

### 1. Interdisciplinary

Captain Fellows runs a company dedicated to selling these objects in *The Power and the Glory* by Graham Greene, the Japanese poet Basho is named after them, and they name a trilogy by Miguel Angel Asturias. The fruit of the genus *Musa*, control over their trade played a major role in the CIA's decision in 1954 to overthrow Jacobo Arbenz as the head of Guatemala. They are high in Vitamin B<sub>6</sub> and potassium, and major exporters now include the Philippines, Colombia, Costa Rica, and Ecuador. Closely related to plantains, their name is used as an adjective to describe governments that are servile and corrupt. Give this word placed in front of the word Republic in a clothing store chain.

ANSWER: Banana

### 2. Current Events

This group is the plaintiff against Criss Candelaria in an immigration case before the Supreme Court. This group also has been targeted by the Yes Men, which created a fake website and held a fake news conference to make it appear that this organization supports the Kerry-Boxer climate change bill. This national organization, headed by Tom Donohue, wants to weaken climate change legislation and the Employee Free Choice Act. Some of its prominent members have resigned this year to protest its lobbying efforts; it spends more money than any lobbying group. Name this not-for-profit business federation.

ANSWER: (United States) Chamber of Commerce

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

Find the slope of either asymptote for the hyperbola with the equation quantity  $x+2$  quantity squared over nine minus quantity  $y+1$  quantity squared over four equals one.

ANSWER:  $2/3$  (or  $-2/3$ )

### 4. British Literature

The only story narrated by this character involves a stop at a girls school run by Miss Tomlinson and explains why another character has a fear of public speaking. His first appearance is in the story *Extricating Young Gussie*, which appears in the collection *The Man With Two Left Feet*. At one point he works for Chuffy, though most of the works he appears in are narrated by his primary employer, Bertie Wooster. His first name is Reginald, and he appeared in works by PG Wodehouse. Name this valet.

ANSWER: (Reginald) Jeeves

### 5. World History

This civilization built the cities of Copan and Tikal though it was mostly rural and abandoned its cities around 900 CE. One of their well-known sites contains the Temple of a Thousand Warriors and Temple of Kukulkan. They kept very elaborate and accurate calendars, and their religious ceremonies involved chacs and nacon sacrificing people by tearing out their hearts. Name this civilization that built Chichen Itza and flourished in what is now Guatemala, Belize, and Southern Mexico.

ANSWER: Maya(ns)

#### 6. Chemistry

This term can be applied to the Aldol Reaction used to form carbon-carbon bonds and to the process that forms certain polymers such as Dacron. This chemical process is used by cloud chambers and explains why high flying jets leave a visible trail behind them. It is often associated with cooling air, explaining the existence of clouds and morning dew, and it is a final part of distillation. Name this phase change in which matter changes from a gas to a liquid.

ANSWER: Condensation (accept different word forms)

#### 7. Music

One of the songs by this composer mentions goldless gold, silkless silk, and soulless souls. One of his early songs was originally about Edward Crump, and, though it was not a positive portrayal, it may have helped Crump get elected Mayor of the city the song is now named after. This musician's most famous song begins with the line, "I hate to see that evening sun go down." Name this musician and songwriter who composed "Loveless Love", "Memphis Blues", and "Saint Louis Blues" who was known as the Father of the Blues.

ANSWER: (William Christopher) Handy

#### 8. Geometry/Trigonometry (30 Seconds)

Find the distance in radians between consecutive asymptotes in the graph of  $y$  equals five times the secant of four times the quantity of  $x$  minus  $\pi$ .

ANSWER:  $\frac{\pi}{4}$  (or One-Fourth  $\pi$ )

#### 9. Nonfiction

This writer's support of rational egoism is highlighted in her essay "Causality Versus Duty", which appears in *Philosophy: Who Needs It*. She claimed that her fiction works were based on the principle that man possesses the faculty of volition in her essay "What Is Romanticism", which appears in *The Romantic Manifesto*. She outlined many of her philosophical views in *Introduction to Objectivist Epistemology*. Name this writer whose first nonfiction book, *For the New Intellectual*, quoted from her novels *The Fountainhead* and *Atlas Shrugged*.

ANSWER: (Ayn) Rand

#### 10. World Literature

One short story from this country tells of a poet who eats his fiancée and notebook, a building, and a bridge; this story was a part of the Hungry Movement in the 1960s. Another short story from this country is about two aristocrats obsessed with playing chess, and one of its revered poets is named Nannayya. This country's only Nobel Literature Laureate wrote its national anthem, Jana Gana Mana, in addition to novels and poetry collections such as Gitanjali. His last name was Tagore. Name this nation whose ancient works include the Vedas, the Mahabharata, and the Ramayana.

ANSWER: India

### 11. Geography/Astronomy/Earth Science

This material, often consisting of phyllosilicates, has smaller particles than silts, forming microscopic crystals, but is often found with silts. This group often contains significant amounts of water between its silicate sheets, which gives it its trademark property of plasticity, while exposure to heat can dry it out, leading to hardening. Name this material which is often used in pottery and sculpture.

ANSWER: Clay(s)

### 12. Vocabulary

John Locke wrote a letter concerning this concept, focusing on the relationship between government and religion. Engineers use it to describe the maximum variation allowed in measurement, and doctors use it to describe the body's ability to accept transplants. Give this term which in common usage refers to a permissive attitude towards beliefs different from one's own.

ANSWER: Tolerance (accept other word forms such as Toleration)

### 13. Biology

These objects were discovered in 1968 based on experiments on the bacteriophage T4 and on E coli cells. These use Flap structure-specific endonuclease one, DNA polymerase delta, and DNA ligase one. They are necessary because the five prime to three prime direction is the only possible direction for continuous growth in DNA strands, but the lagging strand in a growing fork of replicating DNA opens in the other direction. Name these short pieces of new DNA.

ANSWER: Okazaki Fragment(s)

### 14. US History

This man eventually had a falling out with John Hancock, though he served as Lieutenant Governor under him and succeeded him as Governor of Massachusetts. Earlier, many Americans believed that Thomas Gage had sent troops to John Hancock's home to arrest him. This man gave the first speech after the Boston Massacre, and some people credit him for giving the incident its nickname. He also gave the last speech before the Boston Tea Party. Name this famous cousin of an early American President.

ANSWER: S(amuel) Adams (prompt Adams)

### 15. Art/Architecture

One painting of this subject by Peter Paul Rubens shows a man with a red robe standing on the left side of the painting, while the other shows him kneeling and leaning forward. Botticelli painted a series of these works, including one in which he anachronistically placed himself and many members of the Medici family. Other famous versions include one by Gentile de Fabriano and a circular work by Fra Angelico. Name these paintings set soon after the birth of Christ that often show two white kings and one black king.

ANSWER: Adoration of the Magi (or Adoration of the Kings or equivalents, prompt partial answers)

16. Pyramidal Math (30 Seconds)

This number equals the number of vertices in a hypercube. It also equals the sum of the row of Pascal's Triangle that has a six in the exact middle of it, and it equals the decimal equivalent of one zero zero base four. Give this number equal to the only perfect square between ten and twenty.

ANSWER: 16

17. Religion/Mythology

(Note to moderator: Amymone is pronounced uh-MEE-moh-nee, Orion is pronounced oh-RYE-un, Amphitrite is pronounced am-fih-TRY-tee.) This figure changed Caenis into a man, and, after protecting Amymone from a satyr, used her to father Nauplius. This god also allowed Mestra to change her shape to escape slavery, killed Ajax the Lesser, and competed with Athena to become the protector of Athens. His offspring include Polyphemus, Orion, and Pegasus, and his wife was Amphitrite. In addition to the major realm he is associated with, he was the God of earthquakes and horses. Name this fifth child of Cronos and Rhea who carried a trident and ruled the sea.

ANSWER: Poseidon (accept Neptune)

18. Physics (10 Seconds)

Nathan Rosen and Elie Cartan have made recent theories about this force, and there are ongoing attempts to measure its framedragging effects. This fundamental force has been the most difficult to unify with the other three, and it was treated as a spacetime curvature by General Relativity. It was a major subject in Isaac Newton's *Principia*, where a universal law governing it on the macroscopic level was developed using a constant approximated as 6.67 times  $10^{-11}$  cubic meters per kilogram second squared. Name this force responsible for planetary orbits and falling apples.

ANSWER: Gravity (accept other word forms)

19. US Literature

This writer's early stories and first two novels, one set in Personville and the other featuring Gabrielle Dain-Leggett, feature the Continental Op. His last novel, featuring Nick and Nora Charles, was *The Thin Man*. His best-known novel features a man whose secretary is Effie Perine and partner is Miles Archer. In that novel, Miss Wonderly turns out to be Brigid O'Shaughnessy. Name this novelist who featured Sam Spade in his novel *The Maltese Falcon*.

ANSWER: (Dashiell) Hammett

20. Western European History

This document was written during the same year as the Toleration Act and a few years before the Triennial Act. It stated that the King or Queen could not interfere in Parliamentary elections, keep a standing army during peacetime without Parliamentary support, or be Catholic. Much of this document lists the faults of King James the Second, and it also guarantees free speech and bans excessive fines and cruel and unusual punishment. Name this document written after the Glorious Revolution which served as a model for early American amendments to the Constitution.

ANSWER: (The English) Bill of Rights (Act of 1689)

Tiebreakers (The first correct answer wins the match.)

(30 Seconds)

Find the area of a circle that circumscribes a six eight ten right triangle.

ANSWER: 25 Pi

This country contains the origin of the Mura River, and its second largest city, in the state of Styria, has built a steel island in the middle of the river. Its southern border contains Weisskugel Mountain and the Brenner Pass. Though it does not contain Habsburg Castle, it contains many castles used by the Habsburg Dynasty, including Hofburg and Schonbrunn. Name this country East of Liechtenstein whose cities include Linz, Graz, Innsbruck, Salzburg, and Vienna.

ANSWER: Austria

Which city contains sports franchises nicknamed Flyers, 76ers, Eagles, and Phillies?

ANSWER: Philadelphia