

1. In ancient Rome, these people would pray with a *pronuba* matron. According to hadith, the procedure for becoming one of these requires consent from a *wali* who is *mahram*. It's not any kind of royalty, but a metaphorical one of them is greeted in the Hebrew song "L'cha Dodi" and symbolizes Shabbat. In India, these people get a *mangalsutra* or *thaali* before making seven accompanied walks around a sacred (*) fire of Agni. In slave communities, this person was the second to enter a door by jumping over a broom. In Judaism, these people are protected by a *ketubah* contract and watch a man stomp on a glass under a canopy. For 10 points, name these women who, in Christianity, often wear a veil before vowing "I do."

ANSWER: brides [or fiancees; or wives-to-be; prompt on "spouse"-s-to-be or gender-neutral answers indicating a person being married; prompt on "women"]

<Jackson>

2. Lila Abu-Lughod advocates "writing against" this concept as a means of avoiding stereotypes and generalizations, resisting James Clifford and George Marcus's urging to "write" this concept. The claim that colonialist modes of thinking persist in the West even in the present day is presented in an Edward Said ("sigh"-EED) book about this concept "and imperialism." This concept is defined as (*) "personality writ large" in a book that analyzes it among the Dobu, Zuñi, and Kwakiutl and divides this thing into Dionysian and Apollonian elements. For 10 points, identify this concept whose "patterns" were discussed by Ruth Benedict, and which is the sum total of institutions and values in a society.

ANSWER: culture

<Weiner>

3. In one novel, this character is rewarded for helping Charles II retake the throne of England before he investigates why Belle-Ile is being fortified. In another book in which he appears, this character engages in a protracted duel with Mordaunt, a tyrant who executed Charles I. In his first appearance, this character has his letter of introduction to Monsieur de Tréville stolen by the Comte de (*) Rochefort, while he dies shortly after being promoted to marshal in *The Vicomte de Bragelonne*. In that book, this man assists the title characters in fighting the agents of Cardinal Richelieu and proposes the motto "all for one, and for all" to Porthos. For 10 points, name this Dumas character, the protagonist of *The Three Musketeers*.

ANSWER: d'Artagnan [accept either underlined portion of Charles de Batz-Castelmore, Comte d'Artagnan]

<Jose>

4. *Naked City* is a collection of pictures taken in this city by Weegee, including his photograph of a drunk woman glaring at opera patrons, *The Critic*. Tom Junod wrote an article examining a Richard Drew photograph taken in this city, in which a man's profile lines up with the vertical lines of the building he is (*) falling from. Alfred Eisenstaedt took his most famous photograph in this city, where a boy holding a toy hand grenade appears in a Diane Arbus photograph. The collection *How the Other Half Lives* consists of photographs taken of this city's poor by Jacob Riis. For 10 points, name this city where a sailor kissed a nurse on V-J Day in Times Square.

ANSWER: New York City

<Bailey>

5. One version of this technique is aided by collecting an EELS spectrum. Uranyl acetate is used in negative-staining protocols for this procedure, and samples are preferentially prepared in vitreous ice for one version of this technique. A cryogenic version of this technique can be used in single-particle reconstruction. One type of this technique requires using a microtome to take sections, while another requires (*) coating the surface of the sample with a metal. Aberration limits the resolution of this technique to around 2 picometers, which is much better than techniques using light. For 10 points, name this technique which comes in scanning and transmission varieties, which uses negatively-charged particles to image sub-cellular structures.

ANSWER: electron microscopy [or EM; prompt on "microscopy"; accept more specific answers like scanning electron microscopy or transmission electron microscopy before mentioned]

<Mukherjee>

6. Charles Neill and James Reynolds were commissioned to investigate this industry, which Henry Ford credited with inspiring his assembly line process. Refuse from this industry created the horrifying "Bubbly Creek." Andrew Chase designed a railway car with a ventilated upper compartment that transformed this industry, shifting its center from Cincinnati to Gustavus Swift's Union (*) Stock Yards. Philip Armour used its byproducts in various other consumer goods, an approach known as "everything but" a certain sound. This industry features in a fictional work about Jurgis Rudkis that rallied support for the Pure Food and Drug Act. For 10 points, identify this industry based in Chicago in the early 1900s and attacked in Upton Sinclair's novel *The Jungle*.

ANSWER: meat packing industry [accept reasonable equivalents including "meat," "slaughterhouse," "animal butchering," etc; accept specific answers like "hog butchering;" prompt on general answers like "food"]

<Bailey>

7. The ratio of this value caused by grain collisions to that caused by a surrounding viscous fluid is the Bagnold number. Fields of this quantity are created by adding a dislocation to a crystal. This quantity's second deviatoric invariant is the subject of von Mises' criterion. Conservation of angular momentum dictates that the tensor form of this quantity is symmetric, and the terms of that matrix are restricted by Mohr's circles. Bingham plastics begin flowing after a cutoff value of this quantity. The off-diagonal elements of the (*) Cauchy tensor for this quantity are called shear. This quantity is plotted against strain in order to find Young's modulus. For 10 points, name this quantity, a force on a continuous material that causes deformation.

ANSWER: stress

<Mukherjee>

8. This man's early service in the West Indies with Prince William Henry led the future king to give away this man's bride, Frances Nisbet. He spent a year in de facto captivity after being sued by angry merchants in Nevis. This man frequently contemplated abandoning England to live in Italy as the Duke of Bronte with his mistress. At the Battle of Calvi, this man (*) lost his right eye, to which he once drew a telescope in order to ignore an order of retreat from Hyde Parker at the Battle of Copenhagen. This man ordered "every man to do his duty" at a victory over Pierre-Charles Villeneuve off the coast of Cadiz and ended Napoleon's designs at invading England. For 10 points, name this British admiral killed at the Battle of Trafalgar.

ANSWER: Horatio Nelson, Viscount Nelson of the Nile and Burnham Thorpe

<Bentley>

9. This book's narrator asserts that "a living dog is better than a dead lion" and advises letting each person "step to the music that he hears, however measured or far away." In one scene in this book, the narrator discusses the desire for wealth with John Farmer during a rainstorm. In another episode, the narrator watches a hundred men cut blocks of ice to send across the world. The narrator of this work lives within earshot of the (*) Fitchburg Railway and is visited by the illiterate Alec Therien, who lives an "animal life," and the poet Ellery Channing. Its narrator claims that "the mass of men lead lives of quiet desperation." For 10 points, name this transcendentalist memoir about living in a cabin in the Concord woods, a work by Henry David Thoreau.

ANSWER: Walden; or Life in the Woods

<Morlan>

10. One man in this intellectual movement assessed the "infelicity" of acts such as shouting "I divorce you!" This movement includes a man who devised the water substitute XYZ and Twin Earth. Pragmatist Richard Rorty attacked its failure to establish a "mirror of nature." Hilary Putnam and performative utterance theorist J.L. Austin were in this movement, whose papers often show arguments with numbered premises. Common (*) sense defender G.E. Moore helped start this largely Anglo-American movement. Contrasted with continental philosophy, it grew out of logical positivism and pays close attention to logic and language. For 10 points, name this type of contemporary philosophy that shares its name with a kind of definitional, non-synthetic truth.

ANSWER: analytic philosophy [or analytical philosophy; prompt on "philosophy"; prompt on "philosophy of language"; prompt on the "linguistic turn"; prompt on ideal "language" philosophy; prompt on ordinary "language" philosophy; prompt on "British," "American," or "Anglo-American" philosophy until "Anglo-American" is read; prompt on answers indicating contemporary or recent philosophy]

<Jackson>

11. Warren G. Harding sent in federal troops to battle strikers from this industry in the Battle of Blair Mountain. John Mitchell led a nationwide strike in this industry during Theodore Roosevelt's administration. A strike in this industry under Arthur Scargill led to the Battle of Orgreave in the UK, where it was blamed for the fall of the Heath Ministry. Humphrey Davy designed a special lamp to avoid firedamp (*) accidents in this industry, which was transformed after Thomas Savery and Thomas Newcomen invented engines to power its water pumps. Margaret Thatcher successfully resisted a 1980s strike by this industry in Britain. For 10 points, black lung disease is often suffered by laborers in what industry organized by John L. Lewis's United Mine Workers?

ANSWER: Coal Mining Industry [prompt on "Energy Industry" or "Mining Industry"]

<Bentley>

12. The Felkin-Anh model places the group with the highest value for this quantity orthogonal to the carbonyl. Groups with a high value of this quantity always serve as deactivators of EAS reactions. One form of this quantity is equal to the effective nuclear charge divided by the square of the covalent radius, while another form expresses it as the arithmetic mean of the (*) ionization energy and the electron affinity. Those are the Allred-Rochow and Mulliken scales. The difference in this quantity between two atoms determines whether their bond is ionic or covalent. Fluorine has the highest value for this quantity with a 4.0 on the Pauling scale. For 10 points, name this quantity which describes how well an atom attracts electrons in a bond to itself.

ANSWER: electronegativity

<Busse>

13. This man appears next to the floating words "Illum oportet crescere, me autem minui" and pointing his finger at the crucified Jesus in the *Isenheim Altarpiece*. Andrea Pisano created 20 scenes from this man's life for the Florence Baptistery, which is also known as this man's Baptistery, since he is the patron saint of Florence. This man points behind his back toward a Virgin Mary and a baby Jesus in Parmigianino's *The Vision of Saint Jerome*. The Archangel (*) Uriel watches over this man as a baby as he blesses Jesus in a cave, in Leonardo's *Virgin of the Rocks*. For 10 points, name this saint often depicted wearing camel's skin, best-known for baptizing Jesus.

ANSWER: Saint John the Baptist [prompt on Saint "John"]

<Bollinger>

14. This physical property depends on the object's orientation in pleochroic materials, and it is altered in the Schiller Effect. Orientations of thin plates lead to aventurescence, a type of this physical property that features entities which resemble tiny dots. Impurities alter this property in asteriated minerals, which leads to the appearance of a star shape. Adjectives that are used to describe this property include (*) resinous - which applies to amber, greasy - which applies to opal, and metallic - which applies to fool's gold. Like cleavage and streak, it is a useful property in the process of identifying minerals. For 10 points, name this property, a qualitative measure of how light is reflected.

ANSWER: luster [prompt on "color"]

<Jose>

15. Several landforms in this region used to be a part of a larger structure called Wokokon. This region contains Jockey's Ridge. During the Civil War, a failed Confederate offensive in this region led to the Chicamacomico Races. Feral horses live on this region's Ocracoke Island. One division of this region contains the towns of Frisco and Buxton. U-85 was sunk near Bodie, which is an island in this place. The waters off the coast of this region are known as the (*) Graveyard of the Atlantic. The Wright Brothers conducted their first flight in Kitty Hawk, which is located in this region. For 10 points, name this group of barrier islands including Hatteras, which lies off the coast of North Carolina.

ANSWER: Outer Banks, North Carolina [prompt on "North Carolina"; prompt on "Atlantic Coast"]

<Butler>

16. Bruckner's Symphony No. 2 quotes repeatedly from his third work of this kind, which is in F minor. The earliest known complete one of these works by a single composer was written by Guillaume de Machaut and named for "Notre Dame." Haydn wrote one of these pieces "in Angustiis," whose composition coincided with the Battle of the Nile, and thus was nicknamed after Lord Nelson. Mozart did not finish one of these works in C minor, which is nicknamed (*) "Great." One of Beethoven's works of this kind, which has the word "Solemnis" appended to it, has a "Benedictus" inspired by a piece whose "Credo" is known as the "Symbolum Nicenum." For 10 points, name these musical settings of the ordinary of the Eucharist, which includes J.S. Bach's one "in B minor."

ANSWER: mass [or missa; do NOT prompt on or accept "requiem" at any point]

<Lawrence>

17. It's not salt, but bricks of this good were used for currency in Siberia and Mongolia. Tang scholar Lu Yu wrote an early treatise on this good, whose social role transformed during the Song dynasty. The need to balance trade for this good with something besides silver triggered the First Opium War. Declining cholera rates in Victorian England are linked to (*) consumption of this good. Explorer Robert Bruce established plantations for this good in the Assam region of India. *Chashitsu* are buildings designed for the use of this good, which is consumed in ritualized stages like *chaji* in Japan. An act taxing this good prompted men dressed as Mohawks to pitch crates of it into the Atlantic in 1773. For 10 points, name this caffeinated drink.

ANSWER: Tea

<Bentley>

18. The title character of one of his plays is described as a "Bible-killer" by Florentine singers and disappoints Andrea Sarti by recanting his beliefs. In another of his dramas, the protagonist's unflinching charity is rewarded with the money to purchase a tobacco shop, but the stress of running the shop causes her to invent an assertive male persona named (*) Shui Ta. This author of *Life of Galileo* employed the "distancing effect" in a play in which Yvette Pottier sings the "Fraternalization Song". Swiss Cheese dies in that play, whose other characters include Katrin, Eilif, and the title war profiteer. For 10 points, name this German author of *The Good Person of Setzuan* and *Mother Courage and Her Children*.

ANSWER: Bertolt **Brecht** [or Eugen Berthold Friedrich **Brecht**]

<Bentley>

19. These beings turned the children of Pieros into birds. A trio of these beings worshipped at Delphi were named Hypate, Nete, and Mese. One of these immortals had a child whom Zephyrus killed with a disk. The Aganippe and Hippocrene (*) fountains were sacred to these figures, as was the Corcyrean cave. Thamyras was blinded by these figures, who include a carrier of a globe and compass. These figures were born to a personification of memory, Mnemosyne, with Zeus; they include Melpomene and another whose son went to the underworld to save Eurydice. For 10 points, name these deities who include Urania, Clio, and Calliope, nine goddesses who presided over the arts.

ANSWER: the **Muses** [or **Mousai**; or **Pierides**]

<Mukherjee>

20. One member of this group inquired about "this goblin Honour, which the world adores" in his poem "A Rapture." Another member of this group wrote "A Ballad Upon a Wedding" and a poem which opens with the question "Why so pale and wan, fond lover?" Sometimes called the "Sons of Ben," their numbers included a poet who expressed his appreciation for "wild civility" in "Delight in Disorder" and advised the (*) young to "Gather ye rosebuds while ye may" in another poem. These counterparts of the metaphysical poets included as members Thomas Carew ("Carey"), cribbage inventor John Suckling, and the author of "To the Virgins, to Make Much of Time," Robert Herrick. For 10 points, identify this group of poets named for their affiliation with Charles I.

ANSWER: the **Cavalier** poets [prompt on "Sons of Ben"]

<Carson>

21. This man sired an illegitimate son named Thomas Winter with his long-time mistress, Joan Larke. He was given control over the Belgian city of Tournai for helping his monarch win the Battle of the Spurs. Lorenzo Campeggio complicated the plans of this legate *a latere*, who built the lavish Hampton Court Palace. This minister orchestrated a meeting that attempted to end (*) war between Christian nations at the Field of the Cloth of Gold. He temporarily withdrew from secular affairs after being accused of violating praemunire in 1529, and lost power when he could not convince Clement VII to resolve the "great matter" and grant an annulment to his king. For 10 points, name this cardinal and adviser to Henry VIII.

ANSWER: Cardinal Thomas Wolsey

<Bentley>

22. In one of this man's three reinterpretations of *The Scarlet Letter*, Dale Kohler attempts to use computers to prove the existence of God. Another of his novels, written in present tense, contains a character who takes a job as a gardener for Mrs. Horace Smith after the intervention of the golfing minister Jack Eccles and tries not to turn out like Marty Tothoro, his former (*) coach. This author of *Roger's Version* also created a character who accidentally drowns her daughter Rebecca June after her husband leaves her to resume his affair with Ruth Leonard. He wrote a series of novels in which former high school basketball star Harry Angstrom is "at Rest" and "Rich". For 10 points, name this American author of the *Rabbit* novels.

ANSWER: John Hoyer Updike

<Bentley>

23. Attempts to carry out this action have become a nightmarish political battleground in Nigeria, where it causes week-long work stoppages and essentially always fails. Political pressure has prevented this action from being conducted in Lebanon since 1932. They're not taxes, but Judas of Galilee started a revolt in reaction to one of them named for Quirinius. Maintaining the *Regimen morum* was the secondary charge of a Roman official tasked with (*) conducting this procedure. A 72-year rule protects its confidentiality in US, which built the first UNIVAC computer for this purpose in the 1940s. The Electoral College is periodically updated based on the results of, for 10 points, what procedure conducted every 10 years to determine America's population?

ANSWER: taking a census

<Bentley>

24. Granules filled with this element are found in *Actinomyces israelii*. The TPST enzyme is responsible for adding a group containing this element to tyrosine. A radical on this element is found in the active site of ribonucleotide reductase. PDI catalyzes the formation of bonds between two atoms of this element, which in aconitase forms an active site cluster with iron. Its 35 isotope was used in the Hershey-Chase experiment to label (*) proteins. The chemoautotrophic bacteria living near deep sea vents use a compound of this element as an energy source. The side chain of cysteine contains this element, allowing it to form a type of bridge important in secondary structure stability. For 10 points, name this element found in thiol groups, with symbol S.

ANSWER: sulfur [or S before mention]

<Mukherjee>

1. Madame Arcati accidentally summons the ghost of Elvira at a seance arranged by Charles Condomine in a Noel Coward play with this two-word title. For 10 points each:

[10] Identify this two word phrase, which also follows the invocation "Hail to thee" and precedes the line "Bird thou never wert" in the poem "To a Skylark."

ANSWER: "**blithe spirit**"

[10] "To a Skylark" was written by this husband of the author of *Frankenstein*, whose other poems include "Music, When Soft Voices Die," "Adonais," and "Ozymandias."

ANSWER: **Percy Bysshe Shelley** [prompt on partial answer]

[10] This late essay by Shelley is a response to an article by Thomas Love Peacock. It claims that its subjects are "the hierophants of an unapprehended inspiration" and "the unacknowledged legislators of the world."

ANSWER: "**A Defence of Poetry**" [do not accept "An Apology for Poetry" or "The Defence of Poesy"; those refer to the Philip Sidney work]

<Carson>

2. For 10 points each, answer the following about mathematical theorems that show scientific efforts at doing certain mathematical operations are inherently doomed.

[10] The two theorems named for this man demonstrate that no matter what axioms are assumed to be true, there are always statements lurking out in the void that cannot be proven true or false.

ANSWER: Kurt **Gödel**

[10] The "no-free lunch" theorems state that this kind of operation will inherently balance out over all inputs. The simplex method is one mathematical procedure of this kind for linear constraints.

ANSWER: **optimization** [accept word form equivalents; prompt on "programming"]

[10] Tennenbaum's theorem states that no model of logic can completely reproduce the axiomatic set of mathematics named for this mathematician, whose namesake axioms apply to the natural numbers.

ANSWER: Giuseppe **Peano**

<Jose>

3. Pioneers of this field include Heinrich Schliemann, who believed he had found Priam's treasure. For 10 points each:

[10] Name this discipline which excavates assemblages of artifacts to study the material culture of past human societies.

ANSWER: **archaeology**

[10] These layers of earth or archaeological remains are newer when nearer to the surface according to the principle of superposition. Archaeologists and geologists study these layers as markers of time.

ANSWER: **strata** [or **stratum**]

[10] In archaeology, these sites provide exemplary information about a broader material culture. Hallstatt and Clovis, New Mexico are two of these sites, which often lend their names to unknown peoples whose remains are found elsewhere.

ANSWER: **type** sites

<Jackson>

4. One of the parties in this case was a Yale Medical School professor named Lee Buxton. For 10 points each:

[10] Identify this 1965 Supreme Court case where William O. Douglas argued that the Constitution provides a right to privacy through the penumbras and emanations in its text.

ANSWER: Griswold v. State of Connecticut [accept in either order; or Estelle T. Griswold and C. Lee Buxton v. Connecticut]

[10] The right to privacy was also crucial in the majority opinion in this controversial 1973 case, which guaranteed a woman's right to abortion until viability.

ANSWER: Roe v. Wade [or Jane Roe, et al. v. Henry Wade, District Attorney of Dallas County; accept any underlined answer in either order]

[10] Arthur Goldberg's concurring opinion in *Griswold* argued that the "power-constraint" interpretation of this amendment provided a basis for a right to use contraceptives. Debate exists over whether this amendment actually confers rights or is simply instructive regarding the constitution.

ANSWER: Ninth Amendment

<Bentley>

5. Answer the following about incidents of art vandalism, for 10 points each.

[10] Seemingly in protest of Nixon's pardon of William Calley, Tony Shafrazi spraypainted the words "KILL LIES ALL" across this Pablo Picasso painting about the bombing of the namesake Spanish town.

ANSWER: Guernica

[10] A British suffragette took a meat cleaver to this Diego Velazquez painting, which shows Venus looking at herself in a mirror held up by Cupid.

ANSWER: *The* Rokeby Venus [or *The Toilet of Venus*]

[10] A Rembrandt painting of this woman in the Hermitage was damaged in a sulfuric acid attack in 1985. Two little cupids are testing out gold and lead arrows in Correggio's painting of her, and she is draped in a purple veil in a Gustav Klimt painting.

ANSWER: Danaë

<Gupta>

6. This man's valet Mario Abdo Benitez became a major power broker by selling blank documents signed by this man during bouts of dementia. For 10 points each:

[10] Identify this dictator who supported Operation Condor and sheltered Nazi war criminal Josef Mengele. This successor of Federico Chavez died in exile in Brazil after a 1989 coup.

ANSWER: Alfredo Stroessner Matiauda

[10] Stroessner was a ruler of this landlocked South American country, which fought Argentina, Brazil, and Uruguay in the War of the Triple Alliance.

ANSWER: Paraguay

[10] This earlier Paraguayan president died at Cerro Cora after leading his country into the disastrous War of the Triple Alliance, which killed so much of its male population that polygamy became popular for decades afterward.

ANSWER: Francisco Solano Lopez

<Bentley>

7. Rose marries Patrick Blatchford, the heir to his family's department store business, in her short story, "The Beggar Maid." For 10 points each:

[10] Identify this author of the novel *Lives of Girls and Women*, better known for such short story collections as *The Moons of Jupiter*, *The View from Castle Rock*, and *Dance of the Happy Shades*.

ANSWER: Alice Ann Munro [or Alice Ann Laidlaw]

[10] Alice Munro is an author from this country. Its English-language writers include the novelist Robertson Davies, while its French-language writers include Anne Hebert and Roch Carrier, the latter of whom wrote "The Hockey Sweater."

ANSWER: Canada

[10] Many of Alice Munro's stories first appeared in the *New Yorker*. This other long-time *New Yorker* contributor revised William Strunk's *The Elements of Style* and wrote a number of popular children's novels.

ANSWER: E. B. White [or Elwyn Brooks White]

<Bentley>

8. Airbags make use of a compound of this element and sodium. For 10 points each:

[10] Name this element that, along with oxygen, comprises most of the air in the atmosphere.

ANSWER: nitrogen [accept N; prompt on "element number 7" or other such answers]

[10] The toxic gas stored in airbags is the aforementioned sodium, combined with this anion. This anion consists of three nitrogen atoms joined by double bonds.

ANSWER: azide

[10] The decomposition of azide typically triggers this process of a shock front propagating through a medium. This process is necessary for most explosions.

ANSWER: detonation [accept word forms.]

<Jose>

9. For 10 points each, answer the following about musical compositions inspired by trains:

[10] The "complete construction" of this work "from beginning to end" came to its composer, George Gershwin, while on a train ride to Boston in 1924. This piece was commissioned by Paul Whiteman and begins with a famous clarinet glissando.

ANSWER: Rhapsody in Blue

[10] The piece *Pacific 231* is meant to depict a steam locomotive and was composed by Arthur Honegger, a member of this group of French composers in the early 20th century, which also included Darius Milhaud.

ANSWER: Les Six [or The Six]

[10] Milhaud once taught American composer Steve Reich, who composed this piece in 1988. It is split into three movements and features recordings of interviews of Holocaust survivors and a Pullman porter as well as the sounds of trains.

ANSWER: Different Trains

<Berend>

10. Answer these questions about the Twelve Labors of Heracles, for 10 points each.

[10] Heracles had to stun this beast and strangle it for his first labor because its fur was impervious to arrows. He later wore this creature's pelt.

ANSWER: **Nemean Lion**

[10] According to Hesiod, the Nemean Lion was a son of this animal and Echidna. Heracles killed this two-headed dog in order to capture Geryon's cattle for his tenth labor.

ANSWER: **Orthrus**

[10] After that, Heracles traveled far west to get these life-giving items for his eleventh labor. He briefly traded jobs with Atlas and slew a dragon named Ladon to obtain them.

ANSWER: **apples** of the **Hesperides** [or **golden apples**; or **apples** of **immortality**; prompt on "apples"]

<Silverman>

11. This man was forced out of the War Department when the Walcheren Expedition failed to open a new front in the Netherlands during the Napoleonic Wars. For 10 points each:

[10] Identify this man who was later appointed Foreign Secretary under Lord Liverpool's ministry, in which capacity he negotiated for British interests at a conference called by Klemens von Metternich.

ANSWER: Viscount **Castlereagh** [or Robert **Stewart**, 2nd Marquess of Londonderry]

[10] Castlereagh, along with men like Alexander I of Russia, attended this aforementioned 1814 conference that set up a balance of power following the Napoleonic Wars.

ANSWER: Congress of **Vienna** [or **Wiener** Kongress]

[10] This Italian city-state sent Agostino Pareto to represent them at the Congress of Vienna. This Ligurian city was the birthplace of Andrea Doria.

ANSWER: **Genoa** [or **Genova** or **Genua**]

<Bentley>

12. This boy genius drew on the lived experience of his wife Harriet Taylor in arguing against *The Subjection of Women*. For 10 points each:

[10] Name this 19th-century Briton, a classical liberal who foresaw a "tyranny of the majority" in his *On Liberty*.

ANSWER: John Stuart **Mill**

[10] Mill held this principle, that the state should only restrict the liberty of civilized people if one person is causing damaging wrongdoing to another.

ANSWER: **harm** principle [or one person doing **harm** to another]

[10] This later libertarian argued for a minimal "night watchman state" in his *Anarchy, State, and Utopia*, a reply to his Harvard colleague John Rawls.

ANSWER: Robert **Nozick**

<Jackson>

13. She compared herself to a praying mantis in the poem "Nexus", which appears in her collection *The Yellow House on the Corner*. For 10 points each:

[10] Identify this African-American author whose poetry collections include *On the Bus with Rosa Parks* and *Thomas and Beulah*.

ANSWER: Rita Frances **Dove**

[10] This other African-American poet, who wrote "On the Pulse of Morning" for Bill Clinton's first inauguration, is also famous for such popular autobiographies as *I Know Why the Caged Bird Sings*.

ANSWER: Maya **Angelou** [or Marguerite Ann **Johnson**]

[10] *Hard Times Require Furious Dancing* is the latest book of poems by this author of *The Temple of My Familiar*. Celie, the protagonist of her most famous novel, begins an affair with the lounge singer Shug Avery.

ANSWER: Alice Malsenior **Walker**

<Bentley>

14. Over 90 people were killed when a member of this group crashed an explosive-laden truck into the Central Bank Building in 1996. For 10 points each:

[10] Identify this guerrilla group whose successful 1991 assassination attempt elevated V. P. Singh to the position of Prime Minister.

ANSWER: **Tamil Tigers** [or **Liberation Tigers of Tamil Eelam** or **LTTE**]

[10] The Tamil Tigers carried out the Central Bank Building bombing in Colombo, the capital of this island nation.

ANSWER: Democratic Socialist Republic of **Sri Lanka** [or **Ceylon**]

[10] Sri Lanka's chief exports at the time of its independence were tea, coconuts, and this good. Thomas Hancock helped make this product resistant to temperature changes, and Akron, Ohio is sometimes called the world capital of this product.

ANSWER: Natural **rubber** [or Vulcanized **rubber** or India **rubber** or **caoutchouc**; prompt on "latex"]

<Bentley>

15. A quarter-wave plate and a half-wave plate are two tools that be used to create light with this property. For 10 points each:

[10] Name this property of an electromagnetic wave, in which the wave has been forced to oscillate in only one direction.

ANSWER: **polarization** [accept word form equivalents, like **polarized**]

[10] For a wave that has been polarized and is subsequently re-polarized, this quantity for the new wave can be found via Malus's law. Malus's law states that this quantity before the repolarization has been reduced by a factor of cosine squared of the angle.

ANSWER: **intensity**

[10] This quantity is defined as the arctangent of the ratio of two refractive indices for an electromagnetic wave hitting a surface. The light that is reflected will be completely polarized.

ANSWER: **Brewster's** angle

<Jose>

16. Identify the following about literary critic George Steiner, for 10 points each.

[10] Steiner's *After Babel* argues that a poetic use of language is required in performing this literary task. Vladimir Nabokov viciously attacked Walter Arndt for his poor performance of this task in creating an English version of *Eugene Onegin*.

ANSWER: **translation** [accept word forms]

[10] Steiner wrote a 1960 book on the "Death" of this literary art form, which another philosopher divided into Apollonian and Dionysian forms.

ANSWER: Greek **tragedy** [accept *The Death of Tragedy*]

[10] In *The Death of Tragedy*, Steiner argued that this French dramatist staged a "brilliant rear-guard action" to preserve the art of tragedy in his plays. This man wrote *Britannicus* and an updated version of *Andromache*.

ANSWER: Jean Baptiste **Racine**

<Bentley>

17. Anti-peroxidase antibodies cause infiltration and fibrosis of this organ in Hashimoto's disease, and another disease of this organ causes eye-popping. For 10 points each:

[10] Name this gland located in the neck, which uses iodine to produce its namesake hormone.

ANSWER: **thyroid**

[10] The thyroid is activated by the release of this hormone from the anterior pituitary.

ANSWER: **TSH** [or **thyroid-stimulating hormone** or **thyrotropin**; do NOT accept "TRH" or "thyroid-releasing hormone"]

[10] Peripheral deiodinases convert thyroid hormone to this active form by removing a single iodine atom.

ANSWER: **T3** [or **tri-iodo-thyronine**]

<Mukherjee>

18. Catholics believe that this action consists of additional prayers to God the Father from those in Heaven who can mediate between Him and human requests, such as saints. For 10 points each:

[10] Name this process requested of the Virgin Mary by the Hail Mary prayer.

ANSWER: **intercession** of the Saints [or **intercession** of the Blessed Virgin Mary; accept word forms of **intercede**; prompt on "**saints praying** to God for us" or similar answers]

[10] During this Catholic sacrament, a priest in a secret booth might tell the recipient to say Hail Marys. Its recipients begin by stating "Bless me Father, for I have sinned."

ANSWER: Sacrament of **Confession** [or Sacrament of **Penance**; or Sacrament of Penance and **Reconciliation**; do not accept "repentance"]

[10] Before Vatican II, most Catholics also expressed contrition by performing this physical action during the Confiteor on the words "through my fault, through my fault, through my most grievous fault." Others do it during the Agnus Dei.

ANSWER: **hitting** one's **chest** with one's right fist [accept synonyms for "hitting" or "chest"; accept **hit** **ting** ones**elf**]

<Jackson>

19. This film begins with a pharmacist being attacked by a mob, and it goes on to depict several disjointed scenes of people congregating in a desert and eating large chunks of meat. For 10 points each:

[10] Name this 2012 movie trailer created by Nakoula Basseley Nakoula, a.k.a. Sam Bacile, who dubbed anti-Islamic messages over the completed footage.

ANSWER: **Innocence of Muslims** [or **Innocence of Bin Laden**; or **Desert Warrior**; or **The Real Life of Muhammad**; or **Muhammad Movie Trailer**]

[10] Nakoula is believed to be a member of this religious group, whose persecution is depicted at the start of the film. This Christian minority in Egypt has come under attack since the overthrow of Hosni Mubarak.

ANSWER: **Copts** [or **Coptic** Christians or **Coptic** Orthodox Church]

[10] In September 2012, Terry Jones screened the trailer for the film at the Dove World Church Center in Florida. Jones had previously come to prominence in 2010, when he threatened to perform this action on two hundred objects, and in 2011, when he did this in the sanctuary of his church.

ANSWER: **burning the Quran** [or obvious equivalents]

<Weiner>

20. In a sculpture, this woman is wearing a blue crown with a golden diadem wrapped around it. For 10 points each:

[10] Name this woman, whose limestone bust, excavated in 1912, is on display at the New Museum in Berlin.

ANSWER: **Nefertiti**

[10] Nefertiti was a queen of this ancient kingdom, whose other artistic achievements included the Great Pyramid of Giza and the Sphinx.

ANSWER: **Egypt** [or Upper **Egypt**; or Lower **Egypt**]

[10] The bust of Nefertiti was excavated from this Egyptian city. This city's artistic style depicts the pharaoh with feminine hips and breasts, possibly explained by an illness suffered by Akhenaten.

ANSWER: Tell el-**Amarna**

<Bollinger>

21. They are defined as any disturbance from an equilibrium condition that propagates from one region to another. For 10 points each:

[10] Name these phenomena, that may be classified as transverse or longitudinal, depending on the direction of propagation of the disturbance. They combine either destructively or constructively during interference.

ANSWER: **waves**

[10] For a collection of waves, a pulse at a single point can be determined via this principle, which merely states that the collection of waves is equal to the sum of each individual wave.

ANSWER: principle of **superposition**

[10] For a string that is rigidly held at both ends, this value can be found by solving for "velocity divided by 2 times L" which is the length of the string. The frequencies of all standing waves are integer multiples of this one.

ANSWER: **fundamental** frequency

<Jose>

22. In the second stanza of one of this author's poems, the speaker laments that "every spirit upon earth seemed fervourless as I", shortly before he is heartened by "a full-hearted evensong of joy illimited". For 10 points each:

[10] Identify this British author who described struggling against "purblind Doomsters" in the poem "Hap" and wrote such novels as *Jude the Obscure* and *Far from the Madding Crowd*.

ANSWER: Thomas **Hardy**

[10] This aforementioned Hardy poem opens with the speaker leaning on a coppice-gate and celebrates the title bird's choice to "fling his soul upon the growing gloom".

ANSWER: "The **Darkling Thrush**" [or "The **Century's End, 1900**"]

[10] In this Hardy poem, divided into eleven three-line stanzas, the Spinner of the Years's cry of "Now!" marks the moment at which a "Shape of Ice" prepared by the "Immanent Will" collides with the *Titanic*.

ANSWER: "The **Convergence of the Twain** (Lines on the loss of the *Titanic*)"

<Carson>

23. This monarch had an ongoing conflict with the papacy over his annulment to Ingeborg of Denmark. For 10 points each:

[10] Identify this monarch who ruled France from 1179 until 1223.

ANSWER: **Philip Augustus** [or **Philip II** or **Philippe II** or **Philippe Auguste**]

[10] Philip Augustus joined this English king on the Third Crusade before eventually abandoning that venture early and going to war with him. This king was known as the Lionheart.

ANSWER: **Richard I** [or **Richard** the Lionheart or **Richard** the Lionhearted]

[10] Philip Augustus was a member of this dynasty, which traced its origins to Robert the Strong. This dynasty succeeded the Carolingians.

ANSWER: **Capetian** dynasty

<Bentley>