1. A concerto by this composer begins with a piano playing a dotted quarter note fortississimo, followed by alternating one eighth and two sixteenth notes, after the opening timpani roll. Ludvig Lindeman's compilations inspired his Symphonic Dances. His piano works include a concerto in A minor and the 66 Lyric Pieces. This composer included (*) "Morning Mood" in his orchestral music for a play written by Ibsen. For 10 points, name this composer who wrote In the Hall of the Mountain King for his incidental music to Peer Gynt.
ANSWER: Edvard Grieg
2. The purple example of one member in this phylum is a prominent member of West Coast kelp forest communities and is consumed by sea otters. Members of this phylum possess tube feet known as podia, as well as a red or yellow plate called a madreporite, which is connected to the stone canal of its water vascular system. This phylum exhibits ( ${ }^{*}$ ) radial symmetry and its class Asteroidea can regenerate limbs. For 10 points, name this phylum of "spiny-skinned" organisms, including sea urchins and starfish.
ANSWER: echinoderms [or Echinodermata]
3. In a painting of one of these events, two men in red togas walk on a road leading away from Athens. Besides that one of Phocion by Nicholas Poussin, another depiction of one of these events includes a man holding a staff with a tiny crucified Christ at its tip. A robed man holding an open book and a dog surround a dug hole in that painting, which was the sensation of the $\mathbf{1 8 5 0}\left(^{*}\right)$ Paris Salon, since it used the grand scale of a history painting to show a solemn occasion attended by black-clad peasants. For 10 points, name these events, a famous one of which was painted at Ornans by Gustave Courbet.
ANSWER: funeral [or burial; accept the Burial of Phocion before mentioned; accept the Burial of Ornans before mentioned]
4. The book Mountains Beyond Mountains begins by describing Paul Farmer's work in this country. A 2010 cholera outbreak here was linked to contamination of the Meye River, a tributary of this country's Artibonite River. A coalition of pirates called the "Brethren of the Coast" operated out of the island of Tortuga, now part of this country. MINUSTAH was a (*) UN "stabilization mission" which has been in this country since the 2004 coup d'etat that ousted the former priest Jean-Bertrand Aristide. For 10 points, name this poorest country of the Western Hemisphere.
ANSWER: Republic of Haiti
5. The Spaniard Philibert of Orange led a siege of this city at the end of the War of the League of Cognac. A family that ruled this city was targeted by the Salviati in the Pazzi conspiracy. This site of the Ciompi revolt was ruled by a (*) "magnificent" leader who began the collection of the Laurentian Library. In this city, Alexander Savonarola held the Bonfire of the Vanities. For 10 points, name this Italian city that was ruled by Lorenzo and Cosimo, members of the Medici family.
ANSWER: Florence [or Firenze]
6. In this play, a woman steals a handkerchief that is later discovered by Bianca, who chastises her lover. In this play, while celebrating in Cyprus, Montano is wounded by his subordinate, who is then demoted. In the first act, (*) Brabantio accuses the protagonist of witchcraft for seducing his daughter, who is smothered due to suspicions of her unfaithfulness with Cassio. Desdemona is murdered by the title character of this play, who is manipulated by Iago. For 10 points, name this Shakespeare play about "the Moor of Venice."
ANSWER: Othello
7. A cemetery at this site was designed by William Saunders. A two hour long speech given here described how the Athenians honored their dead soldiers and was delivered by Edward Everett. That speech was followed by another oration here that cites the creation of "a new nation," that was (*) "conceived in Liberty." That speech given here stated that America was "dedicated to the proposition that all men are created equal." For 10 points, Abraham Lincoln proclaimed "Four score and seven years ago" in an address given at what site of a Civil War battle?
ANSWER: Gettysburg, Pennsylvania
8. Criticism of this philosopher's use of the word noumena is found in Schopenhauer's The World as Will and Idea. This philosopher created a table of judgments to define categories of understanding. He argued for the necessity of synthetic reasoning and distinguished between (*) a posteriori and a priori propositions. In his Groundwork for the Metaphysics of Morals, he defined the categorical imperative. For 10 points, name this author of the Critique of Pure Reason, the German founder of transcendental philosophy.
ANSWER: Immanuel Kant
9. One of this author's characters is switched at birth by the nurse Mary Pereira and is later the victim of a forced sterilization program. A novel by this author includes the dreams of one of its characters in its even-numbered chapters and opens with an airplane explosion over the English Channel. That novel features the actors Saladin (*) Chamcha and Gibreel Farishta and resulted in its author receiving a fatwa from Ayatollah Khomeini. For 10 points, name this Indian author of Midnight's Children and The Satanic Verses.
ANSWER: Salman Rushdie
10. For a relativistic particle, this quantity is equal to quantity Lorentz factor minus one, times $\mathbf{m} \mathbf{c}$ squared. This quantity is equal to the average of the Hamiltonian and the Lagrangian, the latter of which is equal to this quantity minus a related one. At slower speeds, it is equal to momentum squared divided by two times the mass, or one-half (*) mass times velocity-squared. For 10 points, identify this energy of movement that is contrasted with potential energy.
ANSWER: kinetic energy [prompt on energy]
11. This quantity is lower for a eutectic mixture than it is for the individual components. Due to its zero-point energy, at one atmosphere, helium doesn't possess one of these. The transition that occurs at this point is also called fusion. Supercooling can occur below this temperature in the absence of nucleation sites. Dissolved solutes will (*) "depress" this quantity, which is why salt is sprinkled on the road in winter. For 10 points, name this quantity which equals 0 degrees Celsius for water at one atmosphere, the temperature at which solids turn to liquids.
ANSWER: melting point [or freezing point; or liquefaction point]
12. This author wrote a short story in which inclement weather allows Calixta and Alcee Laballiere to continue an affair that began six years earlier. This author of "The Storm" wrote a story in which Louise Mallard dies of a heart attack after seeing her husband alive. This author of "The (*) Story of an Hour" and "Desiree's Baby" is best known for a novel in which Edna Pontellier drowns herself in the ocean to escape a life of domesticity. For 10 points, name this Southern female author of The Awakening. ANSWER: Kate Chopin [accept Katherine O'Flaherty]
13. This man's apprentice Rudolph Schindler did most of the work for a house whose cornice consists of sculptural hollyhock designs. That house for Aline Barnsdall was constructed at the same time as a structure that blended Mayan and Japanese motifs and mostly survived the Great Kanto (*) Earthquake. This creator of the Tokyo Imperial Hotel designed a house with a staircase that descends directly into Bear Run, a living room that incorporates natural boulders, and a rusticated stone core that supports three cantilevered concrete balconies. For 10 points, name this American architect of Fallingwater. ANSWER: Frank Lloyd Wright
14. Numbers of this type are the only ones which can not be expressed as the sum of at least two consecutive integers. Euler proved that all even perfect numbers are equal to the difference of two of these numbers. The sum of all the entries in a row of Pascal's triangle will always be one of these numbers. A Mersenne prime is one less than one of these numbers, which have only a single one in their (*) binary representation. For 10 points, identify these exponentiations of the only even prime, which include 32, 64 and 128.
ANSWER: powers of two [or obvious equivalents, such as two to the power of n]
15. One unidentified witness to this event was known as the Babushka Lady, due to the Russian-style garment she was wearing. The man accused of carrying out this event was apprehended seventy minutes later for shooting policeman J.D. Tippit. Governor John (*) Connally was seriously wounded during this event, which was captured on film by clothing manufacturer Abraham Zapruder. For 10 points, name this event that occurred in Dallas on November 22, 1963, which the Warren Commission found was perpetrated by Lee Harvey Oswald.
ANSWER: the assassination of John Fitzgerald Kennedy [or equivalents; prompt on answers that only say Kennedy; John Kennedy or JFK is required to distinguish from the assassination of Robert F. Kennedy]
16. In this country, the so-called "Faceless Men" are said to control one major political party's politics, especially during leadership spills. One former leader of this country, who delivered a scathing attack on alleged misogyny in Parliament, was (*) Julia Gillard. For 10 points, name this country which, in September 2013, voted Kevin Rudd's Labor Party out of government and empowered the Liberal-National coalition led by Tony Abbott.
ANSWER: Commonwealth of Australia
17. One character in this play prefers the word "absent" to the word "dead," while another insists that her companions stop "play-acting." In this play, a woman obsesses over seeing herself in a mirror and rebuffs a lesbian's attempts to be her 'mirror' instead. This play's characters include a journalist from Rio and a woman who (*) drowned her own baby. This play is set in a room decorated in Second Empire style and its characters include Inez and Estelle. For 10 points, name this play in which Garcin proclaims that "hell is other people," a work by Jean-Paul Sartre.
ANSWER: No Exit [or Huis Clos]
18. A dialect of this language is spoken by the majority of people in the Venezuelan town of Colonia Tovar. It underwent a major spelling reform in 1996. The most comprehensive dictionary of this language is known as the DWB and was compiled by the $\left(^{*}\right)$ Brothers Grimm. Its irregular verbs include "to be," or "sein," and its alphabet includes the eszett ("ES-tzet") and three vowels with umlauts. For 10 points, name this language spoken by a majority of Swiss and Austrians.
ANSWER: German [or Deutsch]
19. This god was often imagined sitting on a throne within the Hall of the Two Truths and having control over forty-two judges. Sobek sometimes wears this god's Atef, a crown made from the combination of the Hedjet with red ostrich feathers. Often shown holding a flail and a crook, this god was avenged by his son after he was killed and (*) cut up into fourteen pieces before being thrown into the Nile by his half-brother Set. For 10 points, name this Egyptian god who ruled over the underworld and was the husband of Isis.
ANSWER: Osiris
192-14-86-08119
20. The document Benedictus Deus was produced as a result of this event. This event began after a failed attempt to reach similar goals at Mantua in 1537. The Nicene Creed was affirmed as necessary to Christian faith in this event, whose first session was called by $\left({ }^{*}\right)$ Paul III. This council forbade the sale of indulgences but defended the veneration of the Virgin Mary, and it attacked justification by faith alone. For 10 points, name this Catholic Church council that reaffirmed many doctrines in light of the Protestant Reformation.
ANSWER: Council of Trent [or Concilium Tridentinum]
192-14-86-08120
21. The rate of this process can be assessed by a nuclear run-on assay. In some organisms it may be terminated by the rho factor, while in others it begins after the phosphorylation of the CTD. The results of this process are modified concurrently by snRNPs. The TATA box is the binding site for a holoenzyme that carries out this process. The five prime caps of the products of this process serve as binding sites for ribosomes to begin (*) translation. For 10 points, name this process in which DNA is used by RNA polymerase to create messenger RNA.
ANSWER: transcription
22. This writer wrote in one poem that "the whole pageantry of the year was tingling" while a farmer was ploughing nearby. This man wrote about his "fading memory" of a "greeny flower," the asphodel. "A splash quite unnoticed" in Brueghel is recounted in this author's "Landscape with the Fall of Icarus." He described an item "beside the $\left(^{*}\right)$ white chickens" that "so much depends upon" in another poem. For 10 points, name this American poet of "This Is Just to Say" and "The Red Wheelbarrow."
ANSWER: William Carlos Williams
23. Early in his life, Olaf Tryggvason attempted to flee to this city. A tale from this city describes the murder of Boris and Gleb. The Pechenegs fought, often with Byzantine support, against the kingdom named for this city, and the Primary Chronicle was written in this city. Rulers of this city's kingdom included Svyatopolk the Accursed and (*) Vladimir the Great, who converted the kingdom based here to Orthodox Christianity. The ancestor of Russia was the state of Rus (ROOS) based here. For 10 points, name this city that is now the capital of Ukraine.
ANSWER: Kievan Rus

## hsapq

1. In this battle, the fatigued Genoese crossbowmen were proven inferior to the English longbowmen, who cut down knights strategically forced to fight on foot. For 10 points each:
[10] Name this 1346 victory for Edward III of England over Philip VI of France.
ANSWER: Battle of Crecy
[10] The Battle of Crecy was part of this lengthy conflict between England and France that began in 1337 and ended in 1453.
ANSWER: Hundred Years War
[10] During the Hundred Years War, France was ruled by kings of this house, which succeeded the Capetian dynasty.
ANSWER: House of Valois
014-14-86-08201
2. This book includes a descent of the Holy Spirit on Pentecost, during which men "speak in tongues." For 10 points each:
[10] Name this fifth book of the New Testament, which includes the conversion of Paul of Tarsus on the road to Damascus and depicts the period immediately after Jesus's death.
ANSWER: Book of Acts [or Acts of the Apostles; or Práxeis tôn Apostól?n; or Acta Apostolorum]
[10] This disciple of Jesus raises Tabitha from the dead in the book of Acts. He denied Jesus three times after receiving the keys to the kingdom of heaven.
ANSWER: Saint Peter [or Simon Peter; or Simon Cephas; prompt on Simon]
[10] The first Christian martyr, Saint Stephen, is executed in this manner in the Book of Acts.
ANSWER: stoning [or equivalents such as being stoned or having rocks thrown at him until he is dead]
104-14-86-08202
3. In the eastern hemisphere, these storms are referred to as typhoons. For 10 points each:
[10] Name this type of powerful cyclone that develops from a tropical storm in the Atlantic Ocean.
ANSWER: hurricanes
[10] Hurricanes are classified into one of five categories by this scale of hurricane wind speed.
ANSWER: Saffir-Simpson scale
[10] This region of a hurricane contains the strongest thunderstorms. It is superseded by a new band of thunderstorms in a namesake replacement cycle.
ANSWER: eyewall [do not accept or prompt on "eye"]
4. The title character encounters Geraldine in this author's poem "Christabel." For 10 points each:
[10] Name this British poet who wrote about the misfortunes of an albatross-killer in "The Rime of the Ancient Mariner."
ANSWER: Samuel Taylor Coleridge
[10] This Coleridge poem describes a character, partially inspired by a Mongol ruler, in Xanadu, "Where Alph, the sacred river, ran."
ANSWER: "Kubla Khan"
[10] In his writing of "Kubla Khan," Coleridge was notably interrupted by a visitor from this English village, whose name has thus become associated with literary intruders.
ANSWER: Porlock
5. This man's rise to the Presidency was assisted by the political machine of Mark Hanna. For 10 points each:
[10] Name this President, who was assassinated at the Pan-American Exposition in Buffalo.
ANSWER: William McKinley
[10] McKinley was assassinated by this anarchist influenced by Emma Goldman.
ANSWER: Leon Czolgosz
[10] In 1897, McKinley signed a law of this type named for Dingley; it established higher rates than the previous Wilson-Gorman bill.
ANSWER: an import tariff
014-14-86-08205
6. This element's standard reduction potential is defined as zero. For 10 points each:
[10] Identify this element whose most abundant isotope consists of one proton and one electron; it is the simplest element on the periodic table.
ANSWER: hydrogen [or $\underline{\mathbf{H}}$ ]
[10] According to this chemist, acids serve as hydrogen ion donors. His namesake equation relates the reaction rate to activation energy and temperature.
ANSWER: Svante Arrhenius
[10] Hydrogen is produced in the water-gas shift reaction, in which water is reacted with this molecule. This molecule has the strongest-known triple bond, and it is called "carbonyl" when it acts as a ligand. ANSWER: carbon monoxide [or CO]
7. After stabbing Nedda and her lover Silvio, Canio says this opera's final line, "The comedy is over!" For 10 points each:
[10] Name this Ruggiero Leoncavallo opera in which Canio plays the title clown part in his commedia dell'arte troupe. The tenor aria "Vesti la giubba" is sung by Canio after he discovers Nedda's affair.
ANSWER: I Pagliacci [or Clowns]
[10] Pagliacci is often paired with this other verismo opera by Pietro Mascagni. This opera has a notable intermezzo prior to a scene in which Alfio challenges Turiddu to a duel over Lola.
ANSWER: Cavalleria rusticana [or Rustic Chivalry]
[10] Leoncavallo contributed to the libretto for this composer's opera Manon Lescaut. This composer included the aria "O mio babbino caro."
ANSWER: Giacomo Puccini [or Giacomo Antonio Domenico Michele Secondo Maria Puccini]
8. This work is probably the best known in the zuihitsu genre. For 10 points each:
[10] Name this collection of musings about Heian Japanese court life. Written by Sei Shonagon, its sections include "Things That Give a Comfortable Feeling."
ANSWER: The Pillow Book [or Makura no soshi]
[10] This other novel from Heian Japan was written by Lady Murasaki, about the title prince's affairs in court.
ANSWER: The Tale of Genji [or Genji monogatari]
[10] In another early work of Japanese literature, "The Tale of the Bamboo Cutter," a mysterious girl from this place appears in a bamboo grove. Tsukuyomi was the kami of this location.
ANSWER: the moon
9. This artist was one of the first to describe the use of linear perspective during the Renaissance. For 10 points each:
[10] Name this architect who designed the Hospital of the Innocents in Florence. This designer of the Basilica of San Lorenzo is best known for completing the dome of the Florence Cathedral.
ANSWER: Filippo Brunelleschi
[10] Brunelleschi lost to Lorenzo Ghiberti in a competition to design a set of these structures for the Florence Baptistery. They were originally planned to depict the Sacrifice of Isaac.
ANSWER: doors
[10] This other Florentine artist was briefly a student of Brunelleschi early in his career. He later sculpted an equestrian statue of Erasmo Narni, called Gattamelata, as well as a free-standing bronze David.
ANSWER: Donatello [or Donato di Niccolo di Betto Bardi]
232-14-86-08209
10. This poem describes "such heaps of broken glass to sweep away you'd think the inner dome of heaven had fallen." For 10 points each:
[10] Name this poem that concludes with the thought that "one could do worse than be a swinger" of the title trees.
ANSWER: "Birches"
[10] In this other poem, a "little horse must think it queer to stop without a farmhouse near." This poem's speaker has "miles to go" before he sleeps, but acknowledges that "the woods are lovely, dark, and deep." ANSWER: "Stopping by Woods on a Snowy Evening" [10] "Acquainted with the Night" and "Stopping By Woods on a Snowy Evening" are both by this poet, who began his "The Road Not Taken" with the line "Two roads diverged in a yellow wood."
ANSWER: Robert Frost
11. One poem in this collection angrily addresses "you, who like the stab of a knife entered my heart" and compares that woman to a vampire. For 10 points each:
[10] Name this poetry collection including "The Swan," "The Voyage," and the opening "To the Reader," which precedes its section "Spleen and Ideal."

## ANSWER: Les Fleurs du Mal

[10] Les Fleurs du Mal was written by this eccentric French poet who influenced the Symbolists. ANSWER: Charles Baudelaire
[10] Baudelaire produced famous French translations of this other poet, who wrote the collection Tamerlane and Other Poems as well as "Ulalume."
ANSWER: Edgar Allan Poe
12. These figures were studied extensively by Apollonius of Perga. For 10 points each:
[10] Identify this set of four plane curves, so named because they are formed by the intersection of a plane with a certain double-napped pointed solid. They include parabolas and ellipses.
ANSWER: conic sections [or conics]
[10] Conic sections can be differentiated by their value for this quantity. Usually used to measure the elongated-ness of an ellipse, this value always equals one for parabolas.
ANSWER: eccentricity
[10] This value for a quadratic polynomial equals "b" squared minus four "a times c." It can also be used to predict the type of conic formed by the general equation.
ANSWER: discriminant [prompt on "delta"]
13. It was first formulated by Merrill Flood and Melvin Dresher. For 10 points each:
[10] Name this hypothetical problem, in which two people are arrested and must choose whether to testify against each other for a reduced sentence or remain silent.
ANSWER: prisoner's dilemma
[10] The prisoner's dilemma is a game with a type of solution known as this schizophrenic mathematician's "equilibrium," in which a participant cannot improve her own outcome by changing strategy.
ANSWER: John Nash
[10] The prisoner's dilemma is not necessarily this type of game, in which any gain by one participant is precisely balanced by a loss by another participant.
ANSWER: zero-sum game
187-14-86-08213
14. This rebellion was contemporary with the Nien Rebellion in the north. For 10 points each:
[10] Name this rebellion that took place from 1850-1854, and whose leader established a namesake "Heavenly Kingdom."
ANSWER: Taiping Rebellion
[10] The Taiping Rebellion was led by Yang Xiuqing (shoo-CHING) and this eccentric visionary.
ANSWER: Hong Xiuquan
[10] Hong Xiuquan believed he was the brother of this religious leader from Nazareth.
ANSWER: Jesus
014-14-86-08214
15. The first of these poems begins "From fairest creatures we desire increase." For 10 points each:
[10] Name these 154 poems, many of which are addressed to the Dark Lady. Almost all of them are fourteen lines long.
ANSWER: Shakespeare's sonnets [prompt on "sonnets"]
[10] The most famous of Shakespeare's sonnets, number 18, begins with this question, and follows it up with "thou art more lovely, and more temperate."
ANSWER: "Shall I compare thee to a summer's day?"
[10] The first 126 sonnets are addressed to this attractive man, who may have been the Earl of Pembroke or the Earl of Southampton.
ANSWER: the "Fair Youth"
192-14-86-08215
16. This man helped push through the Alhambra Decree. For 10 points each:
[10] Identify this Dominican friar, the first and most notorious leader of the Spanish Inquisition.
ANSWER: Tomas de Torquemada
[10] The Alhambra Decree expelled people of this religion from Castile and Aragon. Many of them became marranos, practicing their faith in secret while pretending to be Catholic.
ANSWER: Judaism [or Jews]
[10] This term generally refers to Jews whose ancestry includes the Iberian peninsula. Jews of this type have different traditions from the central European Ashkenazi.
ANSWER: Sephardic
17. This kingdom includes the phylum Ascomycota, whose members display a characteristic sac. For 10 points each:
[10] Name this kingdom of organisms including mushrooms.
ANSWER: Fungi [or fungus]
[10] The hyphae filaments composing fungi often combine into an extensive network given this name. ANSWER: mycelium
[10] This other major phylum of fungi includes bracket fungi and mushrooms.
ANSWER: Basidiomycota
014-14-86-08217
18. This composer's fear of the number thirteen led him to lop off an "a" from the title of an unfinished three-act opera. For 10 points each:
[10] Name this Austrian composer who wrote Transfigured Night and developed the twelve-tone technique for composing atonal pieces.
ANSWER: Arnold Schoenberg
[10] Schoenberg set German translations of a namesake cycle of poems by Albert Giraud in this set of twenty-one songs, whose first part includes "Valse de Chopin," "Der Dandy," and "Mondestrunken."
ANSWER: Pierrot Lunaire, Op. 21 [or Moonstruck Pierrot; or Pierrot in the Moonlight]
[10] Conventional modes of tonality were earlier smashed by this German opera composer of The Ring of the Nibelung and Tristan und Isolde.
ANSWER: Richard Wagner
014-14-86-08218
19. Peleus accidentally killed Eurytion during this event, whose other participants included Castor and Pollux. For 10 points each:
[10] Name this hunt in which a boar sent by Artemis was killed by Meleager.
ANSWER: Calydonian Boar Hunt [or Calydonian Hunt]
[10] This woman received the hide of the Calydonian Boar for being the first to wound it. She marries Hippomenes after losing a footrace.
ANSWER: Atalanta
[10] In one account of the myth, this goddess of love and beauty turns Atalanta and Hippomenes into lions for failing to properly honor her.
ANSWER: Aphrodite [or Venus]
227-14-86-08219
20. The Teller-Ulam design relies on implosion to allow this process to occur. For 10 points each:
[10] Identify this process, where two atomic nuclei combine and release energy. It is contrasted with nuclear fission, and is the source of most of the energy in a hydrogen bomb.
ANSWER: nuclear fusion
[10] The most energetic fusion reaction occurs when deuterium and tritium combine to form a neutron and an atom of this element.
ANSWER: helium [or He; prompt on alpha particle]
[10] In 1989, Stanley Pons or Martin Fleischmann claimed to have discovered this type of "fusion" that occurs at room temperature.
ANSWER: cold fusion
21. This country contests the Liancourt Rocks with South Korea. For 10 points each:
[10] Name this country whose namesake sea is termed the "East Sea" by the Koreans. It is made up of islands such as Shikoku, Kyushu and Honshu.
ANSWER: Japan [or Nippon-kohu]
[10] This northernmost of Japan's four main islands is separated from Honshu by the Tsuguru Strait. Its capital of Sapporo hosted the 1972 Winter Olympics.
ANSWER: Hokkaido
[10] Hokkaido is the main home of what people, the indigenous inhabitants of Japan?
ANSWER: Ainu

