1. Earth Science/Geography/Astronomy

It split into two pieces, one of which had a mass of 370 kilograms and attained a speed of over ten kilometers per second. When this part rammed into Tempel One, the other part took pictures. Name this probe which on July $4^{\text {th }}$ of this year became the first mission to examine the inside of a comet.

ANSWER: Deep Impact

## 2. Language Arts

Which Latin phrase translates as 'You should have the body'? This phrase names writs that are used to bring a party before a court or judge. The US Constitution specifically states that these writs shall not be suspended.

## ANSWER: Habeus Corpus

## 3. Geometry/Trigonometry (30 Seconds)

Give your answer as a cardinal or ordinal number. As the angle theta goes from zero degrees to three hundred sixty degrees, in which quadrant is both the sine of theta and the cosine of theta increasing?

ANSWER: $4\left(^{\text {th }}\right.$ )

## 4. United States History

Name the famous person who was in jail from 1946 to 1952 on charges of breaking and entering, carrying firearms, and larceny. He was the subject of a week-long television special in 1959 titled The Hate That
Hate Produced. While giving a speech on February $21^{\text {st }}, 1965$, he was shot fifteen times at close range and died. Name this man often associated with Black Muslims.

ANSWER: Malcolm X (accept Little or (El-Hajj Malik El-)Shabazz)
5. World Literature

Which book's primary antagonist is Juno? It mentions her unrelenting hate in the second line. The hero of the story, a Trojan, is driven by Juno to Carthage. Name this story about the founding of the Roman race. It was written by Virgil.

ANSWER: (The) Aeneid
6. Chemistry ( 10 Seconds)

Which element is created when neptunium emits a beta particle? Isotope two hundred thirty-nine can be used as fuel in a nuclear reactor, and it has been used to fuel many spacecrafts and in the atomic bomb dropped on Nagasaki.

ANSWER: Plutonium

## 7. Pop Culture

Whose first movie appearance was in Brown of Harvard portraying a Yale football player? His first starring role was in The Big Trail four years later, which is also when he began using his stage name. Name this star of El Dorado, Sands of Iwo Jima, The Man Who Shot Liberty Valance, True Grit, and Stagecoach.

ANSWER: (John) Wayne (or Marion Robert Michael Morrison)
8. Calculus/Combinatorics (10 Seconds)

Which theorem states that over a continuous closed interval and analogous differentiable open interval there is at least one point in that interval such that the derivative at that point is equal to the average slope over the
entire interval? It is abbreviated MVT.

ANSWER: Mean Value Theorem (Prompt MVT)
9. Nonfiction

Which 1949 work stated, "One is not born, but rather becomes, a woman"? Written by the woman who is now buried alongside Sartre, it took an existential view of early feminist issues. Name this work by Simone de Beauvoir.

ANSWER: (The) Second Sex (or Le Deuxième Sexe)

## 10. Technology

Though this word has been around since the nineteenth century, it was given a new meaning in the 1990s. It now refers to a science that makes use of typing patterns, voice patterns, retinas, signatures, or fingerprints to identify people. What is this term that used to refer to statistical analyses of biological phenomena?

## ANSWER: Biometric(s)

11. Music

Though this composer lived to the age of 76 , he retired from composing operas at the age of 37 . His first successful opera was Tancredi, while his last was William Tell. Name this composer of Almaviva, which is often called The Barber of Seville.

ANSWER: (Gioacchino) Rossini
12. Physics (30 Seconds)

What strength resistor should be added to a series circuit that already has a nine volt battery, a one ohm resistor, and a two ohm resistor so that it will have one ampere of current?

ANSWER: $6 \mathrm{Ohm}(\mathrm{s})$ (prompt if no units are given)
13. United States Literature

Which play opens with Tom dressed as a merchant sailor speaking directly to the audience about the play's setting? It is set in Saint Louis in the 1930s, and Tom's family struggles because his father abandoned them and because his sister Laura is very shy. Name this Tennessee Williams play whose title comes from Laura's collection of animal figurines.

ANSWER: (The) Glass Menagerie
14. Art/Architecture

Which artist designed the bell tower in Florence but died before it was completed? His major work is often considered the frescoes in the Arena Chapel at Padua. It is likely that he also created the fresco depicting the life of Saint Francis in Assisi. Name this $13^{\text {th }}$ and $14^{\text {th }}$ century artist considered by some to be the first great artist of the Italian Renaissance.

ANSWER: Giotto (di Bondone)
15. World History

What was headed by Geoffrey Lawrence, Francis Biddle, Henri Donnedieu de Vabres, and Iona
Nikitchenko? For symbolic reasons, they took place in the city of the party rallies, which is between Frankfort and Munich. The main part ended in 1946 with two acquitals and nineteen guilty verdicts. Many of the accused were sentenced to death by hanging, including Hermann Goring.

ANSWER: Nuremberg (Trials) (prompt on Nazi Trials, War Crime Tribunals, and similar answers)
16. Biology

Which substance has the empirical formula $\mathrm{C}_{254} \mathrm{H}_{377} \mathrm{~N}_{65} \mathrm{O}_{75} \mathrm{~S}_{6}$ ? Its discovery by Banting and MacLeod led to their sharing of the 1923 Nobel Prize in Medicine. The body uses it to increase DNA replication, increase potassium uptake, increase fatty acid synthesis, increase glycogen synthesis, and for the cellular intake of glucose. This substance, produced naturally in the Islets of Langerhans, can be used to control diabetes.

ANSWER: Insulin

## 17. Religion/Mythology

Which holiday is celebrated by the Eastern Orthodox Church on the Sunday after Pentecost but is celebrated by Roman Catholics in November? It is also celebrated by Lutherans, but they use it to thank God rather than ask for aid. Name this holiday sometimes referred to as All Hallows' Day that inspired Halloween.

ANSWER: All Saints' Day (prompt All Hallows' Day or Hallowmas)
18. Algebra ( 30 Seconds)
Find the sum of all the even numbers from 2 to 40 , including 2 and 40 .

ANSWER: 420

## 19. Current Events

On which island were three terrorist bombs simultaneously exploded on October $1^{\text {st}}$ ? Three suicide bombers and nineteen other people were killed, which is much lower than the death toll from a terrorist attack three years ago on the same island. All of the attacks probably were carried out by the group Jemaah Islamiah. Name this island just East of Java which is a popular tourist destination in Indonesia.

ANSWER: Bali
20. British Literature

Which Shakespeare character's opening words are, "In sooth, I know not why I am so sad"? He helps his friend Bassanio get money but offers as collateral a pound of flesh to Shylock. Name the title character of The Merchant of Venice.

ANSWER: Antonio (prompt The Merchant of Venice)
TIEBREAKER: To break a tie, use the following questions in order. The first correct answer wins the match.

What was Hercules supposed to get for his ninth labor? The object was given to its original owner by her father Ares. The owner was very kind to Hercules, but he killed her. Name this piece of clothing belonging to the Queen of the Amazons.

ANSWER: Girdle (or Belt) of Hippolyta (or Hippolyte) (accept equivalents or prompt as necessary)
The twenty categories include Drama, General Non-Fiction, Public Service, Criticism, Commentary, Feature Photography, Editorial Cartooning, and Breaking News Reporting. Name this award given out each year by Columbia University. It is considered the highest award in print journalism.

ANSWER: Pulitzer (Prize)

Which chemical element has atomic mass 40.08 , atomic number 20 , and atomic symbol Ca ?
ANSWER: Calcium (Prompt Ca)

