

### 1. Earth Science/Geography/Astronomy

Which mountain has a top altitude at 6150 feet and is near the Jojoba Hills? It is Northeast of San Diego. Also the location of a Cal Tech observatory, its most famous telescope was the Hale. Recently, its Samuel Oschin Telescope was used to locate what may be the tenth planet.

ANSWER: (Mount) Palomar

### 2. Language Arts

What is defined as a condition of revolt against a recognized government that does not reach the proportions of an organized revolutionary government and is not recognized as belligerency? It has been used a lot lately in relationship to car bombings and suicide attackers in Iraq. Give this word beginning with the letter I.

ANSWER: Insurgency

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

How many edges does a tetrahedron have? The faces of a tetrahedron are four equilateral triangles. A tetrahedron is also known as a regular triangular-based pyramid.

ANSWER: 6

### 4. United States History

In 1809, at the age of sixteen, which future leader ran away from home and lived with a group of Cherokees? In 1829, he abruptly resigned as Governor of Tennessee and once again lived with a group of Cherokees. Eventually moving to Texas, he became Commander-In-Chief of the Texas army and won a huge victory at the Battle of San Jacinto. Name this man who then became President of Texas, and, after Texas became a state, a US Senator.

ANSWER: (Sam) Houston

### 5. World Literature

Give the first and last names. His sister gets a job as a clerk and plays violin. His boss comes to his house to fire him. He is injured when his father throws apples at him. Name this character who changes into an insect in *Metamorphosis* by Franz Kafka.

ANSWER: Gregor Samsa

### 6. Chemistry (10 Seconds)

What type of hybridization is found in fullerenes, ozone, and boron trichloride? This type of hybridization is usually associated with trigonal planar molecules.

ANSWER: SP<sup>2</sup> (accept P2S)

### 7. Pop Culture

Who was named in 1945 by Fortune Magazine as the second most popular woman in America? The accomplishment was especially noteworthy because she is not a real person. She started replying to letters in 1921, got a radio show in 1924, and got a face in 1936. The face has been updated seven times to make her more professional and multicultural. Name this General Mills character who always gives cooking advice.

ANSWER: (Betty) Crocker

### 8. Calculus/Combinatorics (30 Seconds)

Find the equation in slope-intercept form for the tangent line to the graph of  $y=1/x$  at  $x=2$ .

ANSWER:  $y = (-1/4)x + 1$  (or  $y = -.25x + 1$  or  $y = -x/4 + 1$ )

#### 9. Nonfiction

Who said, "A foolish consistency is the hobgoblin of little minds"? His first published essay, "Nature", was published anonymously in 1836. He often spoke in favor of abolition, and to this day he is more popular among Northerners than Southerners. In 1841, he wrote "The Transcendentalist", which defined the movement he was often associated with. Name this poet and essayist who wrote "Self-Reliance".

ANSWER: (Ralph Waldo) Emerson

#### 10. Technology

This two-word phrase began being used in the early twentieth century because of comparisons to bad actors. It is estimated that about three million people worldwide actively use this technology, each with their own call signs. Though they can use UHF or VHF, they often use HF, which is also known as shortwave. Name this phrase associated with amateur broadcasters.

ANSWER: Ham Radio

#### 11. Music

(Note to moderator: Wagner is pronounced Vogner.) Which major musical period is associated with composers such as Richard Wagner and Felix Mendelssohn? Affected by parallel movements in other arts, it relied heavily on emotion. Though there are no exact dates to cover the movement, it ran through most of the nineteenth century.

ANSWER: Romantic (Period) (accept different forms of word)

#### 12. Physics (10 Seconds)

Which unit can be defined as an ampere squared, second to the fourth power, divided by kilogram meter squared? It is more commonly defined as a coulomb per volt. Name this SI unit of capacitance.

ANSWER: Farad

#### 13. United States Literature

Which novel contains the character Jubal E. Harshaw, LL.B., M.D., Sc.D., bon vivant, gourmet, sybarite, popular author extraordinary, and neo-pessimist philosopher? He allows Jill Boardman and Valentine Michael Smith to stay at his house. Boardman and Smith are water brothers, and Smith was born on Mars. Name this work by Robert A. Heinlein.

ANSWER: Stranger In A Strange Land

#### 14. Art/Architecture

Which painting, created when the artist was only twenty-two years old, portrays a person who is probably blind? This subject has clothes that are torn at his shoulder, has his legs crossed, and has his head facing down. Name this work from Picasso's Blue Period that shows a long-fingered musician.

ANSWER: (The) Old Guitarist (do not accept Guitarist)

#### 15. World History

Which nation was first populated by the Kikuyu, Kamba, Luo and Masai? Over the years, it has been controlled by Portugal, Oman, and Britain; it rebelled against Britain during the 1950s in the Mau Mau Uprising. It has been an independent republic since 1964, but it outlawed the major opposition party in 1969. From 1978 to 2002, it was headed by Daniel arap Moi. Name this nation in Eastern Africa which in 2002 became a multiparty democracy.

ANSWER: Kenya

#### 16. Biology

Which class includes the orders ametabola, paurometabola, hemimetabola, and holometabola? It contains over seven hundred thousand species, and they excrete via Malpighian tubules. Examples include aphids, mantids, springtails, dragonflies, and fleas.

ANSWER: Insect(-a or -s)

#### 17. Religion/Mythology

According to later stories he fell in love with Galatea, though he is best known for his appearance in The Odyssey. In that book, he returned home one evening to find Odysseus with twelve men. He ate two men for dinner and then two more for breakfast the next day. Name this creature defeated in large part by Odysseus sticking a hot stake in his only eye.

ANSWER: Polyphemus (prompt Cyclops)

#### 18. Algebra (30 Seconds)

Solve the equation  $x$  divided by the quantity  $x+1$  equals the quantity  $x+2$  end quantity divided the quantity  $x$

+4.



ANSWER: 2

#### 19. Current Events

He was the President Pro Tempore of the Senate from 1989 to 1995 and 2001 to 2003, the Minority Leader from 1981 to 1986, the Majority Leader before that, and the Democratic Whip before that. He did not hold any such leadership positions during his first two terms, which lasted from 1959 to 1971. Name this man who holds the record for the longest unbroken tenure in the US Senate. He represents West Virginia.

ANSWER: (Robert) Byrd

#### 20. British Literature

The action of which novel takes place from 1652 to 1686? The novel is in the form of a journal in which the main character describes his attempts to make candles, train a parrot, and avoid cannibals. Name this work by Daniel Defoe about a shipwreck survivor.

ANSWER: Robinson Crusoe

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

These can be formed by combining alkyl halides with hydroxides, reducing aldehydes or ketones, or hydrating alkenes. The name applies to any organic compound in which a hydroxyl group is bound to a carbon atom which in turn is bound to other hydrogen and/or carbon atoms. Name this class that includes propanol and ethanol.

ANSWER: Alcohol(s) (prompt Hydroxyl)

What six letter word, derived from the Latin word for mob, can refer to speech that is common? It can also refer to speech that is obscene. This word begins with the letter V.

ANSWER: Vulgar

Which chemical element has atomic mass 24.31, atomic number 12, and atomic symbol Mg?

ANSWER: Magnesium (Prompt Mg)