given a ticket for 180 dollars on a road with a 45 miles per hour speed limit. Using an equation that divides her fine by fifteen dollars and then adding the result to the speed limit, calculate how fast Svetlana was driving.

Answer: 57 miles per hour

13. The inventor of this device along with Gustav Kirchhoff discovered the elements cesium and rubidium. This lab instrument mixes air with natural gas to produce a combustion reaction, and the type of flame that is produced is dependant on the amount of air that is mixed with the gas. What is this lab instrument, often depicted with a blue cone in its center, a namesake "burner" not named for the resident scientist on *The Muppet Show?* 

Answer: Bunsen burner (Named for Robert Bunsen not noted Muppet Dr. Bunsen Honeydew)

- 14. While living in Sedalia, Missouri, he sold one of his most famous pieces of music for a one cent royalty, and it became the first piece of instrumental music to sell one million copies. In St. Louis he wrote some of his most famous pieces including "Elite Syncopations," "March Majestic," and "Ragtime Dance." Who was this African American composer most famous for "The Entertainer" and "The Maple Leaf Rag"? Answer: Scott Joplin
- 15. It was in operation only for about a year and a half in 1860 and 1861. Stations were placed about every 10 miles along the route beginning in St. Joseph, Missouri, and ending in Sacramento, California. Before being replaced by the telegraph, the journey took about ten days. What was this famed mail service in which riders on horseback delivered mail at unheard of speeds?

Answer: Pony Express

16. Between its Camp III and Camp IV are the Yellow Band, a 100 meter section of marble, and the Geneva Spur, an anvil-shaped black rock, both of which require fixed ropes to overcome. Near the top is a rock wall called the Hillary Step named for Edmund Hillary, who climbed it in 1953. Lying between Tibet and Nepal in the Himalayas, what is this highest mountain on Earth?

Answer: Mount Everest

- 17. When given the command to "zoom-zoom" this character uses his super-speed to pull Penny's scooter down the highway to track down the evil Dr. Calico. After escaping from the soundstage, he thinks that styrofoam inhibits his superpowers before meeting Mittens, an alley cat, and Rhino, a fearless hamster. Who is this character in a recent Disney film, a movie star who comes to realize that he is just a normal dog? Answer: Bolt
- 18. Guinea pigs, bats, and higher primates including humans cannot manufacture this vitamin, and Nobel Prize winner Linus Pauling recommended taking doses of this highly effective antioxidant well beyond the current government recommendations. A deficiency of it can lead to scurvy. Also known as ascorbic acid, what is this vitamin found in oranges and many other fruits and vegetables?

  Answer: Vitamin C

19. It begins on June 12, 1942, its author's thirteenth birthday. It was written in three volumes, but original second volume went missing after the author's family was arrested and their hiding place discovered. Identify this book or its young author who wrote of her experiences hiding from the Nazis in Amsterdam one of the most famous personal testimonies of the holocaust.

Answer: Anne Frank or Diary of a Young Girl also accept Diary of Anne Frank or equivalents

20. It broke away from China after the battle of Bach Dang River in 938 CE, and was relatively independent until being colonized by the French in the mid 19<sup>th</sup> Century. The 1954 battle of Dien Bien Phu signaled the end of French colonial rule in this country, but it was then split, with Bao Dai leading the south and Ho Chih Minh in the north. What is this country where the US fought a costly war and whose capital is Vientiane?

Answer: Vietnam

- 1. While the dogs of US Presidents are normally used to soften the image of the commander-in-chief, on occasion the First Canines make their own headlines.
  - A. Just after the Barack Obama's election victory, this Scottish terrier belonging to George W. Bush bit the hand of a reporter.

Answer: Barney

B. Pete, a built terrier belonging to this president, acted on his owner's slogan to "speak softly and carry a big stick" when he ripped a hole in the seat of the French ambassador's pants.

Answer: Theodore "Teddy" Roosevelt

C. Less than a year after his owner's own assassination Fido, a dog belonging to this President, was stabbed and killed by a drunk.

Answer: Abraham Lincoln

- 2. For ten points each, name these types of triangles.
  - A. This class of triangle has two sides equal

Answer: Isosceles

B. This class of triangle has no sides equal

Answer: Scalene

C. Finally this kind of triangle has one angle that is greater than 90 degrees.

Answer: Obtuse

- 3. Answer the following about two very similar novels about dogs during the Klondike gold rush.
  - A. This novel follows a domesticated dog named Buck who is kidnapped and made into a hardened sled dog.

Answer: The Call of the Wild

B. This novel is sort of a mirror-image of The Call of the Wild. In it a wild, wolf-like dog struggles to become civilized and domesticated.

Answer: White Fang

C. This San Francisco author wrote *The Call of the Wild* and *White Fang* along with *The Sea-Wolf*, a novel surprising not about dogs.

Answer: Jack London

- 4. Identify the following large American lakes.
  - A. The only one of the Great Lakes entirely in the United States, it is also the largest lake entirely within a single country in terms of surface area.

Answer: Lake Michigan (lake Baikal in Russia has a greater volume)

B. This Florida lake is the second largest freshwater lake in the United States, but it only averages 9 feet in depth.

Answer: Lake Okeechobee

C. This Oregon lake, formed inside a collapsed volcano, is the deepest lake in the United States.

Answer: Crater Lake

- 5. Answer the following regarding two recent bestsellers.
  - A. First published in 1995 after its author became the first African-American president of the Harvard Law Review, this autobiography tells the story of the author's life from his birth in Honolulu and refers to his hazy images of one of his parents.

Answer: Dreams from My Father

B. This one-time Chicago politician and Illinois Senator who has gone on to a much higher office wrote Dreams from My Father.

Answer: Barack Obama

C. In this 2006 bestseller, Barack Obama expanded on many of the themes he addressed during his speech of the same name at the 2004 Democratic National Convention.

Answer: The Audacity of Hope

- 6. Called the blueprint for life...
  - A. It contains the genetic instructions for all known living organisms and some viruses.

#### Answer: DNA or Deoxyribonucleic Acid

B. DNA is not usually a single molecule but rather a pair of molecules intertwined in this shape coined by Watson and Crick.

### Answer: double helix

C. These are the structural units that make up DNA strands. They include adenine and thymine.

Answer: nucleotides

- 7. First proposed in a 1753 article, there were working models of them in Russia, Germany and England before it was patented in America. Answer the following about an important invention
  - A. What is this device used to transmit written messages across long distances through a wire or other conductor?

Answer: Telegraph

B. This man won a lawsuit for the right to be called "the inventor of the telegraph" and helped create his namesake code for sending messages.

#### Answer: Samuel F. B. Morse

C. This other famous American inventor enhanced Morse's telegraph by making it capable of sending and receiving multiple signals at once. The stock ticker, which he also invented, made use of that technology.

Answer: Thomas Edison

- 8. Identify these types of sentences for 10 points each.
  - A. This type of sentence is the most common and is used to state a fact or opinion and ends with a period.

Answer: Declarative

B. This type of sentence gives a specific command and can end with either a period or an exclamation point for added emphasis.

Answer: Imperative (Do not accept "Exclamatory")

C. This type of sentence asks a question or requests information and ends with a question mark.

Answer: Interrogative

- 9. Answer the following about a certain 20th century Spanish painter.
  - A. This highly imaginative, eccentric, and mustachioed Spanish painter is known for his bold fantastical paintings including Swans Reflecting Elephants and The Burning Giraffe.

Answer: Salvador Dali

- B. This 1931 landscape featuring several melting clocks is Salvador Dali's most famous painting. Answer: The Persistence of Memory
- C. Dali was part of this artistic movement of the known for surprising images and unexpected juxtapositions often depicting the artist's version of a superior reality.

Answer: Surrealism

- 10. Give the following terms associated with the interaction of organisms in their environment.
  - A. This is the scientific study of the organisms within an environment and how they interact within it.

Answer: Ecology

B. This word is given to a particular environment, like a pond or a desert, and describes all of the living and non-living things within that environment.

Answer: Ecosystem

C. The non-living parts of an ecosystem—such as air, soil, water, and sunlight—are given this term by ecologists.

Answer: Abiotic Factors

- 11. Answer the following about the most recent winner of the Newbery Medal.
  - A. The winner of the award was this author of the novel Stardust who is perhaps best known for his comic book series The Sandman, which Norman Mailer called "a comic book for intellectuals."

#### Answer: Neil Gaiman

B. Gaiman won the Newbery for this young adult fantasy novel in which Nobody Owens is raised by ghosts.

### Answer: The Graveyard Book

C. The Graveyard Book is not the first literary award for Gaiman. He won the Hugo, Nebula, and Bram Stoker awards for this horror novella that was recently turned in to an animated stop-motion film.

Answer: Coraline

- 12. With Chicago vying to become the host of the 2016 Olympic Games, people are already speculating about who might light the torch to kick off the games. Answer the following about these other opening ceremonies.
  - A. At the Olympic Games in this city, gymnast Li Ning appeared to run in slow motion through the air around the membrane of the stadium before lighting the torch.

#### Answer: <u>Beijing</u>

B. This man lit the Olympic Torch at the 1996 Atlanta Olympic Games and received a replacement gold medal for the one he received for boxing at the 1960 Olympics that he later angrily threw into the Ohio River.

## Answer: Muhammad Ali

C. Arguably the most dramatic torch lighting occurred during this city's 1992 Opening Ceremony when a paralympic archer ignited the torch by shooting a flaming arrow over it.

#### Answer: Barcelona

- 13. Answer the following about the history of modern India for ten points each.
  - A. This long-reigning British Queen was named "Empress of India" in 1876 and kept the title until her death in 1937.

### Answer: Queen Victoria

B. This Indian leader began leading massive non-violent movements in the 1920s including shunning British clothes and leading a march to the sea to protest the British salt tax.

### Answer: Mohandas or Mahatma Gandhi

C. Since it attained independence, India has fought three wars this neighboring country, and evidence shows that the recent attacks in Mumbai were planned in this country.

#### Answer: Pakistan

- 14. Answer the following about a famous American novel.
  - A. This novel, set during prohibition in the 1920s, is narrated by Nick Carraway who is renting a house near the mansion of the title character, a wealthy and mysterious character whose first name is Jay.

### Answer: The Great Gatsby

B. The Great Gatsby was written by this man who also wrote This Side of Paradise.

#### Answer: F. Scott Fitzgerald

Jay Gatsby is in love with this woman who is married to Tom Buchanan and is Nick's second cousin.

## Answer: Daisy Buchanan

- 15. Answer the following about everyone's favorite star, the sun.
  - A. Name both of the two gaseous elements that make up 98% of the mass of the sun.

### Answer: Hydrogen and Helium (Must give both answers)

B. These are areas of intense magnetic activity that appear darker than the areas around them.

## Answer: Sunspots

C. Most easily seen during a total solar eclipse, this extended outer atmosphere of sun is far hotter than the actual surface.

# Answer: Corona

- 16. Answer the following regarding links between Harry Potter and Greek Mythology.
  - A. Fluffy, the three-headed dog guarding the sorcerer's stone is an allusion to this three-headed dog of the underworld in Greek myth.

Answer: Cerberus

B. The first name of Filch, the caretaker of Hogwarts, is taken from the name of this mythical creature with one hundred eyes in Greek myth.

Answer: Argus

C. In Greek mythology Hermione is the daughter of Menelaus and this woman whose abduction started the Trojan War.

Answer: Helen of Troy

17. Answer the following problems involving percentages. You have 15 seconds for each part.

A. What is 140% of 5?

Answer: 7

B. What is 85% of 60?

Answer: 51

C. What percentage of 48 is 18?

Answer: 37.5%

- 18. Answer the following about a famous convention of 300 people held on July 19 and 20, 1848.
  - A. Often considered the beginning of the women's rights movement in America, the meeting was held in this town in upstate New York.

Answer: Seneca Falls

B. Name either of the two women who organized the conference.

Answer: Lucretia Mott or Elizabeth Cady Stanton

C. The convention produced the *Declaration of Sentiments* which was based on this other American document but replaced "King George" with "all men" as the agent of oppression.

Answer: Declaration of Independence

- 19. Identify each of the following Italian musical terms.
  - A. From the Italian for "from the chapel," this is the name given to choral music or singing without instrumental accompaniment.

Answer: A Capella

B. From the Italian for "plucked," this term indicates that notes on string instruments should be plucked and not bowed.

Answer: Pizzicato

C. From the Italian for "growing," in musical notation it refers to a piece of music in which the volume gradually increases.

Answer: Crescendo

- 20. Answer the following about an atomic phenomenon for 10 points each.
  - A. This chemical property describes the ability of an element to attract electrons and form covalent bonds.

Answer: Electronegativity

B. This chemical element, number nine on the periodic table, has the highest electronegativity.

Answer: Fluorine

C. This group of elements has no natural electronegativity.

Answer: Noble Gases or Inert Gases