



1. This man lost to Jesse Jackson and Michael Dukakis in the Democratic primaries of 1988. His wife Tipper has led campaigns against obscenity in music. This politician lost one election after Katherine Harris' decision not to recount was upheld by the Supreme Court. He served as Vice President from 1993 to 2001. This Nobel Peace Prize-winner was the subject of *An Inconvenient Truth*. For 15 points, name this Democrat who lost to George Bush in 2000.

ANSWER: Al **Gore** [or Albert Arnold **Gore**, Jr.]

015-12-85-10101

BONUS: Who was the founder of the National Farm Workers Association who led a boycott of California grapes during a grape picker strike in the 1960s?

ANSWER: Cesar Estrada **Chavez**

030-12-85-1010-1

2. Three similar canvases by this man are titled *Wheat Field with Cypresses*. This man painted *The Yellow House*, his shared residence with Paul Gauguin. He painted a pool table at the center of a room with red walls in *The Night Café*. This artist painted a group of five peasants eating the title food in a dark room in his *The Potato Eaters*. He painted another work from the window of an asylum in Arles. For 15 points, name this Dutch artist of *The Starry Night* who famously cut off his own ear.

ANSWER: Vincent **van Gogh**

015-12-85-10102

BONUS: Name the French Romantic painter of *The Massacre at Chios* and *Liberty Leading the People*.

ANSWER: Eugene **Delacroix**

014-12-85-1010-1

3. The characters in this story believe their possessions would make King Solomon and the Queen of Sheba jealous. One of its characters worries that she will look like a Coney Island chorus girl after visiting Madame Sofronie's shop. One of the stories in *The Four Million*, this work is set at the Dillingham Young apartment. This story ends with the realization that Jim has sold his watch to by Della combs while Della has sold her hair to buy Jim a watch chain. For 15 points, name this Christmas story by O. Henry.

ANSWER: "The **Gift of the Magi**"

015-12-85-10103

BONUS: Name the country in which the 2000 election of PAN-party candidate Vicente Fox ended 71 years of PRI party rule.

ANSWER: **Mexico** [or **United Mexican States**; or **Estados Unidos Mexicanos**]

023-12-85-1010-1

4. A theorem named after these numbers states that n divided by the natural logarithm of n approximates how many of these numbers are less than n . The Sieve of Eratosthenes can be used to determine if a number is of this type. All integers greater than one can be written as a unique product of this kind of number according to the fundamental theorem of arithmetic. Two is the only even number of this type, which is the opposite of composite. For 15 points, name this type of positive integer whose only factors are itself and one.

ANSWER: **prime** numbers [or **primes**]

131-12-85-10104

BONUS: What branch of Buddhism popular in Japan favors quiet meditation and riddle-like koans?

ANSWER: **Zen** Buddhism

015-12-85-1010-1

5. According to one story, this god trapped Theseus and Pirithous (PEE-rih-THOO-us) in their chairs after offering them a feast. He owns an invisible helmet that was made for him by the Cyclopes. This god split the three realms with his brothers Poseidon and Zeus. In one story, he uses some pomegranate seeds to force Persephone to be with him for part of the year after abducting her from Demeter. For 15 points, name this owner of the three-headed dog Cerberus and Greek god of the underworld.

ANSWER: **Hades** [or **Pluto**]

015-12-85-10105

BONUS: What U.S. Senator, an independent from Connecticut, announced in 2011 that he would not run for re-election?

ANSWER: Joseph Isadore **Lieberman**

194-12-85-1010-1

6. This politician's two main contributions to his party's ideology have been the Scientific Development Concept and the Harmonious Socialist Society, both of which augment his predecessor's *Three Represents*. Xi (SHE) Jinping will likely succeed this former leader of his country's Communist Youth League at the 18th Party Congress at the same time as Li Keqiang (kuh-CHANG) replaces this man's head of government, Wen Jiabao. For 15 points, name this successor to Jiang Zemin (JANG tsu-min) and current President of China.

ANSWER: **Hu** Jintao

153-12-85-10106

BONUS: Georges Seurat practiced what painting technique that involves forming images from small dots of color?

ANSWER: **pointilism**

015-12-85-1010-1

7. This country was led by the ten-year-old female "king" Jadwiga (yahd-VEE-guh), who descended from its Piast Dynasty. In the late eighteenth century, this country was partitioned three times by surrounding powers. From 1569 to 1795, this country formed a commonwealth with Lithuania. On September 1, 1939, Germany invaded this country in a move soon bolstered by a simultaneous Soviet attack. For 15 points, name this country that was the location of the 1943 Warsaw ghetto uprising.

ANSWER: Republic of **Poland** [or Rzeczpospolita **Polska**]

015-12-85-10107

BONUS: What onetime writer for the Nickelodeon series *Clarissa Explains It All* has achieved fame by writing about Katniss Everdeen in *The Hunger Games* series?

ANSWER: Suzanne **Collins**

030-12-85-1010-1

8. William Smith's study of these objects led him to posit the "principle of faunal succession." Edward Cope and Othniel Marsh entered an extremely competitive "war" to hunt for these things. These objects were used as evidence of "catastrophism" by one of the earliest people to study them, George Cuvier (COO-vee-ay). Studied in paleontology, they are sometimes captured in resin or created through the permineralization of bones. For 15 points, name these remains of plants and animals used to reconstruct extinct animals like dinosaurs.

ANSWER: **fossils** [or **fossil** layers; or **bones**]

080-12-85-10108

BONUS: This is a 20-second calculation question. In the equation $x^2 + 9 = 5x + 3$, give all solutions for x.

ANSWER: $x = \mathbf{3}$ and $x = \mathbf{2}$

080-12-85-1010-1

9. This work's third section juxtaposes elaborate descriptions of the hunting and preparation of a deer, a boar, and a fox with the protagonists successive attempts to resist seduction. In retaliation for the protagonist's acceptance of a girdle which supposedly grants invulnerability, Lord Bertilak gives the protagonist a nick on the neck and reveals his true identity. For 15 points, name this Middle English poem in which an Arthurian knight participates in a beheading game with the title figure.

ANSWER: *Sir Gawain and the Green Knight*

014-12-85-10109

BONUS: This is a 30-second calculation question. What is the distance between the points (2, 5) and (10, 9)?

ANSWER: **4 root 5** units [or **4 radical 5** units; prompt on square **root** of **80** units]

197-12-85-1010-1

10. One character in this play claims that she had been given leave from her teaching position after the suicide of her husband Allan Grey. During a poker game, one character becomes infuriated at the absence of Mitch and throws a radio out the window. Set in the Elysian Fields of New Orleans, one character in this play says that she has "always depended on the kindness of strangers" after she is raped by Stanley Kowalski, the husband of Stella. For 15 points, name this play about Blanche DuBois by Tennessee Williams.

ANSWER: A *Streetcar Named Desire*

015-12-85-10110

BONUS: What CW show stars Jared Padalecki and Jensen Ackles as the monster-hunting brothers Sam and Dean Winchester?

ANSWER: *Supernatural*

080-12-85-1010-1

11. In bacteria, this organelle binds to the Shine-Delgarno sequence. The elongation factor EF-Tu brings molecules to this organelle, which contains the A, P, and E sites. In eukaryotes, this organelle is composed of a large 60S subunit and a small 40S subunit. These structures can be "free" in the cytosol or "bound" to the surface of the rough endoplasmic reticulum. For 15 points, name these complexes made of RNA, the organelles responsible for protein synthesis.

ANSWER: **ribosomes**

080-12-85-10111

BONUS: What term describes an organism's maintenance a stable internal environment, such as a constant body temperature?

ANSWER: **homeostasis**

104-12-85-1010-1

12. This song was the basis for Germany's first national anthem, Norway's royal anthem, and Lichtenstein's current national anthem. This song's lyrics declare, "Confound their politics, frustrate their knavish tricks" after a request to "scatter her enemies;" it also expresses desire that the title character be "happy and glorious, long to reign over us." Samuel Smith used its music as the tune for "My Country 'Tis of Thee." For 15 points, name this national anthem of the United Kingdom, which requests a blessing on Elizabeth II.

ANSWER: **"God Save the Queen"** [or **"God Save the King"**]

080-12-85-10112

BONUS: This is a 30-second calculation question. Calculate $(\sin(\pi/6) + \cos(\pi/6))^2$ (quantity sin of pi over 6 plus cos of pi over 6, all squared).

ANSWER: **1 plus (the quantity) root 3 over 2** [or **1 plus (the quantity) radical 3 over 2**; or **1.866**]

197-12-85-1010-1

13. This number divided by four is the sum of the sequence beginning one minus one third plus one fifth minus one seventh. The sum of the squares of the reciprocals of the natural numbers is equal to one sixth the square of this number. Archimedes approximated this value by calculating the area of a regular 96-gon. This number is the period of tangent of x and half the period of sine of x. Sometimes approximated as 22/7, for 15 points, name this number, the ratio of a circle's circumference to its diameter.

ANSWER: **pi** [prompt on **3.14159**; prompt on **22/7** before it is read]

131-12-85-10113

BONUS: This is a 30-second calculation question. What is the greatest common divisor of 374 and 578?

ANSWER: **34**

197-12-85-1010-1

14. This quantity is equal to Faraday's constant divided by Avogadro's number. An experiment that measured this value obtained a slightly incorrect result due to using the incorrect viscosity for air. That experiment used a uniform electric field that acted on small droplets of oil and was performed by Harry Fletcher and Robert Millikan. For 15 points, name this constant equal to negative 1.6 times 10 to the negative 19 coulombs (COO-lawms).

ANSWER: **charge of the electron** [or **fundamental** charge; or **e**; or **charge of the proton**]

048-12-85-10114

BONUS: What British scientific society originated in 1660 and, at one point, was headed by Isaac Newton?

ANSWER: The **Royal Society** of London for Improving Natural Knowledge

066-12-85-1010-1

15. This man was stripped of command after implicating Ulysses Grant's brother Orville in a kickback scheme. He led the Michigan Brigade, or "Wolverines," in the Civil War despite finishing last in his class at West Point. As leader of the Seventh Cavalry Regiment, he divided his command with Marcus Reno and Frederick Benteen. In 1876, his forces were crushed by an army of Lakota Sioux under Sitting Bull and Crazy Horse. For 15 points, name this soldier who made his "Last Stand" at Little Big Horn.

ANSWER: George Armstrong **Custer**

015-12-85-10115

BONUS: Meanders in rivers can pinch off to form the oxbow type of these inland bodies of water. Name these bodies of water studied in limnology and which include the Caspian Sea.

ANSWER: **lakes**

066-12-85-1010-1

16. Kimura gave primacy to the force of this effect in his "neutral theory." In this phenomenon, alleles can undergo "fixation" despite having deleterious effects. This phenomenon can occur due to a massive natural disaster in the "bottleneck effect," or when a smaller population separates from a larger population in the "founder effect." For 15 points, name this effect in which chance occurrences cause rapid evolution in a small population.

ANSWER: genetic **drift** [or the **founder effect** before it is read; or the **bottleneck effect** before it is read]

080-12-85-10116

BONUS: What author created the character of David Balfour in his adventure novel set in Scotland entitled *Kidnapped*?

ANSWER: Robert Louis **Stevenson**

052-12-85-1010-1

17. This author created a character who witnesses the suicide of the Jesuit Leo Naphta after an aborted duel and weeps upon seeing the ghost of his cousin Joachim Ziemssen. Another character created by this author obsesses over the Polish boy Tadzio while vacationing in a city stricken with cholera. Those aforementioned characters are the engineer Hans Castorp and the writer Gustav von Aschenbach. For 15 points, name German novelist of *The Magic Mountain* and *Death in Venice*.

ANSWER: Thomas **Mann**

014-12-85-10117

BONUS: What nation's basketball team played at the Olympics with Serge Ibaka, Jose Calderon, and Pau Gasol?

ANSWER: **Spain**

015-12-85-1010-1

18. Louisa May Alcott used the experience of her father at "Fruitlands" to write a satire on this movement's "Wild Oats." Its leaders included Ellery Channing and Margaret Fuller, who edited its chief publication, *The Dial*. One essay grounded in the beliefs of this movement describes a "transparent eyeball" and is titled *Nature*. Another essay from this movement stresses the importance of avoiding conformity. For 15 points, name this American movement propounded by Ralph Waldo Emerson.

ANSWER: **transcendentalism** [or obvious equivalents]

015-12-85-10118

BONUS: Swift Current, Moose Jaw, and Regina are cities in what Canadian province, found to the east of Alberta?

ANSWER: **Saskatchewan**

019-12-85-1010-1

19. Spencer Tucker called this country "The Neutral Ally" for its close relations with the UK during World War I. During World War II, this country was occupied by Germany, and some of its citizens wore an "H7" to support their exiled king, Haakon VII. Hitler placed Vidkun Quisling in charge of this country, which at various times has been united with Iceland, Denmark, and Sweden. For 15 points, name this Scandinavian country where Bill Clinton helped mediate the Oslo Accords.

ANSWER: Kingdom of **Norway** [or Kongeriket **Norge**]

015-12-85-10119

BONUS: What female French philosopher wrote the landmark feminist work *The Second Sex*?

ANSWER: Simone-Ernestine-Lucie-Marie Bertrand de **Beauvoir**

052-12-85-1010-1

20. Aretes (ah-RETS) can be formed on the backwall where two of these objects meet. These objects can be found in bowl-shaped valleys called cirques. Unconsolidated debris found at the snout of these objects are called terminal moraines and mark their furthest advance. They can also deposit sediment in a tear-drop shape, which are known as drumlins. These objects can calve to form icebergs and they are the largest reservoir of freshwater on Earth. For 15 points, identify these large, persistent bodies of ice.

ANSWER: **glaciers**

066-12-85-10120

BONUS: Name the "venerable" writer whose *Ecclesiastical History of the English People* gives many details on the development of religion and government in early England.

ANSWER: Venerable **Bede** [or **Beda**]

023-12-85-1010-1

21. The protagonist of this play exclaims, "See, see where Christ's blood streams in the firmament!" in his final soliloquy. The protagonist declares, "O, thou art fairer than the evening air clad in the beauty of a thousand stars" and asks, "Was this the face that launched a thousand ships?" upon meeting Helen of Troy, after which he is dragged to hell. For 15 points, name this Elizabethan tragedy in which a scholar sells his soul to Mephistopheles, a work by Christopher Marlowe.

ANSWER: **Doctor Faustus**

014-12-85-10121

BONUS: Identify the American composer of the ballets *Rodeo* and *Appalachian Spring*.

ANSWER: Aaron **Copland**

014-12-85-1010-1

22. The phenomenon modeled by this law cannot maintain a stable equilibrium according to Earnshaw's theorem, and a screened version of its potential was developed by Yukawa. Integrating this law generates spherical equipotential surfaces. The constant in it is equal to one over four pi times the permittivity of free space. This law is an electric analogue of Newton's law of universal gravitation. For 15 points, identify this law that gives the force between two point charges as the product of the charges times a constant, k, over the square of the distance.

ANSWER: **Coulomb's** (COO-lawm's) law

048-12-85-10122

BONUS: What Hungarian-American physicist is given the nickname "the father of the hydrogen bomb?"

ANSWER: Edward **Teller**

192-12-85-1010-1

23. This controversy grew from violations of the Boland Amendment and was first reported by Lebanon's *Ash-Shiraa* magazine. One man who lied to Congress during this scandal later hosted a show about "War Stories" on cable TV. The Tower Commission outed Oliver North's role in this scandal, which revealed the source of funds for anti-Sandinista Nicaraguan rebels. For 15 points, name this scandal stemming from the Reagan administration's illegal sale of arms to a hostage-holding Islamic Republic.

ANSWER: **Iran-Contra** affair [or obvious equivalents involving arms sales to **Iran** to fund the **Contras**]

104-12-85-10123

BONUS: This is a calculation question. What is the y intercept of the line parallel to $y=5/6x-3$ that runs through the point (4,3)?

ANSWER: **-1/3**

001-12-85-1010-1

24. This man wrote a "tone parallel" to the history of blacks in America called *Black, Brown and Beige*. In a short film, this man's wife Fredi Washington dances herself to death while his band plays his "Black and Tan Fantasy." Billy Strayhorn composed the theme of his orchestra, "Take the A Train." He wrote the piece that brought him worldwide fame while working in the Cotton Club. For 15 points, name this jazz pianist who composed "Mood Indigo."

ANSWER: Edward "Duke" **Ellington**

121-12-85-10124

BONUS: What member of the Generation of '27 wrote about a woman who desperately wants a child in *Yerma* and about the marriage of The Groom and The Bride in *Blood Wedding*?

ANSWER: Federico Garcia **Lorca**

192-12-85-1010-1

25. This god took the form of a turtle to stop a mountain from sinking into the sand during the churning of the milk ocean. In the form of a fish named Matsya, he saved the first man, Manu, from a flood. This god rides on the eagle Garuda and rests on the many-headed serpent Shesha. This deity's consort is the goddess of luck, Lakshmi. With Shiva and Brahma, this god makes up the Trimurti. For 15 points, name this Hindu preserver god whose avatars include Rama and Krishna.

ANSWER: **Vishnu** [or **Kurma** before "fish" is read]

080-12-85-10125

BONUS: What UN Secretary General in March 2012 gave "The Time Has Come" speech fighting homophobia?

ANSWER: **Ban** Ki-moon

023-12-85-1010-1



26. The main drug used to treat this disease is activated by the KatG catalase-peroxidase and inhibits an enoyl-acyl carrier protein reductase; that drug is often given alongside ethambutol and rifampicin and is called isoniazid. Its causative agent has mycolic acids in its cell wall. This disease causes caseous necrosis and granulomas to appear in the target organ, and it is caused by a mycobacterium. It is often detected using a skin test. For 15 points, name this disease that affects the lungs and causes a bloody cough.

ANSWER: tuberculosis [or **TB**]

048-12-85-10126

BONUS: Caspases help drive what beneficial form of programmed cell death?

ANSWER: apoptosis

023-12-85-1010-1

27. Joe Trace begins an affair with the younger Dorcas in one of this author's novels. That novel, *Jazz*, takes place in Harlem. Another novel by this author begins with a character attempting to fly across Lake Superior but instead plummeting to his death the day before Milkman Dead is born. For 15 points, name this author of the novels *Song of Solomon* as well as *Sula* and *Beloved*, the first African-American woman to win the Nobel Prize in Literature.

ANSWER: Toni Morrison [or Chloe Anthony Wofford]

194-12-85-10127