1. A commonly accepted hypothesis regarding this event is the Alvarez hypothesis. Another hypothesis is that it was caused by the formation of the Deccan Traps. Evidence of this event is found at the K-T boundary, and this event marks the end of the Mesozoic Era. For 10 points, name this event which occurred around 65 million years ago and is thought to have been caused by an asteroid impact.
ANSWER: extinction of the dinosaurs [or Cretaceous-Tertiary extinction event; or K-T extinction event]

024-10-20-13101
2. One character in this play says that he will take a walk outside on his birthday, which would be an occasion because he hasn't left the play's central setting for nearly twenty years since the death of his wife Bess. Other characters in this play include two former enemies from the Boer War named Cecil Lewis and Piet Wetjoen. The plot centers on the murder of Evelyn by her husband Theodore Hickman, known as Hickey, and Hickey's attempts to get the patrons of Harry Hope's bar to fulfill their otherwise empty pipe dreams. For 10 points, name this play by Eugene O'Neill.
ANSWER: The Iceman Cometh
3. One episode of this television show featured players from the New Orleans Saints and Minnesota Vikings facing off. Contestants on this show are given three "lives" and must complete a challenge after seeing its "blueprint." Games on this show include "Supercoin" in which a player must bounce a quarter into a five gallon jug. This show is hosted by chef Guy Fieri and sees contestants asked to complete ten consecutive challenges to win a million dollars. For 10 points, name this NBC gameshow in which players must complete each challenge in sixty seconds.
ANSWER: Minute to Win It
4. In one of this author's novels, Joseph Grand struggles to write the perfect sentence, and Jean Tarrou dies despite the efforts of Dr. Bernard Rieux. This author wrote about a disease that strikes Oran in The Plague. A novella by this man begins with the sentence, "Maman is dead today;" in that novel, Mersault is executed for shooting an Arab "because of the sun." For 10 points, name this French existentialist author of The Stranger.
ANSWER: Albert Camus
5. This man ran for office with the slogan "Congress needs a tail-gunner." He defeated Robert La Follette, Jr., to win his Senate seat. This politician first came to national prominence by giving a Lincoln Day speech in front of the Republican Women's Club of Wheeling, West Virginia. This man was asked "Have you no sense of decency sir?" during a televised hearing of the U.S. Army. For 10 points, name this Wisconsin Senator whose claim that Communists had infiltrated the government at its highest levels led to witch hunts during the Red Scare.
ANSWER: Joseph Raymond McCarthy
6. As this novel ends, its protagonist weeps for the "end of innocence, the darkness of man's heart, and the fall through the air of a true, wise friend." Two characters in this novel are so close their names are usually collapsed as Samneric. The characters in this novel divide into one faction that advocates maintaining a fire and one that advocates hunting pigs. In this novel, a conch shell blown by Ralph represents civilization. For 10 points, name this novel in which the boys Ralph, Jack, Simon, and Piggy are stranded on an island, a work of William Golding.
ANSWER: Lord of the Flies
7. In Welsh mythology, Gwydion intentionally sparks a war by stealing some of these animals from Pryderi. In Greek myth, Theseus kills the Crommyonian one of these animals. Examples of these animals in Norse mythology include the golden Gullinbursti and Sahrimnir, which is eaten every night by the heroes of Valhalla. Atalanta is one of the people who chase the Calydonian one. In the Odyssey, Odysseus's men are turned into this kind of animal by Circe. For 10 points, name this animal which is known for its gluttony.
ANSWER: pig [or boar; or sow]
015-10-20-13107
8. In addition to apoptosis, the CIDEA gene plays a role in the breakdown of these. The tissue associated with this is responsible for much of the body's thermogenesis. Leptin acts as an indicator of the level of this in the body. It is stored in tissue that can be brown or white. This is stored in adipose tissue. These are triglycerides, meaning they are lipids. Trans ones are associated with heart disease and they can be saturated or unsaturated. For 10 points, name this material that stores energy in the long term for humans and whose presence brings about an increase in weight.
ANSWER: $\underline{\text { fats }}$ [or fatty acids; accept adipose tissue before mentioned; prompt on lipidss; accept oil before thermogenesis]

001-10-20-13108
9. This word appears once in Shakespeare, when Shallow proposes a toast to these people in London in Henry IV, Part 2. Derived from a Latin word for "horse-rider," it describes such authors as John Suckling, Robert Herrick, and Richard Lovelace, who are called this kind of "poet." This word is also used for the supporters of Charles I in the English Civil War, as opposed to the "roundheads." For 10 points, give this word, which also denotes an attitude of indifference and the mascot of the University of Virginia.
ANSWER: cavalier
019-10-20-13109
10. This author wrote a courtroom drama about a man who falls to his death from the Faulkner Building; that play, in which the audience votes as the jury, is The Night of January 16th. She also described a man who writes a textbook with no names in it, Ellsworth Toohey, and conspires with the mediocre Peter Keating to undermine a groundbreaking architect, Howard Roark. For 10 points, identify this author who expounded her Objectivist philosophy in such novels as The Fountainhead and Atlas Shrugged. ANSWER: Ayn Rand [or Alisa Zinovyevna Rosenbaum]

019-10-20-13110
11. During this period, the salty Zechstein Sea covered much of Europe. The Dimetrodon was a dominant predator during this period, during which a single large ocean known as Panthalassa surrounded the supercontinent Pangaea. This last period of the Paleozoic Era succeeded the Carboniferous. For 10 points, name this period of about 300 to 250 million years ago, at the end of which as many as ninety-five percent of the then-extant species may have died out in a mass extinction.
ANSWER: Permian Period
12. One character in this work tells his wife to bake a loaf of bread every day to prove that the title character fell asleep. The protagonist of this work gets a plant from the bottom of the ocean but has it stolen by a serpent. One character in this work is sentenced to death after he and the protagonist kill Humbaba and the Bull of Heaven. The protagonist of this work is two-thirds divine and grieves for his friend Enkidu while seeking immortality. For 10 points, name this Mesopotamian epic found on twelve tablets.
ANSWER: Epic of Gilgamesh
015-10-20-13112
13. Landmarks in this city include the Gherkin and the Tower Bridge. A major island in this city's limits is the Isle of the Dogs, which is near its business district at Canary Wharf. This city instituted a high profile "congestion charge" in 2007. It often places installation art on the "fourth plinth" of its Trafalgar Square. This city's other attractions include a giant Ferris wheel called "the Eye" and a clock tower referred to as Big Ben. For 10 points, name this capital of England.
ANSWER: London, England
015-10-20-13113
14. This region's western edge is marked by its namesake "terrace," also known as the Pamlico Formation. One of the last non-Arkansas habitats of the ivory-billed woodpecker, it was named by William Byrd and later surveyed by George Washington. The canal named for this geographic feature connects the Pasquotank River and Albemarle Sound to the Deep Creek and thus Chesapeake Bay. This formation surrounds Lake Drummond and extends from Elizabeth to Norfolk. For 10 points, identify this marshland region on the Atlantic coast of North Carolina and Virginia.
ANSWER: the Great Dismal Swamp
15. In a recurring bit on Late Night With David Letterman, an actor playing this man repeatedly screams "I'm not a doctor!" He is a member of the Pro Football Hall of Fame for his work as a linebacker for the Bears in the 1980s. He may now be better known for postgame outbursts such as "cannot play with them, cannot win with them, cannot coach with them, can't do it" after benching Vernon Davis. For 10 points, name this man who in 2009 finished 8-8 in the NFC West as the head coach of the San Francisco 49ers. ANSWER: Michael "Mike" Singletary

1A. Name the British poet of "Alastor, or the Spirit of Solitude" who wrote of "Two vast and trunkless legs of stone... in the desert" in his poem "Ozymandias."
ANSWER: Percy Bysshe Shelley
1B. What Spanish word for "pregnant" is commonly misused by English speakers to express an emotion, leading to unintended meanings?
ANSWER: "embarazada" (em-bar-ah-THAH-duh or em-bar-ah-ZAH-duh)
2A. Thomas Newcomen and James Watt invented types of what kind of machine responsible for kick starting the Industrial Revolution?
ANSWER: steam engines
2B. What device was codenamed "Project Natal" and allows Xbox 360 users to use their bodies as controllers?
ANSWER: Kinect
3A. This is a 10 -second calculation question. Jonathan has 16 animal crackers, three are giraffes, five are elephants, and the rest are lions. If he picks one at random, what is the probability that it is not a lion?
ANSWER: $\mathbf{1 / 2}$
3B. This is a 10 -second calculation question. What is the average of $2,9,11,37,40$ expressed as a decimal? ANSWER: 19.8

4A. What war featured drawn-out battles fought using trench warfare such as the Battle of the Somme and the Battle of Verdun?
ANSWER: World War I [or First World War; or the Great War]
4B. Name the networking standard codified in IEEE 802.3 that is used in most LANs. A common physical link is CAT- 5 cabling and it comes in 10 and 100 gigabit varieties.
ANSWER: Ethernet
5A. This is a 20 -second calculation question. If the height of a trapezoid is five inches, and its larger base is six inches longer than twice the length of the shorter base, what is the area of the trapezoid if the shorter base is 4 inches long
ANSWER: 45 square inches

5B. This is a 20 -second calculation question. What is the determinant of the two by two matrix with top row 59 and bottom row 2.311 ?
ANSWER: $\mathbf{3 4 . 3}$
6A. Meyer Friedman divided into "Type A" and "Type B" what psychological construct which was divided into subsets such as "INTJ" and "ESFP" in the Myers-Briggs Type Indicator?
ANSWER: personality

6B. What painting by Edvard Munch depicts a man holding his hands to his face against an orange background?
ANSWER: The Scream [or Skrik]
7A. This is a 30 -second calculation question. What is the greatest common divisor of 448 and 296 ? ANSWER: $\underline{8}$

7B. This is a 30 -second calculation question. What is the radius of the circle described by the equation $x^{2}-$ $8 \mathrm{x}+41+\mathrm{y}^{2}=0$ ?
ANSWER: $\underline{5}$

8A. Fermions, but not bosons, are subject to what principle of atomic physics, which states that no two particles in an atom can have the same set of quantum numbers, and is most commonly applied to electrons?
ANSWER: Pauli exclusion principle [or Pauli principle]
8B. The Arostook War, the slogan "54-40 or fight," and the War Hawks movement all arose in early nineteenth century America to dispute the placement of what 4000-mile map line, which now crooks above the 49th parallel at the Northwest Angle, where it runs through Lake of the Woods?
ANSWER: the United States border with Canada [or obvious equivalents]
9A. Parshva and Mahavira are the 23rd and 24th Tirthankaras according to which primarily Indian religion?
ANSWER: Jainism
9B. Name the Asian nation in which Pol Pot lead the Khmer Rouge.
ANSWER: Cambodia
10A. What politician has been criticized for holding "bunga bunga" parties on his lavish estate and for suspicious interactions underage girls as Prime Minister of Italy?
ANSWER: Silvio Berlusconi
10B. Name the laboratory technique that comes in gas, column, and high performance liquid varieties. The paper form is often used in classrooms to separate colored pigments. ANSWER: chromatography

1. The antagonist of this novel has a maid named Kitty who falls in love with the hero. The protagonist of this novel uses his servant Planchet to get a letter to the Duke of Buckingham. The protagonist of this novel rides an old yellow horse into town before getting himself into three consecutive duels on his first day. That hero of this novel falls in love with Constance Bonacieux and is antagonized by Milady de Winter. For 10 points, name this novel in which Athos, Porthos, and Aramis assist d'Artagnan in foiling Cardinal Richelieu, a work of Alexandre Dumas.
ANSWER: The Three Musketeers [or Les Trois Mousquetaires]
2. An iodide of a methyl group attached an atom of this element, which is attached to three phenyl groups, is used to form the ylide for the Wittig reaction. The simplest example of a divalent compound breaking the octet rule is this element's pentachloride. This element comes in violet, black, red, and white allotropes. Found just below nitrogen on the periodic table, for 10 points, identify this element, number 15 with symbol P.
ANSWER: phosphorus [accept just $\underline{\mathbf{P}}$ before mention]
020-10-20-13118
3. One of these events occurred in Boston after the temperature suddenly increased from 0 to 40 degrees Fahrenheit, causing a molasses tank to explode. In response to another of these occurrences, angry citizens unsuccessfully sued the South Fork Fishing and Hunting Club. During that event, Clara Barton oversaw the first major relief efforts of the American Red Cross. One of these destroyed Johnstown, Pennsylvania in 1889. For 10 points, name these disasters that often occur when dams are overrun.

ANSWER: floods [accept molasses flood before "South Fork" is read]
080-10-20-13119
4. The person who introduced this movement to Zen themes is the author of "Why I Take Good Care of My Macintosh Computer" and Turtle Island, Gary Snyder. Buddhist themes are also apparent in a novel from this movement, The Dharma Bums, whose author earlier represented key figures in this movement as the allegorical "Carlo Marx," "Old Bull Lee," and "Dean Moriarty." For 10 points, name this 1950s literary school to which William S. Burroughs, Allen Ginsberg, and Jack Kerouac belonged.
ANSWER: beat literature
019-10-20-13120
5. A group of these organizations are collected under the banner of the Change to Win Federation. The largest of these in the United States is led by Dennis Van Roekel and opposes the policies of Michelle Rhee. One of these organizations has the motto "Sí, se puede" and was founded by Cesar Chavez. One of them was led by Samuel Gompers, and one of the first examples of these organizations was the Knights of Labor. For 10 points, the the United Farm Workers and the AFL-CIO are examples of what organizations which often agitate for better working conditions?
ANSWER: labor unions
6. The second of these laws can expressed as the derivative with respective to time of the areal velocity is equal to zero. The third of these laws states that the square of the orbital period is directly proportional to the cube of the semi-major axis. The second of them, often expressed as "equal area over equal time", is a direct consequence of the conservation of angular momentum. For 10 points, name this group of three astronomical laws, the first of which states that the orbit of a planet around the sun takes the form of an ellipse.
ANSWER: Kepler's laws
7. One role in this vocal range sings that in "matters vegetable, animal and mineral," he is the very model of his namesake occupation. Another role in this vocal range sings "Largo al Factotum" in an opera in which he arranges the marriage of Rosina and Almaviva. It is the higher of the two ranges variously used to perform Boris Godonov; the lower is bass (BASE). For 10 points, name this male vocal range, exemplified by the roles of Major-General Stanley and Figaro, found below the range of the tenor.
ANSWER: baritone
002-10-20-13123
8. This thinker's best-known work ends with the line "What we cannot speak about we must pass over in silence." He used several examples of language games in his Blue and Brown Books, while another of his works uses the thought experiment of a "beetle-in-a-box" to argue against the idea of a private language. That work, Philosophical Investigations, expands on many of the ideas this philosopher introduced in a work with a three-word Latin title. For 10 points, name this 20th century philosopher of Tractatus Logico-Philosophicus.
ANSWER: Ludwig Wittgenstein
9. One person who participated in this event was Tillius Cimber, who used the pretext of begging for his brother's return from exile to hold onto some clothing and prevent the target from raising his arms. The chief instigators of this event were all killed at the Battle of Philippi two years later. It followed several ill omens in bird entrails and a plea from Calpurnia not to leave the house, and it left its target's body under the status of Pompey. For 10 points, identify this event which took place on March 15, 44 BCE , and was orchestrated by Cassius and Brutus against a Roman dictator.
ANSWER: the assasination of Gaius Julius Caesar [or obvious equivalents]
019-10-20-13125
10. In one poem, this author wrote about a man who "did not wear his scarlet coat" and who "killed the thing he loved." This author of fairy tales like The Happy Prince used his time in prison as the basis for "The Ballad of Reading Gaol." A character in one play by this author invents "bunburying" and is named Algernon Moncrieff. In that play by this author, Gwendolen falls in love with Jack Worthing because she thinks he has the title name. For 10 points, name this author of The Importance of Being Earnest. ANSWER: Oscar Wilde
11. Diophantine equations use this type of numbers as variables. They do not form a field and the cardinality of this class of numbers is the same as the rationals. These are symbolized by a Z. Natural numbers are a subset of these which are not negative. Sometimes the phrase whole numbers is used to describe them. For 10 points, name this type of number that when represented as reals have only zeros after the decimal point, examples of which include negative 17,0 , and 3.
ANSWER: integers
001-10-20-13127
12. One of this author's novels involves a promise made to a dying husband to take care of his daughter by another woman; in that work, Olivia feels that her mother's attentions are split unfairly between her and her newfound half-sister Kwan. In addition to writing The Hundred Secret Senses, she wrote about the mother-daughter relationship between Pearl and Winnie Louie in her novel The Kitchen God's Wife. She is better known for a work that chronicles the story of four mother-daughter pairs of Chinese descent. For 10 points, name this author of The Joy Luck Club.
ANSWER: Amy Tan
040-10-20-13128
13. Atmospheric nitrogen or vacuum reaction conditions can be simulated with the Schlenk variety of these objects. Another variety can easily connect to vacuum filtration apparatuses via a sidearm. A more common variety than the Buchner variety contains a fill-line for measuring high-precision. For 10 points, identify these pieces of laboratory glassware that include a volumetric kind and a familiar conical variety known as the Erlenmeyer kind.
ANSWER: flasks
020-10-20-13129
14. A process named for this country was a Cold War term for the gradual increase of Communist influence across borders. "Accords" signed in this country's capital guaranteed human rights in the USSR. One long-serving president of this country was Urho Kekkonen. It fought the Continuation War with the Soviets, who had earlier breached its Mannerheim Line in the Winter War. For 10 points, identify this country that, since becoming independent from Sweden, has seen the growth of high-tech companies such as Nokia.
ANSWER: Republic of Finland [or Suomi; or Suomen Tasavalta; or Republiken Finland]
019-10-20-13130
15. This animal has Leydig's organ, and the four compartments of its heart are arranged in an s shape. One type of this animal has a cephalofoil that enhances the sensitivity of their ampullae of Lorenzini, which allow them to detect electrical signals in seawater. Most species of this animal exhibit ovoviviparity, and they breathe through ram ventilation. Their skin is composed of dermal denticles, and one extinct species of this animal was called the Megalodon. For 10 points, name these cartilaginous fish, types of which include the hammerhead and great white.
ANSWER: sharks
066-10-20-13131

1. This group's legal victory in the case of Worcester v. Georgia was short-lived, as the President refused to abide by the ruling and declared "John Marshall has made his decision; now let him enforce it!" Their newspaper, the Phoenix, was the first major work published using the syllabary that Sequoyah developed for their language. After signing the Treaty of New Echota, they were forced from their homes by Winfield Scott. For 10 points, identify this Native American tribe which was subjected to the Trail of Tears. ANSWER: Cherokee Nation
2. One of this composer's works intersperses the words of the gospel with the lyrics of Picander, including the aria "Eli, Eli, lama sabachthani." This composer wrote six suites for unaccompanied cello in addition to the St. Matthew Passion. He wrote six concertos as a job application for Margrave Christian Ludwig. The composer of the Brandenburg Concertos, this man wrote a prelude and fugue in every major and minor key in another work. For 10 points, name this Baroque composer of The Well-Tempered Clavier.
ANSWER: Johann Sebastian Bach
080-10-20-13133
3. Tuataras are a the only extant members of one order of this class. Squamata and testudines are the main subdivisions of this group of animals which also includes the group sauria. Herpetology involves the study of this class of animals which includes the caiman found in parts of South America. An extinct member of this class of animals is the pterodactyl. For 10 points, name this class of cold blooded animals that includes snakes and lizards.
ANSWER: reptiles or reptilia
064-10-20-13134
4. This architect's buildings in Dallas, Texas, include the Morton H. Meyerson Symphony Center and that town's city hall, while he also developed a namesake plan to revitalize Oklahoma City. He built the Frangrant Hill Hotel in his native nation, while he incorporated a glass pavilion from which hangs an American flag into his design for the John F. Kennedy Presidential Library. For 10 points, name this Chinese-American architect of the Rock and Roll Hall of Fame who also designed a glass pyramid for the entrance of the Louvre.
ANSWER: I.M. Pei (PAY) [or Ieoh Ming Pei]
040-10-20-13135
5. Tucker Carlson purchased the domain of this man's name to send inflammatory emails about his boss Phil Griffin. This man released a 2007 book titled Truth and Consequences compiling the opinions he expressed on the "special comments" segment of his show. In October of 2010, he was suspended for making donations to Democratic candidates in Kentucky and Arizona. For 10 points, name this former sports anchor who identifies "the Worst Person in the World" on his MSNBC show Countdown.
ANSWER: Keith Olbermann

This is a 10 -second calculation question. What is the positive solution for y in $2 \mathrm{y}=\mathrm{y}^{\wedge} 3$ ?
ANSWER: square root of 2

Name the man who yelled "I am a Stalwart" after shooting President James Garfield in 1881.
ANSWER: Charles Julius Guiteau

