

1. Earth Science/Geography/Astronomy

In which city will you find Pergamon Museum, Charlottenburg Palace, and Alexanderplatz? It contained Checkpoint Charlie until 1990, and it has contained The Brandenburg Gate since 1791. Name this capital of Germany.


ANSWER: Berlin

2. Language Arts

Which word refers to a British breed of large draft horses? Its more common meaning is an administrative subdivision of land. Give this word closely associated with *The Lord of the Rings*.

ANSWER: Shire

3. Geometry/Trigonometry (30 Seconds)

Give your answer in radians. What is the period of the graph $y = \cos^2 x$? 

ANSWER: Pi 

4. United States History

Which event was stopped by Hugh Thompson, Jr. and led to the conviction of William Calley? It led CBS commentator Mike Wallace to ask, "We've raised such a dickens about what the Nazis did, or what the Japanese did, but particularly what the Nazis did in the second world war, the brutalization and so forth, you know. It's hard for a good many Americans to understand that young, capable, American boys could line up old men, women and children and babies and shoot them down in cold blood. How do you explain that?" It happened on March 16, 1968.

ANSWER: My Lai (Massacre) (accept Pinkville, do not accept Vietnam War)

5. World Literature

The beginning of this novel contains several drunken ravings. After hearing one from a student, the protagonist pays a visit to Alyona Ivanovna, who is a pawnbroker, and her sister Lizaveta. Name this novel by Fyodor Dostoyevsky about Raskolnikov.

ANSWER: Crime And Punishment (or Prestuplenye y Nakazanye)

6. Chemistry (10 Seconds)

What devices can be classified as differential scanning, high-energy particle, constant volume, or constant pressure? Cheap ones are often made out of pop cans, while strong ones can be classified as oxygen bomb types. Name this apparatus used to measure the heat generated by a chemical reaction.


ANSWER: Calorimeter(s)

7. Pop Culture

Which summer movie was based on a novel by Ann Brashares? It starred America Ferrera, Alexis Bledel, Blake Lively, and Amber Tamblyn; they portrayed girls whose mothers met in a prenatal class. As their lives move apart, they decide to share a magical piece of clothing.

ANSWER: (The) Sisterhood of the Traveling Pants

8. Calculus/Combinatorics (30 Seconds)

Find the limit as x approaches 1 for the quantity $2x^2 + x - 3$ end quantity divided by the natural log of x . 

ANSWER: 5

9. Nonfiction

Name the American who wrote a book in 1946 that has sold over fifty million copies. Many Conservatives blamed the 1960s on him, and he ran for President as a very Liberal Third Party Candidate in 1972. Name this author of *The Common Sense Book of Baby and Child Care* who encouraged parents to treat their children differently than they would treat adults.

ANSWER: (Dr. Benjamin) Spock

10. Technology

This term is a portmanteau coined by Kodak in 1984. Popular devices on the market today include the Canon Elura and Optura as well as products from Sony and Panasonic. What word refers to consumer devices that film moving pictures and put them onto 8 millimeter or VHS tapes or DVDs? It begins with the letter C.

ANSWER: Camcorder

11. Music

Which opera is about Tamino and Pamina? Pamina is the daughter of the Queen of the Night. Linked strongly to Freemasonry, it was composed by Mozart near the end of his life. Name this opera whose name comes from an instrument given to Tamino.

ANSWER: (The) Magic Flute (or Die Zauberflöte)

12. Physics (30 Seconds)

Let little g equal 10 Newtons per kilogram. If a ten kilogram block is lying on a flat surface with a coefficient of friction of 0.25, what amount of force is needed to accelerate the block at one meter per second squared?

ANSWER: 35 Newtons (units can also be kilograms meters per second squared, prompt if no units are given)

13. United States Literature

Which popular writer went into a diabetic coma in 1998? She is still active, as seen by the release of her new book about the early years of Jesus Christ. Name this author famous for a series of ten novels written from 1976 to 2003 ending with *Blood Canticle*. The series is known as The Vampire Chronicles.

ANSWER: (Anne) Rice

14. Art/Architecture

This painter's works often met with controversy. *The Mocking of Christ* was criticized for making Christ seem too human. *The Execution of Maximilian* was censored because it pictured Frenchmen as executioners. *Olympia* was criticized for showing a modern woman rather than an ideal form. *The Absinthe Drinker* portrayed the underside of Paris. Name this artist credited with organizing the Impressionist movement. He also painted *Luncheon on the Grass*.

ANSWER: (Edouard) Manet (do not accept Monet)

15. World History

The Popes Leo The Tenth, Clement The Seventh, and Leo The Eleventh, as well as Cosimo The Elder, Lorenzo The Magnificent, and the wives of Leopold The Fifth, Henry The Second, and Henry The Fourth. What does this group all have in common? As a group, they were famous for supporting The Church of San Lorenzo and The Uffizi. Name this Florence family.

ANSWER: (Members of the d')Medici (Family) (prompt answers relating to Florence or Italy)

16. Biology

There are two types, apical and lateral. The apical type is found at the ends of roots and shoots, while the lateral kind surrounds some parts of some plants. What term is used for the undifferentiated plant tissue from which new cells are formed?

ANSWER: Meristem(s)

17. Religion/Mythology

According to Edith Hamilton, which Greek God appears the most often in tales of mythology? The son of Zeus and Maia, he stole Apollo's herds during his first day of life, returning them later with a lyre. He was the guide of the dead, but he is better known for his sandals and wand. Name this messenger of the Gods.

ANSWER: Hermes (do not accept Mercury)

18. Algebra (10 Seconds)

One way to calculate this quantity is the Laplacian expansion by minors. It can also be calculated by the Leibniz Formula or the Gauss Algorithm. In singular cases, it is equal to zero. For transformations, it equals the proportionality constant of the affected area or volume. Give the name for this scalar which can be calculated for any square matrix. For a two-by-two matrix, you can use the formula A times D minus B times C.

ANSWER: Determinant(s)

19. Current Events

This two-word phrase started becoming controversial in the late 1980s. Two of its biggest proponents are Stephen Meyer and Phillip Johnson. It is promoted by The Discovery Institute, which has a campaign called Teach The Controversy. Name this belief based on the idea that natural systems cannot be explained by natural forces. It is often associated with Creationism.

ANSWER: Intelligent Design

20. British Literature

Which Shakespeare character is the daughter of Brabantio? She marries secretly and then follows her husband to Cyprus after telling her father of her marriage. She is also given a handkerchief by her husband. Name this wife of Othello.

ANSWER: Desdemona

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

(30 Seconds) Include units in your answer. Find the total surface area of a right circular cylinder if its radius is 1 centimeter and its height is also 1 centimeter.

ANSWER: 4π square centimeters



Who wrote nineteen novels from 1836 until his death in 1870, none of which has ever gone out of print? People who don't enjoy his books like to point out that he invented the word "Boredom". Name this author

of Barnaby Rudge, Our Mutual Friend, The Pickwick Papers, Hard Times, Oliver Twist, and A Tale of Two Cities.

ANSWER: (Charles) Dickens

Which chemical element has atomic mass 14.01, atomic number 7, and atomic symbol N?

ANSWER: Nitrogen (Prompt N)