



1. Nicknamed "Turd Blossom," this man once pranked Alan Dixon's campaign by giving fliers to homeless shelters promising free beer at his rallies. This man devised the plan of push-polling voters in South Carolina to claim that one candidate's Bangladeshi daughter was an illegitimate black child. He resigned as Deputy Chief of Staff in the aftermath of the Valerie Plame affair. This man cofounded the SuperPAC American Crossroads, which supports the Romney campaign. For 10 points, name this Republican political consultant, dubbed "the Architect" of Bush's electoral victories.

ANSWER: Karl Christian **Rove**

080-12-71-02101

2. Ambrogio and Berta are two servants in this opera. The soprano in this work sings the aria "Una voce poco fa" while receiving a love letter that is eventually exchanged for a laundry list. The title character of this opera pretends to be Lindoro in order to help his employer, Count Almaviva, attract the ward of Dr. Bartolo, Rosina. One of the most famous arias from this opera is "Largo al factotum." For 10 points, name this opera by Rossini about the title character, Figaro.

ANSWER: *The **Barber of Seville***

192-12-71-02102

3. This man derived an equation for the propagation of voltage down the trans-Atlantic telegraph cable and coined the term "kinetic energy." He used the temperature of the sun as the basis for his incorrect calculation of the age of the Earth, and also claimed that physics prevented heavier-than-air flying machines. For 10 points, name this man who defined the absolute temperature scale now named after him.

ANSWER: William Thomson, Lord **Kelvin** [or William **Thomson**]

003-12-71-02103

4. In one account of this war, "all words meant their opposite" during a riot on Corcyra (kor-SIGH-ruh), whose disputed control had been a cause of this war. The brief peace of Nicias was broken for this war's Sicilian expedition led by Alcibiades, as recounted by the historian Thucydides. This war lasted thirty years and started under one side's rule by the democratic statesman Pericles. For 10 points, name this war between Athens and Sparta, fought partly around the namesake Spartan-controlled peninsula.

ANSWER: **Peloponnesian** War

104-12-71-02104

5. This artist sculpted a tall bronze canopy to mark the location of a tomb. This sculptor included the emblem of the Pamphilij family and a towering Egyptian obelisk in one of his works, which personifies the Ganges and the Rio de la Plata. For the Cornaro Chapel, he created a sculpture in which a shower of gold light illuminates a smiling angel who pierces the title woman with his fiery spear. For 10 points, name this Baroque Italian sculptor of the *Fountain of the Four Rivers* and the *The Ecstasy of St. Theresa*.

ANSWER: Gian Lorenzo **Bernini**

080-12-71-02105

6. "Fighting Joe" Wheeler led one side at this war's engagement at Las Guasimas. Leonard Wood led the First Volunteer Cavalry in this war. Another theater of this war saw Dewey's victory at the Battle of Manila Bay. One battle during this war saw Theodore Roosevelt charge San Juan Hill with the Rough Riders. This conflict was described as a "splendid little war" by John Hay and was covered by the "yellow journalism" of Hearst and Pulitzer. For 10 points, name this 1898 war that began after the USS *Maine* exploded in Havana.

ANSWER: Spanish-American War

192-12-71-02106

7. One character in this novel warns that "we must not always talk in the marketplace of what happens to us in the forest," after another notices the changed appearance of a man on Election Day. This novel was the fictional version of a manuscript discovered in an attic, as explained in its introduction, "The Custom-House." The main characters' plan to flee to Europe is foiled after they discover that Roger Chillingworth booked passage on the same ship, prompting Arthur Dimmesdale to confess his sins and fall dead. For 10 points, name this novel about Hester Prynne, the bearer of the title mark of adultery, written by Nathaniel Hawthorne.

ANSWER: *The Scarlet Letter*

020-12-71-02107

8. A Keats poem in this form compares the title action to "stout Cortes" when he first saw the Pacific Ocean, and is named "On First Looking into Chapman's Homer." Another poem of this type asks "How do I love thee? Let me count the ways." A form of this poem named for Petrarch is made of an octave and a sestet. William Shakespeare wrote works in this genre to the Fair Youth and the Dark Lady, including "My mistress's eyes are nothing like the sun" and "Shall I compare thee to a summer's day?" For 10 points, name this form of poetry that has fourteen lines.

ANSWER: sonnets

192-12-71-02108

9. This philosopher argued that his mind, not his senses, could perceive the continuity in a piece of wax that was melted by a fire. A tutor to Queen Christina, he put forth a thought experiment in which everything he knew, even mathematics, was actually an illusion brought on by an evil demon. He used that method of systematic doubt to determine the fundamental principles on which knowledge could be founded in his *Meditations on First Philosophy*. For 10 points, name this French thinker who stated "I think, therefore, I am."

ANSWER: Rene Descartes [or Renatus Cartesius]

080-12-71-02109

10. This class of animals includes the orders of opiliones and schizomida, and one organism within this class is a common vector for an infectious disease caused by a bacteria from the *Borrelia* genus; that disease is Lyme disease. The Acari subclass within this class includes ticks and mites, and other members within this class possess book lungs. Scorpions and tarantulas belong to this class. For 10 points, identify this class which includes many spiders.

ANSWER: Arachnids [or Arachnida]

189-12-71-02110

11. This man caused a victory when he discovered a key pathway during the Battle of Cerro Gordo. This man rose to his highest position after Joseph Johnston was wounded at the Battle of Seven Pines. This man inflicted heavy losses from a fortified position in the Battle of Cold Harbor. This general managed to win at Chancellorsville despite losing his general Stonewall Jackson. For 10 points, name this man who commanded the Confederate Army in the Civil War.

ANSWER: Robert Edward Lee

192-12-71-02111

12. In this city, horse chestnut trees line the Hauptallee road through the Prater park, which is also home to the old Riesenrad Ferris wheel. Its other landmarks include circular Ringstrasse boulevard and the site of the first modern zoo at Schonbrunn Palace. This European city, the headquarters of OPEC, lost its status as a capital after the *Anschluss*, though it regained it. For 10 points, name this northernmost capital city on the Danube river, the capital of Austria.

ANSWER: Vienna

104-12-71-02112

13. In this novel, a diary is recorded on the then-new phonograph by Doctor Seward. An important shipment of fifty boxes filled with dirt comes to London in this epistolary novel, in which the Texan Quincey Morris stabs the title character and Renfield goes insane. This book opens with Jonathan Harker's trip to an Eastern European castle, after which he and his friend Abraham Van Helsing have to save people with blood transfusions. For 10 points, name this Bram Stoker novel about a Transylvanian vampire.

ANSWER: Dracula

104-12-71-02113

14. Vesicles fuse with cytoplasmic endosomes on the pathway to this organelle. Diseases caused by the improper functioning of this organelle include Hurler's syndrome and Tay-Sachs disease, which arises from insufficient hexosaminidase A activity. The targets of phagocytosis are sent to this organelle, which uses acid hydrolases to carry out its primary function. For 10 points, name this organelle responsible for the digestion of microorganisms and macromolecules.

ANSWER: lysosome

014-12-71-02114

15. G. W. F. Hegel interpreted this play as a conflict between the mutually-exclusive ethics of conscience and the law. At the end of this play, a messenger announces that both Haemon and Eurydice have stabbed themselves. In this play, which is set in the aftermath of *Seven Against Thebes*, Ismene refuses to help her sister bury their brother Polynices against the wishes of Creon. For 10 points, name this tragedy by Sophocles about the daughter of Oedipus.

ANSWER: Antigone

080-12-71-02115



1A. Name the objects which were first classified into multiple divisions by Giovanni Cassini, after Galileo and Huygens had earlier observed them.

ANSWER: Saturn's rings [do not prompt on or accept "Saturn"]

1B. Eamon de Valera was the president and prime minister of what country that experienced the 1916 Easter Rising?

ANSWER: Ireland [or Eire]

2A. What rapper collaborated with his album-mates from the GOOD Music label on the album *Cruel Summer* in 2012?

ANSWER: Kanye Omari West (accept either first or last name)

2B. In 2012, what MLB team clinched its first playoff berth since 1981, when it played as the Montreal Expos?

ANSWER: Washington Nationals (accept city or team name)

3A. What Incan ruler defeated his brother Huascar in a civil war only to be conquered by the forces of Francisco Pizarro?

ANSWER: Atahualpa

3B. What quantity from physics is equal to the product of mass and acceleration?

ANSWER: force [prompt on F]

4A. What German composed the *Italian Symphony* and incidental music to *A Midsummer Night's Dream*?

ANSWER: Felix Mendelssohn

4B. What author described Septimus Smith's suicide in a novel about Clarissa's party, *Mrs Dalloway*?

ANSWER: Virginia Woolf [or Adeline Virginia Stephen]

5A. This is a 20-second calculation question. A thirteen-foot ladder is to be leaned against a twelve-foot wall so that the top of the ladder just touches the top of the wall. Assuming the wall forms a right angle with the ground, how many feet from the wall's base should the bottom of the ladder be placed?

ANSWER: five feet

5B. This is a 20-second calculation question. Find the y-intercept of the line that passes through the points (5,11) and (15,17).

ANSWER: 8 [or (0,8)]

6A. The "smoking mirror" Tezcatlipoca is the rival of what feathered serpent in Aztec myth?

ANSWER: Quetzalcoatl

6B. What author of *Principles of Political Economy and Taxation* theorized comparative advantage and spoke out against the Corn Laws?

ANSWER: David Ricardo

7A. This is a 20-second calculation question. In terms of a multiple of pi, how much water is needed to fill up three-fourths of a sphere with radius 3?

ANSWER: 27 pi

7B. This is a 30-second calculation question. A drawer contains two black socks and three white socks unpaired. If two socks are drawn at random, what is the probability they are the same color?

ANSWER: 2/5 [or 0.4; or 40 percent]

8A. What 1990's television show starred Will Smith as a teenager who moves from Philadelphia to live with his wealthy Uncle Phil in California?

ANSWER: *The **Fresh Prince** of Bel-Air*

8B. What organelle contains genetic material in the form of chromosomes?

ANSWER: cell nucleus

9A. What is the name for the formula of a compound that expresses the simplest ratio between the elements? An example is CH₂O for glucose.

ANSWER: empirical formula

9B. Which English computer scientist lends his name to a test that can determine a machine's ability to exhibit intelligence?

ANSWER: Alan Mathison Turing

10A. In what U.S. state would one find Petrified Forest National Park surrounded by the Painted Desert?

ANSWER: Arizona

10B. What husband of Zipporah talked to a burning bush and parted the Red Sea as he led the Israelites out of Egypt?

ANSWER: Moses



1. The five countries on the UN Security Council, plus Germany, have discussed this program in the "P5+1" talks. Russia has assisted it by completing an unfinished structure 11 miles south of Bushehr. This program has been the target of Operation Olympic Games, one component of which was the Stuxnet worm. Benjamin Netanyahu has argued that a "red line" must be drawn to prevent its success. For 10 points, name this technological program whose success could give Mahmoud Ahmadinejad access to weapons of mass destruction.

ANSWER: the Iranian nuclear program

080-12-71-02117

2. The speaker of this poem asks its reader to "mark the doctrine" under its "strange verses" when his eyes are covered so that Medusa will not turn him to stone. It describes an ice-encased monster whose three heads chew on Brutus, Cassius, and Judas. This poem's narrator sees the inscription, "Abandon all hope, ye who enter here," above a gate and is guided by Vergil through nine circles that each punish a different brand of sinner. For 10 points, name this first portion of *The Divine Comedy* which describes Dante's journey through Hell.

ANSWER: Inferno [prompt on *The Divine Comedy*; prompt on *La Divina Commedia*]

080-12-71-02118

3. The intrafusal type of this tissue is connected to the dorsal root ganglia by 1a afferents. The largest known protein, titin, is found in this tissue, which contains nicotinic receptors on one end of a junction traversed by acetylcholine. This tissue is divided into units called sarcomeres, which contain sliding filaments of actin and myosin, and it comes in cardiac, smooth, and skeletal forms. For 10 points, name this tissue which contracts when doing work and makes up the biceps.

ANSWER: muscle [or skeletal muscle before "skeletal" is read]

104-12-71-02119

4. This language once used the *idu* writing system for loanwords, and its p, t, and k consonants can be unaspirated, aspirated, or tense-voiced. It has up to seven "speech levels" which change verb endings for different degrees of formality. Its mainland form is mutually unintelligible with Jeju island dialect, and its 24-character writing system, which uses horizontal and vertical lines for vowels and groups syllables in blocks, is called *hangul*. For 10 points, name this Asian language spoken on a divided peninsula.

ANSWER: Korean [or Hangugeo; or Chosonmal]

104-12-71-02120

5. When speaking about this event in Indianapolis, Robert Kennedy said his favorite poet was Aeschylus (ESK-uh-luss). An iconic photo of this event features three men standing on a balcony, all pointing to the upper left as a man lies on the ground. This event took place at Memphis' Lorraine Motel the day after its target gave his "I've Been to the Mountaintop" speech in support of black sanitation workers. For 10 points, name this April 1968 event in which James Earl Ray killed a Nobel Peace Prize-winning civil rights leader.

ANSWER: assassination of Martin Luther King Jr. [or assassination of MLK; accept synonyms for "assassination" such as murder or killing]

052-12-71-02121

6. This quantity can assume a negative value after population inversion. The mnemonic "oh be a fine girl kiss me" places stars in decreasing values for this quantity, which is plotted with color against absolute magnitude in a Hertzsprung-Russell diagram. This quantity is directly related to the kinetic energy of particles and can be found by dividing PV by nR when rearranging the ideal gas law. The Kelvin scale for this quantity is based on the concept of absolute zero, its lowest attainable value. For 10 points, name this quantity measured in Celsius.

ANSWER: **temperature** [prompt on **T**]

020-12-71-02122

7. This author wrote a work in which a man named Soapy ends up at a church and vows to change his life after hearing a tune played on the organ. That story by this man ends with Soapy imprisoned in Riker's Island for loitering and is titled "The Cop and the Anthem." In one of his works, two kidnappers pay a boy's father \$250, while in another story, Jim sells his watch to buy a comb for his wife, who has sold her hair to buy him a watch chain. For 10 points, name this author of the stories "The Ransom of Red Chief" and "The Gift of the Magi."

ANSWER: O. **Henry** [or William Sidney **Porter**]

052-12-71-02123

8. The Rim Current is a phenomenon in this body of water, which includes Cape Jason and the Strait of Kerch. This sea is north of the Pontic Mountains and is connected to the Sea of Marmara via the Bosphorus Strait. Cities on this sea include Varna, Odessa, and Sevastopol. The Crimean Peninsula juts into this body of water, which lies south of the Sea of Azov. For 10 points, name this large sea that borders Turkey, Russia, and Ukraine.

ANSWER: **Black** Sea

192-12-71-02124

9. The artist of this work later repainted it with its landscape broken up into small tiles in a work showing its "disintegration." In the foreground of this painting, a creature with eyelashes and a tongue sticking out of it is draped across some rocks. This painting contains a wooden box with a dead tree growing out of it, and it depicts the cliffs of Cape Creus in the background. This painting's most recognizable features are three melting clocks. For 10 points, name this surrealist painting by Salvador Dali.

ANSWER: *The **Persistence of Memory*** [or *La **Persistencia de Memoria***]

080-12-71-02125

10. One theory explaining this force relies on the concepts of confinement and asymptotic freedom. That theory of this force is called quantum chromodynamics. The massless particles that mediate this force can carry eight different types of color charge and are called gluons. This force is responsible for binding protons and neutrons together to form atomic nuclei. For 10 points, name this fundamental force which, as its name implies, is the most powerful of the four.

ANSWER: **strong** force [or **strong** nuclear force]

014-12-71-02126

11. This man increased the tariff rates of the Underwood-Simmons Tariff by signing the Fordney-McCumber Tariff, and he appointed William Howard Taft to the Supreme Court. This President promised a "return to normalcy." During this man's presidency, Harry Sinclair was implicated with Albert Fall over bribes for leasing some Wyoming oil fields in the Teapot Dome scandal. For 10 points, identify this President whose scandal-ridden time in office was ended by his 1923 death and the succession of Calvin Coolidge.

ANSWER: Warren Gamaliel **Harding**

189-12-71-02127

12. Due to omission of this book's twenty-first chapter in the United States, that edition ends with the sarcastic thought, "I was cured all right." In this work, Billyboy and Dim become police officers and the narrator, whose uses the word "krovvy" for blood, is unable to enjoy music after being subjected to the Ludovico technique. This book is largely written in a Russian-based slang called Nadsat. For 10 points, name this dystopian novel about Alex and his gang of ultraviolent droogs, by Anthony Burgess.

ANSWER: A ***Clockwork Orange***

104-12-71-02128

13. If an odd function is expressed as a Fourier series, all of its terms contain a type of this function. When e is raised to the power of imaginary numbers, this function forms the imaginary part of the result. In any triangle, this function of an angle divided by the opposite side is the same for all three angles, according to the "law of" this function. This function over a similar one is the tangent function. For 10 points, name this function which, for a given angle, is the ratio of the opposite side to the hypotenuse of a right triangle.

ANSWER: **sine** function

121-12-71-02129

14. This work's main character constantly fantasizes that her suitor Shep Huntleigh will arrive. One character was married to Allan Grey, who killed himself after having a homosexual affair. The protagonist of this play is first seen arriving at Elysian Fields Avenue and is crushed after her relationship with Mitch ends. This play ends with the protagonist taken to an asylum after saying that she has "always depended on the kindness of strangers." For 10 points, name this Tennessee Williams play about Blanche DuBois and her brutish brother-in-law, Stanley Kowalski.

ANSWER: A ***Streetcar Named Desire***

052-12-71-02130

15. In biology, oncotic forces are due to the combination of this property and the Gibbs-Donnan effect. The standard calculation of this value only applies for solutions that obey Henry's Law and says that this quantity is proportional to temperature, molarity, and the van't Hoff factor. For 10 points, name this colligative property defined as the pressure necessary to counteract the movement of water across a semipermeable membrane.

ANSWER: **osmotic pressure**

003-12-71-02131



1. This commander forced the signing of the Treaty of Luneville after surprising an Austrian army in the Battle of Marengo. He decreed that women be under the control of their husbands with his namesake "code." After overthrowing the Directory, this man became First Consul. Though he won great victories like Jena (YAY-nuh) and Austerlitz, he was eventually forced into exile on St. Helena after his defeat at Waterloo in 1815. For 10 points, name this Corsican conqueror and French emperor.

ANSWER: Napoleon I of France [or Napoleon Bonaparte; or Napoleon Bonaparte]

080-12-71-02132

2. Identifying the degree of racemization of amino acids is one way to perform this process. The law of superposition is a key result used in the relative form of this process, which relies on the relative position of layers of sediments. Another form of this process uses tree rings and is dendrochronology. Yet another form of this process relies on the fact that the half-life of carbon-14 is about 5700 years and is the radiocarbon type. For 10 points, identify this process of determining how far in the past geologic events happened.

ANSWER: dating

066-12-71-02133

3. This character disturbs the maid Charlotte by beating up Noah Claypole for insulting his dead mother in a funeral home. Mr. Brownlow adopts this character, who escapes the abusive crime lord Bill Sikes. He is introduced by the Artful Dodger to a seventy-year-old Jewish criminal named Fagin, who lets him into a pickpocketing gang. For 10 points, name this child whose request for more gruel gets him kicked out of a workhouse, the title orphan of a Charles Dickens novel.

ANSWER: Oliver Twist [or Oliver Twist]

104-12-71-02134

4. This poem informs the reader that "there are millions of suns left" and invites the reader, "Stop this day and night with me and you shall possess the origin of all poems." One stanza in this poem reads, "Do I contradict myself? Very well then I contradict myself, (I am large, I contain multitudes.)" Near the conclusion of this long poem, the speaker declares, "I sound my barbaric yawp over the roofs of the world." For 10 points, name this Walt Whitman poem whose speaker celebrates himself and sings himself.

ANSWER: "Song of Myself"

020-12-71-02135

5. A "reduced" form of this quantity is used in solving the two-body problem, and a change in this quantity for problems involving atomic nuclei is known as its namesake "defect" or "deficit." For a rigid body with uniform density, the centroid is the location of the "center" of this quantity, and adding the prefix "bio" to this word gives a term for biological material from organisms. Dividing this quantity by volume gives density. For 10 points, identify this quantity measured in kilograms.

ANSWER: mass [prompt on m]

189-12-71-02136

This is a 30-second calculation question. How many real roots does the polynomial $10x^2 - 4x + 2$ have?

ANSWER: 0 [or none]

Thelonious Monk and Duke Ellington were two jazz musicians who played what keyed instrument?

ANSWER: pianoforte