1. One character in this work sends a visiting card with a black cross on it to signify his death, and this work concludes with the sound of a door slamming. While her husband was sick, the protagonist forged his signature to borrow money from Nils Krogstad, who is dissuaded from blackmail by Mrs. Linde. At this play's conclusion, the protagonist abandons her children and her husband Torvald. For 10 points, name this play about Nora Helmer written by Henrik Ibsen.
ANSWER: A _**Doll House**_ [or A _**Doll's House**_; or Et _**Dukkehjem**_]

014-12-36-11101

2. It is hypothesized that the non-trivial roots of the Riemann zeta function have this value as their real part. In quantum mechanics, particles have spins of plus or minus this value. In biology, this is the probability that the offspring of a monohybrid cross that will be heterozygous, and the area of a triangle can be found by multiplying this number by its base and height. For 10 points, identify this fraction, the probability that a flipped coin will land on heads.
ANSWER: **one-half** [or **0.5**; or **one over two**; or obvious equivalents]

126-12-36-11102

3. One play by this man contains a scene titled "Don Juan in Hell" portraying a dream of the anarchist Jack Tanner. This author of _Man and Superman_ wrote a play whose title character is the daughter of Lady Britomart and an officer in the Salvation Army. In another play, the phonetician Henry Higgins makes a bet that he can pass off Eliza Doolittle as a duchess. For 10 points, identify this British playwright of _Major Barbara_ and _Pygmalion._
ANSWER: George Bernard **Shaw**

064-12-36-11103

4. As a member of Winfield Scott's staff, this man discovered a way to bypass Santa Anna's position at the Battle of Cerro Gordo during the Mexican-American War. During a later command, he split his forces in the face of Joe Hooker's superior numbers to win at Chancellorsville. This man invaded the North twice, with his first invasion stymied at Antietam by George McClellan. For 10 points, name this Confederate general from Virginia who lost at Gettysburg and surrendered at Appomattox.
ANSWER: Robert Edward **Lee**

139-12-36-11104

5. This baseball team won a pennant after Bobby Thomson hit a home run known as the "shot heard around the world." In the 1954 World Series, an over-the-shoulder catch was made by this team's center fielder Willie Mays. Tim Lincecum helped this team defeat the Texas Rangers in the 2010 World Series. For 10 points, name this baseball team that decided in 2008 not to re-sign home run record holder Barry Bonds.
ANSWER: San Francisco **Giants** [or **San Francisco** Giants; or New York **Giants**; prompt on **New York**]

130-12-36-11105

6. The opening paragraph and parts of the dialogue of *War and Peace* were written in this language to indicate Catherine the Great's obsession with this language and its culture. Samuel Becket wrote *Endgame* in this language so it would be "without style". Many Algerian novelists write in this language, including the pied-noir (PEE-ay NWAR) Albert Camus. For 10 points, name this language that enjoys official status in Haiti and Quebec.
ANSWER: **French** [or **francais**]

005-12-36-11106

7. This poet set one work in "the forest primeval" of Acadie, where the protagonist searches for her love Gabriel Lajeunesse (LAH-zhew-NESS). One of his characters marries Minnihaha and is raised by Nokomis "by the shores of Gitche Gumee." This poet of *Evangeline* wrote that "in the hour of darkness and peril and need" people will hear the "midnight message" of the title character of another poem. For 10 points, name this American poet of *The Song of Hiawatha* and "Paul Revere's Ride."
ANSWER: Henry Wadsworth **Longfellow**

124-12-36-11107

8. The protagonist of this work considers suicide after he dreams about the death of a bird kept in a golden cage by a courtesan. Later, that protagonist learns the way of the river from the ferryman Vasudeva. After exploring a life of materialism with the merchant Kamaswami, the protagonist is eventually reunited with his childhood friend Govinda. For 10 points, identify this novel by Hermann Hesse about a character who shares his name with the founder of Buddhism.
ANSWER: *Siddhartha*

014-12-36-11108

9. OS-CON is an organic type of these devices. In an AC circuit, Fourier analysis gives the impedance of these elements as one over the angular velocity times this elements namesake unit. Ewald Georg von Kleist was the first person to create one of these. The insulator between two plates in one of these devices is called a dielectric. The Leyden jar was the first one of these created. For 10 points, name this device that stores charge and has units of Farads.
ANSWER: **capacitor**

135-12-36-11109

10. One character in this opera owns a servant named Monostatos and heads a council of priests of Isis and Osiris. That character, Sarastro, is a magician who puts the protagonist and his lover under the Test of Silence. This opera features such pieces as Papageno's birdcatcher's song and the aria "Der Hoelle Rache" (dehr HOO-leh "ROCK"-uh) sung by the Queen of the Night. For 10 points, name this opera written by Wolfgang von Mozart about Tamino, who rescues Pamina with the help of the title enchanted instrument.
ANSWER: *The **Magic Flute*** [accept *Die **Zauberflote***]

119-12-36-11110

11. This author wrote about a god of wealth whose eyesight is restored at the temple of Asclepius (uh-SKLEP-ee-us) in a play which evidences the transition from Old Comedy to Middle Comedy titled *Plutus.* This man created such locations as Cloudcuckooland and The Thinkery in his other plays, and he depicted the women of Sparta and Athens uniting to go on a sex strike to end the Peloponnesian War. For 10 points, name this Greek comic playwright of *The Birds, The Clouds,* and *Lysistrata* (LIE-sih-STRAH-tuh).
ANSWER: **Aristophanes** (air-ih-STAH-fuh-nees)

014-12-36-11111

12. One famously dangerous order in this phylum is Siphonophora. Some members of this phylum have a larval form called the planula. That stage in the class Anthrozoa of this phylum is able to feed. The operculum is a lid over this phylum's namesake stinging cells, which are also known as nematocysts. The two body forms of this phylum are the sessile polyp and the mobile medusa. For 10 points, name this phylum that includes corals, anemones, and jellyfish.
ANSWER: **Cnidaria**

13. Frederick Benteen and Marcus Reno were to lead parts of a three-pronged attack at this battle. One commander at this battle disobeyed the orders of Alfred Terry by going off on his own to attack an enemy encampment. That commander had his men of the Seventh Cavalry shoot their own horses in a failed attempt to build a wall to survive this battle. For 10 points, name this battle in modern-day Montana that was a total victory for Sitting Bull and Crazy Horse over George Custer.
ANSWER: Battle of **Little Bighorn** [or **Custer's Last Stand**; or Battle of **Greasy Grass** Creek]

14. The speaker of one poem by this author declares "Out of the ash I rise with my red hair and I eat men like air." This poet of "Lady Lazarus" also wrote a poem which tells the title parental figure that there is a stake in his "fat black heart" and depicts him as a Nazi. In her only novel, the suicide by hanging of Joan Gilling does not disturb college student Esther Greenwood. For 10 points, identify this suicidal American author of "Daddy" and *The Bell-Jar.*
ANSWER: Sylvia **Plath**

15. This work includes such unusual score markings as "the barking dog" and "the drunkards have fallen asleep". It was published in a collection with "The Sea Storm," "Pleasure," "The Hunt," and five other works. Insects annoying a shepherd and rustic bagpipes are evoked in various sections of this work. This part of *The Contest Between Harmony and Invention* consists of "L'estate," "L'inverno," "L'autumno," and "La Primavera." For 10 points, name this set of four concerti by Antonio Vivaldi.
ANSWER: The *****Four Seasons***** [or Le *****quattro stagioni*****]

1A. What British computer scientist names a test used to judge a machine's ability to show intelligent behavior?
ANSWER: Alan Mathison **Turing**

1B. Name the Dutch artist who painted *Girl with a Pearl Earring* and depicted his hometown in *View of Delft*.
ANSWER: Jan **Vermeer** [or Johannes **Vermeer**; or Johan **Vermeer**]

2A. What mythological mountain served is home to the gods of Greek myth?
ANSWER: Mount **Olympus**

2B. Name the Knight of the Round Table who is the subject of a poem about his confrontations with the Green Knight.
ANSWER: Sir **Gawain**

3A. This is a 10-second calculation question. Triangle XYZ has a right angle at Y, and legs XY = 5 and YZ = 12. Find the sine of angle X.
ANSWER: **12/13**

3B. This is a 10-second calculation question. What is the base 3 logarithm of 9?
ANSWER: **2**

4A. This organ metabolizes drugs and helps break down toxic substances. Name the organ damaged in cirrhosis.
ANSWER: **liver**

4B. In which board game do players build cities and roads on hexagonal tiles in order to reach ten victory points?
ANSWER: *The **Settlers of Catan*** [or *Die **Siedler von Catan***]

5A. This is a 20-second calculation question. Find *x* such that the mean of 20, 30, 40, and *x* is 36.
ANSWER: *x* = **54**

5B. This is a 20-second calculation question. A convex polygon has 20 diagonals. Determine the number of sides in the polygon.
ANSWER: **8** [or **octagon**]

6A. Name this American economist whose work on monetarism earned him the 1976 Nobel Prize in Economics, a year after he retired from the University of Chicago.
ANSWER: Milton **Friedman**

6B. Name this British physicist who guided Hans Geiger (GUY-ger) and Ernest Marsden in performing his namesake gold foil experiment.
ANSWER: Ernest **Rutherford**

7A. Which American architect was a leader of the Prairie School and designed such buildings as the Imperial Hotel in Tokyo and a home called Fallingwater?
ANSWER: Frank Lloyd **Wright** [or Frank Lincoln **Wright**]

7B. This religion's sacred scripture is the Qur'an (Koran). Name this religion founded in the seventh century by Muhammad in Arabia.
ANSWER: **Islam** [or al-**Islam**]

8A. This is a 30-second calculation question. The weather forecast calls for a 20% chance of rain on Friday, a 30% chance of rain on Saturday, and a 50% chance of rain on Sunday. Find the probability that all three days are rainy.
ANSWER: **3%** [or **0.03**; or **3/100**]

8B. This is a 30-second calculation question. The tangent of angle P is 2/3, and the tangent of angle Q is 3. Find the tangent of an angle whose measure is the sum of angles P and Q.
ANSWER: **-11/6** [or **-1 5/6**]

9A. This phenomenon gets its name from the Spanish for "The Boy." Name this event characterized by unusually warm sea surface temperatures in the equatorial Pacific Ocean.
ANSWER: **El Niño** Southern Oscillation [or **ENSO**]

9B. What law states that the planet's orbits are ellipses with the sun at one of the two foci?
ANSWER: **Kepler's First** Law [prompt on **Kepler's** law]

10A. What former Minister of Education, Employment, and Workplace Relations under Kevin Rudd is, as of July 2011, the Prime Minister of Australia?
ANSWER: Julia **Gillard**

10B. Name the country that borders Algeria and Mauritania and lies across the Strait of Gibraltar from Spain.
ANSWER: Kingdom of **Morocco** [or Al Mamlakah al **Maghrib**iyah]

1. This number is the natural log of Gelfond's constant, and Ramanujan developed several approximations for it. It is also the period of the tangent function, and the fact that its transcendental is used to show that squaring the circle is impossible. 180 degrees is equal to this many radians. For 10 points, name this number, the ratio of a circle's circumference to its diameter equal to about 3.14159.
ANSWER: **pi**

142-12-36-11117

2. This is the consequence of Myrrha's (MUR-rah) prayer to be neither living nor dead. This also happened to the Heliades (he-LEE-a-deez) when they mourned their brother Phaethon (FAY-ton). Peneus helped his nymph daughter undergo this in order to escape from Apollo. Baucis (BAW-sis) and Philemon (fil-EE-mon) were granted this transformation as a reward for their hospitality. For 10 points, name this process, examples of which include Daphne's transformation into a laurel.
ANSWER: **turning into** a **tree** [accept word forms and obvious equivalents like **being turned into a tree** or **people becoming trees**]

142-12-36-11118

3. One class of these instruments has transmission and scanning variants. Typically, basic forms of this instrument will contain components like an objective, stage and an ocular. They are referred to as compound if they have greater power. Anton von Leeuwenhoek made major early scientific contributions using this instrument, which today are roughly divided into optical and electron variants. For 10 points, name these biological instruments used to observe very small objects.
ANSWER: **microscope**s [prompt on **electron microscope** before "objective"]

064-12-36-11119

4. This man led a series of boycotts to protest a massacre ordered by Reginald Dyer. This reformer outlined his views in his book *The Story of My Experiments with Truth* and experienced racism while living in South Africa. He protested a tax by leading his Salt March as part of the principle of satyagraha (SAT-ya-GRA-ha). This man was assassinated in 1948 by a Hindu nationalist. For 10 points, name this Indian leader who opposed British occupation through non-violent means.
ANSWER: Mohandas **Gandhi** [or **Mahatma**]

052-12-36-11120

5. Particles of this type of substance are removed from emissions by Cottrell precipitators. The Tyndall effect is the scattering of light by these substances. Emulsions, or liquids dispersed in liquids, and aerosols, or liquids dispersed in gases, are categories of this type of mixture. Examples of these substances include fog, milk, and butter. For 10 points, name this type of mixture whose particles fall between those of suspensions and solutions in size.
ANSWER: **colloid**s [or **colloidal dispersion**s]

131-12-36-11121

6. One of this author's title characters becomes the manager of evangelist Sharon Falconer, who later becomes his lover before dying in a fire. Another of this author's title characters works under Max Gottlieb as a doctor. This author of *Elmer Gantry* and *Arrowsmith* set his works, including one following Myra's husband, the real estate broker George, in the fictional city of Zenith. For 10 points, identify this American novelist of *Babbitt.*
ANSWER: Harry Sinclair **Lewis**

7. This author created Bill Driscoll and Sam Howard, who regret kidnapping the title figure in one story. This author of the collection *The Four Million* also wrote about a woman who sells her prized hair for twenty dollars so she can buy her husband a watch fob as a Christmas gift. That story follows the needy couple Della and Jim. For 10 points, identify this American author of "The Ransom of Red Chief" and "The Gift of the Magi."
ANSWER: **O. Henry** [or William Sydney **Porter**]

8. This molecule is ligated to silver in a substance that is used to identify aldehydes, known as Tollens' reagent. It is most commonly produced in a reaction that uses a magnetite or ruthenium catalyst to combine two diatomic gases; that is the Haber-Bosch process. This trigonal pyramidal molecule produces toxic vapors when mixed with hypochlorites, commonly found in bleach. For 10 points, identify this basic, foul-smelling gas with formula NH_3 (N-H-three).
ANSWER: **ammonia** [or **NH_3** before it is read]

9. This nation fought Finland in the Continuation and Winter Wars. In 1929, this nation began its effort to "liquidate the kulaks as a class." One dictator of this country met with Nixon in the 'kitchen debate' and announced "We will bury you" in a speech. That ruler also led a 'thaw' that included De-Stalinization. This country collapsed under Mikhail Gorbachev, and was once ruled by Nikita Khrushchev and Joseph Stalin. For 10 points, name this former Communist nation that included modern Russia.
ANSWER: **Soviet Union** [or **U.S.S.R**; or **Union of Soviet Socialist Republics**; or **Soyuz Sovetskikh Sotsialisticheskikh Respublik**; or **Sovetsky Soyuz**; or **S.S.S.R.**; do not accept "Russia"]

10. This man's security force beat Walter Reuther (ROO-ther) at the Battle of the Overpass. He owned plants at Willow Run and River Rouge that made weapons during the World Wars. This man's secretary published the anti-Semitic *Dearborn Independent.* This man pioneered such innovations as the five-dollar work day and the moving assembly line. His most famous invention was only available in a black color. For 10 points, name this man who founded a car company that sold the Model T.
ANSWER: Henry **Ford**

11. This city has a pedestrian boulevard for shopping called the Stroget (STROY-et). This city has an amusement park originally built in the 1840s called Tivoli Gardens, and is located on the island of Zealand. A seated figure near this city's city hall and a statue on a rock in this city's harbor pay homage to an author of children's stories from here. For 10 points, name this city that is home to the Little Mermaid statue honoring Hans Christian Andersen, and is the capital of Denmark.
ANSWER: **Copenhagen** [or **Kobenhavn**]

12. This woman was tried and burned at the stake for heresy by Bishop Cauchon after being captured by Burgundians outside of Compeigne, but she was canonized in 1920 by Pope Benedict XV. Earlier, she had won a victory at Patay and had convinced the Dauphin to be crowned Charles VII at Reims. For 10 points, name this peasant girl who urged on by the voices of saints lifted the Siege of Orleans and fought against the English during the Hundred Years' War for France.
ANSWER: **Joan of Arc** [or **Jeanne d'Arc**]

139-12-36-11128

13. This law can be used to find the stepdown voltage of a transformer given the turns of the two coils. A modification of this law sets the curl of E equal to negative d B over d t, as part of Maxwell's laws. The negative sign in this law gives the direction which the induced current will flow, which is a statement of Lenz' law. It states that the change in magnetic flux through a loop is equal to the EMF. For 10 points, identify this law of electromagnetic induction named for a Brit.
ANSWER: **Faraday's Law** of induction

135-12-36-11129

14. This period seemed to get support when Frederick William IV rode through Berlin during it, but he later refused the Frankfurt Assembly's offer of a crown. Louis Kossuth briefly came to power during this period, and Klemens von Metternich was forced to resign at its start. France's Second Republic began during this period after the abdication of Louis-Philippe (fil-EEP). For 10 points, name this period of uprisings across Europe that took place in the middle of the nineteenth century.
ANSWER: revolutions of **1848** [or **Spring of Nations**; or obvious equivalents like rebellions of **1848**, revolts of **1848**; prompt on **revolution**s; prompt on **Year of Revolutions**]

121-12-36-11130

15. One of this author's characters is stalked by the sailor James Vane, the brother of the actress he drives to suicide. In one of his plays, a baby is accidentally left in a handbag at Victoria Station, and Jack Worthing invents an imaginary brother. In his only novel, the title character is corrupted by Henry Wotton and remains youthful as Basil Hallward's portrait of him ages. For 10 points, name this Irish author of *The Importance of Being Earnest* and *The Picture of Dorian Gray.*
ANSWER: Oscar Fingal O'Flahertie Wills **Wilde**

132-12-36-11131

1. In May of 2011, a speech defending this act went viral after being delivered in the Minnesota House of Representatives by Steve Simon. In 2010, three judges who had upheld this activity in Iowa lost re-election. In June 2011, a bill instituting this action was signed by Andrew Cuomo, legalizing it in New York. For 10 points, name this action now legal in six states, but without the federal recognition that is determined by the 1996 Defense of Marriage Act.
ANSWER: **same-sex marriage** [or **gay marriage**; or obvious equivalents]

023-12-36-11132

2. This author wrote about a detective who is tricked by Red Scharlach (SCAR-lock) into investigating his own murder in "Death and the Compass." The narrator of another story lives in a universe of hexagonal rooms filled with all possible books. Another narrator is a Chinese spy for Germany who kills the sinologist Stephen Albert. For 10 points, name this Argentinian author of "The Library of Babel" and "The Garden of Forking Paths."
ANSWER: Jorge Luis **Borges** (HOR-hay loo-EES BOR-hays)

121-12-36-11133

3. One man who was fired as a result of this event was offered the Stennis Compromise; that man was Archibald Cox. G. Gordon Liddy was indicted during this event. Five men were arrested at the beginning of this event, and they were paid to lie by the Committee for the Re-Election of the President. This event was named for a hotel in Washington, D.C., that housed the Democratic National Committee headquarters. For 10 points, name this scandal that resulted in the resignation of Richard Nixon.
ANSWER: **Watergate** Scandal [or equivalents mentioning **Watergate**]

120-12-36-11134

4. This state's city of Bettendorf lies across the Mississippi, west another state's cities of Moline and Rock Island, and is one of the two Quad Cities located in this state. This state's namesake writer's workshop is in a city that also contains the Hoover Presidential Library. One major university in this state is in Ames. For 10 points, name this midwestern state that is home to the first caucuses of the Presidential election cycle.
ANSWER: **Iowa**

005-12-36-11135

5. In 1938, Errol Flynn played this character in a movie about his "adventures." He was voiced by Brian Bedford as an animated fox in a 1973 Disney cartoon. Cary Elwes played him in a Mel Brooks parody subtitled "Men in Tights," which largely spoofed a movie where Kevin Costner protrayed this character as "the prince of thieves." Ridley Scott and Russell Crowe brought him to the screen again in 2010. For 10 points, name this legendary outlaw who robs from the rich and gives to the poor.
ANSWER: **Robin Hood**

019-12-36-11136