

1. This author wrote about the atrocities committed by the Red Army in the poem *Prussian Nights*. A novel called *August 1914* begins his novel cycle *The Red Wheel*. He wrote a novel in which Oleg Kostoglotov lives in a cancer ward. He also wrote a short novel about a prisoner whose last name is Shukhov and a long novel which drew on his experiences as a zek to describe life in Soviet labor camps. For 10 points, name this author of *One Day in the Life of Ivan Denisovich* and *The Gulag Archipelago*.

ANSWER: Aleksandr Isayevich **Solzhenitsyn**

024-10-22-08101

2. One experiment that successfully measured a property of this particle used two charged plates to try and suspend droplets sprayed out by an atomizer. That experiment run by Robert Millikan was the oil drop experiment. In different atomic orbital theories, this type of particle can either be found in a cloud or in various levels of orbitals. For 10 points, name this particle emitted in a cathode ray and found moving around the outside of the nucleus of an atom with a negative charge.

ANSWER: **electrons**

023-10-22-08102

3. The protagonist of this novel spends some time with the spoiled debutante Mercedes and her shallow and unprepared companions Hal and Charles. That protagonist is kidnapped by Manuel the gardener from Judge Miller's estate before working with Francois and Perrault delivering mail. Other characters in this novel include the prospector Jack Thornton, whose death at the hands of Yeehat Indians is avenged by the protagonist. For 10 points, name this Jack London novel about the adventures of a dog named Buck.

ANSWER: *The **Call of the Wild***

015-10-22-08103

4. Kevin Sheekey's resignation spurred rumors that this politician would run for the 2012 presidential nomination, though he emphatically denied those rumors on "Meet the Press" in December. Currently the 10th richest person in US and majority owner of his namesake financial data and media company, his office has come under fire for the handling of the Christmas blizzard. For 10 points, name this mayor of New York City.

ANSWER: Michael **Bloomberg**

084-10-22-08104

5. In this novel, a Shaker man who believes he is the angel Gabriel declares that the title character is a god. Another man offers a gold doubloon bearing a picture of three mountain peaks to the first to sight the title character. The prophesy of the shady Fedallah comes to pass in this novel when a character ignores the warnings of Starbuck and the Quaker owners of the *Pequod* and vows revenge on the title character. For 10 points, name this novel narrated by Ishmael in which Captain Ahab chases a white whale.

ANSWER: **Moby-Dick**

015-10-22-08105

6. A polyatomic ion with negative one charge consists of three atoms of this element and is called azide. Two atoms of this element and four atoms of hydrogen form a compound used in rocket fuel, called hydrazine. Negative 196 degrees Celsius is the boiling point for the compound that the natural elemental form of this element is found in. This diatomic element contains a triple bond and is the most abundant gas in the atmosphere. For 10 points, identify this element with atomic number 7 and symbol N.

ANSWER: **nitrogen** [or **N** before it is read]

020-10-22-08106

7. This President's supporters were inspired by an incident in Jefferson's presidency to give him a 1400 pound block of cheese. During this man's presidency, Peggy Eaton's being snubbed in the Petticoat Affair resulted in the adoption of his "Kitchen Cabinet." This man served as military governor of Florida after his success in the Seminole War. During the War of 1812, he commanded the winning side at the Battle of New Orleans. For 10 points, name this seventh President of the United States.

ANSWER: Andrew **Jackson**

015-10-22-08107

8. John Harrison designed one of these for ships, thus winning a 20,000 pound prize offered by the British Government. That device enabled better calculation of Longitude. Ctesibius improved on the Greek version called a clepsydra, which used water. Christiaan Huygens invented a pendulum one, while a Foucault pendulum can also be used as one. In 1955, one using cesium was invented. That is an atomic one, which are the most accurate. For 10 points, name these machines that can tell one the time.

ANSWER: **clock** [or **chronometer**]

001-10-22-08108

9. In this film, an apparent puddle blood is revealed to be a broken juice box, and a sign for the Bank of Evil reveals that it was formerly Lehman Brothers. During this film, the protagonist uses a laser gun to win a giant stuffed unicorn at an amusement park, causing another character to yell out "It's so fluffy!" Jason Segel plays a man named Vector, who obtains a shrink ray needed to steal the moon. For 10 points, name this 2010 animated film in which Steve Carell voices an evil genius who adopts three children.

ANSWER: ***Despicable Me***

064-10-22-08109

10. During this battle, part of the 1st Panzer Division murdered 84 American POWs, which is known as the Malmedy Massacre. The resistance at Bastogne and the eventual arrival of Patton's Third Army from the south resulted in an Allied victory at this battle. The German code name for the offensive during this fight was the "Watch on the Rhine." Begun in December 1944, for 10 points, name this battle of World War II so named because of the large incursion into Allied lines.

ANSWER: Battle of the **Bulge** [or **Ardennes Offensive**]

084-10-22-08110

11. An iron-containing double one of substances is named for Mohr. Molten ones can be used as coolants in nuclear reactors. One of these that exhibits piezoelectricity is named for Rochelle. Another one of these, magnesium sulfate, is used medicinally. Electrochemical cells are often connected using a bridge made of these. These ionic compounds result from an acid-base neutralization reaction. For 10 points, name these substances, the "table" one of which has formula NaCl.

ANSWER: **salts**

001-10-22-08111

12. This process ended with the fall of the Nasrids and the flight of Boabdil. During one episode of this lengthy historical process, a saint was given the nickname "Matamoros" after believers saw him manifest at the Battle of Clavijo. Including such battles at Covadonga and Navas de Tolosa, this process was completed in 1492, when Granada fell to Ferdinand and Isabella. For 10 points, identify this process of Christian kingdoms conquering territory from Muslim kingdoms to create modern Spain.

ANSWER: la **Reconquista** [or the **Reconquest**]

019-10-22-08112

13. This artist painted a woman kneeling next to the bed of a tubercular girl in his *The Sick Child*. That work, along with such paintings as *Death in the Sickroom* and *Vampire*, is a part of this artist's *Frieze of Life* series. That same series also includes a painting that depicts two men in the left background under a blood-red sky while the central figure opens his mouth and clutches his head between his hands. For 10 points, name this Expressionist painter, a Norwegian who created *The Scream*.

ANSWER: Edvard **Munch** (moonk)

023-10-22-08113

14. This man had Charles Blair create nearly a thousand pikes to be used as a part of one of this man's plans. Another action led by this man targeted the absent Dutch Henry, resulting in the death of five other men. This leader of the Pottawatomie Massacre also led an action that was put down by marines under Jeb Stuart and Robert E. Lee. That action resulted in this man's capture after he tried to capture a federal armory. For 10 points, name this abolitionist who was hanged after he led a raid on Harpers Ferry in 1859.

ANSWER: John **Brown**

023-10-22-08114

15. People escaping during this event utilized the McCorkell Line to seek passage to Canada and US. In the country where this took place, it is referred to as "an Gorta Mor" or "an Drochshaol." One response to this event was Robert Peel's decision to repeal the Corn Laws. Thought to be caused an oomycete known as *Phytophthora infestans*, this event resulted in approximately a million deaths. For 10 points, name this massive dying caused by a blight, which affected a particular crop in the 1840's and 50's in Ireland.

ANSWER: Irish **Potato** Famine

084-10-22-08115

1A. What stock car driver has won the last five NASCAR Sprint Cup Series Championships?

ANSWER: Jimmie Kenneth **Johnson**

1B. Name the Nobel Prize winner and former Georgia governor who created the Departments of Energy and Education as President.

ANSWER: Jimmy **Carter** [or James Earl **Carter**, Jr.]

2A. Ended by the Permian Extinction, what geologic era saw proliferation of trilobites, fishes, and the emergence of life from the seas?

ANSWER: **Paleozoic** Era

2B. What Nobel-winning South African author has written the novels *Waiting for the Barbarians* and *Disgrace*?

ANSWER: John Maxwell **Coetzee**

3A. This is a 10-second calculation question. What is the arcsine, or inverse sine, of 3π over 4?

ANSWER: **square root** of **2**

3B. This is a 10-second calculation question. What is the prime factorization of 56?

ANSWER: **2³ x 7** [or **2 x 2 x 2 x 7**]

4A. Name the salt flats near the Great Salt Lake where several land-speed records have been set.

ANSWER: **Bonneville** Salt Flats

4B. Name the element whose hydrides are the subject of Wade's rules, and which has atomic number five.

ANSWER: **boron** [or **B**]

5A. This is a 20-second calculation question. What is the measure of an internal angle of a regular octagon?

ANSWER: **135** degrees [or **3pi/4**]

5B. This is a 20-second calculation question. What is the mean of the set {1, 2, 4, 8, 16, 32, 64}?

ANSWER: **127/7**

6A. Name the French sociologist who piggybacked on Bronislaw Malinowski's research to write *The Gift*.

ANSWER: Marcel **Mauss**

6B. Which Romanian sculptor is known for his controversial *Princess X* and a series of sleek avian sculptures, *Bird in Space*?

ANSWER: Constantin **Brancusi** (bran-COO-see)

7A. This is a 30-second calculation question. What is the equation, in standard form, of a parabola with its vertex at the origin and its focus at (0, 2)?

ANSWER: **y = 1/8 x²**

7B. This is a 30-second calculation question. What is the probability of selecting an even number at random from the first 99 numbers in the Fibonacci sequence?

ANSWER: **1/3** [or **0.33** repeating]

8A. What trigonometric function, the reciprocal of the secant, relates the adjacent side and hypotenuse of a right triangle?

ANSWER: **cosine**

8B. What author of *The Dharma Bums* and *Big Sur* also wrote *On the Road*?

ANSWER: Jack **Kerouac**

9A. Gelatin is a hydrolyzed version of what collection of proteins, which are found in tendons, ligaments, and the hair and skin?

ANSWER: **collagen**

9B. Name the leader of the Swiss Reformation who met Martin Luther at the Marburg Colloquy.

ANSWER: Huldrych **Zwingli** [or Ulrich **Zwingli**]

10A. Name ballet with music by Aaron Copland contains such sections as “Hoe-Down” and “Buckaroo Holiday” and features the characters the Cowgirl and the Rancher.

ANSWER: **Rodeo**

10B. What German word refers to a novel which deals with the coming-of-age of a character, such as *Wilhelm Meister's Apprenticeship* by Goethe?

ANSWER: **Bildungsroman**

1. The Excavate supergroup of this taxon lack a notable structure and another division of this taxon is Unikonta. Flagella in this group show a nine plus two arrangement. Contrary to previously held belief, these are not the only organisms with proteins in the tubulin family. One hypothesis holds that these are the result of endosymbiosis. These contain mitochondria and membrane bound organelles including a nucleus. For 10 points, name this domain of life that contains animals and plants.

ANSWER: eukaryota [or eukaryotes]

001-10-22-08117

2. The causative agent of this disease can be typed using either IS6110 RFLP analysis or spoligotyping. One blood test for the disease is QFT-G, which checks for the presence of interferon gamma. Treatment uses the DOT strategy. The Mantoux test works by injecting PPD into the patient. That test works for the latent form of this disease and is a skin test. It is caused by a *Mycobacterium*. A symptom of it is a persistent cough. For 10 points, name this deadly disease of the lungs that used to be called consumption.

ANSWER: tuberculosis

001-10-22-08118

3. This thinker pointed out that, since goods are valuable not for the labor put into them, but their ability to be exchanged, they are attributed human characteristics, a process he calls “commodity fetishism.” This one-time Young Hegelian originated the aphorism that “Religion is the opiate of the masses.” One of this man’s works begins by noting that “a spectre is haunting Europe;” that work was co-written with Friedrich Engels. For 10 points, name this author of *Das Kapital* and *The Communist Manifesto*.

ANSWER: Karl Marx

080-10-22-08119

4. Unlike a linked list, this data structure does not require memory for references; elements are addressed adding a base memory address to the product of a fixed increment and the index. A one-dimensional one is considered to be linear. One of these stores multiple elements of the same type in contiguous memory locations. For 10 points, name this data structure, analogous to the mathematical matrix.

ANSWER: array

051-10-22-08120

5. As this figure's ship sailed, rotten planks were replaced with new ones, leading to a philosophical problem concerning whether the original ship remained. Parts of this man's thighs were left in the underworld after he Pirithous were stuck to magical chairs. He killed a robber who forced victims to conform to the size of his bed named Procrustes. Aided by Ariadne's ball of string, this figure slew the Minotaur in the labyrinth. For 10 points, name this man who founded Athens and served as its first king.

ANSWER: Theseus

026-10-22-08121

6. In October 2010 in this country, twenty-year-old college student Marisol Valles García agreed to replace Manuel Castro in a position that had been vacant for a year after Castro was beheaded. That job as police chief of border city Guerrero in this country has been dangerous due to the war on drug cartels started in earnest in 2006. For 10 points, name this North American country currently led by Felipe Calderón.

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

023-10-22-08122

7. *In terrorem* clauses in these documents attempt to dissuade lawsuits about their validity. One process of resolving issues arising from these documents is referred to as ademption. A codicil is a document that amends small portions of these. Authors of these documents are called testators. For 10 points, name these documents that outline the distribution of one's property by an executor, which are often paired with testaments.

ANSWER: last **wills**

085-10-22-08123

8. This composer parodied Richard Wagner's "Tristan chord" in a ragtime-inspired movement of a piece meant to evoke childhood. He used a flute solo to open a piece inspired by the frolicking of a Stephen Mallarme (MAH-lar-may) title character. This composer of the *Children's Corner* also wrote the opera *Pelleas and Melisande* and a work that depicts the "play of the waves." For 10 points, name French impressionist composer who wrote *La Mer* and *Prelude to the Afternoon of a Faun*.

ANSWER: Claude **Debussy** [or Claude-Achille **Debussy**]

026-10-22-08124

9. They released their album *Beggars Banquet* with a plain white cover after a picture of a dirty restroom was nixed by the label. The title character of one of their songs "killed the czar and his ministers" and says "pleased to meet you, hope you guess my name." Another of their songs bemoans the distance of the title state even though "I try and I try and I try and I try." For 10 points name this British invasion band of "Satisfaction," composed partially of Keith Richards and Mick Jagger.

ANSWER: the Rolling **Stones**

015-10-22-08125

10. This law can be expressed in an integral or differential form, and can be shown to be equivalent by the Kelvin-Stokes theorem. This law relates the magnetic field around a closed loop to the electric current in the loop. One of the four laws in Maxwell's Equations, Maxwell added a displacement current term to this law. For 10 points, name this law of classical electromagnetism named after its French discoverer.

ANSWER: **Ampere's** Circuital Law

084-10-22-08126

11. Twenty-two traits of this figure are outlined in a book by Lord Raglan. One of those traits is that an attempt is made on his life shortly after his birth. In Vladimir Propp's analysis of fairy tales, this figure typically marries a princess. Joseph Campbell wrote about one "with a thousand faces" in a book discussing the monomyth of this figure. The subtitle of *Vanity Fair* characterizes it as a novel without one of these. For 10 points, name this type of figure, examples of which include Achilles and Heracles.

ANSWER: **hero**

024-10-22-08127

12. In one novel by this writer, Alexander Reschke and Alexandra Piatkowska establish the Polish-German-Lithuanian Cemetery Association. That novel is *The Call of the Toad*. A long-lived magical animal appears before the Women's Revolutionary Tribunal in this author's *The Flounder*. Jan Bronski acts as a father figure to the central character of another of his novels. That character can shatter glass with his voice and stopped growing at the age of three, and is named Oscar Matzerath. For 10 points, name this author of *The Tin Drum*.

ANSWER: Günter Wilhelm **Grass**

001-10-22-08128

13. This quantity's SI unit is used to measure qx which is equal to the thermal conductivity times the temperature gradient times the area. For a sinusoidal wave, this is proportional to the amplitude squared times the square of the frequency times the wave velocity. Intensity is this per area. It is equal to current squared times r . One unit of this is equal to a joule per second. For 10 points, name this quantity which is work per time and is measured in watts.

ANSWER: **power**

001-10-22-08129

14. This author of a historical novel about the pretender Perkin Warbeck wrote about Lionel Verney surviving a plague-ravaged world in *The Last Man*. Her most famous novel grew out of a ghost story writing contest with Lord Byron and her husband. The title character of that novel by this author loses his wife Elizabeth Lavenza on his wedding night and relates his story of scientific experimentation to Robert Walton. For 10 points, name this daughter of William Godwin and author of *Frankenstein*.

ANSWER: Mary **Shelley**

015-10-22-08130

15. This language has seven verb conjugations including the intensive, *pi'el*; the causative, *hif'il*; and the reflexive, *hitpa'el*. Much like its larger neighbor, this language's verbs consist of three-consonant roots. Its alphabet, which is read right to left, is used to write Ladino and Yiddish. For 10 points, name this Semitic language which Eliezer Ben-Yehuda revived from the Old Testament for use as the primary language of Israel.

ANSWER: Modern **Hebrew** [or **Ivrit**]

019-10-22-08131

1. One kingdom of this name was converted to Catholicism in the 1500's by its king Afonso I. A modern nation with this name was first led by Joseph Kasavubu. One personal ruler of this location made use of the Force Publique, which cut off the hands of many unpaid workers in this location. For 10 points, give the name of that state ruled by Leopold II of Belgium, which also names two African countries separated by a same-named river that passes through Brazzaville and Kinshasa.

ANSWER: Congo [or Kingdom of Kongo; or Democratic Republic of Congo; or Congo Free State; or Belgian Congo; or Republic of the Congo; or Republique Democratique du Congo; or État Indépendant du Congo; or Republique du Congo]

023-10-22-08132

2. This author wrote about the extinction of the Bermuda Ern through an outbreak of athlete's foot in a novel about the Pontiac dealer Dwayne Hoover. He included the Handicapper General Diana Moon Glampers in a story about a society that mandates mediocrity. This author of *Breakfast of Champions* and "Harrison Bergeron" included his recurring character Kilgore Trout in a novel in which Billy Pilgrim visits Tralfamadore and becomes unstuck in time. For 10 points, name this author of *Slaughterhouse-Five*.

ANSWER: Kurt Vonnegut, Jr.

015-10-22-08133

3. This character is abandoned at boarding school by his uncaring father and devastated by the death of his sister Fran. He has happy memories of his fiancé Belle and a dance hosted by Mr. Fezziwig. This character refuses an invitation from his nephew Fred. He is surprised to see the face of his old partner Jacob Marley in his doorknocker and dismayed when he is shown his own grave by the Ghost of Christmas Yet to Come. For 10 points, name this character from Dickens's *A Christmas Carol*.

ANSWER: Ebenezer Scrooge

015-10-22-08134

4. With financial support from George Francis Train, this individual published a weekly journal called *The Revolution*. Along with Matilda Gage, this woman was invited to speak at a Syracuse convention. This woman did not support the Fifteenth Amendment despite having been an abolitionist, which caused a split with her friend Frederick Douglass. In New York, she incurred a penalty that she never paid for voting illegally in the 1872 election. For 10 points, name this suffragist who is immortalized on the dollar coin.

ANSWER: Susan Brownell Anthony

020-10-22-08135

5. One of these objects imagines parallel secants coming from a superimposed cone, clearly defining the great circles. The Winkel Tripel one is objectively the most accurate of these objects, though not the best known. That one is flawed for over-representing the size of large landmasses, a consequence of the cylindrical projection used by its Belgian namesake. For 10 points, identify these objects created by Mercator, which are two-dimensional representations of the Earth.

ANSWER: world maps [or maps of Earth; or any other equivalents]

020-10-22-08136

Douglas Engelbart's work on Xerox Star was the ancestor of what now-ubiquitous computing paradigm, in which the user engages with metaphorical visual representations rather than text-based commands to control the system?

ANSWER: GUI [or graphical user interface]

020-10-22-08137

This is a calculation question. What is the median of the set {4, 5, 9, 1, 8, 2}?

ANSWER: 4.5

020-10-22-08137