

### 1. Interdisciplinary

In 1961, an FCC Chairman with this first name described television as a vast wasteland. It also is the name of the X-Ray Multi Mirror Mission launched by NASA in 1999 and the town in which Boston Marathon's Heartbreak Hill is located. This is also the last name of the man who wrote the song "Amazing Grace" and the man who, along with Bobby Seale, formed the Black Panther Party. It is also the last name of the man described in a famous couplet by Alexander Pope that ends, "All was light." A method for recursively approximating the zeroes of a function is named after him, as is the most common unit of force. Give the last name of this man whose three laws form the basis of classical physics and who is sometimes credited with discovering calculus.

ANSWER: Newton

### 2. Current Events

This law was upheld by *Able vs. United States* and may have been inspired by the murder of Allen Schindler. Passed in 1993, it has cost thirteen thousand people their jobs, including at least fifty Arabic linguists. Patrick Murphy is sponsoring a bill to repeal this policy that will soon be taken up by the House Subcommittee on Military Personnel, but Senator Durbin recently said he wasn't sure Congress would get to it within the next year. President Obama has been criticized for not repealing it yet despite his campaign promises. Name this policy which prevents the military from prying into soldiers' private lives but also prevents the service of open homosexuals.

ANSWER: Don't Ask, Don't Tell (accept DADT)

### 3. Algebra/Precalculus (30 Seconds)

How many nickels does somebody have if she has twice as many dimes as nickels and they are worth a total of five dollars?

ANSWER: 20

### 4. British Literature

Ironically, this character is responsible for the saying about wearing one's heart upon one's sleeve. Shortly after telling his close acquaintance about the necessity of killing Cassio, this man protects Cassio by stabbing the acquaintance in the back. Responsible for several terrible acts, the worst involves blaming Cassio for taking a handkerchief from the title character's wife Desdemona that was actually taken by this character's own wife Emilia. Name this acquaintance of Roderigo who is the antagonist in Shakespeare's *Othello*.

ANSWER: Iago

### 5. World History

The second king to take this name killed his half-brother Sogdianus, married his half-sister Parysatis, and was the father of Cyrus the Younger. The first one started building the Apadana at Persepolis, which was completed by his son Xerxes the Great. That first one also married two of the daughters of Cyrus the Great. The third ruler to take this name lost the Battles of Issus and Gaugamela to Alexander The Great. Give the name shared by these Persian kings.

ANSWER: Darius

## 6. Chemistry

(Note to moderator: Laplace is pronounced la-PLAHS.) This quantity is used in the test for jaundice and explains why washing with hot water is better than cold water. At room temperature, it has a value of 0.072 Newtons per meter for the substance it is most associated with and drops almost linearly as temperature increases. This quantity can be measured by the Du Nouy Ring Method, which involves measuring the force necessary to lift a ring, and it is used in the Young-Laplace Equation to calculate capillary pressure. This phenomenon is caused by intermolecular forces, so it is much stronger in liquids with polar molecules. Name this phenomenon which causes a meniscus to form on top of liquids, causes water to form into drops, and allows certain animals to walk on water.

ANSWER: Surface Tension

## 7. Music

One of this composer's oratorios opens with people praying for rain and ends with the piece, "And then shall your light break forth." From 1830 to 1845, this composer wrote eight books, each of which contains six songs for piano, a few of which are called Venetian Gondola songs. One of his symphonies ends with a Saltarello Presto movement. These works are the *Elijah Oratorio*, *Songs Without Words*, and his *Italian Symphony*. Name this composer who also wrote music for *A Midsummer Night's Dream* that included a famous Wedding March.

ANSWER: (Felix) Mendelssohn (or Bartholdy)

## 8. Geometry/Trigonometry (30 Seconds)

If each side of an octagon is length one unit, what is the distance between two opposite sides?

ANSWER: 1 Plus Root 2 (or Root 2 Plus 1)

## 9. Nonfiction

This book references the Book of Exodus before describing the death of its author's son, the myth of Atalanta before discussing the city of Atlanta, and the quest for the Golden Fleece before talking about the cotton industry and its workers. This work talks about what it means to be a problem, refers to a veil that divides society, and repeatedly says that the problem of the Twentieth Century is the problem of the color line. Name this 1903 work by WEB DuBois.

ANSWER: (The) Souls of Black Folk

## 10. World Literature

One of this author's novels features a seventeen-year-old named Kizuki who commits suicide and is named after his girlfriend's favorite song. Another features an unemployed man who can't find his wife's cat and then can't find his wife. A more recent work features an old man who makes money by finding cats. Name this sixty-year-old Japanese author of *Norwegian Wood*, *The Wind-Up Bird Chronicle*, and *Kafka on the Shore*.

ANSWER: (Haruki) Murakami (prompt Haruki)

### 11. Geography/Astronomy/Earth Science

This island contains Amadjuak Lake and Nettilling Lake. It is just North of Prince Charles Island and Melville Peninsula. The first Westerner to discover it was Martin Frobisher, for whom its eastern bay is named. It is South of a bay that shares its name, and it is North of Hudson Strait. Name the fifth largest island in the world, which lies on the Arctic Circle and is part of Canada.

ANSWER: Baffin (Island)

### 12. Vocabulary

This term was originally used as part of the name of a committee organized by Pope Gregory the Fifteenth, and it is associated with the Creel Committee organized by Woodrow Wilson during World War One. During World War Two, it was the last word in the name of an agency run by Joseph Goebbels. Since then, the term has become pejorative and is associated with advertising, especially advertising by the government. Give this term referring to messages aimed at influencing large groups of people.

ANSWER: Propaganda

### 13. Biology

A pair of these bodies arranged perpendicularly is called a diplosome. They are hollow, and their walls contain a total of twenty-seven passages arranged so that each has one end pointing in and one end pointing out. Those passages are nine triplets of microtubules. Though these organelles are normally located near the nucleus of a cell, they move to opposite ends at the beginning of mitosis, connecting to the ends of the spindles. Name these organelles located in the centrosomes of cells.

ANSWER: Centriole

### 14. US History

This President signed the Canadian Reciprocity Treaty. He was in office during the Black Warrior Affair, and, though he never acted on it, the idea of purchasing Cuba published in the Ostend Manifesto made him unpopular among Northerners. This President's inability to take stands on flashpoints between Northerners and Southerners also led to the Wakarusa War, which was part of Bleeding Kansas. He also was President during the Gadsden Purchase and passage of the Kansas-Nebraska Act. Name this President from New Hampshire who served one term between Fillmore and Buchanan.

ANSWER: (Franklin) Pierce

### 15. Art/Architecture

In one painting, this artist showed a woman wearing black with her feet pointing outwards and her finger pointing down. In another painting, he showed the same woman wearing white with red ribbons next to a white dog with a red ribbon. That subject is the Duchess of Alba, who may also appear in another famous pair of his works, one showing her naked and another showing her clothed, the Maja paintings. Late in life, he may have created a series of dark works on the walls of his house, including *Saturn Devouring His Son*. Another painting by him shows a man in a white shirt with his hands up in front of a firing squad. Name this Spanish painter of *The Third of May 1808*.

ANSWER: (Francisco Jose de) Goya (y Lucientes)

16. Pyramidal Math (10 Seconds)

(Note to moderator: Euler is pronounced like oiler. Descartes is pronounced day-KART. Wiles is pronounced WI-uhls.) One theorem named after this man, also known as Thue's Lemma and sometimes combining his name with Euler, states that if  $p$  is a prime number congruent to one mod four, then it can be expressed as  $x$  squared plus  $y$  squared, where  $x$  and  $y$  are integers, exactly one way. Another theorem named after him states that if  $p$  is a prime number, then the difference  $m$  to the  $p$  minus  $m$  is evenly divisible by  $p$ . He was a contemporary of Descartes who also worked on analytical geometry. Name this mathematician whose most famous theorem was proved in 1995 by Princeton professor Andrew Wiles; it states that for  $n$  greater than 2 there are no natural number solutions to  $A$  to the  $N$  plus  $B$  to the  $N$  equals  $C$  to the  $N$ .

ANSWER: (Pierre de) Fermat

17. Religion/Mythology

This Arabic word is closely associated with Bai'at and the first Kalimah. It refers to words that appear at the top of the Afghanistan flag and in large print on the Saudi Arabian flag. It begins with a negation, and if it is performed sincerely, it can turn an enemy of Islam into a member. It ends by declaring Muhammad the messenger of Allah. Name this first pillar of Islam consisting of a brief statement.

ANSWER: Shahada

18. Physics (30 Seconds)

Ignoring air resistance, find the horizontal distance that a projectile will travel if it is launched from ground level with the horizontal and vertical components of its velocity each equal to 9.8 meters per second. Assume that little  $g$  equals 9.8 meters per second squared.

ANSWER: 19.6 Meters (prompt for units)

19. US Literature

This writer's poems include "Stone Is Not Stone", "The Dual Angel", and "The Mortgaged Heart". One of her books is about Miss Amelia, whose marriage lasted ten days, and her cousin Lymon Willis. Another book involves Janice Evans and Jarvis Addams, focusing on Jarvis' sister Frankie, who considers changing her name. Her best-known novel involves Dr. Copeland and a deaf mute silver engraver named John Singer. Name this author of *The Ballad of the Sad Café*, *The Member of the Wedding*, and *The Heart Is a Lonely Hunter*.

ANSWER: (Carson) McCullers

## 20. Western European History

This politician called himself an honest broker when settling tensions between Russia and Austria-Hungary after the Treaty of San Stefano. He later became the first leader to run a nation which provided health, accident, and old age insurance. In one speech, he stated, “Not through speeches and majority decisions will the great questions of the day be decided, but by iron and blood.” For a time, he instituted a series of anti-Catholic measures known as Kulturkampf. Name this leader known as the Iron Chancellor who reunified Germany.

ANSWER: (Otto von) Bismarck

Tiebreakers (The first correct answer wins the match.)

(Note to moderator: Joule is pronounced jewel.) The unit most commonly used to measure this quantity is equivalent to a joule per square ampere. This quantity can be defined as the opposite of the electromotive force divided by the time derivative of current, and for a solenoid it can be calculated as the permeability constant times the number of coils squared times the length times the cross-sectional area. It measures how well a circuit element creates a magnetic field to oppose changes in current, and it is measured in volt seconds per ampere, which is known as a henry. Name this quantity often represented with the letter L.

ANSWER: Inductance (do not accept Induction)

One of his works is about ten good legendary women. It is broken into nine sections, with the two women treated poorly by Jason paired up. Another work takes place on Valentine’s Day and describes the goddess Nature leading a Parliament of Fowls. He also may have been the first poet to write in English with a Christian perspective about Troilus and Cressida. His best known work is about a group of people including a shipman, parson, and reeve who meet near the Tabard Inn. Name this 14<sup>th</sup> Century poet who wrote *The Canterbury Tales*.

ANSWER: (Geoffrey) Chaucer

Which city contains sports franchises nicknamed Stars, Mavericks, and Cowboys?

ANSWER: Dallas