1. This general ordered a frontal assault at Kennesaw Mountain that led to disastrous casualties but also forced the removal of his opponent Joseph E. Johnston. He was named overall commander of the Union armies in the West after Grant was brought east. Known for saying "War is Hell," this general burned crops and destroyed railroads during a month-long march from Atlanta to Savannah. For 10 points, name this Union General known for his "March to the Sea."
ANSWER: William Tecumseh **Sherman**

015-13-93-01101

2. In a novel by this writer, Brian Foxe commits suicide. In that novel by this writer, Hugh Ledwidge marries Helen, who is the lover of Anthony Beavis. In another novel by this writer, beauty is considered disruptive, everyone belongs to everyone, and the terms "mother" and "father" are forbidden. He wrote about a violent revolt led by John the Savage in a dystopian novel. For 10 points, name this writer of *Eyeless in Gaza* and *Brave New World.*
ANSWER: Aldous Leonard **Huxley**

130-13-93-01102

3. One can calculate the total change in this quantity for a reaction by subtracting the standard heats of formation of the products from that of the reactants. This quantity minus temperature times entropy gives Gibbs free energy. The order in which processes occur do not affect the total change in this state function, according to Hess's Law. This quantity equals the internal energy plus pressure times volume. For 10 points, identify this thermodynamic quantity symbolized H.
ANSWER: **enthalpy**

233-13-93-01103

4. Burgess Meredith portrayed this man in a 1960s televised series. He is at times aided by the Kabuki Twins and is the owner of the Iceberg Lounge. In a 1992 appearance, this man runs the Red Triangle gang, plans to kidnap all the first born children, and reveals his real name to be Oswald Cobblepot. Portrayed on the big screen by Danny DeVito, this man possesses an umbrella that can function as a helicopter or a machine gun. For 10 points, name this Batman villain who looks like an aquatic bird.
ANSWER: The **Penguin** [or **Oswald** Chesterfield Cobblepot; or Oswald Chesterfield **Cobblepot**]

064-13-93-01104

5. This statesman was descended from the Alcmaeonidae. The expulsion of Cimon and Ephialtes's murder let him to consolidate power in 461 BCE. This leader's efforts saw the Delian League turn into an empire that rivaled Sparta and led to the Peloponnesian Wars. Three years before defeating Thucydides in 444 BCE, he started the building of the Acropolis and Parthenon. For 10 points, name this Athenian statesman and leader of that city's Golden Age.
ANSWER: **Pericles**

147-13-93-01105

6. Certain words in this language that receive syllable stress on the penultimate vowel are called segolates. The system of assigning numerical value to a word in this language is called gematria, and plurals are typically created by appending an "eem" or "oht" suffix depending on the gender. This language was revived by Eliezer Ben-Yehuda, who added words to modernize it from its original Biblical version. For 10 points, name this language that along with Arabic is an official language of Israel.
ANSWER: **Hebrew**

7. Islands belonging to this nation include Skellig Michael, the site of a medieval monastery, and the Aran archipelago. The ancient kings of this nation supposedly ruled from Tara and were crowned with the Lia Fail. The Liffey River flows through this nation's capital, a city which today is the location of the Book of Kells. Cities in this country include Galway, Cork, and Limerick. For 10 points, name this nation where you'd find the Blarney Stone.
ANSWER: Republic of **Ireland**

8. One of this author's characters resents Miss Taylor's marriage to Mr. Weston, as that leaves her alone at home with her hypochondriac father. A conflict in a novel by this author is resolved when Lucy decides to marry Robert, not Edward. Lady Catherine de Bourgh and Catherine Bingley attempt to prevent the Bennett girls from marrying Mr. Bingley and Mr. Darcy in her best-known novel. For 10 points, name this author of *Sense and Sensibility* and *Pride and Prejudice*.
ANSWER: Jane **Austen**

9. This location is the site of Guano Point, near the Bat Cave Mine, as well as El Tovar Hotel, which was situated atop this site's namesake railroad. The Havasupai Native Americans cleared the Bright Angel Trail at this landmark. In 2007, a "Skywalk" was opened at this site. Lying at the southern terminus of the Kaibab Plateau, this landmark's national park is located near Flagstaff. For 10 points, name this landform carved out by the Colorado River in Arizona.
ANSWER: **Grand Canyon**

10. This right was protected by the Supreme Court in 2009's *Baxter v. Montana*, and in 2004's *Gonzales v. Oregon*, the Court ruled that the Controlled Substances Act could not be used to prosecuted people who aided in this action. Jeb Bush attempted to prevent a woman from using this right in 2005, but that law named for Terri Schiavo was struck down. For 10 points, name this right exercised by people who are euthanized.
ANSWER: the right to **die** [or the right to commit **suicide**; or physician-assisted **suicide**; or **euthanasia** or word forms before it is read]

11. This gland secretes the hormone that stimulates the thyroid to secrete thyroxine and triiodothyronine (tri-I-odo-thy-row-neen). A tumor of this gland can lead to elevated ACTH and cortisol levels, which is known as Cushing's disease. A lobe of this gland forms from Rathke's pouch in a developing fetus. The magnocellular neurons of the posterior lobe of this gland release oxytocin and vasopressin, or ADH. This endocrine gland protrudes from the hypothalamus. For 10 points, identify this gland that secretes human growth hormone.
ANSWER: **pituitary** gland [or **hypophis**]

12. Brigham Young taught a Mormon doctrine that this Biblical character, not God, was the father of Jesus. The original wife of this man was a female demon named Lilith. This man's name derives from the Hebrew word for "earth". He is instructed to name "every beast of the field" and "every fowl of the air", then explains that he hid from God because he was naked and frightened. For 10 points, name this Biblical character whose rib was used to create his wife Eve.
ANSWER: **Adam**

190-13-93-01112

13. One of Edvard Munch's self-portraits depicts the painter between a bed and one of these objects. A black one sits above a train emerging from a fireplace in a Magritte painting, and another painting that features these objects shows a creature with one giant closed eye. For 10 points, name this object, several of which are shown melting in Dali's *The Persistence of Memory*.
ANSWER: **clock**s

048-13-93-01113

14. Early rulers of this empire were called "labarna" after its apocryphal founder, and it reached its apex under the reigns of Suppululiumas I and Mursilis II. Bogazkoy served as the capital of this empire, that fought Ramses II at Kadesh, and its power began to wane with attacks from the Assyrians and the Sea Peoples. For 10 points, name this fourteenth century BCE empire in Turkey that crafted iron artifacts.
ANSWER: **Hittite** empire

144-13-93-01114

15. At the end of one of this man's short-stories, a deaf and mute child throws sticks into a fire only to discover that it is his own house that is burning and that his mother has been murdered. This author of "Chickamauga" disappeared after traveling with Pancho Villa's army. In another of this man's short-stories, a union scout lures the protagonist into attempting to burn down a structure from which he is eventually hanged. For 10 points, name this author of "An Occurrence at Owl Creek Bridge" and *The Devil's Dictionary*.
ANSWER: Ambrose **Bierce**

136-13-93-01115

1A. What American author wrote ghost stories like *The Turn of the Screw* in addition to *The Ambassadors*?
ANSWER: Henry **James**

1B. What is the term for repeating the initial sound of words, such as in the phrase "a purple poetic piece of prose"?
ANSWER: **alliteration**

2A. From what part of Zeus's body did an armed, fully-grown Athena spring upon her birth?
ANSWER: his **head**

2B. What 1973 Supreme Court case decriminalized abortions and was limited by *Planned Parenthood v. Casey*?
ANSWER: *__Roe__ v. Wade*

3A. This is a 20-second calculation question. If Matt draws two cards from a standard 52-card deck, what is the probability neither of them are hearts?
ANSWER: **19/34** [or **114 over 204**]

3B. This is a 20-second calculation question. The altitude of a right triangle from the hypotenuse to the right angle bisects the right angle and has length one unit. What is the length of the hypotenuse?
ANSWER: **2** units

4A. What river of northern China, whose name derives from its loess (LESS) soil content, is called "China's sorrow" for its frequent flooding?
ANSWER: **Yellow** River [or **Huang He**]

4B. Name the former Michigan State and Los Angeles Lakers player and member of the "dream team" who was rivals with Larry Bird.
ANSWER: Earvin "Magic" **Johnson**

5A. What red dwarf is the nearest known star to our Sun?
ANSWER: **Proxima Centauri**

5B. What type of galaxies, typically near the center of clusters, lack entirely the arms characteristic of spiral galaxies?
ANSWER: **elliptical** galaxies

6A. What animated film features the fictional corporation Buy 'n' Large and is partially set on a spaceship where passengers have become obese due to inactivity?
ANSWER: *WALL-E*

6B. In the 1950's, British authors like John Osborne and Kingsley Amis were described as what type of young men?
ANSWER: **angry**

7A. This is a 30-second calculation question. A regular polygon has n sides and its exterior angles each measure n plus 9 degrees. What is the value of n?
ANSWER: **15**

7B. This is a 30-second calculation question. If Tom can paint a whole fence in 3 hours, and Huck can paint one in 6 hours, then how many MINUTES would it take if they painted it together, assuming each works at a constant rate?
ANSWER: **120** minutes [do not accept "2"]

8A. Allegedly while taking a bath, what Greek thinker discovered a namesake buoyancy principle that states that a floating object displaces its own weight in fluid?
ANSWER: **Archimedes**

8B. Which neurotransmitter is released at neuromuscular junctions to stimulate muscle contractions?
ANSWER: **acetylcholine**

9A. Which reedless woodwind instrument was played by Jean-Pierre Rampal and Frederick the Great?
ANSWER: **flute**

9B. What document did Martin Luther nail to a church door in Wittenberg to protest the Catholic Church's use of indulgences?
ANSWER: *The **Ninety-Five Theses** on the Power and Efficacy of Indulgences*

10A. Name the French composer who used an out-of-tune violin to depict skeletons carousing in his *Danse Macabre.*
ANSWER: Charles-Camille **Saint-Saens**

10B. What shape is formed when a paper strip is given a half-twist and then has its ends taped together, and is notable for having only one side?
ANSWER: **Mobius** strip

1. This man called Shimon Peres "a great and good friend" in a letter later accused of being fabricated. In June of 2012, he said he would try to free Omar Abdel-Rahman in a speech delivered in Tahrir Square. This member of the Freedom and Justice Party was unseated by a council that included the Coptic Pope. He won election by defeating Ahmed Shafik, the former prime minister under Hosni Mubarak. For 10 points, name this first democratically elected President of Egypt, who was ousted in July 2013.
ANSWER: Mohamed **Morsi**

052-13-93-01117

2. This process involves decolorization with alcohol or acetone, after which safranin is used. The mordant for this process is typically a solution of iodine and potassium iodide. When performed on organisms whose cell walls are made primarily of peptidoglycan (pep-tid-oh-GLY-can), it results in a purple color. Its creator first used it to distinguish between two different pneumonia-causing bacteria. For 10 points, name this stain which separates bacteria into "positive" and "negative" groups.
ANSWER: **Gram** staining

024-13-93-01118

3. This novel opens by describing the protagonist's father Andrei, who jumps off a train after the protagonist's mother dies. Abducted by the Forest Brotherhood, this book's protagonist deserts, then allows his lover to be with Komarovsky instead. General Strelnikov, also known as Pasha Antipov, fights in the Red Army in this novel, in wich Lara eventually dies in a gulag, never reuniting with Yuri. For 10 points, name this epic novel by Boris Pasternak.
ANSWER: *Doctor Zhivago*

190-13-93-01119

4. The LUX experiment studying this phenomenon released results in October 2013. MOND was proposed to circumvent the need for this phenmenon, which was inferred using the virial theorem by Fritz Zwicky. A small free-streaming length is characteristic of the particles involved in the "cold" explanation of this phenomenon. Axions, MACHOs, and WIMPS are among the candidate particles for this phenomenon, which accounts for 27% of the universe. For 10 points, name this kind of mass-matter that produces no electromagnetic radiation.
ANSWER: **dark matter**

020-13-93-01120

5. This author wrote that "life is too much like a pathless wood" in a poem whose speaker wishes to "get away from earth awhile." He began one poem with the line, "Something there is that doesn't love a wall," skewering a neighbor who believes that "Good fences make good neighbors." This author of "Birches" wrote a poem whose speaker is "sorry he could not travel both" when confronted with a fork in the road. For 10 points, name this poet of "The Road Not Taken."
ANSWER: Robert **Frost**

190-13-93-01121

6. At constant temperature and pressure, surface tension is the partial derivative of this quantity with respect to surface area. This quantity adds the product of pressure and volume to the difference of internal energy and the product of temperature and entropy. A reaction is spontaneous if the change in this quantity is negative. For 10 points, name this thermodynamic quantity, a type of free energy named after an American physicist.
ANSWER: **Gibbs** free energy [prompt on **free energy**]

7. One of this writer's poems begins with Scipio Africanus appearing to the narrator in a dream, after which the title creatures form an assembly and pair off. Besides "The House of Fame" and "The Parliament of Fowls," he wrote a story in which the title ugly character transforms into a beautiful woman after her husband chooses loyalty over beauty. This poet wrote a General Prologue that begins with a description of April "with his shoures soote." For 10 points, name this author who wrote about the Knight, the Miller, and the Wife of Bath in *The Canterbury Tales.*
ANSWER: Geoffrey **Chaucer**

8. This is the number of atoms bonded to carbon in carbenium ions. Pyruvate contains this many carbons, since glycolysis splits one glucose into two pyruvate molecules. The polyatomic ion phosphate has an overall charge of negative this number. This number is the lowest possible principal quantum number for electrons in a d-orbital. The nitrogen family normally have oxidation states of this number, which is why ammonia contains this many hydrogens bound to nitrogen. For 10 points, give the atomic number of lithium.
ANSWER: **three** [or negative **three**]

9. This artist's alter ego, Rose Selavy (SAY-la-VEE), was often photographed by Man Ray. This artist chose to abbreviate a dirty French phrase for the title of an image of the Mona Lisa with facial hair. This artist's *L.H.O.O.Q.* is an example of a genre of artworks he pioneered by restructuring ordinary objects. For 10 points, name this French creator of readymades, who signed a urinal "R. Mutt" and named it *Fountain,* and painted *Nude Descending a Staircase*.
ANSWER: Marcel **Duchamp**

10. The closing of this city's African Methodist Episcopal Church in 1820 was one of the events that caused Denmark Vesey to plan a slave revolt here. During the Civil War, the Confederacy was reinforced by cadets from the Citadel, a military academy in this city. Union Major Robert Anderson abandoned Fort Moultrie outside of this city and relocated his troops to Fort Sumter. For 10 points, name this major South Carolina city where the first shots of the Civil War were fired.
ANSWER: **Charleston**, South Carolina

11. For an idealized soap bubble, the net form of this quantity is zero. In differential geometry, this value is given by the derivative of the unit tangent vector with respect to arc length. In general relativity, gravity causes space-time to have this property, an effect that can be visualized with the metaphor of a ball on a rubber sheet. For a circle, it is equal to one over the radius. For 10 points, name this quantity, denoted k, that measures how much something deviates from flatness.
ANSWER: **curvature**

12. This man collaborated with *Roots* author Alex Haley to write his autobiography. He urged his audience to vote but also warned that more extreme measures might be necessary in a speech known as "The Ballot or the Bullet." After converting to Sunni Islam, this man was shot and killed by three gunmen in New York's Audubon Ballroom. For 10 points, name this radical civil rights activist who changed his surname to a single letter after converting to Nation of Islam.
ANSWER: **Malcolm X**

015-13-93-01128

13. A text named for this concept attempts to link the converse of the word "bad" with "good." This concept's inquirers sometimes approach it with a distinction between consequentialism and a deontological version, the latter of which is supported by Kant's sense of duty. This discipline is referenced in the title of a work that introduces the naturalistic fallacym written by G.E. Moore. For 10 points, name this concept that titles Baruch Spinoza's magnum opus and is the study of virtuous behavior.
ANSWER: **ethics** [or **ethica**]

033-13-93-01129

14. This theory's final complete model was published by Xavier Le Pichon in 1967. It was supported by Edward Bullard's "fit" model and analysis of the fern genus *Glossopteris*. This theory proposes the existence of entities named after Juan de Fuca and the Nazca and the existence of "Gondwana". It built off of Alfred Wegener's earlier theory of continental drift. For 10 points, name this theory which divides the lithosphere into various moving portions.
ANSWER: **plate tectonics** [or **continental drift** until it is read]

052-13-93-01130

15. Pronouns of this type are the "V-form," which is distinguished from "T-form" pronouns. In French, this type of pronoun and the T-form are identical for plural, but the singular versions are different. In German, this pronoun is the same as the third person, "Sie," which is also true for Mexican Spanish, which uses "usted" instead of the less polite "tú." For 10 points, name this type of pronoun used when talking to strangers or social superiors.
ANSWER: **formal** second person

121-13-93-01131

1. In plant cells, preparation for this process involves fracturing the central vacuole and the creation of a phragmosome that bisects the cell. Astral microtubules only exist during this process, whose second phase involves the breakup of the nucleus, which frees sister chromatids. Unlike a similar process, this process contains only a single stage of prophase, anaphase, metaphase and telophase. For 10 points, identify this process of asexual reproduction that produces two identical daughter cells, as opposed to meiosis.
ANSWER: **mitosis**

066-13-93-01132

2. A poem by this author asks Walt Whitman "Which way does your beard point tonight?" He memorialized his mother Naomi in a poem named for the Jewish mourning prayer. This poet of "A Supermarket in California" and "Kaddish" exclaimed "Moloch whose blood is running money!" in his best-known work, which was dedicated to Carl Solomon. For 10 points, name this Beat poet who "saw the best minds of my generation destroyed by madness" in "Howl."
ANSWER: Irwin Allen **Ginsberg**

082-13-93-01133

3. This man advocated the theory of panspermia in his book *Worlds in the Making.* As an extension of his theory of ionic dissociation, he defined acids as substances which form hydrogen ions in aqueous solutions. An equation named for him expresses the rate constant k in terms of the gas constant, the activation energy, and temperature. For 10 points, name this Swedish chemist whose namesake equation calculates the rate of a reaction.
ANSWER: Svante August **Arrhenius**

024-13-93-01134

4. This politician noted that his top priority was "education, education, education" upon first securing high office. This "Third Way" proponent first rose through the ranks after the sudden death of John Smith. This man's government signed the Good Friday Agreement with Northern Ireland. He ceded power to his Chancellor of the Exchequer, Gordon Brown, in 2007. For 10 points, name this founder of "New Labour", the British PM beginning in 1997.
ANSWER: Anthony Charles Lynton "Tony" **Blair**

190-13-93-01135

5. In HTML, a tag using an exclamation point, followed by several hyphens, serves this purpose. Docstrings serve the same purpose as this type of text. In C++, text serving this purpose is set off by a slash and an asterisk. A common debugging technique is doing this "out" to an line of code to determine what is causing the error, as compilers do not attempt to run this code. For 10 points, name these fragments of code often used as notes by programmers.
ANSWER: **comment**s [or **commenting**]

190-13-93-01136

What literary character is served by the squire Sancho Panza and rides the horse Rocinante?
ANSWER: **Don Quixote** [or **Alonso** Quijano; or Alonso **Quijano**]

This is a calculation question. If the tangent squared of x is equal to 0.7, what is the secant squared of x?
ANSWER: **1.7**