



1. In one legend, this hero saves his friend by donning the horse's skin worn by his defeated enemy, Guy of Gisborne. In another story, he is defeated in a fight by a potter, who forces him to trade clothing and possessions. This hero dies after he goes to his cousin, a Prioress, to be bled, but she treacherously lets him bleed out. This man is knocked into the water during a quarterstaff duel atop a bridge with the warrior who becomes his most famous companion. His allies include Will Scarlet, Much the Miller's Son, Friar Tuck, and Little John. For 10 points, name this English outlaw who legendarily stole from the rich to give to the poor.

ANSWER: **Robin Hood** [or **Robin of Locksley**]

080-12-59-05102

2. For Bose-Einstein condensates, this value is proportional to fugacity over quantity 1 minus fugacity. In general, its expectation value is the negative of fugacity times change in the grand potential over fugacity. The operator corresponding to this quantity is the product of the creation and annihilation operators. Allowing this value to be variable generalizes the Boltzmann distribution to the Gibbs distribution. This quantity is conjugate to the chemical potential. By subtracting b times this value from volume, the van der Waals equation corrects the ideal gas law, which states it as equal to P times V over quantity k times T . For 10 points, name this property of a system often symbolized N , equal to Avogadro's number times the number of moles.

ANSWER: **particle number** [or obvious equivalents; prompt on **N**; accept **number of moles** due to the van der Waals clue]

121-12-59-05103

3. A key moment in this battle was Titus Labienus's filling a breach in one side's lines. One commander in this battle was Commius, whose only success in his offensives was quickly counteracted by cavalry under Gaius Trebonius and Mark Antony. A group of Mandubii civilians became trapped between the two sides of this battle and were left to starve. The victor of this battle built two sets of fortifications, one facing inwards and the other outwards, to prevent relief of the namesake besieged city. For 10 points, name this 52 BCE battle in which Julius Caesar defeated the Gauls under Vercingetorix.

ANSWER: Battle of **Alesia** [or Siege of **Alesia**]

040-12-59-05104

4. In one of this man's works, characters remember a childhood game in which they imagined driving a car into a flock of butterflies. In another of his plays, a character considers writing a school essay using ballroom dancing competition as a metaphor for politics. In that work, the title character remembers flying a homemade kite and is aghast about his father's release from the hospital. Another of his plays is about two brothers who live in the "colored" section of town, one of whom is able to pass for white, named Morris and Zachariah. This man wrote a play in which the title teenager eventually begins to berate the black servants Sam and Willie. For 10 points, name this South African playwright of *Blood Knot* and *Master Harold...and the Boys*.

ANSWER: Athol **Fugard**

052-12-59-05105

5. Several characters in this work perform the khorovod, a traditional circle dance to the tune of the song "In the Garden." The notoriously lazy composer Anatoli Liadov passed on a chance to compose this work. The hero of this work is the son of King Vyaslav and falls in love with Elena after spying on thirteen princesses. The antagonist of this work was the subject of a one act opera by Rimsky-Korsakov and given the epithet "The Deathless." In this ballet, the evil sorcerer Kastchei and a host of monsters engage in the "Infernal Dance." For 10 points, name this ballet with choreography by Michael Fokine that was composed by Igor Stravinsky and features a mythical creature that gives Ivan one of its feathers.

ANSWER: *The **Firebird*** [or ***L'Oiseau de Feu***; or ***Zar-ptica***]

030-12-59-05106

6. In one of this author's stories, the protagonist is enraged when his "Anabaptist" Houdan hen is sold and chants a hymn with the lyric, "His enemies called for peace, but he brought them death." That story ends with the implied death of Mrs. de Ropp at the hands of the title creature. This author concluded one story with the line, "Romance at short notice was her specialty;" in another of his stories, the child Conradin worships a polecat ferret. In his most famous story, Vera Sappleton claims that three of her relatives were swallowed into a bog on a hunting trip to scare off Framton Nuttel. For 10 points, name this author of comic short stories like "Sredni Vashtar" and "The Open Window."

ANSWER: **Saki** [or Hector Hugh **Munro**]

052-12-59-05107

7. Mark Balaguer claimed that a "full-blooded" version of this system exists for those who believe in the existence of as many abstract objects as there can possibly be. One group of philosophers that had this movement in their name were known as "latitude men" for their religious tolerance. Those members of this movement, who included Ralph Cudworth and Henry More, were named for Cambridge University. Pseudo-Dionysius was associated with a form of this philosophical system that produced the *Enneads* and included Porphyry and Plotinus; those philosophers were associated with the "neo" version of this system. For 10 points, name these philosophical movements that presumably follow the teachings of the author of "Crito" and "The Apology."

ANSWER: **Platonism** [or **Platonists**; or Cambridge **Platonists**; or Christian **Platonists**; or Full-Blooded **Platonists**; or Neo-**Platonists**]

030-12-59-05108

8. At the bottom right of this painting, a plain white mask and a tan mask with gray eyebrows and goatee can be seen by one figure's foot. One figure is stepping on thorns in front of a girl with the lower body of a lion who holds a honeycomb. This painting includes a grotesque old woman clawing her head and a boy poised to throw a bunch of roses at the central couple. That couple consists of a woman holding up a golden arrow as her son grasps her breast and kisses her. For 10 points, name this allegorical painting depicting a love goddess, her son, and others by Agnolo Bronzino.

ANSWER: ***Venus, Cupid, Folly, and Time***

014-12-59-05109

9. A deficiency of this molecule causes the degeneration of retinal neurons in a mitochondrially-inherited disease called Leber's Optic Neuropathy. The Schilling test is used to measure its uptake. It's not iron, but hypersegmented neutrophils are a finding of its deficiency. This molecule is the cofactor of the MTR protein, which synthesizes methionine from homocysteine. Myelin damage resulting from a deficiency of this molecule can be prevented if folic acid takes its place as the cofactor of methylmalonyl coenzyme A mutase in the production of succinyl coenzyme A. The inability of the parietal cells to produce intrinsic factor, which is necessary for this molecule's uptake, leads to a deficiency of this molecule in pernicious anemia. For 10 points, name this B vitamin with a central cobalt atom.

ANSWER: Vitamin **B12** [accept specific vitamers such as cyanocobalamin or methylcobalamin or adenosylcobalamin]

079-12-59-05110

10. This man was depicted in a cartoon as a little boy with a huge gun after he testified before HUAC against Paul Robeson. In 1964, he became a national director for Nelson Rockefeller's campaign, leaving his position at Chock Full O'Nuts. His autobiography, *I Never Had It Made*, describes the vicious abuse he faced from Ben Chapman. A statue at Coney Island shows Harold "Pee Wee" Reese with his arm around this man, who was the subject of a mutiny stopped by Leo Durocher. A former standout for UCLA's sports teams, he was recruited as someone "with guts enough not to fight back" by Branch Rickey. For 10 points, name this man who debuted with the Brooklyn Dodgers in 1947, becoming the first black Major League Baseball player in the modern era.

ANSWER: Jackie **Robinson** [or Jack Roosevelt **Robinson**]

052-12-59-05111

11. This woman married Rhadamanthys after going to the Islands of the Blest. Before sleeping with her first husband, she demanded that he avenge the deaths of her brothers by attacking the Taphians and Teleboans. This woman was allowed to give birth after her servant-girl Galanthis tricked Lucina into releasing her curse. In later life, she was persecuted by Eurystheus, but obtained vengeance by gouging the eyes out of his head. She gave birth to Iphicles by her first husband, Amphitryon, but gave birth to a more famous child by a god who took that husband's form to seduce her. For 10 points, name this mother of Heracles.

ANSWER: **Alcmene** [or **Alcmena**]

080-12-59-05112

12. A local holiday in this city is the annual repainting of a gold fire hydrant. In 1835, William Richardson established the first major homestead outside of Mission Dolores in what was to become this city, though he called it Yerba Buena. This city grew upon the arrival of Sam Brannan and some Mormon pioneers. It gained one of its most famous landmarks in 1937 after the completion of Joseph Strauss, Irving Morrow and Charles Ellis's suspension bridge. For 10 points, name this "Paris of the West" that experienced a major 1906 earthquake and is home to the Golden Gate Bridge.

ANSWER: **San Francisco**

147-12-59-05113

13. On this celestial object, twisted terrain can be viewed in the Noachis quadrangle, which contains a plain that is antipodal to the Alba Mons. Thomas Gangale proposed the Darian calendar as a timekeeping system based on this object. A large volcanic region on this celestial object is known as Tharsis. On this planet, Chryse Planitia opens into the Borealis basin and was the landing site of Viking 1. Giovanni Schiaparelli first discovered "canals" on this planet, which was extensively studied by Percival Lowell. In 2008, water was discovered on this planet by the rover *Phoenix*. For 10 points, name this planet whose moons are Phobos and Deimos.

ANSWER: **Mars**

149-12-59-05114

14. During one railway strike in this country, Vasile Roaita was shot in the Grivita workshops. Another leader of this country got Joseph Stalin to purge Ana Pauker from this country's Communist party. Inspired by Communist Asian countries, one leader of this country increased restrictions on politics and culture after making the July Theses speech. The aforementioned purge ended most of the opposition to this country's General Secretary Gheorghe Gheorghiu-Dej. The regime of one ruler of this country fell following a revolution that started in Timisoara after an attempt to evict Laszlo Tokes. For 10 points, name this country that was led by Nicolae Ceausescu from Bucharest.

ANSWER: **Romania**

149-12-59-05115

15. One play by this author begins with Erossimov taking pictures with a new kind of camera, which proves to protect those it depicts from a deadly cloud of radiation. A novel by this author ends with a mysterious August freeze stopping a plague of giant snakes that had been accidentally unleashed on Moscow in an attempt by Alexander Rokk to compensate for a disease in poultry. This author of *Adam and Eve* and *The Fatal Eggs* also wrote about a revolutionary transplant performed on Poligraph Poligraphovich in one novel. In another novel of his, the Variety Theater master Woland retrieves a man who is writing a novel about Pontius Pilate. For 10 points, name this Russian novelist of *Heart of a Dog* and *The Master and Margarita*.

ANSWER: Mikhail Afanasyevich **Bulgakov**

019-12-59-05116

16. This people's trapezoidal doorways can be seen in villages in the Sacred Valley, which contains Pisac. This civilization built their capital city in the shape of a puma, whose tail is formed by two rivers. They built a magnificent temple to their sun god called the "Golden Enclosure." Without using mortar, they created walls so tight that a knife could not be wedged through their stones. One of their cities is next to a mountain that, viewed sideways, resembles a human face; that city, with a name meaning "Old Peak," was discovered in 1911 by Hiram Bingham. For 10 points, name this Andean civilization that built Machu Picchu in modern-day Peru.

ANSWER: the **Inca**

080-12-59-05117

17. A 1969 study by Brent Berlin and Paul Kay claimed that there were only eleven universal terms to describe this characteristic. Ewald Herring developed the "opponent-process theory" to describe perception of this characteristic. That theory differs from one developed by Thomas Young and revised by Helmholtz, which says that this characteristic is initially perceived by S, M, and L cells. Metamers cannot be distinguished on the basis of this characteristic despite having different spectra. The Ishihara test is used to identify people who have its namesake "blindness." This characteristic is described by saturation, brightness, and hue. For 10 points, name this property of light, whose perception is described by the trichromatic theory.

ANSWER: **color**

003-12-59-05118

18. One of this poet's collections is divided into poems in standard English called "majors" and poems in dialect called "minors." He claimed that "labor's painful sweat-beads made a consecrating chrism" upon his race, whose name is "writ in Glory's scroll," in his "Ode to Ethiopia." In one poem, he says that the world "may dream otherwise," but "oh great Christ, our cries to thee from tortured souls arise." His most noted poem describes a song that is "not a carol of joy or glee, but a prayer that he sends from his heart's deep core." For 10 points, name this African American poet of "We Wear the Mask," whose poem "Sympathy" contains the line, "I know why the caged bird sings."

ANSWER: Paul Laurence **Dunbar**

080-12-59-05119

19. A complex of this element and phosphine catalyzes the first step of the Shell higher olefin process. Impurities of this element in Ziegler-Natta catalyst solutions cause early termination. In one process that generates this element, it is purified in a reaction with carbon monoxide that forms its tetracarbonyl. A porous alloy of this element and aluminum is used to desulfurize thioacetals. One device using this element has electrodes composed of this element's oxyhydroxide and a hydrogen-absorbing alloy. That device is this element's metal hydride cell. This metal can be extracted by reacting its oxide with hydrogen in the Mond process. For 10 points, name this element with atomic number 28 and symbol Ni.

ANSWER: **nickel**

132-12-59-05120

20. One ritual used by this group involved transferring a ball of rice from the left hand of one official to another. The Genna Martyrdom resulted from a campaign against this people, who were targeted by a ceremonial procedure in which people were forced to trample on stone images. Twenty of the Twenty-Six Martyrs belonged to this group, whose practices have altered significantly in its "Kakure" incarnation. This group's symbols were used by the Shimabara Rebellion, after which this group was forced into seclusion even in Nagasaki, where this religious group had been prominent. For 10 points, name this minority religious group that emerged after its first convert, Anjiro, met with the missionary Saint Francis Xavier.

ANSWER: **Japanese Christians** [or **Japanese Roman Catholics**; or Kakure **Kirishitan**; prompt on **Christians**; prompt on Roman **Catholics**; prompt on **Japanese** people]

104-12-59-05121

21. One work by this man begins with the speaker bidding farewell to "dungeons dark and strong." That work's chorus says that the title character "played a spring and danced it round, below the gallows-tree." The speaker of another poem by this man says that he will come again, "tho' 'twere ten thousand mile," and says his love is "like a red, red rose." In another work by this author of "McPherson's Farewell," the title character rides home on his grey mare Meg, who loses her tail after that character shouts "Weel done, Cutty Sark!" For 10 points, "Tam o' Shanter" is a work of which Scottish poet who also wrote "Auld Lang Syne"?

ANSWER: Robert **Burns**

142-12-59-05122

22. This action was planned to take place at the 1995 World Youth Day in the Philippines as the first phase of the aborted "Bojinka Plot." Balkan Airlines representative Sergei Antonov was arrested for his role in planning a case of this action, which the Mitrokhin Commission blamed on the Bulgarian and Soviet governments. Some, including the target of these actions, interpreted one case as the fulfillment of the Third Secret of Fatima, who interceded to protect him. The most notable attempt at this action was perpetrated by Mehmet Ali Agca in 1981 in St. Peter's Square, which led to the introduction of bulletproof glass on specially constructed vehicles. For 10 points, identify these failed actions that sought to kill a certain Polish pontiff.

ANSWER: attempting to **assassinate John Paul II** [accept synonyms for **assassinate**; accept Karl Jozef **Wotyla** for John Paul II; prompt on attempting to **assassinate the pope**]

052-12-59-05123

23. John Theophilus Desagulier had a significant impact on the study of this phenomenon by proposing an adhesive model of it. Archard improved one theory of this phenomenon by assuming elastic deformation in addition to plastic deformation. That theory is partially proportional to shear strength divided by the yield pressure of the concept and was proposed by Bowden and Tabor. Coloumb designed the first tribometer, used to measure the coefficient of it. It is directly proportional to the applied load according to the first of Amonton's laws but is independent of the area of contact. For 10 points, identify this phenomenon that resists the movement of two objects in contact.

ANSWER: **friction**

066-12-59-05124



1. Answer the following about things Jesus did in Jerusalem before his arrest, for 10 points each.

[10] Jesus went into this location in Jerusalem, where he overturned the tables of the money changers, saying they were making it “a den of robbers.”

ANSWER: the Holy **Temple**

[10] In a parable named for this item, Jesus tells of several servants. One receives five of these items, and another receives one. The one with five earns five more, while the servant with just one buries it, displeasing his master.

ANSWER: **talents** [or **minas**; or **pounds**; prompt on **money**, do not accept “skills” or “abilities”]

[10] Jesus curses one of these objects because it does not have anything to eat. He uses the example of what happens to it after he curses it as proof that you can do anything with faith.

ANSWER: **fig tree**

052-12-59-05201

2. The Laue equations reduce to this law. For 10 points each:

[10] Name this law, which states that two times distance times the sin of the angle of incidence equals n times the wavelength of the incident light.

ANSWER: **Bragg's law**

[10] Bragg's law describes x-ray scattering caused by the lattice of these solids. These solids are arranged in a regular and repeating pattern in all three spatial dimensions.

ANSWER: **crystal**

[10] The maximum intensity for Bragg diffraction occurs when ‘ n ’ is this type of number. According to the Bohr model of the atom, the principle quantum number must be this type of number.

ANSWER: **integer**

149-12-59-05202

3. One member of this family, a senator named Thomas, is affected after reading a chapter about death in *The World as Will and Idea*. For 10 points each:

[10] Name this mercantile family from Lübeck. Its business is founded by Johann, and a later heir, Hanno, is more interested in music than business.

ANSWER: **Buddenbrook**

[10] The Buddenbrook family appears in a novel by this German author, who also wrote about Hans Castorp's visit to a sanatorium in *The Magic Mountain*.

ANSWER: Thomas **Mann**

[10] This Thomas Mann title character appears in a novel unfinished at the time of Mann's death. An immoral figure, he learned the art of disguise when dressing up as a child with his godfather. Later, he poses as the Marquis de Venosta.

ANSWER: **Felix Krull** [or Felix **Krull**]

052-12-59-05203

4. One notable piece from this opera is a "Meditation" in D major often performed by violin soloists. For 10 points each:

[10] Identify this opera in which the monk Athanael attempts to convert the title courtesan to Christianity.

ANSWER: **Thais**

[10] This French composer of *Thais* also composed such operas as *Esclarmonde* and *Manon*.

ANSWER: Jules **Massenet**

[10] This Goethe protagonist is the title character of another Massenet opera, which features the "Letter Aria." It is based on a German epistolary novel.

ANSWER: **Werther**

126-12-59-05204

5. Austria's withdrawal from the Third Coalition after their defeat at Ulm led to this treaty, which was brokered by Count Gyulai. For 10 points each:

[10] Name this treaty that effectively ended the Holy Roman Empire.

ANSWER: Treaty of **Pressburg** [or Peace of **Pressburg**]

[10] Austria also ceded several of its claims in this region to France. Joseph II and Frederick the Great fought a war over this region twenty-five years earlier.

ANSWER: **Bavaria** [or **Bayern**]

[10] The Treaty of Pressburg came after this battle, in which Napoleon defeated the Third Coalition by dividing his troops and taking the Pratzen Heights.

ANSWER: Battle of **Austerlitz** [or the Battle of the **Three Emperors**]

079-12-59-05205

6. This party's James Callaghan was Prime Minister during the "Winter of Discontent." For 10 points each:

[10] Name this British party of Tony Blair and Gordon Brown.

ANSWER: **Labour** Party

[10] This Labour PM served nonconsecutive terms in the 1960s and 70s. He avoided the Vietnam War and opposed Enoch Powell's "Rivers of Blood speech."

ANSWER: James Harold **Wilson**

[10] This man is the current leader of the Labour Party, having defeated his brother David in an election for the position in 2010.

ANSWER: Edward Samuel **Miliband**

015-12-59-05206

7. Botulinum toxin inhibits this molecule's release, causing paralysis, and this neurotransmitter has nicotinic and muscarinic receptors. For 10 points each:

[10] Identify this main neurotransmitter in voluntary muscles. An enzyme that breaks down this substance is inhibited by organophosphate pesticides and nerve gas.

ANSWER: **acetylcholine**

[10] This disease is caused by antibodies blocking ACh receptors at neuromuscular junctions, thus inhibiting acetylcholine and causing muscular weakness.

ANSWER: **myasthenia gravis**

[10] Acetylcholine receptors have also been targeted in treatments of this form of dementia occurring primarily in senior citizens, although it has a rarer early-onset form. A variant of apolipoprotein E is the largest known genetic risk factor for this disease.

ANSWER: **Alzheimer's** disease

126-12-59-05207

8. One leader claimed the age of this type of person was over after the death of Álvaro Obregón, and Martín Guzmán wrote a novel about the "shadow of" one. For 10 points each:

[10] Name this term for a Latin American strongman who usually rules through charisma and patronage.

ANSWER: **caudillos**

[10] Shortly after his aforementioned speech, this man stepped down from the presidency of his country but created the National Revolutionary Party, which later became the PRI. He held power from 1924-1935, a period called the *maximato*.

ANSWER: Plutarco **Calles**

[10] The PRI was the dominant party in this country for the rest of the 20th century, until Vicente Fox became its president in 2000.

ANSWER: **Mexico** [or **United Mexican States**; or **Estados Unidos Mexicanos**]

121-12-59-05208

9. A late addition to this painting is a man with two dogs, who may have been a representation of Napoleon III's unwelcome rule of France. For 10 points each:

[10] Name this painting by Gustave Courbet that shows a boy marveling at a landscape being painted by Courbet himself, who ignores his nude model.

ANSWER: *The **Artist's Studio**: A Real Allegory of a Seven Year Phase in my Artistic and Moral Life* [or *L'Atelier du peintre*]

[10] *The Artist's Studio* influenced the canvases *The Old Musician* and *Music in the Tuileries* by this impressionist who painted *Luncheon on the Grass*.

ANSWER: Eduoard **Manet**

[10] The boy in the painting stands in front of one of these animals, one of which is being taught to dance in a painting by Jan Steen.

ANSWER: **cats** [or **kittens**]

020-12-59-05209

10. This work states that "the simplest person, who in his integrity worships God, becomes God," and it asks, "We grant that human life is mean; but how did we find out that it was mean?" For 10 points each:

[10] Name this Ralph Waldo Emerson essay describing a natural entity "within which every man's particular being is contained and made one with all other."

ANSWER: "The **Over-Soul**"

[10] This Emerson essay says that genius is "to believe that what is true for you in your private heart is true for all men." It also warns that "a foolish consistency is the hobgoblin of little minds."

ANSWER: "**Self-Reliance**"

[10] In this other essay, Emerson characterizes the title figure as "the man without impediment, who sees and handles that which others dream of," and the ultimate expresser and representative of beauty on earth.

ANSWER: "The **Poet**"

014-12-59-05210

11. This deity set up a snake that dripped venom onto Loki's face while he was chained down. For 10 points each:

[10] Name this Norse deity, the wife of Njord, who served as a goddess of the hunt.

ANSWER: **Skadi**

[10] Skadi is also associated with this season, which, in Greek myth, corresponds to Persephone's time in the underworld.

ANSWER: **winter**

[10] Skadi chose Njord as her husband based on these body parts of his that were attractive. They were seen as a symbol of fertility amongst the Norse people.

ANSWER: **feet** [or bare **feet**]

040-12-59-05211

12. Answer these questions about the Netherlands, for 10 points each.

[10] Since the Low Countries are actually low in altitude, these structures are built facing the ocean to keep the country from flooding. Modern ones are made of clay, though they were originally earthen.

ANSWER: **dikes** [or **levees**; prompt on **embankments**; prompt on **walls**; do not accept "dams"]

[10] Within the Netherlands, this river splits into the Lek and Waal distributaries, which then run to the ocean. This river flows north from the Swiss Alps.

ANSWER: **Rhine** river

[10] This region of the northern Netherlands and the barrier islands off that north coast is home to a people whose Germanic language is the most similar language to English.

ANSWER: West **Frisia** [or **Friesland**]

104-12-59-05212

13. This phenomenon was first observed by Fridtjof Nansen in his historic expedition on the *Fram*. For 10 points each:

[10] Name this phenomenon in which the wind deflects a surface current, which in turn deflects the layers of water below it, to successively lesser degrees.

ANSWER: **Ekman spiral**

[10] The Ekman spiral arises from this effect, which describes the deflection of objects undergoing motion in a rotating reference frame.

ANSWER: **Coriolis** effect

[10] The Coriolis effect causes these westward-propagating plane waves, observed in the atmosphere as large meanders in the mid-latitude jet stream.

ANSWER: **Rosby** waves [or **planetary waves**]

014-12-59-05213

14. This character's death by suicide is implied, and she earlier encourages her husband to murder King Duncan and assume the throne. For 10 points each:

[10] Name this Shakespeare character from a play set mainly in Scotland.

ANSWER: **Lady Macbeth**

[10] As Lady Macbeth sleepwalks, she cries that "all the perfumes of Arabia will not sweeten" this.

ANSWER: her **hand**

[10] After being notified of Lady Macbeth's death, Macbeth delivers a monologue proclaiming this to be "a walking shadow, a poor player that struts and frets his hour upon the stage and then is heard no more."

ANSWER: **life**

040-12-59-05214

15. This composer wrote six violin sonatas for Brillion de Jouy, and his *String Quintet in E Major* includes a famous minuet. For 10 points each:

[10] Name this early pioneer of the string quintet and piano quintet.

ANSWER: Luigi **Boccherini**

[10] Boccherini played this string instrument, the largest in a standard string quartet.

ANSWER: **cello**

[10] This French composer wrote two cello concertos, the first for Auguste Tolbecque. He also wrote a piece inspired by a Henri Cazalis poem which makes use of the xylophone to imitate the sound of rattling bones.

ANSWER: Camille **Saint-Saens**

014-12-59-05215

16. In this section, the author claims that he approaches his art as a Parisian romancier would a target. For 10 points each:

[10] Name this chapter, in which the author reveals that his motivation for performing the title action is to introduce people to noble and delicate experiences.

ANSWER: "**Why I Write Such Good Books**" [or "**Warum ich so gute Bucher schreibe**"]

[10] "Why I Write Such Good Books" is a section from this philosopher's biography *Ecce Homo*, in which he reflects upon his work *Thus Spake Zarathustra*.

ANSWER: Friedrich Wilhelm **Nietzsche**

[10] In that chapter, Nietzsche expresses surprise that this other book of his was deemed a work of "Junker Philosophy." As its title suggests, it is about the abandonment of the traditional system of morality.

ANSWER: ***Beyond Good and Evil: Prelude to a Philosophy of the Future*** [or ***Jenseits von Gut und Bose: Vorspiel einer Philosophie der Zukunft***]

020-12-59-05216

17. The paper "The Nature of the Firm" argues that these expenditures explain why companies hire employees rather than contract out all work. For 10 points each:

[10] Name these expenditures incurred by participating in a market.

ANSWER: **transaction costs**

[10] "The Nature of the Firm" was an early paper by this economist. He showed that if transaction costs were assumed to be zero and property rights were well-defined, externalities could be internalized regardless of the initial allocation of property rights in "The Problem of Social Cost."

ANSWER: Ronald **Coase**

[10] Another economist that has argued for the importance of clearly defined property rights is this Peruvian. This founder of the Institute for Liberty and Democracy described the extralegal system of property rights created by squatters in the outskirts of Lima in his book *The Other Path*.

ANSWER: Hernando **de Soto**

121-12-59-05217

18. The most general form of this equation states that when the Hamiltonian operator is applied to a wave function, the resulting wave function is proportional to the original wave function times an energy constant E. For 10 points each:

[10] Name this equation of quantum mechanics that is used to describe the probability of a particle being in a certain location.

ANSWER: **Schrodinger** equation

[10] The Schrodinger equation predicts that there is a small probability that a particle can cross an energy barrier, a phenomenon known by this name.

ANSWER: **quantum tunneling** [prompt on **tunneling**]

[10] The imaginary unit is used in this form of the Schrodinger equation which in general terms states that the total energy equals the potential plus kinetic energy.

ANSWER: **time dependent** Schrodinger equation

064-12-59-05218

19. Answer the following about notorious newspaper headlines in American history, for 10 points each.

[10] In 1948, after winning an upset election, this incumbent president was photographed cheerfully holding a *Chicago Tribune* edition that claimed he had lost the election to Thomas Dewey.

ANSWER: Harry S. **Truman**

[10] In 1929, this periodical ran the headline "Wall St. Lays an Egg" in response to the stock market crash on Black Monday. A more typical headline for this entertainment focused magazine was "Sticks Nix Hick Pix," a reference to how rural audiences rejected rural set films.

ANSWER: **Variety**

[10] The *Boston Globe* once accidentally ran the editorial headline "More Mush from the Wimp," referring to a speech by this man. Another unsuccessful speech by this man, the "crisis of confidence," or "malaise," speech, urged Americans to carpool and obey the speed limit.

ANSWER: Jimmy **Carter** [or James Earl **Carter**, Jr.]

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20. He wrote, "Oh, I have picked up magic in her nearness to sheathe me half in half the things that sheathe her" in his poem, "A Virginal." For 10 points each:

[10] Name this poet of "Portrait d'une Femme" and a loose translation of "The Seafarer" beginning, "May I for my own self song's truth reckon."

ANSWER: Ezra **Pound**

[10] Pound worked for decades on this massive multilingual poem. Its "Pisan" section was written while he was imprisoned in Italy.

ANSWER: *The Cantos*

[10] This long and possibly autobiographical Pound poem describes a struggling poet who "For three years, out of key with his time...strove to resuscitate the dead art of poetry."

ANSWER: **Hugh Selwyn Mauberley**

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21. This emperor defeated rivals Maxentius and Licinius to secure power. For 10 points each:

[10] Name this son of Saint Helena who issued the Edict of Milan, allowing for religious freedom.

ANSWER: **Constantine the Great** [or **Constantine I**; or **Flavius Valerius Constantinus**; prompt on **Constantine**; prompt on **Constantinus**]

[10] Constantine defeated Maxentius at this 312 battle after having a vision instructing him to put crosses on his army's shields.

ANSWER: Battle of **Milvian Bridge**

[10] Lorenzo Valla exposed Constantine's "donation" of Roman lands to this pope as fraudulent. The Council of Nicaea occurred during this pope's tenure.

ANSWER: **Sylvester I** [or **Saint Sylvester**; prompt on **Sylvester**]

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