

1. In one of her novels, Luddites attack Robert Moore's mill, and this author created Lucy Snowe in her novel *Villette*. This author of *Shirley* also wrote a novel in which the title character is haunted by the ghost of Uncle Reed and learns that Reverend St. John Rivers is her cousin. That character created by this author is employed in a household where Grace Poole looks after Bertha Mason, the crazed wife of Edward Rochester. For 10 points, name this author of *Jane Eyre*.

ANSWER: Charlotte **Brontë** [accept Currer **Bell**]

079-10-20-02101

2. This state is home to the Yavapai people. It contains the fourth most populous county in the United States, Maricopa County. That county contains the cities Chandler and Glendale, as well as Tempe. Its northeast section contains part of the Navajo Nation, the only area of this state which observes Daylight Saving Time. It is home to the cities of Yuma and Mesa, as well as the Grand Canyon. For 10 points, name this state whose capital is Phoenix.

ANSWER: **Arizona**

024-10-20-02102

3. One player of this instrument composed songs such as "Billie's Bounce" and "Now's the Time." Another player of it included the songs "Countdown" and "Naima" on his album *Giant Steps*. Those players of this instrument made the albums *Ornithology* and *A Love Supreme* and are Charlie "Bird" Parker and John Coltrane. For 10 points, name this family of instruments important in jazz, a single-reed wind instrument made of brass and named for its inventor Adolph.

ANSWER: **saxophone**

079-10-20-02103

4. This author wrote an eleven-book series about an American boy who participates in the great events of the early 20th century. This author of the Lanny Budd series wrote about the death by drowning of the child Antanas in a novel. That novel by this author includes a foreman named Connor who turns Ona into a prostitute, causing her husband Jurgis Rudkus to join the Chicago socialist party. For 10 points, name this author who revealed the misery of the stockyards in his novel *The Jungle*.

ANSWER: Upton **Sinclair**

015-10-20-02104

5. Trent Reznor of Nine Inch Nails composed the score of this film, which begins with the protagonist lecturing his girlfriend about final clubs. The protagonist of this film earns the ire of the Winklevoss twins, a pair of Olympic rowers, before meeting Sean Parker, who is the founder of Napster as played by Justin Timberlake. The story of this movie is told as Jesse Eisenberg's character is deposed because he is being sued by his former Harvard classmates. For 10 points, name this 2010 movie that dramatizes Mark Zuckerberg's founding of Facebook.

ANSWER: *The* **Social Network**

079-10-20-02105

6. One poem by this author opens “deep in the shady sadness of a vale” and describes the titular Titan. Another poem tells of how Cortez stared into the Pacific while standing on a peak in Darien. This poet of “On First Looking Into Chapman’s Homer” told of a knight taken to an “elfin grot” in “La Belle Dame Sans Merci.” In one poem he wrote “Thou wast not born for death, immortal Bird!” while another poem ends by declaring that “beauty is truth, truth beauty.” For 10 points, name this English poet who wrote “Ode to a Nightingale” and “Ode on a Grecian Urn.”

ANSWER: John **Keats**

064-10-20-02106

7. This poet wrote about the dead, who are "untouched by morning and untouched by noon," in the poem "Safe in their alabaster chambers." Another work by this poet speaks of "the little bird that kept so many warm." That poem is "Hope is the thing with feathers." The speaker of another of her poems states "I heard a fly buzz when I died." She also wrote a poem in which a carriage "held but just ourselves and Immortality." For 10 points, name this reclusive poet of "Because I could not stop for Death."

ANSWER: Emily Elizabeth **Dickinson**

024-10-20-02107

8. In one speech, this man claimed that he had "nothing to offer but blood, toil, tears and sweat." This leader resigned his position as First Lord of the Admiralty after the Battle of Gallipoli. Anthony Eden succeeded this man after one of his terms. During an earlier ministry, this man had suffered a surprise defeat to Clement Atlee. This man attended the Tehran and Yalta Conferences as a member of the "Big Three" with Roosevelt and Stalin. For 10 points, name this charismatic Prime Minister of the United Kingdom during World War II.

ANSWER: Winston Leonard Spencer **Churchill**

015-10-20-02108

9. This poem describes “gardens bright with sinuous rills” and an Abyssinian maid “singing of Mount Abora” and playing a dulcimer. In its second stanza, it describes “caverns measureless to man” through which the sacred river Alph runs. Supposedly composed after its author experienced an opium-influenced dream, this poem opens with the title ruler decreeing “a stately pleasure-dome” in Xanadu. For 10 points, name this poem by Samuel Taylor Coleridge.

ANSWER: “**Kubla Khan**”

083-10-20-02109

10. In this novel, the protagonist believes himself to be the father of Maria Truczinski’s child and later goes to jail after he claims to have murdered Sister Dorothea, a nurse from Düsseldorf. This novel, which forms part of a series with *The Dog Years* and *Cat and Mouse*, concerns a man who can shatter glass with his voice and stops growing at the age of three. This first part of the Danzig Trilogy focuses on a character named Oskar Matzerath. For 10 points, name this novel by Günter Grass titled after a metallic instrument.

ANSWER: *The **Tin Drum*** [or *Die **Blechtrommel***]

064-10-20-02110

11. This psychologist planted letters in public places in his "lost letter" experiment. He conducted an experiment in which participants were asked to forward letters to acquaintances. That experiment, the small world experiment, popularized the idea of "six degrees of separation." In his most famous experiment, an actor claiming to have a heart condition was quizzed on word pairs. For 10 points, name this psychologist who tested obedience by asking participants to administer electric shocks.

ANSWER: Stanley **Milgram**

024-10-20-02111

12. This element violates the Madelung rule by having ten electrons in the 3d orbital. Speculum metal is composed of tin and this element. The sulfate of this element is commonly used along with steel wool to demonstrate exothermic reactions. On the periodic table, it is in the same family as silver and gold. When exposed to air, it can form a green patina known as verdigris. For 10 points, name this element with symbol Cu.

ANSWER: **copper** [accept **Cu** before mentioned]

024-10-20-02112

13. One prominent opponent of this policy is Patrick Murphy, who gives his name to an amendment to the 2011 National Defense Authorization Act. Its constitutionality was challenged in *Log Cabin Republicans v. United States America*. On the day before the 2009 National Equality March, Barack Obama announced his intent to end this policy. For 10 points, name this policy prohibiting homosexual or bisexual people from serving in the U.S. military.

ANSWER: **don't ask, don't tell** [or **DADT**]

024-10-20-02113

14. The "skip" variety of this data structure is a type of probabilistic data structure. S-expressions consist of these data structures, which are in Lisp, a language built around processing them. When each component of one of these contains a reference to the next component, it is called the "linked" variety. For 10 points, name this data structure which consists of an ordered collection of values.

ANSWER: **lists**

024-10-20-02114

15. The Archimedean property is a key property of these numbers as they are an ordered field. These can be constructed using Cauchy sequences or Dedekind cuts. The fact that they are uncountable can be demonstrated using Cantor's diagonal argument. They can be divided into the rational numbers and the irrational numbers. They can be written as decimal representations with an infinite sequence of digits after the decimal point. For 10 points, name these numbers, the set of which is represented by a capital R.

ANSWER: **real** numbers

024-10-20-02115

1A. Rene Magritte's *The Treachery of Images* features what common item above a caption noting that "This is not" one of those items?

ANSWER: a **pipe**

1B. What Greek letter names a type of decay when an up quark converts into a down quark and a pleated sheet seen in a protein's secondary structure?

ANSWER: **beta**

2A. A sous-chef may be the top assistant in the kitchen, but what does "sous-chef" literally translate to in English?

ANSWER: **under**-chef

2B. What mid-major university made the finals of the 2010 NCAA Division I Men's Basketball Championship, but lost when Gordon Hayward's last-second heave rimmed out?

ANSWER: **Butler** University

3A. This is a 10-second computation question. If the circumference of a circle is 10 pi, what is the area in terms of pi?

ANSWER: **25** pi

3B. This is a 10-second computation question. What is the sine of an angle in a right triangle whose opposing side is length 4 and the length of the other leg is length 3?

ANSWER: **4/5** [or **0.8**]

4A. In what 1066 battle did the forces of William the Conqueror defeat Harold Godwinson to gain control of England?

ANSWER: Battle of **Hastings**

4B. Which 15th-century Dutch artist collaborated with his brother Hubert on the *Ghent Altarpiece* and also painted *The Arnolfini Wedding*?

ANSWER: **Jan van Eyck** [prompt on **van Eyck**]

5A. This is a 20-second computation question. What is the mean of the list 11,99,34,60,70,23,29,100,17.

ANSWER: **49.22**

5B. This is a 20-second computation question. A garden has 11 red roses and 17 white roses. If two flowers are picked randomly without replacement, what is the probability as a reduced fraction that two picked flowers are red?

ANSWER: **55/136**

6A. John Calhoun was a proponent of what philosophy, by which a state could declare a federal law invalid within its borders, and which led to a namesake nineteenth-century crisis?

ANSWER: **nullification**

6B. *The Skeptical Chemist* outlined the theories of what seventeenth-century British scientist, better known for a law stating that the pressure and volume of a gas are inversely related?

ANSWER: Robert **Boyle**

7A. This is a 30-second computation question. Consider the system of equations $2x^2+7x+10y=50$, $2y+3x=9$. The solutions for x in that system are of the 2 plus or minus half the square root of what integer?

ANSWER: **26**

7B. This is a 30-second computation question. What is the product of the following 3 by 3 matrices which will be described by reading the first row from left to right, then second row, and so on. 1, 2, 3, 1, 2, 3, 4, 5, 6 times 8, 9, 7, 6, 5, 4, 2, 2, 2. Give your answer in the same format.

ANSWER: **26, 25, 21, 26, 25, 21, 74, 30, 60**

8A. What is the name for a term that is derived from a person's name?

ANSWER: **eponym**

8B. What name is given to the asteroids that occupy stable Lagrange points around Jupiter's orbit?

ANSWER: **Trojans**

9A. What island is split between Haiti in the west and the Dominican Republic in the east?

ANSWER: **Hispaniola**

9B. Benjamin Netanyahu warned that what country, the site of the Shiite militant group Hizbollah, was becoming an Iranian satellite in the wake of Mahmoud Ahmadinejad's October 2010 visit?

ANSWER: **Lebanon** [or **Lebanese Republic**; or Al Jumhuriyah al **Lubnaniyah**]

10A. Weather occurs in which lowest layer of the atmosphere, found just below the stratosphere?

ANSWER: **troposphere**

10B. A rash of copycat deaths followed the publication of Goethe's *The Sorrows of Young Werther* (VAIR-tur). How did Werther die?

ANSWER: **suicide** [accept self-inflicted **gunshot** wound; accept equivalents of either answer]

1. The protagonist of this novel plays billiards with Count Greffi, and engages in the game of “priest-baiting” with his friend, Lieutenant Rinaldi. After being wounded, the protagonist of this novel falls in love with a British nurse in Milan named Catherine Barkley, who dies giving birth to his stillborn child. This novel focuses on Frederic Henry, an ambulance driver who deserts from the army during World War I. For 10 points, name this novel by Ernest Hemingway.

ANSWER: A *Farewell to Arms*

080-10-20-02117

2. In the *Odyssey*, this Greek god gave Odysseus the Moly herb to help ward off Circe. After Zeus’s affair with Semele, this Greek god was forced to protect the infant Dionysus. With Dryope, this god was the father of Pan, the god of shepherds. This Greek god who carried the staff Caduceus was the god of liars and travelers and was given a pair of golden footwear by Hephaestus. For 10 points, name this Greek god known for his winged sandals who serves as a messenger.

ANSWER: Hermes

064-10-20-02118

3. In prokaryotes, these organelles have a sedimentation coefficient of 70, while in eukaryotes it is 80. These organelles are composed of two subunits of unequal size, which consist of proteins and RNA. The rough endoplasmic reticulum is so called because it is covered with these. They decode messenger RNA to produce a chain of amino acids, a process known as translation. For 10 points, name these organelles which assemble proteins.

ANSWER: ribosomes

024-10-20-02119

4. One type of this quantity is related to thermal diffusivity by the Prandtl (PRAN-tul) number. Increased by the “no-slip condition,” this quantity is measured in poise (PWAHZ). The ratio of inertial forces and this quantity gives the Reynolds number. A decrease in its magnitude causes turbulence, and it is not observed in superfluids. For 10 points, give this term for a fluid’s resistance to flow.

ANSWER: viscosity

079-10-20-02120

5. This American poet found inspiration in the painting *Landscape with the Fall of Icarus* in writing his collection *Pictures from Brueghel*. This author of “Asphodel, That Greeny Flower” and the epic *Paterson* wrote a poem in which the speaker seeks forgiveness for eating the “delicious” and “sweet” plums that the subject had been saving. For 10 points, name this poet who wrote about an object “beside the white chickens” upon which “so much depends” in “The Red Wheelbarrow.”

ANSWER: William Carlos Williams

079-10-20-02121

6. Two of the delegates at the negotiations leading to this treaty were nicknamed the "Heavenly Twins." An eight point plan failed to be presented by Ho Chi Minh during the negotiations of this treaty. Article 231 of this treaty is commonly known as the "War Guilt Clause." It was the result of a conference attended by diplomats such as Georges Clemenceau and David Lloyd George. This treaty saw Alsace and Lorraine returned to France and Germany forced to pay war reparations. For 10 points, name this treaty signed in 1919 in France at the end of World War I.

ANSWER: Treaty of Versailles

024-10-20-02122

7. This composer set works by the poet Hermann Mueller in his song cycle *Die schoene Muellerin* and another cycle that ends with a musical depiction of a hurdy-gurdy man. This composer of *Winterreise* also wrote a "Little" and a "Great" C-major symphony. He used the song "Die Forelle" as the basis of his *Piano Quintet in A Major*. For 10 points, name this Austrian composer of the *Trout Quintet* who composed hundreds of Lieder in addition to his eighth, "Unfinished" symphony.

ANSWER: Franz Peter **Schubert**

026-10-20-02123

8. R. H. Blyth popularized this type of poem in England. Ezra Pound's "In a Station of the Metro" was written in the style of this type of poem, which was derived from the renga. For most of their history they contained a phrase called a *kigo* associated with a certain season. Much of the work *The Narrow Road to the Deep North* contains this type of poem written by Matsuo Basho. For 10 points, name this type of poem with three lines of five, seven and five syllables that originated in Japan.

ANSWER: **haiku**

064-10-20-02124

9. Cross linking in this protein occurs when two oxidized derivatives of lysine link up; the amount of cross linking that occurs in this protein increases with age. This protein contains three left handed helices which combine to form a triple helix. About one third of this protein is amino acid is glycine; this protein also consists of hydroxyproline. A lack of ascorbic acid causes an inability to synthesize hydroxyproline, causing a breakdown of this protein in the gums in a disease called scurvy. For 10 points, name this elastic protein found in connective tissue, skin and cartilage.

ANSWER: **collagen**

064-10-20-02125

10. The European version of this game gives each player a certain secret mission. A version of this game subtitled "2210 AD" includes a map for this moon. Two of the regions in this game are Irkutsk and Yakutsk. In this game, the attacking side can use up to three dice while the defending side can use up to two dice. A common strategy early in this game is the control of Australia. For 10 points, name this board game centering on world conquest.

ANSWER: **Risk**

064-10-20-02126

11. President Alberto Fujimori crushed the Maoist Shining Path guerrillas in, for 10 points, what South American country, where Fujimori's corrupt role caused him to flee in 2000 to his ancestral home of Japan?

ANSWER: Republic of **Peru** [or Republica del **Peru**]

080-10-20-02127

12. The Barkhausen effect concerns tiny inconsistencies in materials displaying this property, which is visualized on a microscopic level by the Ising model. This property lags when the applied field is changed in a process called hysteresis. Disappearing above the Curie temperature, it is seen in materials that remain magnetized after an external magnetic field is removed. For 10 points, name this type of magnetism observed in cobalt, nickname, and, as its name suggests, iron.

ANSWER: **ferromagnetism**

079-10-20-02128

13. Bill Bradley ran for the Democratic nomination in this election. One state's Secretary of State, Katherine Harris, played a large role in the final outcome of this election. That state purged 50,000 felons from the voting records of this election, many of whom were innocent. Hanging chads and misleading butterfly ballots during this election caused an unusually high number of votes for Pat Buchanan in Florida. For 10 points, name this tightly contested presidential election that was decided by the Supreme Court case *Bush v. Gore*.

ANSWER: Election of **2000**

064-10-20-02129

14. This psychologist theorized that humans adapted their schemas to new objects by "assimilation" and "accommodation". This thinker attempted to devise a scientific theory of thought, which he called genetic epistemology. The sensorimotor stage is the first of this psychologist's four stages of child development. For 10 points, name this Swiss child psychologist.

ANSWER: Jean **Piaget**

080-10-20-02130

15. The Platt Amendment withdrew troops left over from this conflict that was partially sparked by a letter from Foreign Minister De Lôme. This war included the Battle of El Caney and saw the proliferation of William Randolph Hearst's "yellow" journalism. Sparked by the explosion of the U.S.S. *Maine*, this conflict saw the Rough Riders charge San Juan Hill under Teddy Roosevelt. Resulting in the transference of Puerto Rico, for 10 points, name this 1898 war fought between the U.S. and an Iberian nation.

ANSWER: **Spanish-American** War

079-10-20-02131

1. This organ located in the sell turcica develops from a depression called Rathke's pouch. Its anterior section release two materials abbreviated LH and FSH. One material secreted by this organ sometimes known as vasopressin regulates the body's water retention while another material is released in females during labor and breastfeeding. For 10 points, name this organ that secretes antidiuretic hormone, oxytocin, and growth hormone, earning it the nickname the "master gland".

ANSWER: **pituitary** gland

064-10-20-02132

2. The efficiency of the Carnot cycle is equal to one minus the values of this for the two reservoirs. The change in entropy is equal to the change in heat divided by this. The calorie is defined in terms changing a gram of water by one unit of this. In the standard form of the ideal gas law, the product of number of moles and the ideal gas constant is multiplied times this on the right hand side. Converting between two important measures of it involves adding or subtracting 273. For 10 points, name this property that is measured in Kelvin and degrees Celsius.

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

001-10-20-02133

3. Carbonyls act as donors in this interaction, but amines can act as either a donor or acceptor. This interaction allows carboxylic acid to form dimers. As temperature decreases, the strength of these increase, and they allow for the formation of six membered puckered rings in ice. They can be intermolecular or intramolecular, and are formed between a highly electronegative atom and an atom of the namesake element. For 10 points, name these interactions that help explain many of properties of water, which are named for one of the elements found in water.

ANSWER: **hydrogen bond**

001-10-20-02134

4. This Biblical figure gained his name when, at his birth, his mother said "I have possessed a man by the favour of the Lord." This man founded the city of Enoch, which he named after his son. He bore a special mark on his forehead, "lest any finding him should kill him," and was banished to the Land of Nod. After performing his best-known action, this figure asked, "Am I my brother's keeper?" For 10 points, name this Old Testament son of Adam who killed his brother Abel.

ANSWER: **Cain**

080-10-20-02135

5. This case was combined with four other cases when it was heard by the Supreme Court, including *Gebhart v. Belton* and *Bolling v. Sharpe*. One part of this case said its decision must be enforced "with all deliberate speed." It overturned the *Plessy v. Ferguson* decision of "separate but equal." This case resulted in a unanimous decision by the Warren Court in 1954 that cited the Equal Protection Clause. For 10 points, name this 1954 Supreme Court case that held that segregation in public schools is unconstitutional.

ANSWER: **Brown v. Board of Education of Topeka**

024-10-20-02136

This is a 10-second computation question. Solve $4x+5=6x$ for x .

ANSWER: $x =$ **2.5**

024-10-20-02137