1. One group put this adjective in its name because of paintings by George Rodrigue, which hung in the offices of the Louisiana congressmen who helped found it. Those conservative Democrats are known as this kind of "dog." Restrictions against doing business on Sunday are known as these kind of "laws," after the paper on which they were originally printed. For 10 points, give this color, which also was used in the uniforms for soldiers who served under Joseph Hooker and Ulysses Grant, opposing the Confederates in gray.
ANSWER: blue
2. As of October 2010, a bridge across this body of water is being retrofitted to include a novel self-anchored suspension span. The deepest part of this body of water is Raccoon Strait, and San Pablo Bay is a northern extension of it. Angel Island, in this body of water, was the Pacific counterpart to Ellis Island, and another island in this bay was home to a notorious prison. On its east end lie the cities of Berkeley and Oakland, which are part of a namesake "Area" whose southern part includes Silicon Valley. For 10 points, name this bay in Northern California.

ANSWER: San Francisco Bay

003-10-20-11102
3. In one song, this artist recalls getting a motel room and building a fort out of sheets. She was criticized for appearing in a music video with Elmo while wearing a seemingly low cut dress. One track by this singer accuses "you change your mind like a girl changes clothes." This artist sang one song about liking "the taste of her cherry chapstick," and another song about characters with "sun-kissed skin, so hot, will melt your popsicle." For 10 points, name this singer of "I Kissed a Girl" and "California Gurls."
ANSWER: Katy Perry [or Katheryn Elizabeth Hudson]
4. Matteo Ricci was one of many missionaries who invented writing systems for this language. Another system's "tone numbers" are still retained, even when using the spelling of a more modern system that represents this language's "ch" ("CH") sound as the letter "q" and "sh" ("SSH") sound as the letter "x."For 10 points, identify this language that is "romanized" into English letters by the Wade-Giles or Pinyin systems.
ANSWER: Mandarin Chinese [or Mandarin; or Hanyu]
5. This author started writing to support her family when her father's utopian community Fruitlands failed. Over a century after her death, the manuscript to her thriller A Long Fatal Love Chase was published. She also wrote such works as Hospital Sketches, based on her work as a nurse during the Civil War, but is likely best known for a novel in which Mrs. Kirke's governess marries Professor Bhaer and Beth dies of scarlet fever. For 10 points, name this author who created Beth, Amy, Meg, and Jo in Little Women. ANSWER: Louisa May Alcott [or Flora Fairfield]
6. One of this artist's paintings was exchanged by its commissioner Edward Coates for a less controversial work, The Pathetic Song. Another of his works depicts his friend in the titular vessel on the Schuylkill River. In addition to Max Schmitt in a Single Scull, he also painted several of his students and himself swimming in a lake in The Swimming Hole. This artist is better known, however, for a painting depicting several men in an auditorium looking down at a bloody medical operation. For 10 points, name this American artist of The Gross Clinic.
ANSWER: Thomas Eakins
7. This author's experiences observing the Soviet Union, Haiti, and the Spanish Civil War are recounted in his book I Wonder as I Wander. A man's request to obtain improvements on his apartment is met with accusations of trying to overthrow the government in this man's poem "Ballad of the Landlord." He also wrote a poem in which he describes rivers as "as ancient as the world and older than the flow of human blood in human veins." That poem is "The Negro Speaks of Rivers." For 10 points, name this poet of "Harlem," a work that questions what happens to a dream deferred.
ANSWER: Langston Hughes
030-10-20-11107
8. This polity's judicial branch includes a Civil Service Tribunal headed by Paul Mahoney, and its highest court is currently headed by Vassilios Skouris. In 2004, that court ruled on the citizenship of the daughter of Katherine Chen, a Chinese woman who had deliberately chosen to have her second child here. Its legislative branch consists of a namesake council of ministers as well as a parliament, while its executive branch is currently led by Herman van Rompuy. The Treaties of Maastricht and Lisbon dealt with the governance of, for 10 points, which group of nations located on a namesake continent west of Asia? ANSWER: European Union

040-10-20-11108
9. ?This man's work with tartaric acid marked the beginning of stereochemistry. His studies with silkworm diseases and beer and wine contamination are credited with saving three of his home country's industries. This scientist's investigations into dried rabbit spines enabled him to cure the child Joseph Meister, who had suffered fourteen dog bites. For 10 points, identify this French polymath who developed a rabies vaccine and created a process for heating food and beverage in order to kill harmful microorganisms. ANSWER: Louis Pasteur
10. One founder of this institution was a master bookbinder who abandoned this project to become a nun. In addition to Ellen Gates Starr, this place was organized by an ACLU co-founder who wrote of "twenty years" here. Located at 800 South Halsted Street and modeled on Samuel Barnett's Toynbee Hall in London, this institution included educational facilities from kindergarten through the collegiate level, a gymnasium, and centers for handicrafts. For 10 points, identify this settlement house for the immigrants and poor of Chicago led by Jane Addams.
ANSWER: Hull House
019-10-20-11110
11. One atom of this element is found in a prototypic furan and an atom of this element forms the bridge in an ether. The liquid form of one of its allotropes is paramagnetic. Reactive species of this element are potent free radicals. It is found with silicon in quartz. Another allotrope of this element absorbs UV radiation. It has atomic weight 16 . Rust is a combination of iron and this. For 10 points, name this element that along with hydrogen is found in water.
ANSWER: oxygen
12. In this novel, the Bokanovsky Process is used to produce groups such as the "epsilon minus morons" and "alpha plus intellectuals." The central character takes an interest in the Hatchery employee Lenina Crowne, and the two journey together on a rocket to a New Mexico reservation. At the reservation, a religious whipping ceremony is seen, and that action recurs at the end of this book, leading to John the Savage's suicide. Mustapha Mond and the widespread consumption of soma keep the populace docile in, for 10 points, what dystopian novel by Aldous Huxley?
ANSWER: Brave New World
13. Projects such as VIRGO, LISA, and LIGA are looking for the gravitational kind of these phenomena. The frequency of these phenomena decreases as their source moves towards an observer in the Doppler Effect. They can be classified as transverse or longitudinal, and the theory that light functions as one of these phenomena was advanced by Thomas Young's double-slit experiment. de Broglie (duh BROY)'s principle of duality states that light acts as both particles and these phenomena. For 10 points, name these phenomena in which vibrational energy is transmitted through space and time, examples of which includes "micro" ones used in a food-cooking device?
ANSWER: waves
14. One character in this play uses the lantern to portray Moonshine; he is part of a theater troupe called "The Mechanicals." Another character in that group has his head transformed into that of a donkey by a character who places drops of love potion onto the eyes of two main characters. Nick Bottom's staging of Pyramus and Thisbe is a key event in this play that is set in Athens and includes the couples Demetrius and Hermia, and Lysander and Helena. For 10 points, identify this play that features the mischievous Puck, a comedy by William Shakespeare.
ANSWER: A Midsummer Night's Dream
020-10-20-11114
15. This god killed his evil wetnurse Putana by removing her internal organs, after being saved from his uncle Kamsa by a switch of wombs with Deva. The deadly Juggernaut was said to contain the bones of this god, who came between Rama and Buddha as the eighth avatar of Vishnu. In that role, he lectures Arjuna (ARJ-oo-nuh) on the justice of war, in a speech which comprises the Bhagavad-Gita. For 10 points, identify this Hindu god with dark blue skin, the subject of such devotional movements as the evangelizing, orange-robed "Hare" (HA-ray).
ANSWER: Krishna[prompt on Vishnu before it is read]

VHSL Regular Season 2010-2011
Round 19
Directed Round
1A. Meyer's law can provide information given what property of a material that can be measured by the Brinell and Vickers tests?
ANSWER: hardness
1B. This 1917 document was issued by the British Foreign Secretary and pledges "the establishment in Palestine of national home for the Jewish people." Identify this "declaration" that angered Arab nationalists by contradicting other British promises.
ANSWER: Balfour declaration
2A. Though he wrote the screenplay for the movie The Saddest Music in the World, his bigger impact on film has been creating novels adapted by others. Identify this author of The Remains of the Day and Never Let Me Go.
ANSWER: Kazuo Ishiguro
2B. Which college football team that lost the 2010 Rose Bowl to the Ohio State Buckeyes is currently coached by Chip Kelly?
ANSWER: Oregon Ducks (accept either name)
3 A . This is a 10 -second calculation question. What is the median of the data set $\{8,2,9,1,5\}$ ?
ANSWER: $\underline{5}$
3 B . This is a 10 -second calculation question. If secant squared of theta is equal to 1.7 , what is tangent squared of theta?
ANSWER: $\underline{0.7}$ [or 7/10]

4A. What structures often contain pith and support the weight of a plant while facilitating the transfer of nutrients from the roots?
ANSWER: stems
4B. On which peninsula are the Guadalquivir, Tagus, and Ebro rivers located?
ANSWER: Iberian Peninsula
5 A . This is a 20 -second calculation question. What is the solution to the system of equations $2 \mathrm{a}+6 \mathrm{~b}=20$ and $3 \mathrm{a}+3 \mathrm{~b}=12$ ?
ANSWER: $\underline{\mathbf{a}=\mathbf{1}} ; \underline{\mathbf{b}=\mathbf{3}}$
5B. This is a 20 -second calculation question. Simplify the expression $x^{4}-4 x^{2}-32$ divided by $x^{2}+4$ ? ANSWER: $\underline{x}^{2}-\mathbf{8}$
6A. Name the British watercolorist who painted Dedham Vale and The Haywain.
ANSWER: John Constable
6B. Which data structure is defined as a graph consisting of a parent node, called a "root," and a series of child nodes, called "leaves"?
ANSWER: trees
7A. This is a 30 -second calculation question. You have 12 chocolate covered espresso beans, 6 cinnamon jelly beans and 5 blue raspberry jelly beans in a jar. What is the probability of picking two chocolate covered espresso beans out of the jar in a row?
ANSWER: $\underline{\mathbf{6} / 23}$

7B. This is a 30 -second calculation question. What is the volume of a regular tetrahedron with side length 4 expressed as a reduced fraction times a simple radical?
ANSWER: $16 / 3$ square root of 2
8A. Charles VI issued one in 1713 to ensure that Maria Theresa would inherit the Austrian throne. Give this two-word term for the measure that Ferdinand VII used in 1830 to revoke Salic law in Spain.
ANSWER: Pragmatic Sanctions
8B. In Islam, what son of Abraham and Hagar is thought to have built the Ka'aba?
ANSWER: Ishmael
9A. Which Dutch computer scientist argued against the use of the "go to" operator and names an algorithm that finds shortest paths?
ANSWER: Edsger W. Dijkstra
9B. Which mathematician names a theorem that generalizes the binomial distribution for large values of $n$ to the normal distribution along with Laplace and, by himself, names a theorem that can be used to calculate the exponents of complex numbers?
ANSWER: Abraham de Moivre
10A. Arthur Rimbaud wrote a poetry collection titled "A Season in" which place that is defined as "other people" in the Jean-Paul Sartre play No Exit?
ANSWER: Hell
10B. In which U.S. state was Marco Rubio elected as a senator to fill a seat once held by Mel Martinez? ANSWER: Florida

1. This composer's Clarinet Concerto was commissioned by Benny Goodman, while another of his works opens and closes with the "Open Prairie" theme and depicts the capture of the titular outlaw. He set music to the speeches of a certain President in his Lincoln Portrait and used timpani and a large brass ensemble for his Fanfare for the Common Man. This composer of Billy the Kid also created such ballets as Rodeo and one that includes the Shaker hymn "Simple Gifts." For 10 points, name this American composer of Appalachian Spring.
ANSWER: Aaron Copland
083-10-20-11117
2. This channel's miniseries have included reimaginings of the works of L. Frank Baum and Lewis Carroll. This channel advertises its Saturday night movies as "the scariest night on television." Original series on this channel include two separate reality shows about Ghost Hunters and a remake of Battlestar Galactica. For 10 points, name this cable channel that changed the spelling of its name to include only y's as vowels and which shows primarily fantasy, horror, and the once-namesake genre of television and movies. ANSWER: Syfy Channel
3. The adhesion types of these entities are often entered into without negotiation. Article 2 of the Uniform Commercial Code concerns these entities, and the mailbox rule makes some of them effective when a letter is posted. Specific performance is not a remedy for the violation of these at common law, and in order to be enforceable, these entities must be supported by consideration. For 10 points, name these agreements between parties that create duties to do something which are often signed by athletes and singers. ANSWER: contracts

030-10-20-11119
4. This piece was commissioned for the consecration ceremony of the new Cathedral of Christ the Savior. The central conflict depicted in this composition is represented when the melody of the "Marseillaise" (mar-say-EHZ) overtakes "God Preserve Thy People." After the final quoting of "God Save the Tsar," cannons are set off to celebrate the triumph of Russia's army over Napoleon's invasion force during the title year of, for 10 points, what bombastic musical piece by Pyotr Tchaikovsky, that is often played at American celebrations of July 4th?
ANSWER: The 1812 Overture [or The Year 1812: Festival Overture]
019-10-20-11120
5. Yevgeny Khaldey took the photograph of a Soviet soldier raising the red flag over this building in 1945. One man put on trial for attempting to destroy this building was the future Bulgarian dictator Georgi Dimitrov. Dutch Communist Marinus van der Lubbe was convicted of arson at the same trial, though many believe that Karl Ernst and Hermann Goering actually set fire to this structure. The Enabling Act gave dictatorial powers to Adolf Hitler following the mysterious 1933 burning of, for 10 points, what meeting-place of the German Parliament?
ANSWER: the Reichstag
6. Some of these structures, such as those belonging to organisms in desert environments, undergo a namesake "hibernation," which is not to be confused with a related phenomenon in which they require light or heat to break out of their dormancy. These structures sometimes contain radicles and hypocotyls, and in many cases possess a namesake hard "coat." Usually dispersed by water, wind, and animals who consume them, these plant structures contain either one or two cotyledons. For 10 points, identify this embryo-containing plant structure found in certain fruits.
ANSWER: seeds
020-10-20-11122
7. This magazine was forced to close in 1969 after it lost a defamation suit due to an article it published accusing University of Georgia coach Wally Butts and Alabama's Bear Bryant of colluding to fix a game. Jack London's The Call of the Wild was first published in serial form in this magazine. A doctor listening to the "heartbeat" of a doll and Rosie the Riveter were among the cover illustrations of this magazine. For 10 points, name this magazine known for its Norman Rockwell pictures.
ANSWER: Saturday Evening Post
030-10-20-11123
8. This president fired seven members of the Travel Office during his first term, at the end of which he escaped an assassination attempt in the Philippines. He signed the Brady Bill and was criticized for shady real estate dealings in the Whitewater Scandal. He appointed his wife to head a taskforce to implement a universal health care plan. This President achieved infamy for implementing the reviled Don't Ask, Don't Tell policy and for his affair with intern Monica Lewinsky. For 10 points, identify this Democratic president of the 1990s.
ANSWER: Bill Clinton [or William Jefferson Clinton; or William Jefferson Blythe III]
9. The main character of this play denies eating macaroons in the first act. The card that the syphilitic Dr. Rank sends this work's protagonist is overshadowed by another letter, and Kristine Linde is a childhood friend of the protagonis.. The bank employee Krogstad tries to blackmail the protagonist of this work regarding her forging of a loan. This play ends with Torvald forgiving his wife and begging her to reconsider her decision to leave the family. For 10 points, name this play about Nora Helmer, a work by Henrik Ibsen.
ANSWER: $\underline{\text { A Doll's House }}$
030-10-20-11125
10. One poem produced by a member of this movement describes a man who is "droning a drowsy syncopated tune." A novel created by another participant was Banana Bottom by Claude McKay. Another member of this literary movement wrote about a woman who marries Logan Killicks and Tea Cake, Janie Crawford, in Their Eyes Were Watching God. For 10 points, Zora Neale Hurston and Langston Hughes were among the leading lights of what flowering of black culture in the 1920s, named for the New York neighborhood where it took place?
ANSWER: the Harlem Renaissance
11. In international relations, this term refers to the absence of a universal leader in the world political system. As an ideology, this term refers to a political theory espoused by Peter Kropotkin and Mikhail Bakunin in the nineteenth century. Emma Goldman founded the magazine Mother Earth to promote this theory in the United States. Contemporary supporters of this political theory often use the symbols of a black flag and the letter A surrounded by a circle. For 10 points, name this political theory that argues for a stateless society.
ANSWER: anarchy [or anarchism; accept word forms of anarchy]
12. At one point in this novel, the title character is infuriated when his wife gives a quack doctor twenty dollars for a therapeutic battery. The protagonist is briefly enthralled by an advertisement reading "Trips to the West: Reduced Rates" but ultimately is seen transporting an engineer to his home in Starkfield. The arrival of Mattie Silver causes a rift with the hypochondriac Zenobia in, for 10 points, what Edith Wharton novel that climaxes with the crash of a sled into a tree?
ANSWER: Ethan Frome
019-10-20-11128
13. This quantity is often confused with a quantity symbolized delta $G$ double dagger. The Hammond Postulate bases the structure of an intermediate on the difference in this quantity between the transition state and that of the reactants or products. It is divided by the product of reaction rate and temperature in the Arrhenius Equation, which calculates this quantity given a known reaction rate. Catalysts lower, for 10 points, what amount of energy that must be overcome for a reaction to take place?

003-10-20-11129
14. In the Mabinogion, Lleu Llaw Gyffes turns into one of these animals after being wounded by a spear. A hawk named Vedrfolnir sits between the eyes of one of these animals in Norse myth. In one of Aesop's fables, this animal's home is burned by a fox. The cupbearer Ganymeade is abducted by Zeus in the form of this animal, which is often depicted eating the liver of Prometheus. For 10 points, name this majestic bird whose "bald" variety is important in the American mythos.
ANSWER: eagles
015-10-20-11130
15. In one of this author's stories, Kismine hoards rhinestones as a mountain explodes. He used the tubercular Cecilia Starr as the narrator of his unfinished novel about Hollywood, The Last Tycoon. Cecilia is similar to the subject of his nonfiction work The Crack-Up, and, like the character of Nicole Diver in Tender is the Night, was inspired by his wife Zelda. For 10 points, name this writer who wrote about Myrtle Wilson's death in a car accident in a novel set in West Egg, The Great Gatsby.
ANSWER: F. Scott Fitzgerald [or Francis Scott Key Fitzgerald]

1. George Meredith noted that the French understand men and women better than the British do, due to having a "school" of this concept, in his Essay on this concept. G.K. Chesterton divided this concept into "old" and "new," while a more common division is between "high" and "low." The "high" form of this concept includes ones "of manners" and "of ideas," which often include satire; the "low" form typically makes use of farce. For 10 points, name this concept that describes any work intended to make people laugh.
ANSWER: comedy
2. One specific value of this entity is equal to the square root of the ratio of $h$ bar $G$ to $c$ to the fifth. One version of the uncertainty principle relates energy to this. This is one component of Minkowski space. Its reversal is combined with charge and parity in an important symmetry. It can dilate in special relativity, leading to people experiencing it differently in the twin paradox. Velocity is the change in position divided by the change in this. For 10 points, name this entity measured in minutes and days.
ANSWER: time
001-10-20-11133
3. An immigration act passed as part of this program abolished the national-origins quota system. A speech regarding this program stated that "it is a place where man can renew contact with nature," and stated that it was meant to prevent an "Ugly America." That speech establishing this plan was delivered at the University of Michigan. Among the other programs associated with it include Head Start, Job Corps, and Medicare. For 10 points, name this domestic program of President Lyndon B. Johnson.
ANSWER: Great Society
030-10-20-11134
4. A 2007 study found that a bacterial glycosidase could remove the surface antigens used in this classification scheme. This classification scheme is often appended with a plus or minus indicating the presence or absence of a protein first discovered in the rhesus monkey. This classification scheme was invented by Karl Landsteiner, who explained why some blood transfusions failed. For 10 points, name this classification scheme in which a person is classified as $\mathrm{A}, \mathrm{B}, \mathrm{AB}$, or O .
ANSWER: ABO blood groups [or blood types]
003-10-20-11135
5. This king spent thirty years in a campaign to conquer and Christianize the Saxons, which ended shortly after he arrived in Rome to pass judgment on Leo III. The grateful Pope allegedly surprised this man by forcibly placing a crown on his head during a Christmas mass. He willed his title to his son Louis the Pious, who also ruled from Aachen (OCK-en). This son of Pippin the Short was the first Westerner in three hundred years to take the revived title of Roman Emperor, doing so in 800 . For 10 points, name this "great" ruler of the Franks.
ANSWER: Charlemagne [or Charles I; or Charles the Great; or Charles le Grand; or Carolus Magnus ; or Karl der Grosse; prompt on Charles]

This is a 10 -second calculation question. If a container holds 5 red marbles, 1 green marble, and 7 blue marbles, what is the probability of randomly selecting a red marble?
ANSWER: $\underline{\mathbf{5 / 1 3}}$

Name the volcano on Mars which is almost three times as tall as Mt. Everest and is the tallest known volcano and mountain in the Solar System.
ANSWER: Olympus Mons [accept Mount Olympus]

