### 1. Earth Science/Geography/Astronomy

Caused by Plinian eruptions, examples include scoria, reticulite, and lapili. Give this term for volcanic rocks ejected during an eruption.

ANSWER: Pyroclast(ics Rock) (accept Tephra)

### 2. Language Arts

This word started out in Scotland, where it was used as a war cry. What word refers to a brief phrase used to advertise or to express a stand on a contested issue?

ANSWER: Slogan

## 3. Geometry/Trigonometry (30 Seconds)

Include units in your answer. Find the height of a pyramid if its volume is 100 cubic centimeters and its base is 10 square centimeters.

ANSWER: 30 centimeters

## 4. United States History

Who was the youngest major-party presidential nominee in history? He was a native of Illinois who represented Nebraska in the House of Representatives, and he would later serve as Woodrow Wilson's Secretary of State. The final years of his life were spent supporting Prohibition and fighting the Theory of Evolution. Name this Presidential candidate from the 1896, 1900, and 1908 Elections.

ANSWER: (William Jennings) Bryan (do not accept Bryant)

#### 5. World Literature

This author was born in West Virginia in 1892 and left America at the age of three months. She returned to the United States permanently in 1934 and lived until 1973. Though she wrote over one hundred works, she is usually associated with one novel published in 1931. It follows O Lan and Wang Lung. Name this author of *The Good Earth*.

ANSWER: (Pearl Comfort Sydenstricker) Buck (accept Sydenstricker, Walsh, or Sedges)

## 6. Chemistry (10 Seconds)

What has empirical formula  $C_4H_{10}O$ ? Some variations include dioxane and THF, and a monument to this chemical can be found in Boston. Its first medical use was in 1841 or 1842. For a long time it played a major role in medicine, but it is no longer used because it is an irritant to some patients and can be dangerous. Name this anesthetic.

ANSWER: (Diethyl) Ether

### 7. Pop Culture

Give the first and last names. He loves Andy Williams and fresh huckleberries, and he made a diorama of The Grapes Of Wrath. Name this character who was defeated in battle by Bart The General and who dated Lisa. This character from The Simpsons has said "Gotta nuke something", "So burn that flag if you must", and "Smell Ya Later". He is famous for his laugh.

ANSWER: Nelson Muntz (prompt if half the name is given)

## 8. Calculus/Combinatorics (30 Seconds)

Approximate the area under the graph from x=1.5 to x=3.5 using two midpoint rectangles for the graph of

 $y=x^2+2x+3$ .

ANSWER: 29

#### 9. Nonfiction

Name the philosopher who put his five children in orphanages, claiming that he would have been a poor father. This did not stop him from writing *Emile*, a book in which he explained how to raise children. He argued in other books that interdependent societies were bad for people and that we would be better off as noble savages. This Frenchman wrote *The Creed of a Savoyard Priest*, *Reveries of a Solitary Walker*, and *The Social Contract*.

ANSWER: (Jean Jacques) Rousseau

## 10. Technology

The Red Book Standard for these objects was created in 1980, while the Yellow Book Standard, which is more important for computers, was created in 1985. They were first mass produced in 1983, and there are now thirty billion sold every year. These devices are often divided up into frames, which hold 24 bytes, and sectors, which hold 98 frames. Name these objects with 12 centimeter diameters often placed in stereos or computers.

ANSWER: CD(s) (or Compact Disc(s) or CD-ROM(s))

#### 11. Music

(Note to moderator: No singing; nothing personal.) Name the song with the lyrics: "But I'm here in my mold trying to make ends meet, trying to find some money then you die. I am here in my mold. You know I can change, I can change, I can change, and I'm a million different people." It was performed at Live 8 by Coldplay with Richard Ashcroft. Ashcroft usually performs the song with Verve.

ANSWER: Bitter Sweet Symphony

### 12. Physics (10 Seconds)

Though it can also refer to voltage, what term within physics usually refers to a force tending to stretch or elongate something? The measurement of this force can be simplified if you assume that a cord is massless and stretchless. The force can be measured by putting a spring scale between the cord and the object pulling it. Give this word beginning with the letter T.

ANSWER: Tension

#### 13. United States Literature

Which famous writer died of tuberculosis and malarial fever in 1900 at the age of 28? He attempted to cover the Cuban insurrection in 1897, but the ship he was on sank. This incident inspired his most famous short story. In 1893, he wrote a novel about an abused girl's tragic life, and his best known novel, published in 1895, was about Henry Fleming. Name this author of <a href="Maggie:A Girl of the Streets">Maggie:A Girl of the Streets</a> and <a href="The Red Badge of Courage">The Red Badge of Courage</a>.

ANSWER: (Stephen) Crane

## 14. Art/Architecture

Which architectural term refers to a part of a building marked off by vertical elements such as columns? It also refers to a window space projecting outward from the main walls of a building. Give this three-letter word.

ANSWER: Bay

### 15. World History

A third of this country's population died in a war-induced famine in 1696. Though it has historically feuded with Russia, it signed a mutual defense pact with the Soviet Union in 1948 and has enjoyed good relations since then. Name this Scandinavian nation which, though independent since 1917, has historically been controlled by Russia or Sweden.

ANSWER: Finland

## 16. Biology

Though Edward Jenner was the first person to develop an inoculation, who was the first person to develop one artificially? This came after research in which he diluted a solution one hundred times to prove the germ theory of disease. Along with Claude Bernard, he developed the process named after him, which involves heating food to kill the harmful organisms inside. Name this famous 19<sup>th</sup> century French scientist.

ANSWER: (Louis) Pasteur

# 17. Religion/Mythology

Though this word is becoming common on the internet, it usually is associated with Hinduism and Vishnu. Some Hindus believe that The Buddha was one of these rather than a regular human, and many believe that King Rama was one as well. Give this term for an embodiment of a God in human or animal form.

ANSWER: Avatar

18. Algebra (30 Seconds)

Find the x-intercept for the graph of the function y equals the log base x of the quantity 2x-5.

ANSWER: 3 (accept (3,0))

### 19. Current Events

Which city contains Tavistock Square? At 9:47 AM on the morning of July 7<sup>th</sup>, a double-decker bus exploded there, killing thirteen innocent people and the bomber. This took place almost an hour after three bombs went off almost simultaneously on different subway trains in the city. These were the worst attacks in this city since it was bombed by the Nazis during World War II. Name this capital of Great Britain.

ANSWER: London(, England or Great Britain or United Kingdom)

### 20. British Literature

Who wrote the conversational poems "Frost At Midnight" and "The Nightingale"? These were completed during the most productive part of his career in the 1790s. Name this friend of William Wordsworth who wrote "Christabel", "Kubla Khan", and "The Rime of the Ancient Mariner".

ANSWER: (Samuel Taylor) Coleridge

TIEBREAKER: To break a tie, use the following questions in order. The first correct answer wins the match.

You can give either the first or last name. Who has made millions of dollars through associations with The Teletubbies, The Power Rangers, Curiosity Killed The Cat, and Westlife? Lately, he has been on television a lot himself instead of working in the background, and he has become famous for saying things like, "There are only so many words I can draw out of my vocabulary to say how awful that was." Name this person often seated next to Randy Jackson and Paula Abdul on American Idol.

ANSWER: Simon Cowell (accept either half of name or both)

This company was started in New Mexico in 1975. Its first product was a BASIC interpreter for the Altair 8800. A fateful day in its history was August 12<sup>th</sup>, 1981, when it was given a contract by IBM to developing an operating system. Now headquartered in Redmond, Washington, it is the world's largest software company. Name this creator of Windows and Xbox.

ANSWER: Microsoft

Which chemical element has atomic mass 1.01, atomic number 1, and atomic symbol H?

ANSWER: Hydrogen (Prompt H)