



1. This emperor divorced Claudia Octavia to marry Poppaea (po-PIE-uh), and he most likely poisoned his stepbrother, Britannicus. This emperor had his general Corbulo wage war against and eventually negotiate peace with the Parthians. This emperor built a palace complex known as the Domus Aurea (OW-ree-uh), for which there was space after a large part of Rome was destroyed. For 10 points, identify this fifth Roman emperor whose death began the Year of the Four Emperors and who supposedly fiddled while Rome burned.

ANSWER: **Nero** Claudius Caesar Augustus Germanicus [or **Nero** Cladius Drusus Germanicus; or **Lucius Domitius Ahenobarbus**]

126-12-54-07101

2. One member of this group bonds with carbon to form teflon and formed the first noble gas compound with xenon. This group of elements is the only to feature, at standard temperature and pressure, members that are solids, liquids, and gases. Three members of this group can bond with a single atom of hydrogen to form an extremely strong acid. For 10 points, name this group of highly reactive elements that contains fluorine and chlorine.

ANSWER: **halogens** [or Group **17** elements]

002-12-54-07102

3. One attack against this country followed the Case White strategy. An electrician in this country co-founded the first trade union in the Eastern Bloc. During the eighteenth century, this country was carved up among other nations in a series of three partitions. The allies of the USSR responded to the creation of NATO by signing a pact in the capital this country. For 10 points, name this country in which Lech (LEK) Walesa (vuh-LESS-uh) led the labor union Solidarity.

ANSWER: Republic of **Poland** [or Rzeczpospolita **Polska**]

002-12-54-07103

4. Two times the inverse of this constant squared times GM is equal to the Schwarzschild radius. The Lorentz (LORE-ens) factor is equal to one over the square root of one minus velocity squared over this quantity squared. A material's refractive index is directly proportional to this quantity. The Michelson-Morley (Michael-son-more-lee) experiment showed that this quantity was constant. The total energy stored in an object is equal to its mass times this quantity squared. For 10 points, what quantity is roughly equal to three times ten to the eight meters per second?

ANSWER: **speed of light** [or **c**]

149-12-54-07104

5. This speech urged for "us the living, rather, to be dedicated here to the unfinished work" that has been "thus far so nobly advanced." The last part of the speech explains that "we cannot dedicate, we cannot consecrate, we cannot hallow this ground." It ends with the line "that government of the people, by the people, for the people, shall not perish from the earth." For 10 points, name this speech that begins "Four score and seven years ago" as delivered by Abraham Lincoln.

ANSWER: **Gettysburg** Address

130-12-54-07105

6. The McNamara brothers were defended by Clarence Darrow in this city, which erupted into violence over the abduction of Yut Ho and the killing of Robert Thompson in 1871. One riot in this city was caused by the arrest of Marquette Frye. This city also erupted into riots after four officers were acquitted who had been involved in a beating. For 10 points, name this city in California in which the 1965 Watts Riots and the 1991 beating of Rodney King occurred.

ANSWER: **Los Angeles** [or **LA**]

040-12-54-07106

7. This man was criticized for his sending in Douglas MacArthur to break up the Bonus Army. This man used anti-Catholic rhetoric to defeat Al Smith to reach the presidency, pioneering the use of the "Southern Strategy." This President defended Prohibition as "The Noble Experiment." Over a thousand economists petitioned this man to veto the disastrous Smoot-Hawley Tariff. For 10 points, name this President who failed to hinder the start of the Great Depression.

ANSWER: Herbert Clark **Hoover**

002-12-54-07107

8. H II (eitch two) regions are one of these objects; the first known H II region was the Orion one of these. The planetary form of these objects are formed when the outer part of a star is blown away. The first object in the Messier (MESS-ee-yay) catalog is one of these objects. The NASA image "Pillars of Creation" depicts one of these objects. Another of these objects was formed from a supernova observed by Chinese astronomers in 1054. For 10 points, name these interstellar clouds of dust and gas that include the Crab and Eagle.

ANSWER: **nebulae**

066-12-54-07108

9. Participants in this event received food donations from the Wide Awake Bakery and Northland Sheep Dairy, but were criticized for withholding sheep cheese from the homeless. One opponent of this event was Anthony Bologna, a police officer who pepper-sprayed participants. This event established the "People's Library" in Zucotti Park before being evicted on November 15. For 10 points, name this protest of the "one percent" in New York City which sparked similar demonstrations across the country.

ANSWER: **Occupy Wall Street** [or **OWS**; prompt on non-specific answers such as **Occupy**, as all the clues refer to Occupy Wall Street specifically]

141-12-54-07109

10. In texts from after the Vedic period, this god is called the leader of the Adityas (uh-DEE-tee-uz). He is sometimes depicted lying on a coiled serpent, surrounded by the Ocean of Milk, as his feet are massaged by Lakshmi (LACK-shmee). This god, who successively appeared as a fish, turtle, and boar, forms the Trimurti along with Brahma and Shiva. For 10 points, name this Hindu deity who comes to earth in the form of ten "avatars" and is the preserver of the world.

ANSWER: **Vishnu**

019-12-54-07110

11. This number appears twice in the definitions for both hyperbolic sine and cosine. Raising this number to the power of pi time i equals negative one. The cosine of theta (THAY-tuh) plus i times sine of theta is related to this number raised to the i times theta in Euler's ("oilers") formula. When this number is raised to the power of x, it is its own derivative. The logarithm with this number as its base is called the natural logarithm. For 10 points, name this number approximately equal to 2.718.

ANSWER: **e** [accept **Euler's number** before "Euler" is read]

066-12-54-07111

12. This composer wrote an etude consisting of rapid A flat major arpeggios nicknamed for the “Aeolian (ee-OH-lee-an) Harp.” Another of this composer's pieces has the right hand play sixteenth notes while the left hand plays triplets; that piece is his “Fantasie-Impromptu.” This composer of the "Raindrop" prelude wrote a C minor etude nicknamed “Revolutionary.” A long right-hand trill begins this composer's Minute Waltz. For 10 points, identify this Polish composer of numerous waltzes and mazurkas for the piano.

ANSWER: Frederic **Chopin** (SHOW-pan)

132-12-54-07112

13. An earthquake near this national park created Quake Lake. A lava flow created its Obsidian Cliff. The namesake caldera of this national park is also the largest supervolcano in the United States. The largest bison herd in the country lives in this national park. It was created by the Act of Dedication, signed by Ulysses S. Grant, making it the first national park. Every ninety-one minutes here, Old Faithful erupts. For 10 points, name this park that contains many geysers and is found in Idaho, Montana, and Wyoming.

ANSWER: **Yellowstone** National Park

020-12-54-07113

14. An early version of this game included a player called a "rover" who could play either offense or defense. The "Original Six" were the first teams in this sport's best-known league, which eliminated the "crease rule" around 1999. One of the greatest defensive players in the history of this game was Bobby Orr, who played for Boston. The American team defeated the Soviet Union at this sport at the 1980 Winter Olympics in a game called a "Miracle." For 10 points, name this sport played by the Washington Capitals, which is played on ice-skates.

ANSWER: ice **hockey**

080-12-54-07114

15. One character in this work asks a telegraph operator, "Can't you spell Q?" and gets a headache from the smell of gasoline. Another character in this work is beaten up by Gerald Bland after breaking his watch on the day he commits suicide. This work's fourth section takes place on Easter Sunday and focuses on the cook Dilsey, while its first part is narrated by mentally retarded Benjy. For 10 points, name this novel about the Compson family written by William Faulkner.

ANSWER: *The **Sound and the Fury***

142-12-54-07115



1A. In what nation's cities of Homs and Dara'a did protests against the regime of Bashar al-Assad continued through much of 2011?

ANSWER: **Syrian** Arab Republic

1B. What mineral, ranked 9 on the Mohs hardness scale, comes in forms such as ruby and sapphire?

ANSWER: **corundum**

2A. Name this 1755 natural disaster that destroyed an Iberian capital city and prompted a lot of brooding among Enlightenment-era philosophers.

ANSWER: 1755 **Lisbon earthquake** [or Great **Lisbon earthquake**; or **Portugal earthquake** since it affected other cities too; prompt on **earthquake**]

2B. Name the 1848 meeting organized by Lucretia Mott and Elizabeth Cady Stanton that started the women's rights movement in the United States.

ANSWER: **Seneca Falls** Convention

3A. This is a 10-second calculation question. What is the determinant of a two-by-two-matrix whose first row is [1 2] and whose second row is [2 3]?

ANSWER: **-1**

3B. This is a 10-second calculation question. Out of ten books on a bookshelf, how many different sets of three books can be chosen?

ANSWER: **120**

4A. In what kind of novel is the story told through a series of letters written by the characters?

ANSWER: **epistolary** novel

4B. Preceding *Skyrim*, what Bethesda RPG allowed the player to wander Cyrodiil and close gates to the namesake hellish realm?

ANSWER: *The Elder Scrolls IV: **Oblivion*** [or *The **Elder Scrolls IV***; do not accept or prompt on "The Elder Scrolls"]

5A. This is a 20-second calculation question. What is the dot product of the vectors A and B, where A is equal to <1, 2, 3, 4> and B is equal to <3, 4, 7, 6>?

ANSWER: **56**

5B. This is a 20-second calculation question. What is the variance of the numbers 1, 3, 5, and 7?

ANSWER: **5**

6A. What Biblical figure hanged himself after accepting thirty pieces of silver to deliver the so-called "kiss of death?"

ANSWER: **Judas** Iscariot

6B. What term refers to a form of automatic memory control which clears non-active objects in a program from memory?

ANSWER: **garbage collection**

7A. This is a 30-second calculation question. What is the area of the isosceles triangle in the Cartesian plane whose vertices are at (4, 1), (-4, 1), and (0, 3)?

ANSWER: **8**

7B. This is a 30-second calculation question. If cosine squared of theta minus sine squared of theta equals .6, what is sine squared of theta?

ANSWER: .2 [or one-fifth; or one over five]

8A. What 1937 Pablo Picasso work, depicting a panicked horse and several dismembered human bodies, was painted in response to the German bombing of a Basque town?

ANSWER: Guernica (GWER-ni-kuh)

8B. What anthropologist, the teacher of Zora Neale Hurston, studied the Kwakiutl peoples and supported cultural relativism in *The Mind of Primitive Man*?

ANSWER: Franz Boas

9A. Manrico is executed at the end of what Verdi opera, which contains the "Anvil Chorus?"

ANSWER: *Il trovatore* [or *The Troubadour*]

9B. What chemical law states that the enthalpy change of a reaction is the sum of the enthalpy changes of its individual steps?

ANSWER: Hess's law of heat summation

10A. Intrusive and extrusive are two categories of what type of rock, examples of which include obsidian, pumice, and basalt?

ANSWER: igneous rocks

10B. What law of optics can be used to compute the angle of refraction, given the angle of incidence and the refractive indices of two media?

ANSWER: Snell's Law



1. Cities on this body of water include Varna and the future Winter Olympics site Sochi. The South Stream natural gas pipeline will be constructed across this body of water, which receives the Dneiper River. The Kerch Strait connects this sea with the Sea of Azov. The Crimean Peninsula lies in this sea, which is separated from the Sea of Marmara by the Bosphorus near Istanbul. It borders significant parts of Turkey, Ukraine, and Russia. For 10 points, identify this colorfully named inland sea.

ANSWER: **Black** Sea

131-12-54-07117

2. In one of this man's works, Jimmy has a colleague arrest his old friend Silky Bob. This author of "After Twenty Years" coined the term "banana republic." This man wrote about a young boy whose kidnappers pay to give him back to his father, and his pseudonym reportedly comes from a guard he met while in prison. His best known story involves Jim and Della Young's Christmas gifts to one another. For 10 points, name this author of "The Ransom of Red Chief" and "The Gift of the Magi."

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

131-12-54-07118

3. This actress wanted to kill a mockingbird in her role as Kit. She appeared as Kat in four episodes of *Weeds*. This actress claimed not to believe in love, and pretended to live in an Ikea in *500 Days of Summer*. In the movie version of *Hitchhiker's Guide to the Galaxy*, she played Trillian. She played Jovie in *Elf* and Anita in *Almost Famous*. This actress plays an awkward schoolteacher Jess who moves in with three guys in a current TV show. For 10 points, name this star of *New Girl*.

ANSWER: Zooey **Deschanel**

124-12-54-07119

4. In one novel by this author, Madame Merle engineers the marriage between Gilbert Osmond and a woman who had turned down Caspar Goodwood. This creator of Isabel Archer also wrote a novel in which Lambert Strether is tasked with returning Chad Newsome from Europe to America. This author of *The Portrait of a Lady* and *The Ambassadors* also described the ghost of Peter Quint haunting the children Flora and Miles. For 10 points, name this author of *The Turn of the Screw*.

ANSWER: Henry **James**

040-12-54-07120

5. One disease affecting this organelle leads to the over accumulation of phytanic (fih-TAH-nick) acid in cells and is called Refsum's disease. Plants have a specialized form of this organelle call a gloxysome (glie-ACKS-ee-some). Oxidation of long chain fatty acids occur in this organelle, which also contains the enzyme catalase for breakdown of a certain molecule into water. For 10 points, identify this organelle which breaks down a compound with formula H_2O_2 .

ANSWER: **peroxisomes** (purr-ACKS-ee-some)

126-12-54-07121

6. One poem by this author ends by describing pigeons sinking "downward to darkness, on extended wings." That poem describes a woman who realizes that "divinity must live within herself" and opens with the image of the "complacencies of the peignoir (pen-WARR)." This author of "Sunday Morning" wrote a poem in which the "horny feet" of a dead woman protrude. The speaker of that poem wishes "the roller of big cigars" to whip "concupiscent (con-CUE-pih-sent) curds" of the title substance. For 10 points, name this poet of "The Emperor of Ice-Cream."

ANSWER: Wallace **Stevens**

040-12-54-07122

7. One of the intermediate products of this pathway is formed by an aldol cleavage and is PGAL, or GAP, of which two are formed for each input molecule into this pathway. Hexokinase (hecks-oh-KIE-nays) catalyzes the first step in this metabolic pathway. The anaerobic process of fermentation includes the reoxidation of NADH and this pathway. This process produces 4 ATP molecules but uses 2 in the process for a net production of 2 ATP and 2 NADH. For 10 points, name this process in which glucose is metabolized to pyruvate (pie-ROO-vate).

ANSWER: **glycolysis** (glie-KAH-lih-sis)

066-12-54-07123

8. This novel opens at the Korova Milkbar, where the protagonist drinks drug-laced milk along with Georgie, Pete, and Dim. In this novel, the fifteen-year-old protagonist attacks and rapes the wife of F. Alexander along with his fellow Nadsat-speaking gang members. After being arrested, the protagonist is subjected to the Ludovico Treatment, which renders him averse to both violence and Beethoven. For 10 points, name this dystopian novel about the sadistic Alex, written by Anthony Burgess.

ANSWER: A ***Clockwork Orange***

080-12-54-07124

9. Friedrich Miescher was the first man to isolate this substance. "Photo 51" depicted this substance, which was first imaged by a woman who later died of cancer, Rosalind Franklin, using X-ray crystallography. A correspondence with Edwin Chargaff helped the completion of a paper in the journal *Nature* describing its structure correctly in 1953. For 10 points, name this substance discovered by Watson and Crick to be a double helix containing the genetic code.

ANSWER: **DNA** [or **deoxyribonucleic acid**]

104-12-54-07125

10. This poet described a place where "they are gone, and here I must remain" in his poem addressing Charles Lamb, "The Lime-Tree Bower My Prison." In another of his poems, the people cry out, "For he on honeydew hath fed, and drunk the milk of Paradise!" after the speaker describes a vision that he once had of "a damsel with a dulcimer." He also wrote about the killing of an albatross by a seaman. For 10 points, name this poet of "Kubla Khan" and "The Rime of the Ancient Mariner."

ANSWER: Samuel Taylor **Coleridge**

040-12-54-07126

11. This man sculpted a *Dying Slave* for a papal tomb. Laszlo (LASH-low) Toth attacked one sculpture created by this man with a hammer. This man placed horns on the head of his statue of *Moses*. The only work he signed depicts the Virgin Mary cradling a dead Christ. He made a marble sculpture of a hero holding a rock in his palm and a sling on his shoulder about to fight his enemy. For 10 points, name this sculptor of *Pieta* (pee-ay-TAH) and a marble statue of *David*.

ANSWER: **Michelangelo** di Lodovico Buonarroti Simoni

002-12-54-07127

12. In one novel by this writer, an obtrusively large Adam's apple becomes a source of compensation for a devout Catholic named Mahlke. That novel is narrated from the perspective of Pilenz. In another novel by this writer, the protagonist's voice is shrill enough to break glass and his body resembles that of a dwarf. That novel's title object is was a birthday gift for its protagonist, Oskar Matzerath. For 10 points, name this German writer who wrote *Cat and Mouse* and *The Tin Drum*.

ANSWER: Gunter Wilhelm **Grass**

130-12-54-07128

13. This island is the site of a Mahayana monument consisting of many stupas and Buddha statues, known as Borobudur. Its former Dutch colonizers built the city of Batavia here. This Muslim-majority island is the most populated island in the world. For 10 points, name this island, the home of Jakarta, which is the largest island in Indonesia.

ANSWER: **Java**

020-12-54-07129

14. One character in this work impulsively decides to go home after seeing a cherry tree in bloom. This work has a sequel called *The Road Back*, which features almost none of the same characters, with the possible exception of Tjaden (TYAH-den). This work's narrator inherits some boots from Muller that used to belong to Kemmerich. Kat dies while the narrator carries him to a dressing station. For 10 points, name this World War I novel about Paul Baumer written by Erich Maria Remarque (reh-MARK).

ANSWER: **All Quiet on the Western Front** [or **Im Westen Nichts Neues**]

142-12-54-07130

15. This language has two major dialectical differences; the Northern dialect features an unstressed "o" while the Southern dialect has a fricative velar. The alphabet used for this language was developed in the ninth century by Saint Methodius and his brother. This is the most widely spoken Slavic language and the most widely spoken language to be written in the Cyrillic alphabet. For 10 points, name this language that is spoken by residents of Archangelsk, St. Petersburg, and Moscow.

ANSWER: **Russian**

141-12-54-07131



1. This man led a successful caravan ambush at the Battle of Badr (BAD-er) and fought off the Quraysh (koo-RYSH) tribe at the Battle of the Trench. This leader fled to Yathrib in the *Hijra* (HEE-juh-ruh). This man was succeeded in one role by his father-in-law, Abu Bakr (uh-boo bah-KAR). This figure ordered the idols in the Ka'aba (KAH-buh) destroyed after he conquered Mecca, and he united the tribes of the Arabian Peninsula under his new religion. For 10 points, name this Prophet of Islam and author of the Q'uran.

ANSWER: Abu al-Qasim **Muhammad**

080-12-54-07132

2. This novel describes the banker Nicholas Bulstrode, who is forced to leave the title location after his past as a pawnbroker is revealed. In this novel, the protagonist's first husband is a dull clergyman working on the *Key to All Mythologies*. At the end of this novel, the protagonist decides to marry her love Will Ladislaw despite having formerly been married to his cousin, Edward Casaubon. For 10 points, name this novel about Dorothea Brooke, written by George Eliot.

ANSWER: **Middlemarch**

080-12-54-07133

3. At the end of this novel, the protagonist violently whips his love interest in front of a large crowd, causing the crowd to erupt into an orgy. The protagonist is taken from a reservation in New Mexico when it is visited by Lenina Crowne and Bernard Marx. This novel describes a society where people are designated as Alphas, Betas, Gammas, Deltas, or Epsilons from birth, and it ends with the suicide of John the Savage. For 10 points, name this dystopian novel by Aldous Huxley.

ANSWER: **Brave New World**

080-12-54-07134

4. This structure is powered by the motion of the protein dynein (DIE-neen), which in turn derives its energy from ATP hydrolysis. The core of this organelle consists of a base anchored by a basal body and a bundle of nine pairs of microtubules surrounding two central pairs of microtubules. This organelle is structurally similar to the cilia (SIH-lee-uh). For 10 points, name this hairlike structure that is involved in moving the cells of most living organisms in a whip-like manner.

ANSWER: **flagellum** [or **flagella**]

130-12-54-07135

5. In one story from this people's mythology, the underworld deities Hun Came (hoon cah-MAY) and Vucub Caquix (vuh-cub ca-KEEX) behead Hun Hunaphu. The bat god Camazotz is another opponent of the Hero Twins, who travel to this people's underworld, Xibalba (sheh-BALL-buh), in their central mythical text, the Popul Vuh. For 10 points, name these worshippers of Itzamná and Chac, whose deities preceded those of the Aztecs as objects of worship in present-day Mexico.

ANSWER: Quiche **Mayans**

019-12-54-07136

This is a calculation question. If a fair coin is flipped four times, what is the probability exactly one of those flips will land on heads?

ANSWER: **0.25** [or **1/4**; or **25%**]

019-12-54-07137

Who depicted "Neptune, the Mystic" and "Jupiter, the Bringer of Jollity" in his orchestral suite *The Planets*?

ANSWER: Gustav **Holst**

019-12-54-07137