1. World Literature

Which author was born in present-day Ukraine with the last name Korzeniowski? From the time he was twenty until he was thirty-six, he served in the British merchant navy, which is when he learned English. Identify this author of Almayer's Folly, Nostromo, Lord Jim, and Heart of Darkness.

ANSWER: (Josef Teodor) Conrad

2. Algebra (30 Seconds)

Put the following into simple radical form: three divided by the cube root of nine. [Image]

ANSWER: Cube(d) root of three (or third root of three or equivalent) [Image]

3. Biology

Theoretically, this can be a single layer of cells that causes increases in the thickness of plant stems. What layer is found between the xylem and phloem?

ANSWER: (Vascular) Cambium (or cambial zone or cambial layer)

4. United States History

Whose house at 139 Arch Street in Philadelphia is preserved, though historians believe it probably was not her real house and that her basic claim to fame is false? She gained fame in 1870, thirty-four years after her death, based on a story told by her grandson. The story goes that George Washington, George Ross, and Robert Morris brought a pencil sketch into her shop and told her to sew it. She changed the six-pointed stars to five-pointed ones, and the rest may be history.

ANSWER: (Elizabeth 'Betsy' Griscom) Ross

5. Pop Culture

Her last name is Eksterowicz. Name the woman who was proposed to by Aaron this week in the season finale of The Bachelor.

ANSWER: Helene

6. Technology

Two of the places that are successfully reaping which source of energy are Altamont Pass, California and Trent Mesa, Texas? It currently supplies one-half of one percent of our nation's energy needs, and many experts claim that it could handle the energy needs of Texas, North Dakota and Kansas. Identify this clean source of energy that has caused some local controversies because of the noise and size of generating turbines.

ANSWER: Wind (accept equivalent answers)

7. British Literature

Who shows up on his wedding day dressed like a scarecrow and afterwards does not allow his wife to sleep or eat? His wife is Katharina, and the two of them are the main characters in The Taming of the Shrew.

ANSWER: Petruchio

8. Calculus (10 Seconds)

What name is given to equations that involve functions and their derivatives? These are often classified as ordinary or partial.

ANSWER: Differential (Equations)

9. Language Arts

When followed by the word 'opera', what word tells you that the show is a Western? When followed by the word 'around', it is similar in meaning to joke. Identify this word that refers to the species Equus caballus.

ANSWER: Horse

10. Chemistry (30 Seconds)

(Note to moderator: Read this question slowly.) I'll read you a chemical reaction using the names of the compounds. You should tell me the reaction using coefficients to balance the equation and chemical formulas for the compounds. Methane and oxygen gas yield carbon dioxide and water.

ANSWER: $CH_4 + 2O_2$ yield $CO_2 + 2H_2O$ (accept other terms for 'yield', and accept 'one' when no number is given)

11. World History

There are several legends about the residents of this city, one of which is that the women in it once cut off their hair to provide bowstrings for catapults. Another story tells that its borders were decided by how much land could be encircled with a single oxhide by Queen Dido. Identify this city ruled by the Phoenicians from 800 to 146 BC when they fought the Punic Wars against Rome.

ANSWER: Carthage

12. Music

(Note to moderator: No singing, please. Nothing personal.) "Raindrops on roses and whiskers on kittens. Bright copper kettles and warm woolen mittens. Brown paper packages tied up with strings." In what song from the Sound of Music do these things appear? When I simply remember them, I don't feel so bad.

ANSWER: My Favorite Things (allow more information, prompt on The Sound of Music)

13. United States Literature

Which writer finished college at the University of Iowa after dropping out of the University of Missouri and Washington University? His plays were very popular from the mid 1940s until the early 1960s, though he continued writing until his death in 1983. His first successful play was about the Wingfield family, and two years later he wrote about a stormy relationship between Stanley and Stella. Identify this playwright of The Glass Menagerie and A Streetcar Named Desire.

ANSWER: (Tennessee) Williams

14. Physics (30 Seconds)

Find the centripetal acceleration of an object moving at a velocity of five meters per second that completes a circular revolution every two seconds.

ANSWER: Five Pi Meters Per Square Second (or Meters Per Second Squared) (do not accept Meters Per

Second)

15. Current Events

Which country controls Failaka Island? This island has been used by the United States military for training since the Persian Gulf War. During October, several marines were shot at by terrorists on this island. In another part of this country, two American soldiers were shot two days ago. This country was liberated by the United States during the Persian Gulf War.

ANSWER: Kuwait

16. Geometry/Trigonometry (10 Seconds)

It has been found on a Babylonian tablet from before 1600 BC, though it is unlikely that any proof was known that far back. Today, over three hundred proofs exist. It can be used to prove the Arithmetic-Geometric Means Inequality and Stewart's Theorem, and it can be extended into the Law of Cosines or the Distance Formula. Identify this basic theorem of geometry.

ANSWER: Pythagorean (Theorem) (accept $a^2+b^2=c^2$ or a statement equivalent to the theorem)

17. Religion/Mythology

What deity's name means auspicious one? He is usually depicted with a blue neck around which is a garland of skulls or a serpent. He rides the bull Nandi and is the father of Skanda and Ganesha. Identify this Hindu deity who has three eyes.

ANSWER: Shiva (or Siva)

18. Astronomy/Earth Science/Geography

Which city with a current population over six hundred thousand was named by Andrew Jackson? Its existence almost ceased in the 1870s because of a yellow fever epidemic, but it recovered in the 1890s. It is the home of the Mud Island River Park, the Lorraine Motel Civil Rights Museum, Beale Street, Sun Studios, and Graceland.

ANSWER: Memphis

19. Nonfiction

In the middle of last October, fifty thousand copies of which book were sitting in a warehouse in Scranton, Pennsylvania? Ann Sparanese, a New Jersey librarian, generated a lot of attention and letters to publisher HarperCollins by posting messages on librarian listserves, and the books were eventually sold in stores. Identify this book that has spent several weeks at Number One on the New York Times bestseller list. It is very critical of the Bush Administration and was written by Michael Moore.

ANSWER: Stupid White Men (...and Other Excuses for the State of the Nation)

20. Art/Architecture

Which artist did a series of close-up paintings of flowers while living in New York City in the 1920s and later painted many animal bones set against desert backgrounds while living in New Mexico? She had a love affair with a man fifty years younger than her long after the death of her husband, the photographer Alfred Stieglitz.

ANSWER: (Georgia) O'Keefe

TIEBREAKERS

(30 Seconds) Units are not necessary in this problem. Find the acceleration of an object if its position in terms of time is given by the expression $7.8t^2-4.1t+5.1$.

ANSWER: 15.6

Wilhelm Friedemann, Carl Philipp Emanuel, and Johann Christian. These are all members of a family that demonstrated remarkable musical talents during the seventeenth and eighteenth centuries. What family's most famous member was Johann Sebastian, who composed the Brandenburg Concertos?

ANSWER: Bach(s)

TRUE OR FALSE: There is a servant in Shakespeare's Romeo and Juliet named Sampson.

ANSWER: True