

1. Earth Science/Geography/Astronomy

Which state contains the Longfellow Mountains and the Chamberlain, Grand, and Moosehead Lakes? The Penobscot River runs through it, and about half of the state is owned by paper companies. Its boundary was settled by the Webster-Ashburton Treaty, and it gained statehood through the Missouri Compromise.

ANSWER: Maine

2. Language Arts

What two-word Latin phrase is used to describe evidence that is sufficient in law to establish the fact in question unless rebutted? It can also refer to opinions based on immediate impressions. This phrase translates into English as ‘at first view’.

ANSWER: Prima Facie

3. Geometry/Trigonometry (30 Seconds)

What is the greatest possible numerical value of the sum $\sin x$ plus $\cosine x$?



ANSWER: Square Root of 2 []

4. United States History

What was guarded by Major Robert Anderson? One evening at midnight, three emissaries went there and told him that he had until 4:00 AM to surrender. He refused, and the attacks started at 4:30. Anderson surrendered thirty-four hours later—fortunately, the only fatality was a horse. Name this fort attacked by General Beauregard on April 12, 1861, beginning the Civil War.

ANSWER: (Fort) Sumter

5. World Literature

(Note to moderator: Philoctetes and Antigone each have four syllables.) Scientists have recently been working on restoring a copy of *The Progeny*. Who wrote *The Progeny* over 2400 years ago? His other surviving works include *Philoctetes*, *Electra*, *Ajax*, *Oedipus Rex*, and *Antigone*.

ANSWER: Sophocles

6. Chemistry (10 Seconds)

Types of this process include azeotropic, dry, and extractive. The fractional kind is used for petroleum. Most types require a pot, condenser, and receiver. What is this process of purifying a liquid by boiling it and condensing its vapors?

ANSWER: Distill(-ation or -ing)

7. Pop Culture

Give the first and last names of the character created in 1964 who has been portrayed by Julie Dawn Cole and Julia Winter. Her father owns a very successful peanut shelling factory. In one movie’s song, she sings “I Want The World”, and in a song in the other movie she is referred to as, “The little brute who has just gone down the garbage chute”. Name this spoiled brat from *Charlie and the Chocolate Factory*.

ANSWER: Veruca Salt

8. Calculus/Combinatorics (30 Seconds)

How many positive whole numbers less than 100 are both even and divisible by three?

ANSWER: 16

9. Nonfiction

Who wrote the twentieth century classic *Beyond Freedom and Dignity*? He was a major advocate of operant conditioning, positive reinforcement, and the behaviorist school of psychology. Name this man who also wrote the novel *Walden Two*.

ANSWER: (Burrhus Frederic) Skinner

10. Technology

This type of network can be found at Freenet, Entropy, and Gnutella. An early example was Napster before they ran into legal problems. Name this type of network that relies on the bandwidths of users rather than central servers.

ANSWER: P2P (or Peer-To-Peer)

11. Music

Whose first major opera, completed in 1707, was Rodrigo? His famous pieces were sometimes written for a specific purpose, such as celebrating the end of the War of Austrian Succession or celebrating a procession of King George The First up the Thames. The work he wrote to celebrate Easter is usually used to celebrate Christmas. Name this composer of Fireworks Music, Water Music, and Messiah.

ANSWER: (George Frideric) Handel

12. Physics (10 Seconds)

Photons, gluons, and Helium Four atoms are examples of what type of particle? These particles do not follow the Pauli Exclusion Principle and have angular momenta in integral units. Name this category which covers all fundamental particles that are not fermions.

ANSWER: Boson(s)

13. United States Literature

Which novel contains the characters Cliff Quackenbush and Chet Douglass? A tragic event in the novel involves Finny jumping out of a tree into a river. It takes place at Devon School in New Hampshire during World War II, and it was written by John Knowles.

ANSWER: (A) Separate Peace

14. Art/Architecture

The angle type makes the corner of a building look like a cross. The diagonal type makes a one hundred thirty-five degree angle with the building. The clasping type is the thicker part of walls at a corner. What are these structures which are built to support walls? The flying type, often found on old cathedrals, has space underneath it.

ANSWER: (Flying) Buttress(es)

15. World History

Which English King spent only six months of his ten year reign in England, complaining according to some sources that it was cold and always raining? During one attempt to return home, he was captured by Leopold The Fifth of Austria and handed over to Henry The Sixth of the Holy Roman Empire. This took place after he gave up hope during The Third Crusade. Name this son of Henry The Second and Eleanor of Aquitane.

ANSWER: (King) Richard The First (accept Richard the Lion-Hearted or Richard Cœur de Lion) (prompt Richard)

16. Biology

The answer is a two-word phrase, and the second word begins with a T. This process was first used in 1990 to treat ADA Deficiency, which is also known as the "Boy in the Bubble" disease. Recent clinical research in the area has been slow because of a 1999 death and a 2002 leukemia-like condition in subjects. Scientists are hopeful, however, that it can be used to cure hereditary diseases, especially those based on single defects. Name this attempt to use vectors to fix DNA.

ANSWER: Gene Therapy

17. Religion/Mythology

This word translates into English literally as 'Extinction'. The end of samsara, it exists as a related though different concept in Buddhism and Hinduism. Name this emancipation from ignorance that transcends reincarnation.

ANSWER: Nirvana

18. Algebra (30 Seconds)

A train leaves at 10:30 AM. At what time will it finish its journey if it travels sixty miles at fifty miles per hour?

ANSWER: 11:42 AM (prompt on 11:42)

19. Current Events

This leader cut short a visit to Kazakhstan this week and cancelled a trip to Israel. Since taking over his country in 1999 upon the death of his father, he has restricted freedom of speech, especially speech by Islamic radicals. The Islamists have now struck against him, setting off bombs in three hotels in his capital city three days ago. Name the King of Jordan.

ANSWER: (King) Abdullah (II ibn al-Hussein) (prompt Hussein)

20. British Literature

Give the first name of the woman loved by Alec and Angel. Her jobs include tending chickens and being a milkmaid. She is the title character in an 1891 novel by Thomas Hardy.

ANSWER: Tess (Durbeyfield or of the D'Urbervilles)

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

Name the one man who served as Chief Justice of the Supreme Court for the following cases: Baker vs. Carr, Griswold vs. Connecticut, Miranda vs. Arizona, and Brown vs. Board of Education of Topeka. Though he was appointed by Eisenhower, he was often criticized by Republicans. He was replaced by Warren Burger when he retired.

ANSWER: (Earl) Warren

(30 Seconds) Solve for x: $19-2x = 1$

ANSWER: 9

Which chemical element has atomic mass 22.99, atomic number 11, and atomic symbol Na?

ANSWER: Sodium (Prompt Na)