

1. In 2003, this leader removed his country from the Commonwealth of Nations in protest of pending suspension from the group. In 2005, he ordered the destruction of temporary housing as part of "Operation Drive Out the Rubbish." A 2008 power sharing agreement saw Morgan Tsvangirai (suh-VAIN-guh-ree) become the Prime Minister, while this man retained the Presidency and his ZANU-PF retained control of the Army. For 10 points, name this dictator of Zimbabwe.

ANSWER: Robert **Mugabe**

002-09-3-02101

2. Joyce Carol Oates claimed that the most memorable remark in this play is that the title character is "liked...but not well liked." A character in this play gave up a football scholarship after he flunked a math class. One scene in this play takes place at Frank's Chop House, where Biff tells Happy that he stole a pen from Bill Oliver. This play ends with Linda talking to the grave of her dead husband. Willy Loman commits suicide by means of an automobile crash in, for 10 points, what play by Arthur Miller?

ANSWER: ***Death of a Salesman***

003-09-3-02102

3. The start of this event was signaled via telegram by Heinrich Müller. Three days after this event, the government ordered insurance companies not to pay out claims arising from it. It was a reaction to the assassination of diplomat Ernst vom Rath and was spurred on by a Joseph Goebbels (GUR-bulz) speech. It occurred on November 9 and 10, 1938, and targeted Jewish homes, businesses, and synagogues. For 10 points, the smashing of windows during what event gave rise to its name, meaning "Night of the Broken Glass?"

ANSWER: **Kristallnacht** (KREE-stahl-knocked) [accept **Night of the Broken Glass** before it is read]

045-09-3-02103

4. The speaker of this poem describes an "eli eli lamma lamma sabachthani (sah-BOK-tah-nee) saxophone cry that shivered the cities." This poem's third section features the refrain "I'm with you in Rockland." The second section of this poem repeatedly refers to Moloch. The opening of this poem describes the "angel-headed hipsters" as "starving hysterical naked." For 10 points, name this Beat Generation poem that begins "I saw the best minds of my generation destroyed by madness" and was written by Allen Ginsberg.

ANSWER: "**Howl**"

024-09-3-02104

5. This man coined the term "symphonic poem," which is exemplified by a piece this man composed based on a poem by Alphonse de Lamartine (lah-mar-TEEN), titled *Les Preludes*. He was inspired by *The Divine Comedy* to write his "Dante" Symphony. A *Hans von Bulow* and the *Rakoczi* (rah-COK-zee) *March* are among the pieces in one collection by this man. His virtuosity as a touring pianist inspired his namesake mania to sweep Europe. For 10 points, name this composer of the *Hungarian Rhapsodies*.

ANSWER: Franz **Liszt**

030-09-3-02105

6. Christmas Disease is caused by a defect in this structure, as is Duchenne (du-SHEN) muscular dystrophy. Martin-Bell Syndrome is a symptom of a "fragile" one of these structures. Inactive ones condense and become a Barr body. An abnormally low number of these structures in a person can lead to amenorrhea (AY-MEN-oh-REE-uh) and infertility in Turner Syndrome. For 10 points, name this structure that contains the genetic cause of hemophilia, two of which are found in women.

ANSWER: **X chromosome**

034-09-3-02106

7. After the death of Shirkuh (SHUR-kuh), this man became the vizier of Nur ad-Din (NUR ahd DIN). This ruler ended the reign of the Fatimid dynasty in Egypt, and founded the Ayyubid (EYE-oo-bid) dynasty. He captured Reginald of Chatillon (shah-tee-YON) and Guy of Lusignan (GEE of LOO-seen-YON) at the Battle of the Horns of Hattin, and he recaptured Jerusalem from the Crusaders in 1187. For 10 points, name this Muslim ruler who fought Richard the Lionhearted during the Third Crusade.

ANSWER: **Saladin** [or **Salah ah-Din** Yusuf]

004-09-3-02107

8. This man's first novel is about a boy who is fixated on an Andrea Mantegna (mon-TANE-yuh) painting of Saint Sebastian. Another of his novels contains a riddle called "Nansen kills a kitten." This author of *Confessions of a Mask* wrote about Father Dosen, who flirts with a geisha, and Mizoguchi (miz-oh-GOO-chee), a stammering protagonist who burns down the title structure because it is beautiful. For 10 points, name this seppuku (SEH-puh-koo)-committing Japanese author of *The Temple of the Golden Pavilion* and the *Sea of Fertility* tetralogy.

ANSWER: Yukio **Mishima** [or **Mishima** Yukio; do not accept or prompt on "Yukio" by itself; or Kimitake **Hiraoka**; or **Hiraoka** Kimitake; do not accept or prompt on "Kimitake" by itself]

034-09-3-02108

9. This data structure implements hash tables, stacks, and queues (KYOOZ). "Packed" ones store multiple contiguous elements in one word. Associative ones can have strings for indices. These structures may be replaced by linked lists so that they can grow and shrink, and a naive search method on this structure succeeds in linear time. For 10 points, name this linear data structure in which each element can be accessed by its index.

ANSWER: **arrays**

022-09-3-02109

10. The Trung (TROO-un) sisters fought for the independence of this modern-day country. Buddhist monks burned themselves to death here to protest the actions of Ngo Dinh Diem (NO din dee-EM). It was the site of the siege of a French garrison at Dien Bien Phu (DEE-yen BEE-yen FOO). The *USS Maddox* was allegedly attacked by part of this country in the Gulf of Tonkin; four years later, the Tet Offensive took place here. For 10 points, name this country where the US fought a war from 1964 to 1973.

ANSWER: **Vietnam** [do not accept "North Vietnam" or "South Vietnam", as the question clearly asks for "this modern-day country"]

059-09-3-02110

11. This body of water's Vozrozhdeyina (vahz-RAHZ-din-ey) Island was once the site of a bioweapons facility. The construction of the Dike Kokaral (koh-kuh-RAHL) Dam raised the northern half of this sea by eight meters. That is in sharp contrast to the effects of the construction of the Qaraqum (KAR-uh-koom) Canal and other irrigation measures, that caused its water levels to plummet drastically during the twentieth century. The Amu Darya and Syr Darya rivers feed, for 10 points, which Asian sea, shared between Kazakhstan and Uzbekistan?

ANSWER: **Aral** Sea

040-09-3-02111

12. The oxide of this element is found in rubies and sapphires as corundum. Charles Hall, Paul Heroult (huh-ROO), and Karl Bayer all developed methods to extract and purify this element from its main ore, bauxite. Though it is found along the Zintl (ZIN-tel) line, it is considered a metal and not a semimetal. For 10 points, name this element with atomic number thirteen, that is used in soda cans and abbreviated Al.

ANSWER: **aluminum** [or **Al** before it is read]

032-09-3-02112

13. The only work by this painter that is permanently held in the United States is his portrait of Ginevra di Benci (jih-NAVE-ruh dee BEN-chee). He depicted the angel Uriel holding the infant John the Baptist, who is ushered towards the infant Christ by Mary. This artist of *Lady with an Ermine* used the *sfumato* (sfoo-MAH-toe) style to paint his works. This artist of *Virgin of the Rocks* traced out ideal human proportions in his sketch of the *Vitruvian Man*. For 10 points, name this artist who also painted the enigmatically smiling *Mona Lisa*.

ANSWER: **Leonardo** da Vinci [or Leonardo di ser Piero **da Vinci**]

060-09-3-02113

14. Shell companies created by this corporation included a pair named JEDI and Chewco. This company's former president Jeffrey Skilling is serving a twenty-four-year prison sentence, and former CEO Kenneth Lay died after being convicted in 2006. This company's collaboration with the firm Arthur Andersen inspired the Sarbannes-Oxley Act, by using "creative accounting" tactics that allowed it to rise to fifth on the Fortune 500. For 10 points, name this Houston-based energy corporation whose collapse triggered a wave of corporate bankruptcies in 2002.

ANSWER: **Enron** Corporation

019-09-3-02114

15. The work *Peri Lithon* (PEAR-ee LEE-thon) by Theophrastus (THEE-oh-FRAS-tuss) was an authoritative text in this field for nearly a millennium. Nicholas Steno's law of superposition was important to this field's development. James Hutton is considered the father of this field, and Hutton's disciples were called Plutonists because they believed that volcanic activity was the cause of many rock formations. Charles Lyell wrote a book on the principles of it. For 10 points, name this branch of science that studies the materials that comprise the Earth.

ANSWER: **geology** [prompt on **stratigraphy**]

040-09-3-02115

1A. Identify the language whose main writing systems are kanji (CON-jee), katakana (kah-tuh-KAH-nuh) and hiragana (HEAR-uh-gah-nuh), the latter two of which are syllabic.

ANSWER: **Japanese** [or **Nihongo**]

1B. Identify the metabolic pathway that converts glucose into pyruvate (pie-ROO-veyt).

ANSWER: **glycolysis**

2A. In October 2009, what Burmese dissident leader's appeal of her eighteen-month prison sentence was rejected, effectively blocking her from participating in the 2010 elections?

ANSWER: Aung San **Suu Kyi** (soo kyee)

2B. What sculptor of *The Gates of Hell* and *The Burghers of Calais* (cah-LAY) is better known for a sculpture which may have been modeled on Dante?

ANSWER: Auguste **Rodin**

3A. What Colin Meloy-fronted band's most recent release is *The Hazards of Love*, which follows previous albums including *Picaresque* and *The Crane Wife*?

ANSWER: The **Decemberists**

3B. What British inventor of the analytical engine is often considered the father of the computer?

ANSWER: Charles **Babbage**

4A. This is a 10-second calculation question. Multiply one and a half by two and a third.

ANSWER: **7/2** [or **three and a half** or **3.5**]

4B. This is a 10-second calculation question. Solve the equation $5x + 21 = 2x - 15$.

ANSWER: $x =$ **-12**

5A. Mauna Kea and Mauna Loa are examples of what type of volcano, which is formed from the lengthy, calm flow of magma over a large area?

ANSWER: **shield** volcano

5B. Identify the comic book superhero who is transformed by Vita-Rays and Super Soldier Serum, opposes the Red Skull, and is the alter-ego of Steve Rogers.

ANSWER: **Captain America**

6A. This is a 20-second calculation question. Give the equation of the line with slope 5 passing through the point (-9, -8).

ANSWER: **$y = 5x + 37$** [or **$y + 8 = 5(x + 9)$**]

6B. This is a 20-second calculation question. A regular dodecagon has a side length of 18 inches. What is the perimeter of this figure?

ANSWER: **216** inches

7A. Name the American city that lies at the confluence of the Allegheny and Monongahela rivers, where those waterways form the Ohio River.

ANSWER: **Pittsburgh**, Pennsylvania

7B. It was popularized by James Joyce and Virginia Woolf. Identify this narrative technique, that involves the representation of the interior monologues of characters.

ANSWER: **stream of consciousness**

8A. Examples of this device include Plato's tale of the cave from *The Republic*. Give this literary term for a story which metaphorically conveys a non-literal meaning.

ANSWER: **allegory**

8B. Czech President Václav Klaus has yet to sign this 2007 treaty, though the other twenty-six European Union member states have done so. Name this treaty that, if ratified, will amend the treaties of Rome and Maastricht (MAH-strict) and create a new EU constitution.

ANSWER: Treaty of **Lisbon**

9A. This is a 30-second calculation question. Find the Celsius temperature that corresponds to 77 degrees Fahrenheit.

ANSWER: **25** degrees Celsius

9B. This is a 30-second calculation question. A group of seven teams meets in a competition to select two qualifiers for further contests. How many different sets of two qualifiers can be chosen?

ANSWER: **21**

10A. What quantum mechanical principle states that it is impossible to know both the position and momentum of a particle to arbitrary precision?

ANSWER: **Heisenberg** uncertainty principle [or **uncertainty** principle]

10B. Edward Sapir, Alfred Kroeber, and Margaret Mead were some of Columbia University students taught by what influential figure in American anthropology, who also wrote *The Mind of Primitive Man*?

ANSWER: Franz **Boas**

1. In reaction to this character's death, her fiancée spits on the king and then falls on a sword. This character proclaims "if it's a crime, then it's a crime that God commands" to defend an action that she cannot persuade her sister Ismene (iz-MEE-nee) to assist with. Defying a decree of Creon, she performs burial rites for her brother Polynices (pahl-uh-NEE-keez). For 10 points, identify this daughter of Oedipus (ED-uh-poss) and title heroine of a Greek tragedy by Sophocles.

ANSWER: **Antigone** (an-TIH-go-nee)

019-09-3-02117

2. The AKS algorithm tests to see if an entity is one of these and Wilson's theorem gives a condition for them. Their namesake theorem states that the probability of a number being this is about one over the natural log. They can be found using the Sieve of Eratosthenes (air-uh-TOSS-thuh-nee). Euclid proved there were infinitely many of them and types of these are named for Fermat and Mersenne. For 10 points, name these numbers that have no divisors other than one and itself.

ANSWER: **prime** numbers

001-09-3-02118

3. Alpheus Williams took command of the slain Joseph Mansfield's Twelfth Corps during this battle, and James Longstreet's artillery drove back Richardson in the Bloody Lane here. This battle was affected by the discovery of "Special Order 191," containing the Confederate battle plans, and it was quickly followed by the Emancipation Proclamation. It featured Ambrose Hill's crucial counterattack and McClellan's refusal to press on. For 10 points, name this 1862 loss for Lee in Maryland, which was the bloodiest battle of the Civil War.

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

060-09-3-02119

4. This instrument now performs music that was written for the basset horn in the classical era. It has three registers, including one called "chalumeau" (shah-loo-MOE). One performer of this instrument was nicknamed "The King of Swing." A glissando on this instrument opens George Gershwin's *Rhapsody in Blue*. This woodwind has one reed and is most commonly played in its B flat and A types. For 10 points, name this instrument played by artists such as Jimmy Dorsey and Benny Goodman.

ANSWER: **clarinet**

032-09-3-02120

5. This author's political pamphlets, including *The Shortest Way with the Dissenters*, landed him in Newgate in 1702. One of his characters so annoys a ship with preaching that he is put ashore in China. Another of this author's protagonists was based on Alexander Selkirk and is assisted by Friday. For 10 points, name this Englishman who wrote *Moll Flanders*, *A Journal of the Plague Year*, and a tale of a man deserted on an island, *Robinson Crusoe*.

ANSWER: Daniel **Defoe** [or Daniel **Foe**]

062-09-3-02121

6. The mansion of John Neville was burned down during this event. The "Watermelon Army" called to put it down was led by "Light Horse Harry" Lee and, for the last time in American history, the sitting President. The cause of this insurrection was a scheme to gain more money for the government devised by Alexander Hamilton. For 10 points, name this rebellion centered in western Pennsylvania, which arose against an excise tax on the namesake liquor.

ANSWER: **Whiskey** Rebellion

023-09-3-02122

7. This man conceived of a creature that could open a trap door through which only fast-moving particles could enter; that creature, supposedly contradicting the Second Law of Thermodynamics, is his "demon." Oliver Heaviside formulated the current form of his most famous work; his main contribution to that work was the addition of a displacement current to Ampere's Law. For 10 points, name this Scottish physicist who derived four namesake equations that describe electromagnetism.

ANSWER: James Clerk **Maxwell**

001-09-3-02123

8. In one TV show, this character's ability to communicate with sea monsters aids in the arrest of Nute Gunray (noot GUN-ray). Joe Morgenstern of *The Wall Street Journal* called this character a "Rastafarian Stepin Fetchit on platform hoofs, crossed annoyingly with Butterfly McQueen." He reveals that he has been banished for clumsiness after Qui-Gon Jinn frees him from Boss Nass on Naboo. For 10 points, name this widely panned computer-generated Gungan who travels with Jedi Knights in *Star Wars: The Phantom Menace*.

ANSWER: **Jar Jar** Binks

045-09-3-02124

9. This man's son Alexis was tortured to death due to allegations of treason. In 1696, this ruler captured Azov from the Ottoman Empire. He traveled incognito on a European tour from 1697 to 1698 in an attempt to learn how to modernize his country. He was the victor at Poltava and fought Charles XII of Sweden in the Great Northern War. For 10 points, name this tsar who moved the capital of Russia from Moscow to his namesake city.

ANSWER: **Peter I** [or **Peter the Great**; or **Pyotr Veliky**; prompt on **Peter**]

030-09-3-02125

10. One of these creatures was a ferryman who was slain by Heracles after trying to rape the hero's wife, but got his revenge when his poisonous blood burned the hero to death. The wisest of them was an immortal master of medicine and tutored such heroes as Jason and Achilles (uh-KILL-ees). Nessus and Chiron (KY-ron) were members of this race, who were known for their savage wars with the Lapiths. For 10 points, name these creatures from Greek mythology, who were half-men, half-horses.

ANSWER: **Centaurs** [or **Kentauroi**]

052-09-3-02126

11. One character in this work saves the life of Ogier (OH-zheer) the Dane. One group in this work is betrayed by the evil Ganelon. That betrayal in this work leads to the ambushing of Archbishop Turpin and Oliver by Saracens at Roncesvalles (RON-seh-valz) Pass. The title character blows his "olifant" horn so hard that his temples burst open, and he dies calling for Charlemagne to avenge his death. For 10 points, name this French epic poem.

ANSWER: *The **Song of Roland*** [or *La **Chanson de Roland***]

045-09-3-02127

12. This figure created the tides when he was tricked into trying to drink the entire ocean. In one story, he dressed up as the goddess of love in order to retrieve a possession stolen by Thrym. This god's chariot was pulled by two goats, and his weapon required a belt and gloves to wield. At Ragnarok, he will kill and be killed by Jörmungandr (YOR-mung-ahnd-er), or the Midgard Serpent. This wielder of the hammer Mjöllnir (ME-oll-neer) is, for 10 points, what Norse god of thunder?

ANSWER: **Thor**

026-09-3-02128

13. One phase of this battle was Operation Stosser, a failed paratrooper attack on the Baraque Michel Crossroads. An offensive by the 1st SS Panser Division resulted in the Malmedy Massacre during this event. The sieges of St. Vith and Bastonne occurred during it. In Bastonne that Anthony McAuliffe responded to a demand for surrender during this battle with the one-word reply "Nuts!" For 10 points, the Germans failed to reach the Meuse River in which 1944 offensive, named for the indentation that was created in the Allied line?

ANSWER: Battle of the **Bulge**

040-09-3-02129

14. This element is incorporated into glutamine ("GLUE"-tuh-"mean") and glutamite ("GLUE"-tuh-"might") in a process known as assimilation of this element. The presence of this element in fertilizer causes "dead zones" in polluted water. Legumes ("LAY"-gyumez) convert this element into more biologically usable form in a process known as this element's "fixation." For 10 points, name this element whose diatomic ("DIE"-uh-tom-ick) form is an inert gas that makes up about seventy-eight percent of the atmosphere.

ANSWER: **nitrogen** [or **N**]

021-09-3-02130

15. A character named Oswald responds to this story by telling of a man named Symkyn (SIM-kin) who is cuckolded by a pair of Cambridge students. John the carpenter suspends himself from the ceiling in a bathtub after another character convinces him a flood is imminent. In this story, Nicholas scorches the backside of the clerk Absolon after seducing Allison, the wife of John. For 10 points, name this vulgar second story from *The Canterbury Tales*.

ANSWER: "The **Miller's Tale**"

045-09-3-02131

1. These compounds are called "killed," "semikilled," "capped," or "rimmed" depending on the degree of oxidation. One type of these compounds can be divided into austenitic (OS-ten-it-ick), ferritic (fer-RIT-ick), or martensitic (MAR-ten-zit-ick) types depending on the chromium and nickel content. Inexpensive production of these compounds was first obtained by using an air blast to remove impurities; that process was named after Henry Bessemer. For 10 points, name these metals that are produced by adding elements to pig iron.

ANSWER: **steels**

003-09-3-02132

2. This religious figure was rebuked by Paul for his prejudice against Gentile Christians in the Incident at Antioch (ann-tee-OCK). This brother of Andrew cut off the ear of Malchus during Jesus's arrest, and this saint refused to be crucified in the same manner as Christ. This individual denied Jesus three times after the Crucifixion, though he had been told that he would be the rock upon which the Church would be built. For 10 points, name this Apostle of Jesus considered to be the founder of the Catholic Church and holder of the keys of Heaven.

ANSWER: Saint **Peter** [or **Petros**; or **Cephas**]

059-09-3-02133

3. This phenomenon causes a disorder observed in Erasmus Bartholin and originally thought to have been caused by atomic bomb testing, Patau Syndrome. Another disorder caused by one of these leads to hypogonadism and reduced fertility and is named after Klinefelter. The Simian crease, an unusually round face, and impairment of cognitive ability are signs of Down Syndrome, which is caused by one of them at chromosome 21. For 10 points, name this type of aneuploidy in which there are three copies of a chromosome.

ANSWER: **trisomy** [prompt on **aneuploidy** before it is read]

040-09-3-02134

4. The protagonist of one of this author's works decides not to blackmail Bertha in order to protect Lawrence Selden. Another character created by this author remains faithful to May Welland even though he loves May's Polish cousin. This author created Lily Bart in the novel *The House of Mirth* and Newland Archer in *The Age of Innocence*. She also created a character who loves Mattie Silver and tries to commit suicide by sledding into an elm tree. For 10 points, name this American author of *Ethan Frome*.

ANSWER: Edith Newbold Jones **Wharton**

024-09-3-02135

5. This term was used to describe Brand Whitlock, who argued against the death penalty. It was also used to describe two separate people who chronicled the history of Standard Oil, Henry Lloyd and Ida Tarbell. This word was popularized by Teddy Roosevelt, who commented on such writers' similarities to a character from *The Pilgrim's Progress*. For 10 points, give this term used to describe late-nineteenth and early-twentieth century writers who used novels and articles to expose corruption and poor social conditions.

ANSWER: **muckrakers** [prompt on **progressives** before "Pilgrim's Progress" is read]

003-09-3-02136