

1. One character in this film calls for Directive A113, and a celebration is marked with a complimentary cupcake-in-a0 cup. This film features live-action footage from *Hello, Dolly*, and Peter Gabriel wrote "Down to Earth" for this film's end credits. Much of the action in this film takes place on the *Axiom*, a spaceship operated by the Buy n' Large corporation after piles of garbage rendered the Earth uninhabitable. For 10 points, name this 2008 Pixar film featuring EVE and the titular trash-compacting robot.

ANSWER: **WALL-E**

082-10-20-08101

2. This ruler attacked the custom of smoking in his essay "A Counterblast to Tobacco," and he wrote about witchcraft in his book on demonology. Anthony Weldon dubbed this king "the wisest fool in all of Christendom." This ruler angered Parliament by playing favorites, such as by making George Villiers the Duke of Buckingham. During this man's reign, Guy Fawkes attempted to destroy parliament in the Gunpowder plot. For 10 points, name this son of Mary, Queen of Scots, the successor to Elizabeth I and first Stuart monarch.

ANSWER: **James I** of England [or **James VI of Scotland**; prompt on **James**]

080-10-20-08102

3. One portion of this organ is a U-shaped structure known as the loop of Henle, which is a component of a more general structure in this organ which is divided into cortical and juxtamedullary types. Those structures are responsible for regulating the concentration of water in the body, and are called nephrons. For ten points, name this organ responsible for filtering the blood, whose function is carried out in some people by dialysis.

ANSWER: **kidney**

081-10-20-08103

4. Robert Putnam talked about the decline of the "social" type of this resource in *Bowling Alone*. This concept names a work which introduced the idea of "commodity fetishism", and along with land and labor, it is one of the factors of production in classical economics. Startup firms can benefit from the "venture" form of this. For 10 points, name this concept that gives its name to an economic system where goods are privately produced and owned, the title subject of a four-volume work by Friedrich Engels and Karl Marx.

ANSWER: **capital** [or Das **Kapital** or **capitalism**]

082-10-20-08104

5. In French, the third person singular ending in this construction is "e" and the first person plural is "ions." French forms this construction by adding "que" before the pronoun, dropping the "ent" from the third person plural "ils" present tense form, and then adding set endings. It is rarely seen in English, but survives in constructions such as "If I were to tell you." For 10 points, identify this mood which expresses a hypothetical or wishful state, as opposed to the indicative mood.

ANSWER: **subjunctive** mood [or **conjunctive** mood]

019-10-20-08105

6. In one short story, this author created Ozzie Freeman, who threatens to jump from the roof unless all onlookers confess to a belief in Christ. This author of *Goodbye, Columbus* created a title character who tells his life story to the psychiatrist Dr. Spielvogel. This author's recurring character of Nathan Zuckerman appears in his novels *The Human Stain* and *American Pastoral*. For 10 points, name this Jewish-American author who wrote *Portnoy's Complaint*.

ANSWER: Philip Milton **Roth**

026-10-20-08106

7. The idea for this piece of art originated with the historian Edouard de Laboulaye (ed-WAHRD deh LAH-boo-lay). This work was split up into pieces so that it could be transported on the Iserre to Bedloe Island. A 35 foot bronze replica of this work sits next to the Seine River. Joseph Pulitzer led a campaign to fund the pedestal of this work, whose color is due to a verdigris patina. The base of this sculpture is inscribed with Emma Lazarus's poem "The New Colossus." For 10 points, name this Frederic Bartholdi copper sculpture that sits on an island in New York Harbor.

ANSWER: **Statue of Liberty** Enlightening the World

023-10-20-08107

8. This state was the location of Black Mountain College. The region of this state's three major universities is known as the Research Triangle. A large number of shipwrecks have occurred in this state's Outer Banks, which is nearby this state's tourist destination Cape Hatteras. Nicknamed the "Tar Heel state," its large cities include Winston-Salem, Durham, and Greensboro. For 10 points, name this state whose capital is Raleigh.

ANSWER: **North Carolina**

004-10-20-08108

9. In one myth, this god fails in his attempts to court his wife until he seduces her in the guise of a cuckoo. He tricks another of his lovers into turning into a fly, then swallows her, only to find out that she was pregnant and that his daughter is causing him a massive headache. In another myth, this god draws lots with his brothers to see who controls the sky, the sea, and the underworld after he castrates and overthrows his father Cronus. For 10 points, name this philandering leader of the Greek gods who is married to the jealous Hera.

ANSWER: **Zeus**

003-10-20-08109

10. In one sonnet, this poet wrote of a "triple-tyrant" who scatters the bones of Waldensians across the Alps. He also wrote a sonnet that ends "they also serve who only stand and wait." This poet of the sonnet "On the Late Massacre in Piedmont" considered "how [his] light is spent" in the sonnet "On His Blindness." He wrote a long poem in which Satan creates Pandemonium and launches a war against God. For 10 points, name this British poet who wrote *Paradise Lost*.

ANSWER: John **Milton**

026-10-20-08110

11. This event was immediately followed by the mysterious Planck time. Its occurrence can be verified by the fact that matter, at sufficiently large scales, is homogenous and isotropic, as well as by the uniform 2.73 Kelvin temperature of the cosmic microwave background radiation. It was accompanied by a very rapid inflation and soon followed by recombination, during which electrons and protons cooled enough to form atoms. For 10 points, identify this event which occurred roughly fourteen billion years ago and began the existence of the universe.

ANSWER: the **Big Bang**

019-10-20-08111

12. This poet instructed readers to "approach thy grave" like one who "lies down to pleasant dreams" in a poem that admonishes "go not like the quarry slave at night." Another poem by this author describes a bird that pursues its "solitary way." This longtime editor of the *New York Evening Post* wrote a poem titled after the Greek for "meditation on death." For 10 points, name this early American poet who wrote "To a Waterfowl" and "Thanatopsis."

ANSWER: William Cullen **Bryant**

026-10-20-08112

13. This Supreme Court case was ruled on jointly with the similar cases *Vignera v. New York* and *California v. Stewart*. This case built on the decision reached two years earlier in *Escobedo v. Illinois*. The appellant in this case was convicted of kidnapping and rape after signing a confession during an interrogation. For 10 points, name this 1966 Supreme Court case that resulted in the use of a warning that gives people the right to the counsel of an attorney and the right to remain silent.

ANSWER: ***Miranda v. Arizona***

023-10-20-08113

14. This molecule contains four cyclic tetrapyrroles that form a macrocycle. It also contains a 20-carbon phytol chain. A magnesium atom found in a porphyrin ring is characteristic of this compound, which comes in P680 and P700 types. Found in the thylakoid membrane, there are "a" and "b" types of this substance, which is used in photosynthesis to absorb light. For 10 points, name this green pigment in plants.

ANSWER: **chlorophyll**

079-10-20-08114

15. Out of revenge, Enrico Dandolo diverted the Fourth Crusade to sack this capital in 1204. In the 670s, this city defeated a siege by the Umayyad Empire because of the discovery of Greek Fire. This city finally fell to Mehmed II in 1453, causing it to become part of the Ottoman Empire. During its height, this city was the site of the Hippodrome and the Hagia Sofia. During that period, this capital was ruled by such people as Justinian. For 10 points, name this capital of the Byzantine Empire which was later renamed Istanbul.

ANSWER: **Constantinople** [or **Byzantium**; or **Istanbul** before mentioned]

004-10-20-08115

1A. Name the first pharaoh of Ancient Egypt's First Dynasty who united Upper and Lower Egypt.

ANSWER: Menes [or Narmer]

1B. Structured Query Language, or SQL, is a programming language used to interact with what information storing structures?

ANSWER: databases

2A. Ray Manzarek's organ covered for the absent bass on songs such as "Light My Fire" and "Riders on the Storm" by what 1960s band, which was led by the vocals of Jim Morrison?

ANSWER: The Doors

2B. Name this leader of the Likud Party, the current Prime Minister of Israel.

ANSWER: Benjamin Netanyahu

3A. This is a 10-second calculation question. How many ways can you choose 3 items from a set of four items.

ANSWER: 4

3B. This is a 10-second calculation question. What is the standard deviation of the list of numbers 2,2,2,2?

ANSWER: 0

4A. Name the American author who included Clyde Griffiths and George Hurstwood in his novels *An American Tragedy* and *Sister Carrie*, respectively.

ANSWER: Theodore Dreiser

4B. This is a 20-second calculation question. What is $4x^{-16}$ divided by $2 - x$?

ANSWER: $-4x - 8$

5A. This is a 20-second calculation question. How many squares with a diagonal length of square root 8 foot would fit in a 24 foot by 24 foot grid?

ANSWER: 144

5B. What religious movement founded by George Fox has silent meetings for worship, features the concept of an Inner Light, and advocates pacifism?

ANSWER: Quakers or Religious Society of Friends

6A. J. M. Coetzee was inspired to write a novel about Susan Barton, Friday, and Crusoe by what British author's novel *Robinson Crusoe*? He also wrote *Moll Flanders*.

ANSWER: Daniel Defoe

6B. This is a 30-second calculation question. What is the 11th power of the complex number $1 + i$?

ANSWER: $-32 + 32i$

7A. This is a 30-second calculation question. What is the area of a circle whose diameter is the diagonal of a square with a side length of 4, in terms of pi?

ANSWER: 8 pi

7B. What French thinker developed the law of three stages and positivism and is often known as the father of sociology?

ANSWER: Isidore Auguste Marie Francois Xavier Comte

8A. What English inventor created designs for a difference engine and an analytical engine and was an associate of Ada Lovelace?

ANSWER: Charles Babbage

8B. What trigonometric term can refer to either the ratio between the hypotenuse and the adjacent side of an angle, or to a line that intersects a curve at exactly two points?

ANSWER: **secant**

9A. Name this only unobserved particle predicted by the Standard Model, so-called the "god particle" because it gives mass to other particles.

ANSWER: **Higgs boson**

9B. A man is so eager to read the *Arabian Nights* that he hits his head on a ceiling beam and contracts septicemia in "The South," a short story that accompanies "The Library of Babel" and "The Garden of Forking Paths" in what blind Argentinian's *Ficciones*?

ANSWER: Jorge Luis **Borges**

10A. In men's tennis, this feat has not been accomplished since 1969, when Rod Laver did it for the second time, joining Don Budge as the only players to achieve it. What term is used for this calendar-year sweep of the four most prestigious tennis tournaments?

ANSWER: winning the **Grand Slam**

10B. Name the largest New Deal agency, which employed over eight million people in projects such as infrastructure spending and the Federal Writers' Project.

ANSWER: **WPA** [or **Works Progress Administration**]

1. This politician's e-mail account got hacked during one election period by a college student named David Kernell. In the 2010 Senate primaries, this politician chose to support Joe Miller against the heavily favored Lisa Murkowski, leading to Miller winning the primary and gaining a lot of support from the Tea Party movement. At a speech during the 2008 Republican National Convention, this woman claimed that lipstick was the difference between a pit bull and a hockey mom. For 10 points, name this potential candidate for the presidency in 2012 from Alaska.

ANSWER: Sarah Louise **Palin** [or Sarah Louise **Heath**]

023-10-20-08117

2. The phenomenon of the location of this value changing from a normally equivalent other value is called thermal hysteresis. A eutectic point becomes the lowest value at which this point can be reached for systems that undergo a depression of this value. That depression can be caused by the addition of another compound to a pure solvent, such as adding salt to water or ice. For 10 points, name this measure of the point at which the liquid and solid phases are in equilibrium, which for water occurs at 32 degrees Fahrenheit.

ANSWER: **freezing** point [or **crystallization** point; or **melting** point]

023-10-20-08118

3. This figure's husband was given the task of giving good qualities to all animals, but he ran out before he could give one to man. That husband of this figure was warned by his brother to never accept a gift from Zeus. Hephaestus (heh-FESS-tuss) helped create this wife of Epimetheus (EP-uh-ME-thee-us) out of the earth and the air. This woman was given an object by Hermes that caused trouble due to her trait of curiosity. For 10 points, name this character from Greek mythology who released all evil into the world when she opened her box.

ANSWER: **Pandora**

023-10-20-08119

4. The Oneida man Scarouady (SKAR-roh-ah-dee) served during this war and lost his son while serving as a scout for one side. One member of that side had been forced earlier in this war to surrender at Fort Necessity. One battle during this war on the Monongahela River resulted in the death of Edward Braddock. This war ended by a Treaty of Paris led to one side's loss of most of their New World possessions. For 10 points, name this nine year war that created a large debt for Britain, which helped spark the American Revolution twelve years later.

ANSWER: **French and Indian** War [prompt on **Seven Years'** War]

023-10-20-08120

5. This organelle contains the GAAP protein, which plays a role in halting apoptosis. It can add a sugar tag to target molecules for the lysosomes. This organelle is composed of stacked cisternae. Its basic function is to process and package newly synthesized proteins and lipids. For 10 points, name this cell organelle that is attached to the endoplasmic reticulum, which is named for an Italian scientist.

ANSWER: the **Golgi** apparatus [accept "body" or "complex" or other synonyms for "apparatus"]

026-10-20-08121

6. This European country was home to the 1970s "historic compromise" between its communist party and its other political parties. This country's center-right coalition is known as the "Pole of Freedoms." During the "Years of Lead," the Red Brigades kidnapped and murdered this country's prime minister, Aldo Moro. This republic was created when, in 1946, Victor Emmanuel III abdicated the throne. For 10 points, name this country that has recently been led by prime minister Romano Prodi from Rome.

ANSWER: **Italy** [or **Italian Republic**; or Repubblica **Italiana**]

026-10-20-08122

7. One form of this device that makes use of a helical spring and an object with two protruding vanes is named for Lionel Robert Wilberforce. Another setup, which is the coupled form of this device, connects two individual types of this object by a spring. Connecting two of these devices directly to one another can represent chaotic movement in the double variety of this object. For 10 points, name this type of object that most simply consists of a mass connected to a string that can swing in simple harmonic motion.

ANSWER: **pendulums**

023-10-20-08123

8. The highest point in this country is on its peninsula at Mount Catherine. This country's aptly named Western Desert features a deep basin called the Qattara Depression. The temple complex of Abu Simbel had to be relocated in this country after its location was compromised by the building of the Aswan High Dam. That dam in this country resulted in the creation of Lake Nasser. For 10 points, name this country that controls the Sinai Peninsula and has the delta of the Nile River right near its capital Cairo.

ANSWER: Arab Republic of **Egypt** [or Jumhuriyat **Misr** al-Arabiyyah]

023-10-20-08124

9. One character in this work helps kill the leader of an opposing army by throwing her shoe at him. This work starts out with a scene set at a party in the Stahlbaum house, while other scenes in it take place in the Land of Snow and the Land of Sweets. The title object of this ballet is given as a gift by Drosselmeyer, and it is broken shortly after by Fritz. Composed by the creator of *Swan Lake*, this ballet also sees Clara dance with the titular toy. For 10 points, name this ballet that features the Dance of the Sugar Plum Fairy and was created by Pyotr Tchaikovsky.

ANSWER: *The **Nutcracker***

023-10-20-08125

10. One character in this novel botches a clubfoot operation, which partly contributes to the fall of an estate that is eventually controlled by Lheureux. The title character of this novel procures arsenic from Homais (oh-MAY) in the midst of her crumbling relationship with her husband, a country doctor named Charles. For 10 points, name this novel in which the title character commits suicide after having affairs with Leon and Rodolphe, written by Gustave Flaubert.

ANSWER: ***Madame Bovary***

026-10-20-08126

11. This man painted a girl in a striped blue and yellow dress at the center of a crowd of hundreds of people under chandeliers in his painting of a dance at *Le Moulin de la Galette*. He painted a small girl in a blue dress and red bow standing in a garden in his *Girl with a Watering Can*. This artist painted a man in a yellow hat and sleeveless shirt under a red awning standing next to a table loaded with food and wine. For 10 points, name this impressionist painter of *Luncheon of the Boating Party*.

ANSWER: Pierre-Auguste **Renoir**

015-10-20-08127

12. This theory was originally suggested by Abraham Ortelius in 1596, and was later opposed to another theory based on paleomagnetic evidence, the polar wandering theory. This process is thought to be driven by another process whereby magma seeps out on ocean bottoms to form new crust, seafloor spreading, and its most notable proponent was Alfred Wegener. For 10 points, name this theory that was built on by the concept of plate tectonics, the idea that namesake land masses slowly move.

ANSWER: **continental drift**

081-10-20-08128

13. Sergei Prokofiev's Classical Symphony is in this key, as are Mozart's Haffner and Prague Symphonies. Joseph Haydn's Miracle and Clock Symphonies are also in this key, which is the relative major of B Minor. A guitar plays an "open" chord in this key by depressing the second fret on the first and third strings and the third fret on the second string. A B flat instrument plays the root of this key to match a piano's C. For 10 points, name this major key with two sharps.

ANSWER: **D major**

003-10-20-08129

14. One version of calculating this property involves dividing the electron densities of atoms and is named for Sanderson. Taking the average of the ionization energy and the electron affinity of an atom gives the Mulliken scale for measuring this value. Atoms with identical values for this property will have non-polar bonds and those with large differences form ionic bonds. For 10 points, name this property usually measured on Pauling's scale that describes the ability of an atom to attract a bonding pair of electrons, for which fluorine has the highest value at 4.0.

ANSWER: **electronegativity**

023-10-20-08130

15. During this battle, Joseph Mansfield led his forces up near the Dunker Church. John Sedgwick's troops in this battle took heavy casualties after advancing from the West Woods. William French moved his forces in this battle to a sunken road that became known afterwards as the "Bloody Lane." This strategic victory for George McClellan ended Robert E. Lee's attempt to bring the Civil War into the northern states through Maryland. For 10 points, name this 1862 battle that was the bloodiest single day of combat during the Civil War.

ANSWER: Battle of **Antietam** [or Battle of **Sharpsburg**]

023-10-20-08131

1. One author from this country wrote *Three Exemplary Novels and a Prologue*. In addition to that member of the Generation of '98, Miguel Unamuno, this country was home to a Baroque playwright who wrote *Life Is A Dream*, a Modernist whose "Rural Trilogy" includes *Yerma* and *Blood Wedding*, and the creator of *Rocinante* and *Dulcinea*. For 10 points, name this nation whose authors include Pedro Calderon, Federico Garcia Lorca and the creator of *Don Quixote*, Miguel de Cervantes.

ANSWER: **Spain**

082-10-20-08132

2. Finding this sort of independent set is NP-complete. The default size for this type of transmission unit on Ethernet is 1500 bytes. Determining the parameters of a statistic of a model can be done using this type of likelihood estimation. This type of extrema occurs at a point when the first derivative is positive on an open interval to the left and negative to the right of the point. For 10 points, name this term given to a largest item which is paired with a minimum.

ANSWER: **maximum**

001-10-20-08133

3. In one part of this work, three men set off to kill Death, but they are distracted when they find a large amount of money. At the end of another section of this work, a knight gives up his choice of having either a young and unfaithful wife or an old and faithful one. The plot of this work is set in motion when a group sets out together from the Tabard Inn in Southwark. For 10 points, name this collection of stories told by pilgrims such as the Pardoner and the Wife of Bath, which was written in Middle English by Geoffrey Chaucer.

ANSWER: *The **Canterbury Tales*** [accept "The **Pardoner's Tale**" before "another section"]

023-10-20-08134

4. In one story of this type, a bird catcher's leg is stung by one character in order to alert another character. Another story of this type ends with one character chewing through a rope to free a captured character who had earlier been merciful. Those stories of this type attributed to the same author are *The Ant and the Dove* and *The Lion and the Mouse*. These stories are generally allegorical and end with a moral lesson. For 10 points, name this story form that was used by Jean de la Fontaine and Aesop.

ANSWER: **fables**

023-10-20-08135

5. This thinker advocated a plot shift "from ignorance to knowledge" that produces "love or fear." In addition to pioneering the concepts of "reversal" and "recognition," this thinker theorized that the dramatic plot should be based on a character flaw he dubbed *hamartia*. He advocated the purging of fear and pity that he dubbed *catharsis*. For 10 points, name this ancient Greek philosopher who set out the ideal tragic plot in the *Poetics*.

ANSWER: **Aristotle** [or **Aristoteles**]

026-10-20-08136

This is a 10-second calculation question. Solve the following equation for x; $x^2 + 2x - 8 = 0$.

ANSWER: x = **-4**; x = **2**

026-10-20-08137

What term refers to the probability that a statistical test will reject the null hypothesis and a physical quantity that can be calculated by work divided by time?

ANSWER: **power**

026-10-20-08137