1. One actor with this surname claimed *Tosca* was a plagiarization of his play *Nadjezda* (na-JEZ-da) and married Georgianne Drew. In addition to nineteenth century stage actor Maurice, and the portrayer of Mr. Potter in *It's a Wonderful Life*, Lionel, an actress with this surname starred with Cameron Diaz and Lucy Liu in *Charlie's Angels*. That actress with this surname also played the female leads in *The Wedding Singer* and *50 First Dates*. For 10 points, name this theatrical family whose youngest member made her acting debut in the film *E.T* and is named Drew.
ANSWER: **Barrymore**

2. One character in this novel dreams about a pious discourse delivered by the Reverend Jabez Branderham. The main male character starves himself to death after learning that Cathy plans on marrying Hareton. Hareton does not inherit his father Hindley's estate at the this novel's title location. This novel opens with Mr. Lockwood's arrival at Thrushcross Grange, and was published under the pseudonym "Ellis Bell." For 10 points, name this work about Catherine Earnshaw and Heathcliff, the only novel by Emily Brontë.
ANSWER: ***Wuthering Heights***

3. A 2002 study by Lonnie Thompson suggested that the Furtwängler (firt-VAIN-glur) Glacier, located on this structure, will disappear by 2015. The northern route of this location features the Rongai gate, while the Lemosho route leads to the Shira plateau. Mount Meru lies to the west of this mountain. In 1889, Hans Meyer ascended Kibo, the highest of this mountain's three peaks. For 10 points, name this mountain that is known as "Uhuru" in Swahili and is the tallest mountain in Africa.
ANSWER: Mount **Kilimanjaro**

4. This man announced that his country would "let a hundred flowers bloom" during a brief relaxation of censorship. This man's wife Jiang Qing (jang ching) was part of the radical Gang of Four. He supported the Red Guard's efforts to remove Western influence in the Cultural Revolution. This participant in the Long March supported the Great Leap Forward and took control of his nation after forcing Chiang Kai-shek (CHANG kai-SHEK) to flee to Taiwan. For 10 points, name this "Chairman" of the People's Republic of China.
ANSWER: **Mao** Zedong [or **Mao** Tse-Tung]

5. The disparate organizations that today represent this denomination are organized into large Yearly Meetings, which issue this denomination's Books of Discipline. One concept unique to this denomination suggests that God's presence is signified by an "inner light." This denomination's Peace Testimony causes its members to oppose warfare. George Fox founded this denomination, for which William Penn founded Pennsylvania as a safe haven. For 10 points, name this denomination also known as the Religious Society of Friends.
ANSWER: **Quaker**s [or the Religious **Society of Friends** prior to mention]

6. The namesake coefficient of this process is given by the Einstein relation, and this phenomenon is described by Fick's Laws. In cells this process can be facilitated, active, or passive. It can be viewed as a consequence of the Brownian motion of many particles. When this concept is applied to water across a membrane, it is called osmosis. For 10 points, name this process through which particles move from high to low concentrations.
ANSWER: **diffusion**

7. This man made use of an inverted telescope to size the proportions of his hometown, which he depicted in a painting of buildings on the river Schie (SHE). This artist of *Girl Interrupted at Her Music* depicted his own backside as he sits down to paint in his work *The Art of Painting*. He showed a woman looking over her left shoulder, wearing a blue headdress while a piece of white jewelry hangs from her ear. For 10 points, name this Dutch artist who painted *View of Delft* and *Girl with a Pearl Earring*.
ANSWER: Jan **Vermeer** [or Johannes **Vermeer**]

8. One poet from this country wrote the line "A black, E white, I red, U green, O blue" in his "Sonnet of the Vowels." A medieval poet from this country asked "where are the snows of yesteryear?" One of this country's most-read poets collected the poems "Benediction" and "The Albatross" in a volume divided into such sections as "Wine" and "Spleen and Ideal." For 10 points, name this country whose poetic tradition includes Paul Verlaine, Arthur Rimbaud (rem-BO), and the author of *The Flowers of Evil*, Charles Baudelaire.
ANSWER: **France** [or **French Republic**; or **Republique Francaise**]

9. A politician in this state, Solomon Sharp, was assassinated by romantic rival Jereboam Beauchamp in one of the biggest scandals of the 1820s, this state's namesake "tragedy." Shortly thereafter, a man from this state became Secretary of State due to an alleged "corrupt bargain." This site of the Civil War battles of Perryville and Mill Springs was the birthplace of both Jefferson Davis and Abraham Lincoln. For 10 points, identify this home state of Henry Clay, where the Wilderness Road was built by Daniel Boone.
ANSWER: **Kentucky**

10. Operations in them include unicasting, multicasting, and broadcasting. Topologies for them include star, tree, and mesh. Protocols used with these include ARP, ICMP, and UDP. One can create a virtual private one of these inside an existing one. They often include switches, hubs, or routers, and ways to create them include ethernet and Wi-Fi. For 10 points, name this term for a group of interconnected computers.
ANSWER: computer **network**

11. While serving as a mercenary in the Netherlands, this man was recruited by Robert Catesby. His efforts were thwarted by Francis Tresham, who warned Lord Monteagle to stay home. This man is burned in effigy on "bonfire night" in England each November 5. His goal was to restore Catholicism to England by by blowing up Parliament while King James I and the entire Protestant nobility were inside. For 10 points, name this chief executor of the Gunpowder Plot.
ANSWER: Guy **Fawkes**

12. One of these events occurred during the Late Devonian (duh-VO-nee-un) Period, and other notable events of this type include the Ordovician-Silurian (or-doe-VISH-ee-un sill-UR-ee-un), Permian-Triassic and End Triassic. The best known of these events occurred at the end of the Cretaceous Period and was likely caused by by an asteroid's impact. For 10 points, name these events in which all living members of multiple species were wiped out.
ANSWER: mass **extinction**s

13. This man founded a congress in Natal to fight discrimination while serving as a lawyer in South Africa. This man was followed from Sabarmati (sah-bar-MAH-tee) to Dandi in a march protesting a British tax on salt. That protest followed his philosophy of passive resistance called satyagraha (SAHT-ee-uh-grah-ha). This man was assassinated by Nathuram Godse (NAH-too-rahm GAWD-say) while on his way to pray. For 10 points, name this leader of the independence movement that eventually led to the creation of Pakistan and India.
ANSWER: Mahatma **Gandhi** [or Mohandas Karamchand **Gandhi**]

14. This organ includes the fornix (FOR-nix) and mammillary (MAM-uh-LAIR-ee) region in the hypothalamus (HIGH-po-THAL-uh-mus). The amygdala (uh-MIG-duh-luh) is part of this organ's limbic system. The pons connects the medulla oblongata (meh-DOO-luh obb-lon-GOT-uh) to the rest of this organ. In humans, the largest part of this organ is the cerebral cortex. For 10 points, name this organ housed inside the cranium that controls the nervous system.
ANSWER: **brain**

15. Johnson's men attacked a Union line near Culp's Hill in this battle. One major rout in this battle came when flanking fire caused a brigade led by Brockenbrough to flee through Trimble's position and both brigades fled to Seminary Ridge. A major turning point in this battle was an assault on the Union position at Cemetery Ridge, which James Longstreet predicted would go badly. For 10 points, name this battle that included Pickett's Charge and saw a major Union victory on July 3, 1863, followed by an "address" from Abraham Lincoln.
ANSWER: Battle of **Gettysburg**

1A. What inventor, who was working for Nathanael Greene's wife when he invented the cotton gin, popularized the concept of interchangeable parts?
ANSWER: Eli **Whitney**, Jr.

1B. The real estate boom at this Middle Eastern city, home to the world's tallest man-made structure, abruptly ended as a financial crisis surfaced. Name this emirate (EM-uh-ret) whose state corporation announced recently that is is unable to meet its interest bills.
ANSWER: **Dubai**

2A. Give the German word that is used in English as a literary term referring to coming-of-age novels, such as *Great Expectations* and *Siddhartha*.
ANSWER: **bildungsroman** (BILL-dungs-row-MON)

2B. A "kinked demand curve" is characteristic of what market structure, in which a small number of firms, but more than one firm, dominates the market?
ANSWER: **oligopoly**

3A. What metamorphic rock, often used in architecture and sculptures, is derived from limestone and dolomite?
ANSWER: **marble**

3B. Name the architectural complex, commissioned by Pericles, that includes the Propylaia (PRO-peh-LAY-uh) gate and the temple to Athena known as the Parthenon.
ANSWER: **Acropolis** of Athens

4A. This is a 10-second calculation question. Divide three eighths by one sixteenth.
ANSWER: **6**

4B.This is a 10-second calculation question. What is the circumference of a circle whose area is 81 pi?
ANSWER: **18 pi** [or **56.54**]

5A. Identify the principle, that applies to all fermions, and states that no two electrons can have the same quantum numbers.
ANSWER: **Pauli exclusion** principle [prompt on partial answer]

5B. The Spanish word "embarazada" (em-BAH-ruh-SAH-dah) is a false cognate, because it signifies not being embarrassed, but being what?
ANSWER: **pregnant** [accept **pregnancy** or other word forms; accept anything that conveys the meaning of being pregnant]

6A. This is a 20-second calculation question. If the sum of interior angles of a polygon is 1260 degrees, how many sides does it have?
ANSWER: **9**

6B.This is a 20-second calculation question. If the probability of a kitten being male is 50% and the probability of being female is 50%, what is the probability that a litter of 6 kittens having at least one male kitten?
ANSWER: **63/64** [or **98.4375%**]

7A. James Agee wrote a screenplay based on a C.S. Forester novel for what 1951 film, which stars Katherine Hepburn as a missionary's sister and Humphrey Bogart as the captain of the title steamboat hired to attack the Germans during World War I?
ANSWER: *The **African Queen***

7B. What lymphocytes mediate humoral immune response by producing antibodies?
ANSWER: **B**-cells

8A. What second-most-populous British city, located in the West Midlands, led Britain in manufacturing during the Industrial Revolution?
ANSWER: **Birmingham**

8B. Arnold Schwarzenegger was accused of making obscene use of what poetic form, in which the first letters of each line form a name or a message?
ANSWER: **acrostic**

9A.This is a 30-second calculation question. What is 177^2 minus 23^2?
ANSWER: **30,800**

9B.This is a 30-second calculation question. Find the greatest common factor of 168 and 98.
ANSWER: **14**

10A. What type of rhyme involves two or more sounds, as in "turtle" and "fertile?"
ANSWER: **feminine** rhyme

10B. Identify the national soccer team, led by Pim Verbeek (vur-BEEK), that is in group D of 2010 World Cup along with Germany, Serbia, and Ghana, and has such stars as Tim Cahill and Harry Kewell.
ANSWER: **Australia**

1. In one novel by this man, the orphan Esther Summerson is raised by one of the parties in the lawsuit *Jarndyce v. Jarndyce*. Another work by him is about the husband of Agnes Wickfield. In that novel by this man, Uriah Heep hires Micawber at a law firm. This author of *Bleak House* created a character who revisits his job with Fezziwig after Jacob Marley's ghost, bound in chains, haunts him. For 10 points, name this author of *David Copperfield* who created Ebenezer Scrooge in *A Christmas Carol*.
ANSWER: Charles John Huffam **Dickens**

027-09-3-07117

2. The minimum total distance from a point to all the vertices of one of these objects is the Fermat point. Ceva's theorem describes the condition in which lines from all of the vertices of these objects intersect at a single point. In Euclidean geometry, the sum of the angles of one of these objects is pi radians. The area of these objects can be found using Heron's formula, as well as the formula one half base times eight. For 10 points, name these shapes divided into scalene, isoceles, and equilateral types.
ANSWER: **triangle**s

004-09-3-07118

3. One author from this country wrote *Concerning Famous Men*. Another native of this country wrote of life in Auschwitz in *If This is a Man*. This country was also home to a man who wrote of his "vital spirit" trembling before his love in *The New Life* and a work in which the protagonist is led through the city of Dis by Virgil. For 10 points, name this home country of Primo Levi, as well as Petrach and the author of *Inferno*, Dante.
ANSWER: **Italy** [or **Italia**n Republic; or Repubblica **Italia**na]

060-09-3-07119

4. This composer wrote the "Scarbo" movement in a solo piano work. This man wrote the dance suite *The Tomb of Couperin* (COO-puh-rin) and *Gaspard de la Nuit* (GOS-pard day la NOO-ey). He also created the most widely played orchestration of Mussorgsky's *Pictures at an Exhibition* and wrote *Pavane For A Dead Princess*. This man wrote a Spanish dance with a theme that begins in the flutes and is repeated in all sections of the orchestra. For 10 points, name this French composer of the repetitive *Bolero*.
ANSWER: Maurice **Ravel** [or Joseph-Maurice **Ravel**]

026-09-3-07120

5. The static form of this force typically has a coefficient larger than the coefficient of the kinetic form of this force. Those coefficients are represented by the Greek letter mu (MEW). The kinetic coefficient is found by taking the value of this force over the value of the normal force. This force works perpendicular to gravity and the normal force and in opposition to an applied force. For 10 points, name this force that occurs between two objects moving against one another, which causes objects to slow down as they move over a rough surface.
ANSWER: **friction** force

023-09-3-07121

6. This ruler was the first to call himself the "King of England", as opposed to the "King of the English." His query "will no one rid me of this troublesome priest" inspired his knights to murder the Archbishop of Canterbury, Thomas a Becket. He married the ex-wife of French King Louis VII, Eleanor, in order to inherit Aquitaine. For 10 points, name this great-grandson of William the Conqueror who ruled from 1153 to 1189 as the first monarch of the House of Plantagenet.
ANSWER: **Henry II** [prompt on **Henry**]

045-09-3-07122

7. Towards the end of this work, the speaker becomes again "an overstaid fraction." Section Six of this work compares grass to "the handkerchief of the Lord." Early in this poem, the speaker declares himself "one of the roughs, a cosmos." The final section of this poem asks the reader to "look for me under your bootsoles" and declares "I sound my barbaric yawp over the roofs of the world." For 10 points, name this centerpiece of *Leaves of Grass* by Walt Whitman, which begins "I celebrate myself."
ANSWER: "**Song of Myself**"

8. Flysch (FLISH) and molasse are terms for cycles of this type of material, found in deep-water and shallow-water facies (FAY-sees), respectively. These materials can be characterized by lamination. Coquina (coe-KEE-nuh) is an example of this class of material made up entirely of shell fragments. These materials are classified as clastic, organic, or chemical. This is the only class of rock that can contain fossils, and common examples include shale, limestone, and sandstone. For 10 points, identify this type of rock, made up of layers of gradually-deposited particles.
ANSWER: **sedimentary** rocks [prompt on **rocks**]

9. During this President's time in office, Zebulon Pike explored the American southwest. This man refused to listen to his Treasury Secretary, Albert Gallatin, who advised this man not to sign the Embargo Act. This President also sent the Corps of Discovery to Oregon; that expedition, led by Lewis and Clark, explored the lands that this man acquired in the Louisiana Purchase. For 10 points, name this writer of the Declaration of Independence, who became the third President after winning the election of 1800 over John Adams.
ANSWER: Thomas **Jefferson**

10. One tradition associated with this holiday involves throwing pieces of bread into flowing water. This holiday includes the recitation of poems called piyuttim (pee-YOO-teem). This holiday is celebrated on the first and second of Tishrei. Like the Day of Atonement that occurs ten days after it, this holiday includes the blowing of the shofar (SHOW-far). Eating round, sweet bread and apples dipped in honey are other traditions of this holiday. For 10 points, name this holiday, the Jewish New Year.
ANSWER: **Rosh Hashanah**

11. In a short story by this man, the gangsters Al and Max go into a diner looking for Ole Andreson. In a novel by this writer of "The Killers," Robert Cohn has an affair with Lady Brett Ashley. Another of his novels describes the World War I retreat from Caporetto. Frederick Henry impregnates the nurse Catherine Barkley in that book by this author, who also wrote about Santiago catching a marlin in Cuba. For 10 points, name this writer of *The Sun Also Rises*, *A Farewell to Arms*, and *The Old Man and the Sea*.
ANSWER: Ernest Miller **Hemingway**

12. One member of this group had a brother who married Pandora, and another was the mother of the muses, Mnemosyne (neh-MAH-zuh-nee). The leader of this group used a diamond sickle to castrate his father and take power before swallowing his five children. The Hecatonchires (heck-uh-TAHN-keer-ayz) and Cyclopes (SIGH-klah-peez) helped to overthrow this group that was led by Cronos. For 10 points, name this race of Greek gods who were overthrown by Zeus and the Olympians, and whose name now refers to something large or powerful.
ANSWER: **Titan**s

13. This country fought the War of the Oranges with its eastern neighbor. In 1961, India forcibly annexed this country's colony of Goa, but it held on to its African colonies until the Carnation Revolution. This nation saw the formation of the Estado Novo under the rule of Antonio Salazar, and had earlier been rocked by a 1755 earthquake in its capital. For 10 points, name this country which colonized Angola and Mozambique and was the home of Henry the Navigator and Vasco de Gama.
ANSWER: **Portugal** [or **Portuguese Republic**; or **Republica Portuguesa**]

14. In the second act of this ballet, the main characters are entertained by the "Dance of the Reed Flutes." A suite named for this ballet includes the Spanish, Arabian, and Chinese dances and the "Waltz of the Flowers." This ballet incorporated the celesta for its "Dance of the Sugar Plum Fairy." During this ballet, the Mouse King is defeated by the title object, which is given to Clara on Christmas Eve by Herr Droselmayr. (Dross-el-me-yer) For 10 points, name this ballet about a soldier toy, by Tchaikovsky.
ANSWER: *The **Nutcracker*** [or ***Shchelkunchik***]

15. In one novel by this man, the Jew Abraham Zogoiby (zuh-GOY-bee) traces his ancestry back to the last Muslim ruler of Granada. Another novel by this author of *The Moor's Last Sigh* includes a mass sterilization that takes place during Indira Gandhi's rule and is about the first child born in an independent India, the psychic Saleem Sinai. One novel by this man opens with Saladin Chamcha (CHAHM-chuh) and Gibreel Farishta (fuh-REESH-tuh) falling out of a hijacked plane. For 10 points, name this author of *Midnight's Children* and *The Satanic Verses*.
ANSWER: Ahmed Salman **Rushdie**

1. For reversible isobaric processes, the molar version of this quantity is equal to the molar heat capacity times the natural log of the ratio of final to initial temperatures. By Trouton's Rule, its molar version for vaporization processes is approximately eighty-eight Joules per mole Kelvin. It is equal to Boltzmann's constant times the natural log of the number of microstates according to a formula written on Boltzmann's tombstone. For 10 points, name this measure of disorder of a system, symbolized S.
ANSWER: **entropy** [prompt on early **S**]

003-09-3-07132

2. Mark Twain wrote an essay on the "literary offenses" of this creator of Chingachgook (ching-GOCH-guk), who is the father of one of this author's title characters, Uncas. *The Pioneers*, *The Prairie*, and *The Deerslayer* are among the works he wrote about a character variously known as "the trapper" and "Hawkeye." For 10 points, name this American author who wrote about Natty Bumppo in the *Leatherstocking Tales*, which includes his *The Last of the Mohicans*.
ANSWER: James Fenimore **Cooper**

024-09-3-07133

3. This term was first coined by Cora Dubois and further elucidated in a 1954 lecture given by Kalervo Oberg. Oberg noted that symptoms of this malady include the "tropical stare," "excessive concern over drinking water," and a "terrible longing to be back home." Oberg further noted that in this condition, "the environment has not changed. What has changed is [one's] attitude towards it." For 10 points, give this term referring to the disorientation and eventual disgust one feels upon having to live in a new human environment.
ANSWER: **culture shock**

003-09-3-07134

4. One type of these creatures, *Danio rerio* (DAH-nee-oh RAY-ree-oh), is an important model organism. These creatures use counter current circulation and a lateral line sensory system. One class of them includes the "lung" type and the once-believed-to-be-extinct Coelacanth (SEE-luh-kanth). Common types of these organisms are divided into classes Osteichthyes (OSS-tee-ICK-thees) and Chondrichthyes (KON-DRICK-thees) based on the presence of a bone or cartilage skeleton. For 10 points, name these aquatic verbrates, examples of which include koi and sharks.
ANSWER: **fish**

001-09-3-07135

5. In one of this man's operas, the "liebestod" occurs after Queen Mark's wife falls in love with an Arthurian knight. This composer wrote an opera where Senta falls in love with a ghostly ship captain cursed to roam the seas, entitled *The Flying Dutchman*. This man wrote a four-opera cycle about magical jewelry forged by a dwarf, which also features the heroic Siegfried and the valkyrie [valk-REE] Brünnhilde. For 10 points, name this German composer of the cycle called *The Ring of the Nibelungs*. [NEE-buh-lungs]
ANSWER: Richard **Wagner** [VAG-ner]

052-09-3-07136