1. Earth Science/Geography/Astronomy

It passes through three European and five African countries. Its use was agreed upon by representatives from 25 nations who met in Washington, DC in 1884, but France held out until 1911. Name this line that passes through a famous observatory Southeast of London.

ANSWER: Prime Meridian (accept Greenwich Meridian, prompt Zero Longitude)

2. Language Arts

What word can mean lying on so as to exert downward pressure, busily engaged, or imposed as a responsibility? It is used more often in politics, where it refers to the holder of an office, especially when comparing the office holder to a challenger in an election.

ANSWER: Incumbent

3. Geometry/Trigonometry (30 Seconds)

Include units in your answer. Find the area of an isosceles triangle if the vertex angle is forty-five degrees and the congruent sides are each two centimeters. The vertex angle is the angle that is not congruent to the others.

ANSWER: Square Root of 2 Square Centimeters



4. United States History

Which woman was sometimes portrayed by John Goodman on Saturday Night Live? She had been arrested when she was nineteen years old, and because the government leaked that fact and other pieces of personal information, it settled a lawsuit by paying her \$595,000. Name this former Department of Defense employee and White House Secretary who secretly taped her conversations with Monica Lewinsky.

ANSWER: (Linda) Tripp

5. World Literature

Several of this author's works, such as *Chronicle Of A Death Foretold*, are difficult to classify as either fact or fiction. His report of a shipwreck in 1955 made it unsafe for him to stay in his home country, and he now lives in Mexico. Name this creator of the fictional town of Macondo who has written *The Autumn of the Patriarch*, *The General In His Labyrinth*, *Love In The Time of Cholera*, and *One Hundred Years of Solitude*.

ANSWER: (Gabriel) Garcia (Marquez) (prompt on Marquez)

6. Chemistry (30 Seconds)

Balance the following reaction, giving the coefficients in order to match the way the question is read. Propane and oxygen gas combine to form carbon dioxide and water. As a hint, the chemical formula for propane is C_3H_8 . Use the smallest possible integer coefficients.

ANSWER: 1 (Propane or C_3H_8 and) 5 (Oxygen or O_2 yields) 3 (Carbon Dioxide or CO_2 and) 4 (Water or H_2O)

7. Pop Culture

In the first movie this character appeared in, he claimed that, "My first job was programming binary load lifters...very similar to your vaporators." In the next movie, he was temporarily turned into a pile of junk, and in the one after that he was worshipped by a race of tree-dwelling creatures. Name this protocol droid created by nine-year-old Anakin Skywalker.

ANSWER: C-3PO (prompt on 3PO)

8. Calculus/Combinatorics (10 Seconds)

If a function is defined in terms of several independent variables, what type of derivative involves holding all the independent variables constant except for one? It is usually represented in notation by a rounded lower case d. The name for this type of derivative begins with the letter P.

ANSWER: Partial (Derivative)

9. Nonfiction

Whose best known works are *On The Sublime And Beautiful* and *Reflections On The Revolution In France*? He served in the British House of Commons from 1765 to 1794. Though he was very critical of the French Revolution, he supported British conciliation with the American Revolution.

ANSWER: (Edmund) Burke

10. Technology

As one word this is a Macromedia programming language for web-based applications. As two words, this describes an energy source that caused a major controversy during the 1980s when researchers claimed they achieved a nuclear reaction in a jar of water at room temperature. Though most researchers do not believe that this will ever be a source of energy, there are some who think it will solve all of our energy problems in the future.

ANSWER: Cold Fusion

11. Music

The main character in which musical is almost reunited with his old girlfriend Cha Cha DiGregorio? His friends, the rivals of The Scorpions, are called the T-Birds and attend Rydell High with the Pink Ladies. The 1978 movie starred John Travolta as Danny and Olivia Newton-John as Sandy. Name this musical set in the 1950s.

ANSWER: Grease

12. Physics (10 Seconds)

Who shared a Nobel Prize with Tomonaga and Schwinger for using quantum dynamics to consider every path from one state to another and adding them to get a final path? He also developed a way of diagramming quantum interactions. This physicist may be best known to the general public for his autobiographies, in which he described his love of music and practical jokes.

ANSWER: (Richard) Feynman

13. United States Literature

(Note to moderator: 1 is a lower case L—you should just say '1'.) Who wrote a poem whose first line is 1 left apostrophe a? Another poem begins r-p-o-p-h-e-s-s-a-g-r, while another is titled "i carry your heart with me". Name this twentieth century writer who also wrote the novel *The Enormous Room* about his war

experiences. Though he wrote many sonnets, he is known for experimental styles and punctuation.

ANSWER: (Edward Estlin) Cummings

14. Art/Architecture

Who put a magic square in his 1514 painting *Melancholia One*? He was known for incorporating the mathematics of proportions in his paintings, which can be seen in his portraits of Adam and Eve. Name this German painter, engraver, and wood carver who in 1498 created a work called *The Apocalypse*.

ANSWER: (Albrecht) Durer

15. World History

Depending on whether or not you include people before 1185 AD, there have been from 41 to 45 people in history to hold this title. The full title translates as 'General who overcame the barbarians', but it is acceptable to use the shorter title that translates as 'General'. Important periods include 1338 to 1573 and the years 1603 to 1868. Often associated with the term Bakufu, give this title that was also linked to the samurai.

ANSWER: (Seii Tai)Shogun(ate)

16. Biology

(Note to moderator: Coccyx is pronounced Cossix.) What contains big holes on each side called obturator foramen? This combination of fused bones holds the sacrum and coccyx. Give the name for the collection of the ilium, ischium, and pubis that holds together your body between the spine and the legs.

ANSWER: Pelvis

17. Religion/Mythology

He was the God of wisdom, writing, magic, and measurement. The husband of Maat, he had the head of an ibis or ape, and many ibises were mummified in his honor. Name this Moon God who assisted Isis and her son Horus.

ANSWER: Thoth (accept Toth, Tot, Djhuty, Djehuty, Dhouti, Djehuti, Tehuty, Tehuti, Thout, Zehuti, Sheps, Lord of the Khemenu; do not accept Tut)

18. Algebra (30 Seconds)

Find the eleventh term of an arithmetic sequence if the fifth term is 18 and the tenth term is 33.

ANSWER: 36

19. Current Events

(Note to moderator: No impersonations, please.) On Thursday, he said, "I should have also listened to my wife, who said, 'Don't do this.'" He was referring to his efforts to limit government spending, change redistricting laws, make it harder for teachers to get tenure, and limit the uses of union funds. He did this by holding a special election in his state, but all four measures supported by him failed. Name the Governor of California.

ANSWER: (Arnold) Schwarzenegger

20. British Literature

When he died in 1796, people from all over Scotland sent in money to support his widow and children. Much of his work involved collecting folk songs. Name this poet who wrote "Tam O' Shanter" and "A

Red, Red Rose". He is often associated with the song Auld Lang Syne.

ANSWER: (Robert) Burns

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

Which instrument was invented in the early 1700s by the Denner family? They were originally pitched in C but are now often pitched in B Flat. A multi-octave glissando on this instrument opens the piece Rhapsody In Blue. Name these single reed woodwinds containing seven holes and seventeen keys. They usually are black and have a flared end.

ANSWER: Clarinet(s)

Until recently, scientists believed that only primates could teach their offspring how to use tools. Observers in Western Australia, however, have found evidence of which species passing on lessons from mothers to daughters? These animals use sponges to protect their noses as they collect food in the water. Name these intelligent underwater mammals.

ANSWER: Dolphin(s)

Which chemical element has atomic mass 19.00, atomic number 9, and atomic symbol Fl?

ANSWER: Fluorine (Prompt Fl)