



1. This man was dubbed the "young Hercules" for his stringent support of the War of 1812 in the Senate, where he delivered a notorious 1837 speech dubbing slavery "a positive good." He wrote the *South Carolina Exposition and Protest* to oppose the Tarriff of Abominations during the nullification crisis. For 15 points, name this orator who clashed with both John Quincy Adams and Andrew Jackson while serving as Vice-President under both.

ANSWER: John Caldwell Calhoun

019-13-104-12101

BONUS: This is a 30-second calculation question. What is the square of the quantity, sine of 15 degrees plus cosine of 15 degrees?

ANSWER: 3/2 [or 1.5; or 1 1/2]

233-13-104-1210-11

2. The west bank of this lake is the location of a kittbutz on the En Gedi oasis. A peninsula known as "The Tongue" separates this body of water into two basins, and Mount Sodom is located at its southwestern end. Khirbat Qumran was the location of a discovery made by a shepherd boy in a cave near this body of water's shores in 1947. For 15 points, name this salt lake between Israel and Jordan that is about 1,300 feet below sea level and is known for its namesake scrolls.

ANSWER: Dead Sea [prompt on Salt Sea]

030-13-104-12102

BONUS: Lord Dunmore's 1775 seizure of Williamsburg's munitions re-entered the public conscience after what first doll in the American Girls Collection was written to have experienced it?

ANSWER: Felicity Merriman [or Felicity Merriman]

003-13-104-1210-11

3. These two countries signed the 1871 Treaty of Washington, which settled the "Alabama claims" between them. These two countries engaged in a dispute over the diplomats James Mason and John Slidell, the *Trent* affair. These two countries clashed over the "impressment" controversy, and now enjoy the "special relationship." For 15 points, name these two countries which were led during World War II by Franklin Roosevelt and Winston Churchill.

ANSWER: USA [or United States of America] and UK [or United Kingdom; or Great Britain; or England; either order is acceptable, but do not accept or prompt if only one answer is given]

019-13-104-12103

BONUS: What organization's Unit 61398 was revealed by security firm Mandiant to be behind large-scale corporate espionage in the United States?

ANSWER: People's Liberation Army [or PLA; or Zhongguo Renmin Jiefangjun; or Chung-kuo Jen-min Chieh-fang-chun; prompt on Chinese army and equivalent answers]

153-13-104-1210-11

4. In a play by this author, Simon Stimson leads a chorus that sing "Blessed Be the Tie that Binds," which is later sung at a funeral. In one novel by this author, the Marquesa de Montmayor is among the five who die in an event that is chronicled by Brother Juniper. That novel by this author is *The Bridge of San Luis Rey*. In this author's most famous play, the Stage Manager narrates events such as the marriage of George Gibbs and Emily Webb. For 15 points, name the American author who wrote *Our Town*.

ANSWER: Thornton **Wilder**

140-13-104-12104

BONUS: Which country was ruled for a time under the "New Order" administration during the presidency of Suharto?

ANSWER: Republic of **Indonesia**

186-13-104-1210-11

5. This phenomenon is used with X-rays when determining the structure of a crystal. An equation describing image resolution due to it employs a factor of 1.22 and is named for Rayleigh. Huygens modeled this process by considering every point on a wavefront as a wavesource. Young employed this process in his double-slit experiment in order to prove the wave nature of light. For 15 points, identify this phenomenon in which light bends around an obstacle.

ANSWER: **diffraction**

226-13-104-12105

BONUS: Ununseptium might belong to what highly reactive group on the periodic table that is sometimes referred to by its first element, fluorine?

ANSWER: **halogens**

153-13-104-1210-11

6. This author wrote about a purple flashlight that turns a narrator into "The Evil Clergyman." In a story by this author, the "old signal of three-and-two strokes" as a knock alerts Daniel Upton to the fact that the corpse of Asenathe Waite is being animated by the soul of Edward Derby. In another of his stories, a ship in the South Pacific encounters the non-Euclidean city of R'lyeh. For 15 points, name this author of "The Thing on the Doorstep" and "The Call of Cthulhu."

ANSWER: Howard Phillips **Lovecraft**

019-13-104-12106

BONUS: Name the pious king of England whose death led to a succession crisis ending with the invasion of William the Conqueror.

ANSWER: **Edward the Confessor** [prompt on **Edward**]

230-13-104-1210-11

7. This man was the president of the U.S. Olympic Committee in the 1928 Summer Olympics, and he sent troops to break up the Bonus Army. This man gave the "Old Soldiers Never Die" speech after being relieved of one post, and he stated "I shall return," after evacuating the Philippines in World War II. For 15 points, name this man who oversaw the Southwest Pacific Theater in World War II and was dismissed as commander of UN forces in the Korean War after clashing with President Truman.

ANSWER: Douglas **Macarthur**

030-13-104-12107

BONUS: What dance's music originated from the Jacques Offenbach composition "Infernal Galop" in the opera *Orpheus in the Underworld*?

ANSWER: **Can-can**

052-13-104-1210-11

8. Apomixis (EY-poh-MIKE-sis), also known as a clonal version of this process, can occur in species that utilize the ZW sex-determination system. Automixis (AWE-toh-MIKE-sis) occurs when the eggs in this process do undergo meiosis. This process occurs naturally in invertebrates such as aphids, rotifers and nematodes (NEE-muh-tohdz). This form of reproduction has been observed in vertebrate species such as hammerhead sharks and Komodo dragons. For 15 points, identify this form of asexual reproduction, named from the Greek for "virgin birth," in which an unfertilized egg becomes a new organism.

ANSWER: **parthenogenesis** [prompt on asexual **reproduction**]

084-13-104-12108

BONUS: The Portuguese "President-King" Sidónio Pais (pai-EES) promoted an ideology named for what month, also the month of 1825 in which liberal Russian nobles protested for "Constantine and constitution" against the ascent of Nicholas I?

ANSWER: **December**

019-13-104-1210-11

9. This man authored most of George Washington's farewell address, and he anonymously circulated the biting pamphlet *The Public Conduct and Character of John Adams, Esq.* This author of *Report on a National Bank* advocated protective tariffs and investment in infrastructure in his *Report on Manufactures*. For 15 points, name this man who was the first secretary of the Treasury and who was killed in a duel with Aaron Burr.

ANSWER: Alexander **Hamilton**

030-13-104-12109

BONUS: Identify the African river that separates Brazzaville and Kinshasa, the capital cities of two countries that share this river's name.

ANSWER: **Congo** River

023-13-104-1210-11

10. This politician's 1971 election bid was grounded in a slogan for "eliminating poverty." She put her son in charge of an aggressive family planning program which controversially included sterilization quotas. She died en route to an interview with Peter Ustinov. Her authorization of Operation Blue Star, which was an attack on the Golden Temple of Amritsar, ultimately led to her assassination by her own Sikh bodyguards, after which she was succeeded by her son Rajiv. For 15 points, identify this daughter of Jawaharlal (jah-WAH-hur-lol) Nehru and first female prime minister of India.

ANSWER: **Indira Priyadarshini Gandhi** [prompt on **Gandhi**]

189-13-104-12110

BONUS: What inefficient sorting algorithm is named for the manner in which smaller elements float to the top of the list?

ANSWER: **bubble** sort

014-13-104-1210-11

11. Coronene contains six instances of this compound fused together to form a cyclohexane in the center. Michael Faraday was the first to isolate this compound from fish oil residues. Hypothetical structures of this completely planar compound include prismane and one named for Dewar. Naphthalene contains two and anthracene contains three molecules of this compound fused together, and phenols consist of an OH group attached to this molecule's aromatic ring. For 15 points, name this simplest aromatic compound, a carcinogen with formula C₆H₆.

ANSWER: **benzene**

239-13-104-12111

BONUS: What British author wrote about Charles Ryder's interactions with the Marchmains in *Brideshead Revisted* and also penned *A Handful of Dust*?

ANSWER: Evelyn **Waugh**

233-13-104-1210-11

12. A specialized type of this organelle found in plants is the site of the glyoxylate (glai-OCK-sul-ate) cycle. Acatalasia (UH-cat-uh-LAHZ-ee-uh) results when this organelle lacks a key enzyme. Most disorders involving this organelle, such as infantile Refsum disease, result from mutations in PEX genes. A sharp reduction in the number of this organelle is observed in patients with Zellweger syndrome. This organelle contains the enzyme catalase (CAT-uh-layz). For 15 points, name this organelle that decomposes its namesake compound into oxygen and water.

ANSWER: **peroxisome**

127-13-104-12112

BONUS: The most expensive painting ever sold was *The Card Players*, a work by what Frenchman also known for his still life paintings?

ANSWER: Paul **Cezanne**

052-13-104-1210-11

13. This man designed motion-inhibiting cardboard costumes for the Erik Satie ballet *Parade*. A visit to the Ethnography Museum at Trocadero's primitive art exhibits inspired another painting by this man, which shows the African mask-like faces of two of five Barcelona prostitutes. One of this man's paintings shows a lightbulb above a wounded horse's head and protests the bombing of the namesake town. For 15 points, name this Spanish artist who painted *Guernica* and, with George Braque, invented Cubism.

ANSWER: Pablo Ruiz y **Picasso**

030-13-104-12113

BONUS: What artist made use of gold leaf in paintings such as *The Kiss*?

ANSWER: Gustav **Klimt**

140-13-104-1210-11

14. A thiazole ring contains one atom of nitrogen and this element and is an important component of thiamine. Chemotrophs at hydrothermal vents often use a compound consists of two hydrogens and this element as an energy source. The only amino acids to contain this element are cysteine and methionine. This element is paired with C, H, N, O, and P as one of the six most common elements in living organisms. Emissions of nitric oxide and this elements dioxide can cause acid rain. For 15 points, identify this element with symbol S.

ANSWER: **sulfur** [or **S** until it is read]

066-13-104-12114

BONUS: What Mesopotamian hero befriends Enkidu and spurns Ishtar in a namesake epic?

ANSWER: **Gilgamesh**

233-13-104-1210-11

15. Canal ray tubes were used by Ives and Stilwell in order to study one variant of this phenomenon important in special relativity. The mathematical description of this effect employs a factor of the wave velocity over the wave velocity plus the relative velocity of the source. Its relativistic form can be used to calculate the radial velocity of galaxies by measuring blueshift or redshift. Radar uses this effect in order to measure speed. For 15 points, identify this perceived change in frequency of a moving wave source, exemplified by the change in pitch of a siren passing by.

ANSWER: **Doppler** effect

226-13-104-12115

BONUS: This is a 20-second calculation question. If two sides of a triangle measure 3 and 5, and the length of the third side is an integer, how many possibilities are there for that third side?

ANSWER: 5

233-13-104-1210-11

16. A special episode of this series took place in the fictional country of Sangala. Its main character once worked for George Mason and had a deadpan sidekick named Chloe. This show's protagonist generally worked for CTU and tried to protect President Palmer. Most episodes of it ended with split screens revealing what each character was doing as a beeping clock counted down. For 15 points, name this television show about counter-terrorist expert Jack Bauer, which took place in "real time."

ANSWER: 24

052-13-104-12116

BONUS: What kind of proof shows the falseness of a proposition by assuming the proposition to be true and deriving a logical impossibility?

ANSWER: proof by **contradiction**

121-13-104-1210-11

17. The MV Transpacific was responsible for transferring this substance to the Johnson Atoll as part of Operation Pacer IVY. A class-action lawsuit concerning this substance was spearheaded by Hy Mayerson and Victor Yannacone on behalf of Charles E. Hartz. This substance, which was used extensively during Operation Ranch Hand, consisted of equal parts of 2,4,5-T and 2,4-D and got its name from the stripes on the barrels containing it. For 15 points, name this dangerous herbicide that was sprayed during the Vietnam War.

ANSWER: **Agent Orange**

048-13-104-12117

BONUS: What largest city in Turkey is split by the Golden Horn?

ANSWER: **Istanbul**

023-13-104-1210-11

18. A song by this composer starts with the lyric "The sun shines bright on" the title place. This composer managed to achieve considerable popularity in 1847 with one of his songs by setting it to a polka beat. Lyrics for songs by this composer include lines about a racetrack "five miles long" where "somebody bet on the bay" and about a man who came "from Alabama with my banjo on my knee." For 15 points, name this composer of "My Old Kentucky Home," "Camptown Races," and "Oh! Susanna."

ANSWER: Stephen Collins **Foster**

023-13-104-12118

BONUS: Name the Japanese novelist who wrote *The Temple of the Golden Pavilion* and the *Sea of Fertility* tetralogy.

ANSWER: Yukio **Mishima** [or **Mishima** Yukio]

014-13-104-1210-11

19. The investment firm 3G Capital, run by two brothers from this country, masterminded an insider trading deal to expedite Berkshire Hathway's buyout of Heinz Co. In this country, the Pacifying Police Units oppose rioting. Recent social unrest in this country has been sparked by the decision to eradicate several of this country's favela shantytowns to build stadiums. For 15 points, name this South American country that will host the 2014 FIFA World Cup.

ANSWER: Federative Republic of **Brazil** [or Republica Federativa do **Brasil**]

020-13-104-12119

BONUS: What ancient Greek pioneered medical technique and names a document that includes the line "I will prevent disease whenever I can."

ANSWER: **Hippocrates** of Kos

052-13-104-1210-11

20. This object provoked a rebellion in Cornwall that Edward Seymour crushed at the Battle of Sampford Courtenay. Introduced under the Act of Uniformity, this object is the origin of the phrases "in our time" and "vile bodies." It is also the source of the phrase "till death do us part" used in wedding vows. It was introduced during Edward VI's reign under the supervision of Thomas Cranmer. For 15 points, name this religious text that contains the standard liturgy of the Anglican Communion.

ANSWER: the **Book of Common Prayer**

080-13-104-12120

BONUS: This is a 20-second calculation question. If Matt draws two cards from a standard 52-card deck, what is the probability neither of them are hearts?

ANSWER: **19/34** [or **114 over 204**]

233-13-104-1210-11

21. At the start of his political career, this future President joined the KKK and worked in the political machine of boss Thomas Pendergast. This president called the "Turnip Day Session" of Congress and used an executive order to desegregate the Army. He went on the "Whistle Stop Tour of America" to win the last Presidential election in which four candidates each exceeded two percent of the vote. The *Chicago Tribune* claimed that this "Fair Deal" proponent lost to Dewey in the election of 1948. For 15 points, name this successor to FDR, who chose to bomb Nagasaki and Hiroshima.

ANSWER: Harry S. **Truman**

149-13-104-12121

BONUS: What star of *The African Queen* and *The Caine Mutiny* uttered the line, "Louie, I think this is the beginning of a beautiful friendship," at the end of *Casablanca*?

ANSWER: Humphrey **Bogart**

030-13-104-1210-11

22. The Tempo program is used to find and model these objects, which are sometimes surrounded by a plerion. An example of these objects in Virgo is surrounded by the first discovered extrasolar planets. A binary example of them was used to indirectly prove the existence of gravitational waves by Hulse and Taylor. Burnell and Hewish named the first discovered one LGM-1 and noted that its emissions were periodic. For 15 points, name these highly magnetized rotating stars that periodically emit radiation.

ANSWER: **pulsars** [or **pulsating stars**; prompt on neutron **stars**]

048-13-104-12122

BONUS: Name the Renaissance sculptor of *Gatamellata* ("GAH"-tah mel-"LAH"-tah) and a bronze *David*.

ANSWER: **Donatello** [or Donato di Niccolo di Betto **Bardi**]

080-13-104-1210-11

23. This man wrote a story in which the protagonist tells a story to Sybil Carpenter while wading in the ocean. That story features title creatures which gorge themselves on fruit and get too fat to escape feeding holes. This author wrote about Seymour Glass' suicide in "A Perfect Day for Bananafish." He created a youthful character expelled from Pencey Prep who disdains "phonies." For 15 points, name this reclusive author of the *Nine Stories*, who created Holden Caulfield in *Catcher in the Rye*.

ANSWER: Jerome David "J.D." **Salinger**

052-13-104-12123

BONUS: This is a 20-second calculation question. What is the value of n such that n factorial equals 10 factorial divided by 720?

ANSWER: 7

233-13-104-1210-11

24. This man defeated pro-gold Judge Alton Parker to win one presidential election. This man's secretary of state negotiated an accord that acknowledged Japan's right to annex Korea, the Root-Takahira Agreement. He appointed Gifford Pinchot to run the Forest Service, and led the charge up San Juan Hill in the Spanish-American War. For 15 points, name this president who succeeded William McKinley and ran unsuccessfully on the Bull Moose ticket in 1912.

ANSWER: Theodore **Roosevelt**

030-13-104-12124

BONUS: Proteins such as EcoRI are a part of what class of enzymes important in recombinant DNA technology, which cut DNA strands at specific recognition nucleotide sequences?

ANSWER: **restriction** enzymes [or **restriction** endonucleases]

226-13-104-1210-11

25. A theory that attempts to explain this phenomenon argues the substantial gelatinosa in the dorsal horn of the spinal cord contains a "gate" that controls it. Although it is not fever, drugs that suppress this phenomenon include ketobemidone (KEY-toh-bem-EH-doan) and paracetamol (PAIR-uh-CEET-uh-mall). It is caused by contact between the medial epicondyle (EH-puh-CON-dial) of the humerus and the ulnar nerve. This sense is removed by the chemicals lidocaine and novocaine, which are both anesthetics. For 15 points, identify this feeling which may accompany burns or broken bones.

ANSWER: **pain** [or **nociception**; prompt on **touch**; prompt on **suffering**]

239-13-104-12125

00--20-1210-11

26. Max Brod published this author's manuscript about the arrest for an unknown crime and execution of the banker Josef K. This author of *The Trial* created a character in a short story whose sister plays violin and whose father throws an apple that lodges into the character's back. That story by this author starts with Gregor Samsa waking up to find he has turned into a giant insect. For 15 points, name this author from Prague who wrote the story *The Metamorphosis*.

ANSWER: Franz **Kafka**

023-13-104-12126

00--20-1210-11



27. In this year, two million people joined a human chain called the Baltic Way across Estonia, Latvia, and Lithuania. Also in this year, Hungary removed the defenses on its Austrian border, eventually resulting in protests whose participants overwhelmed guards, walked through Checkpoint Charlie, and chipped off souvenirs from a defunct barrier. For 15 points, name this year that included the fall of many Communist regimes and the destruction of the Berlin Wall.

ANSWER: 1989

080-13-104-12127

00--20-1210-11

28. This character has a vision of his Aunt Clara lecturing him for causing trouble for his friend. This man was accused of raping a girl in Weed when he patted her dress too hard. He accidentally kills Curley's wife by breaking her neck. This farm hand continually dreams of taking care of the rabbits and is ultimately shot by his friend to save him from a lynch mob. For 15 points, name this character from John Steinbeck's *Of Mice and Men*, a mentally challenged giant and friend of George.

ANSWER: Lennie Small [or Lennie Small]

052-13-104-12128