

1. One member of a family created by this author becomes obsessed with reenacting the sinking of the *Wilhelm Gustloff* with Wolfgang Stremplin. That family first appeared in a novel by this author in which Pilenz recounts hanging out near a half-sunken Polish minesweeper with the large-Adam's-appled orphan Joachim Mahlke. This creator of the Pokriefke family is most famous for a novel in which Herbert (*) Truczinski attempts to make love to a ship's figurehead. The protagonist of that novel becomes the lover of Roswitha Raguna after joining Bebra's circus troupe in order to leave Danzig, and stops growing at age three. For 10 points, identify this German author of *Crabwalk*, *Cat and Mouse*, and *The Tin Drum*.

ANSWER: Gunter Wilhelm Grass

<Carson>

2. Late in his life, the Count de Soisson allied with this man's Master of the Robes, the Marquis de Cinq-Mars, to overthrow one of his advisers. One of his ministers revoked the paulette tax that had been instituted by his father, antagonizing noblemen like Henri, Duke of Rohan. That early minister of this monarch was named Charles de Luynes. During his reign, the Protestant stronghold at La Rochelle was captured. This man decided not to dismiss his chief adviser during the (*) Day of the Dupes. His mother, Marie de Medici, served as his regent after his predecessor was assassinated. His reign was dominated by his chief minister, Cardinal Richelieu. For 10 points, name this French monarch, the father of the Sun King.

ANSWER: Louis XIII [or Louis the Just or Louis le Juste; prompt on "Louis"]

<Bentley>

3. This country hosts the Valhalla Experimental Station, which plants macadamia trees to restore local agribusiness. This country claims territory between the Hondo and Sibun Rivers, but it agreed to a "Line of Adjacency" in 2000. This country's northernmost department, Peten, has its capital at Flores. In colonial times, this country was governed from the city of Antigua. The world's first Mixed Cultural and Natural World Heritage Site, (*) Tikal, is located in this country, whose currency, the quetzal, is named for a bird sacred to one of its indigenous peoples, the Quiche Maya. For 10 points, name this Central American country embroiled in a border dispute with Belize, which also borders Honduras and Mexico.

ANSWER: Republic of Guatemala [or Republica de Guatemala]

<Wynne>

4. A suite by this composer features the songs of Jean-Baptiste Besard in its movement "Courtly Airs." The second movement of a piece by this composer draws heavily from the twelfth-century German chant "Christ ist erstanden" to depict the Jubilee. Another piece by this composer features a series of trumpet blasts to depict the horn of Triton. He composed a symphonic poem whose four movements depict a set of landmarks "at (*) dawn," "in the early morning," "at midday," and "at sunset." This composer of *Ancient Airs and Dances* and *Roman Festivals* also wrote a piece representing the title objects at Janiculum and the Appian way. For 10 points, name this Italian composer of *The Fountains of Rome* and *The Pines of Rome*.

ANSWER: Ottorino Respighi

<Montoya>

5. When this property is nonzero, an applied magnetic field creates an even number of sublevels in the anomalous Zeeman effect. The precession of this quantity's vector generates signals in NMR spectroscopy, in which coupling between particles with this property causes splitting. It was first discovered in an experiment in which a furnace launched a beam of silver atoms through an inhomogeneous magnetic field, performed by (*) Stern and Gerlach. It is represented by up or down arrows in configuration diagrams, and each subshell of an orbital can contain only two electrons due to the fact that this property for an electron is either $\frac{1}{2}$ or negative $\frac{1}{2}$. For 10 points, name this property, the quantum number representing the intrinsic angular momentum of a particle.

ANSWER: spin angular momentum [or intrinsic angular momentum before mention; prompt on "angular momentum" or "momentum" before mention]

<Mukherjee>

6. One model of this concept postulates a central executive governing a "phonological loop" and "visuospatial scratchpad," and was developed by Baddeley and Hitch. Increased synchrony of theta wave activity is considered a neurological "tag" for this process. This process does not explain the primacy effect in the research of Herman Ebbinghaus, but does explain the (*) recency effect.

Cognitive load theory is derived from the limitations of this construct, which is thought to be impaired in ADHD. The process known as "chunking" can enhance this faculty's capacity, which was defined by George Miller's "Magic Number" of seven plus or minus two. For 10 points, identify this type of memory, converted by consolidation into the long-term variety.

ANSWER: working memory [or short-term memory; prompt on just "memory"]

<Wynne>

7. One of these gods copulated with the horses of Erichthonius of Dardania. Several of them lived on the island of Lipara. Robert Graves claims that in the Pelasgian creation myth, Eurynome first had sex with one of them who later raped the Athenian princess Oreithyia. Although it was Hephaestus who created Pandora, these gods brought her to life. One of them was jealous of Apollo, so he changed the path of a (*) discus and made it kill Hyacinthus. Odysseus's men opened a bag containing all but one of them that was given as a gift by their ruler, Aeolus. Their names were Eurus, Notus, Boreas, and Zephyrus. For 10 points, name these figures that presided over the four cardinal directions of a meteorological phenomenon.

ANSWER: the four winds [or Anemoi]

<Gupta>

8. One person sentenced in this affair had previously defended three suspects in the Fountain children murders. John Kendrick started the investigation into it. A court case that arose from it set the precedent that Congress had the power to compel testimony. This incident was investigated by Thomas Walsh's commission and gave rise to the Supreme Court case (*) *McGrain v. Daugherty*.

Harry Sinclair and Edward Doheny were both charged in this incident; another person convicted was previously a senator from New Mexico. It involved a bribe given to Secretary of the Interior Albert Fall in order to gain exclusive rights to Elk Hills, California and a site in Wyoming. For 10 points, name this Harding administration scandal over oil drilling contracts.

ANSWER: Teapot Dome scandal

<Mukherjee>

9. It is not the mitochondria, but the cytochrome P450 system localizes to this organelle. A tetramer of Sec61 proteins forms the translocon in this organelle's membrane. COPII coated vesicles bud from this organelle, which has a membrane protein complex that recognizes the signal recognition particle. One protein in this organelle catalyzes N-linked glycosylation of proteins, while another is responsible for forming disulfide bonds. One version of this organelle is responsible for (*) drug detoxification, while secretory proteins are synthesized in another section of this organelle, which then transfers those proteins to the Golgi apparatus. For 10 points, name this organelle which comes in rough and smooth varieties, whose name means "little net".

ANSWER: Endoplasmic reticulum [or ER; accept smooth ER or rough ER]

<Mukherjee>

10. One author from this country set a work in which Alf Dubbo, Mordecai Himmelfarb, and others experience a vision from the Book of Ezekiel in the fictional town of Sarsaparilla. That author from this country also wrote a novel about the painter Hurtle Duffield. This home to the author of *Riders in the Chariot* and *The Vivisector* is also the birthplace of an author who wrote a novel about two gamblers who make a bet involving moving a (*) glass church to Bellingham, called *Oscar and Lucinda*. That author wrote about an armor-wearing bushranger from this country in *The True History of the Kelly Gang*. For 10 points, name this home of Patrick White and Peter Carey, who set his novel *Illywhacker* in New South Wales.

ANSWER: Commonwealth of Australia

<Carson>

11. This man aroused controversy for taking a secret trip to persuade Russia against selling anti-aircraft missiles. He signed the Wye River memorandum during his first term, during which he called for Jonathan Pollard's release. He was wounded as part of the commando team that killed the Sabena Flight 571 hijackers, and his brother was the only casualty of the (*) Entebbe Raid. He responded to another leader's Cairo speech by proclaiming his support for a demilitarized state in a speech at Bar-Ilan. He was defeated by Ehud Barak in one election and currently heads the Likud Party. He recently agreed to a two-state solution and direct talks with Mahmoud Abbas's Palestinian National Authority. For 10 points, name this current prime minister of Israel.

ANSWER: Benjamin "Bibi" Netanyahu

<Mukherjee>

12. This poem's twenty-fourth section describes how "seas of bright juice suffuse heaven" and declares "Unscrew the locks from the doors! / Unscrew the doors themselves from their jambs!" Its twenty-first section begins with its speaker declaring that he is "the poet of the Body" and the "poet of the Soul." A child asks "What is the (*) grass?" in the sixth section of this poem, whose fifty-second and final section ends with the line "I stop somewhere waiting for you" after the speaker sounds his "barbaric yawp" over the "roofs of the world." When it was published in 1855, it took up over half of the pages of its author's collection *Leaves of Grass*. For 10 points, name this long poem by Walt Whitman which begins "I celebrate myself and sing myself."

ANSWER: "Song of Myself"

<Magin>

13. Mark Levine named a chord consisting of a major third interval followed by three perfect fourths after this album's first track, where it is used as the “amen response figure” on the piano. George Russell’s book *Lydian Chromatic Concept of Total Organization* inspired this album's use of a “modal” approach not based on chords. The biography *Portrait in Jazz* reveals that pianist Bill Evans wrote its third track, (*) “Blue in Green,” and that a spectator who snuck into concerts without paying inspired the title of its track “Freddie Freeloader.” Cannonball Adderley and John Coltrane were the saxophonists for this album, whose tracks include “Flamenco Sketches” and “So What.” For 10 points, name this colorfully titled album by Miles Davis.

ANSWER: Kind of Blue

<Gioia>

14. The sign of this operation tells whether a linear transformation preserves orientation. The shoestring method for finding the area of a polygon is based on a formula that uses this operation. A simplex in n dimensions can have its volume calculated using the Cayley-Menger type of this operation. One method of calculating this operation involves expansion by minors, which takes into account that this function is alternating multilinear. For a (*) system of linear equations, doing this on collections of coefficients is used to find solutions according to Cramer’s rule. Invertible entities have nonzero value for this operation, which for a two-by-two input is equal to ad minus bc. For 10 points, name this operation taken on matrices and symbolized by straight lines.

ANSWER: determinant

<Mukherjee>

15. These structures have at least one room with two gigantic wall-mirrors facing each other. At the dedication of each of these structures, a Hosanna shout is performed. Endowment ceremonies in these places precede weddings, which unite a couple into "celestial marriages" because of the sealing power that they grant. The basements of many of them contain large water tanks used as baptismal fonts, which may be used on volunteers acting as proxies for (*) dead people. Sacred places for special ordinances are provided by these secretive buildings, which are often topped by golden angel statues. One of the earliest ones was built in Nauvoo under the orders of Joseph Smith. For 10 points, name these holy places in the Church of Jesus Christ Latter Day Saints.

ANSWER: Mormon temples [prompt on Mormon places of worship or synonyms; prompt on temples; accept Church of Jesus Christ Latter Day Saints temple before mentioned; accept LDS temples before mention of "Latter Day Saints"; do not accept "Mormon churches" or "meetinghouses" or other wrong answers]

<Gupta>

16. One method of producing this compound uses an iridium di-iodide di-carbonyl catalyst, which replaced an earlier rhodium-based catalyst. Current methods of synthesizing this compound involve the metal-catalyzed carbonylation of methanol, which includes the aforementioned Cativa and (*) Monsanto processes. One form of this compound with no water in solution is commonly used as a recrystallization solvent; that is its "glacial" variety. It has a pK_a of about 4.8 and can be synthesized by twice oxidizing ethanol. This two-carbon molecule is one of the simplest with a carboxyl group, though it has one more carbon than formic acid. For 10 points, name this acid with formula CH_3COOH , which is found in vinegar.

ANSWER: acetic acid [or acetate; accept CH_3COO , CH_3COO minus, or CH_3COOH before the formula is read]

<Mukherjee>

17. In one work by this author, Solomon Flamborough fails to prevent Moses from buying a gross of green spectacles from Ephraim Jenkinson. David Garrick wrote a prologue in which the actor Mr. Woodward laments the death of comedy for another work by this man. The plot of that work is set in motion in the Three Pigeons Inn, where the protagonist and Hastings encounter Tony (*) Lumpkin. This author penned a novel in which Sophia is abducted by Timothy Baxter but rescued by Mr. Burchell, who eventually reveals himself to be Squire Thornhill's virtuous uncle and saves the family of Charles Primrose. For 10 points, name this author who wrote about Charles Marlow and Kate Hardcastle in *She Stoops to Conquer* and penned *The Vicar of Wakefield*.

ANSWER: Oliver Goldsmith

<Carson>

18. One painting by this artist sees Jesus standing above the words "Salve nos Christe redemptor" and two translucent patrons. This painter of *Ecce Homo* decorated the exterior of another work with the image of a flat landscape encased in a glass sphere, and set God's all-seeing eye at the center of his circular (*) *Seven Deadly Sins*. People are crushed by the title conveyance in the center panel of another work by this artist, whose most famous work includes a knife attached to a pair of giant ears and a "tree man" whose body is broken like an egg to punish his sodomy. That work is divided into panels representing Eden, False Paradise, and Hell. For 10 points, name this Dutch artist of *The Haywain* and *The Garden of Earthly Delights*.

ANSWER: Hieronymus Bosch [or Joroen Bosch or Jeroen Anthoniszoon van Aken]

<Bentley>

19. This thinker noted the difficulty of learning to swim by making motions while hanging from a harness. This man compared ballet dancers who stumble slightly after a leap to those who land in perfect posture in a "Preliminary Expectoration," in the first of three Problemata. In another book, this thinker charted the wooing and sudden divorce of Cordelia, mirroring his own treatment of (*) Regine Olsen. This creator of the "Diary of a Seducer" argued that one can stand above the universal when the ethical is suspended teleologically. He described infinite resignation as the last step before the leap to faith. For 10 points, name this Christian thinker who lauded Abraham in *Fear and Trembling*, wrote *Either/Or*, and hailed from Denmark.

ANSWER: Soren Aabye Kierkegaard [or Johannes de Silentio; or Victor Eremita; or William Afham; or Frater Taciturnus; or Constantin Constantius; or Vigilius Haufniensis; or Nicolaus Notabene; or A.B.C.D.E.F. Godthaab; or A.B.C.D.E.F. Rosenblad; or Inter et Inter; or Procul; or Captain Scipio; or Judge William; or A.F.; or Hilarius Bookbinder; or Johannes Climacus; or H.H.; or Anti-Climacus; prompt on "A"; prompt on "B"]

<Jackson>

20. After a political reform, this place was ruled by the Popular Assembly and a much stronger Tribunal of One Hundred and Four. The anonymous text *Periplus* claims a flotilla from here traveled in the Atlantic as far south as Gabon. The seizure of Himera led to a disastrous attack on Syracuse by a powerful family of this city called the Magonids. The *Periplus* claims to be a copy of an inscription from a temple to (*) Ba'al Hammon in this city. This city signed a treaty agreeing not to make a separate peace with the general Pyrrhus, and later lost at the Battle of Zama. Ultimately, Scipio Aemilianus seized and razed this city, whose military was at one time commanded by Hannibal. For 10 points, name this city that fought Rome in three Punic Wars.

ANSWER: Carthage

<Bailey>

21. This author wrote of a man who lures his victims to a pool of water by promising to show them a picture of the colonel. In that play, Dany's murder leads the protagonist to leave the radiant city. In another play by this man, the Doctor and Marie attempt to console the 400-year-old protagonist on his impending death. This author of *The Killer* and (*) *Exit the King* also wrote a play in which the protagonist shouts "I'm not capitulating!" rather than follow Dudard and Daisy in a certain transformation. In another of his plays, the Martins and the Smiths begin speaking in non-sequiturs after the Fire Chief mentions the title singer. For 10 points, name this creator of *Berenger*, the Romanian author of *Rhinoceros* and *The Bald Soprano*.

ANSWER: Eugene Ionesco [or Eugen Ionescu]

<Kirsch>

22. The *Lonicera* fly is the first known example of this type of creature to arise naturally, and introgression creates organisms of this type. In plants, one type of these organisms can arise through sympatric speciation via allopolyploidy. Transgressive phenotypes arise in organisms of this type, and guinea fowl are able to form interfamilial ones. Their namesake vigor describes their sometimes superior function relative to their parents. Haldane's rule notes that heterogametic ones have more frequent (*) sterility. This word is also used to describe genetic crosses between heterozygotes, whose "di" type gives a 9 to 3 to 3 to 1 phenotypic ratio. For 10 points, give this term used for organisms such as mules, which result from species interbreeding.

ANSWER: hybrids [prompt "heterozygotes" or "heterozygous" organisms; do NOT accept "species"]

<Jackson>

23. One person who held this title went on a crusade against the Galindians. Another person who held this title was manipulated by the Duke of the Seniorate Province and had the nickname "Wrymouth." It was also held by a man called "the elbow-high" and a man who granted Jews citizenship in the Statute of Kalisz. Those were members of the (*) Piast Dynasty, and a later house which possessed this title was founded by a man who defeated Ulrich von Jungingen at the Battle of Grunwald. For 10 points, identify this title that was held by such men as Casimir III and Mieszko I, as well as several who also ruled Lithuania in a personal union.

ANSWER: King of Poland [or Grand Duke of Poland-Lithuania]

<Foster>

24. One type of this device contains a series of magnets with alternating poles called an undulator, and uses charged particles moving sinusoidally as the medium. These devices were used to cool a clump of rubidium atoms to create the first (*) Bose-Einstein condensate, and they are also used to deliver power to a deuterium-tritium pellet in inertial confinement fusion. These devices require a three-level system, because they rely on population inversion, and simple ones consist of a gain medium with a pair of mirrors on either side to create a resonator. For 10 points, name these devices which use changes of energy levels in electrons to generate a coherent beam of light, used in CD players, weapon sights, and pointers.

ANSWER: Laser [accept more specific answers, like free electron laser; also accept Light Amplification by Stimulated Emission of Radiation]

<Mukherjee>

1. Answer the following about the wonderful world of wartime weaponry, for 10 points each.

[10] This mysterious Byzantine weapon may have been invented by Kallinikos. Possibly created using naphtha, it was used to destroy various Muslim fleets and could reportedly continue to burn while floating on water.

ANSWER: **Greek fire** [prompt on "sea fire", "water fire", or "fire"]

[10] This medieval siege engine was used to fling heavy projectiles. Unlike catapults, it used the energy from a counterweight to launch objects, but like catapults it became obsolete after gunpowder was popularized.

ANSWER: **trebuchet**

[10] This Byzantine ruler was described as inventing several types of trebuchets during the 1097 Siege of Nicaea. This ruler's request of aid from Europe triggered the First Crusade, and his daughter Anna wrote a notable biography of him.

ANSWER: **Alexius I** Comnenus

<Cheyne>

2. The Baron tells the other characters about the Actor's suicide-by-hanging at the end of this play. For 10 points each:

[10] Identify this play set in a boardinghouse run by Kostilyoff, who is killed by the thief Vaska Pepel. It centers on a vagabond named Luka.

ANSWER: *The* **Lower Depths** [or *Na Dne*]

[10] This Russian playwright, a founder of socialist realism who wrote his novel *Mother* while traveling through the Adirondack Mountains, penned *The Lower Depths*.

ANSWER: Maxim **Gorky** [or Alexei Maximovich **Peshkov**]

[10] In 1931, this figure autographed a copy of Gorky's "A Girl and Death", claiming that it was "stronger than Goethe's *Faust*". This Soviet leader was described as a "Kremlin Caucasian" who forged "rules and decrees like horseshoes" in an "Epigram" by Osip Mandelstam.

ANSWER: Joseph Vissarionovich **Stalin** [or Iosef Vissarionovich **Dzhugashvili**]

<Carson>

3. Identify the following authors whose non-fiction inspired major social trends, for 10 points each:

[10] This marine biologist and author of *The Sea Around Us* launched modern environmentalism in the United States by publishing *Silent Spring*.

ANSWER: Rachel **Carson**

[10] This author wrote the novel *Ramona* and tract *A Century of Dishonor* to publicize the plight of Native Americans in the late 19th century.

ANSWER: Helen Hunt **Jackson** [or Helen **Fiske**; accept just "**Hunt**," which was her sole last name for a while]

[10] The 1948 publication of *The Seven Storey Mountain*, an autobiography by this Trappist Monk of Kentucky's Gethsemani Abbey, ignited American interest in religious meditation.

ANSWER: Thomas **Merton**

<Ray>

4. In life, pharaohs were regarded as incarnations of this deity. For 10 points each:

[10] Name this falcon deity who vanquished Set, the great enemy of his father Osiris.

ANSWER: **Horus**

[10] One form of Horus, Horus-Behdety, fathered a child with this cow-headed goddess, who once performed an erotic dance to cheer up Ra.

ANSWER: **Hathor**

[10] Another view of the Horus-Set conflict is that it symbolized this region's conquest by its counterpart. Rulers of this region wore a red crown known as the Deshret.

ANSWER: **Lower Egypt** [do not prompt on or accept "Egypt"]

<Gupta>

5. On Broadway, this opera was reworked into *Miss Saigon*. For 10 points each:

[10] Name this Puccini opera set in Japan, in which the title character, Cio-Cio San, is impregnated and abandoned by the American sailor Benjamin Franklin Pinkerton.

ANSWER: **Madame Butterfly** [or **Madama Butterfly**]

[10] After her maid Suzuki warns her that Pinkerton may never return, Cio-Cio San sings this aria, in which she imagines seeing the smoke of a returning ship and reuniting with Pinkerton.

ANSWER: **"Un Bel Di, Vedremo"** [or **"One Beautiful Day"**]

[10] This other Puccini opera features the act two aria "Musetta's Waltz," and ends with Rodolfo crying over the dead body of Mimi.

ANSWER: **La bohème** [or **The Bohemians**]

<Thompson>

6. The entropy of one of these is proportional to their area, and their namesake information paradox deals with the loss of physical information within them. For 10 points each:

[10] Name these astronomical bodies that consist of an event horizon surrounding a gravitational singularity.

ANSWER: **black hole**

[10] This physicist names a type of radiation given off by black holes. He also disagreed with Leonard Susskind over interpretations of the information paradox.

ANSWER: Stephen **Hawking**

[10] Hawking radiation occurs when this event happens near the event horizon. In this process, a particle and antiparticle are spontaneously created from a photon.

ANSWER: **pair production**

<Neithalath>

7. This man was the godson of Horace Walpole and would go on to replace Philip Schuyler as the general in charge of American troops in New York. For 10 points each:

[10] Identify this general who suffered a severe defeat at the Battle of Camden. With Benedict Arnold, he had earlier defeated John Burgoyne at the Battle of Saratoga.

ANSWER: Horatio Lloyd **Gates**

[10] The overall commander of the British forces at Camden was this general who also saw his position bombarded by the Comte de Grasse and the French navy at the Battle of Yorktown.

ANSWER: Charles **Cornwallis**, 1st Marquess Cornwallis [or Viscount **Brome** or The Earl **Cornwallis**]

[10] The Green Dragoons or British Legion was led by this infamous loyalist colonel, nicknamed the "Butcher." Most of his contingent was captured at the later Battle of Cowpens.

ANSWER: Sir Banastre **Tarleton**, 1st Baronet

<Foster>

8. This collection makes a distinction between compelling-yet-fictional “story-truth” and entirely factual “happening-truth” in its section “Good Form,” and in its title story, Kiowa’s death in a sewage field makes Lieutenant Jimmy Cross feel very guilty. For 10 points each:

[10] Name this collection of stories narrated by their author, Tim O’Brien.

ANSWER: *The Things They Carried*

[10] *The Things They Carried* is set during this war, fought in a country where Alden Pyle advocated for a “third force” before its onset in Graham Greene’s *The Quiet American*. Its outcome is flipped in the alternate history of *Watchmen*.

ANSWER: the Vietnam War

[10] The title character of one of this author’s works dies saving some Vietnamese children from a grenade. Earlier in that work by this man, the title character had accidentally killed Tabitha Wheelwright with a foul ball.

ANSWER: John Winslow Irving [or John Wallace Blunt, Jr.; the work is *A Prayer for Owen Meany*]

<Jackson>

9. Stable, autonomously replicating versions of these elements are called episomes, and one particularly useful one encodes for a postsegregational killing system. For 10 points each:

[10] Name these small loops of DNA found in bacteria, originally discovered by Joshua Lederberg. The F one encodes for a fertility factor, and the R one codes genes that confer antibiotic resistance.

ANSWER: plasmid

[10] The F plasmid confers the ability to transfer genetic information by this mechanism, in which a sex pilus is extended between two bacteria.

ANSWER: conjugation

[10] High frequency of recombination or Hfr strains use mating bridges to transfer genetic material. Hfr strains are created when the F plasmid does *this* with respect to the bacterial genome, which is also done by lysogenic phages.

ANSWER: integrates into the genome [or inserts, joins, fuses, jumps into, becomes part of, puts itself in, etc]

<Mukherjee>

10. H. W. Janson et al described how the title figure’s horse was being “urged on ... by the light from the left” in this artist’s *The Polish Rider*. For 10 points each:

[10] Identify this artist better known for *Aristotle with a Bust of Homer*.

ANSWER: Rembrandt van Rijn

[10] This Rembrandt painting’s nickname comes from the varnish that has darkened the image. A man in a red sash gestures at a man in a yellow suit in the foreground of this group portrait of the Company of Captain Frans Banning Cocq.

ANSWER: *The Night Watch*

[10] In this late religious painting by Rembrandt, a bearded man wearing a red jacket comforts the title character, who is depicted kneeling and wearing tattered clothes with his back to the viewer.

ANSWER: *The Return of the Prodigal Son*

<Bentley>

11. This city was in a tripartite confederation with Tlacopan and Texcoco. For 10 points each:

[10] Name this city, which was defended on “La Noche Triste.”

ANSWER: **Tenochtitlan**

[10] Tenochtitlan was the capital of this people, who were ruled by Montezuma and controlled central Mexico when Cortes arrived.

ANSWER: **Aztecs**

[10] This ritual practice of the Aztecs was initiated by emperor Tlacaehlel, who took captives for sacrifice from Tlaxcala after small battles. These rituals took the place of full-scale warfare.

ANSWER: **flowery wars** [or **xochiyaoyotl**]

<Weiner>

12. A cat named Charlemagne and an iguana named Schwarzenegger figure in this work, in which Liquid Sheep drummer Janet Hayakawa helps John Brown write a personal ad that leads to a romance with Liz Donati. For 10 points each:

[10] Identify this novel composed of 690 sonnets, which centers on a group of yuppies living in San Francisco.

ANSWER: *The **Golden Gate***

[10] *The Golden Gate* was written by this Indian author, who detailed Rupa Mehra's attempts to find the title figure for her daughter Lata in his incredibly long novel *A Suitable Boy*.

ANSWER: Vikram **Seth**

[10] *The Golden Gate* was written in "Onegin stanzas", which take their name from their use in this Russian author's *Eugene Onegin*.

ANSWER: Alexander Sergeyevich **Pushkin**

<Kirsch>

13. They include the agriculture spirit Inari, who employs foxes, and a female who once darkened the world by hiding in a cave out of frustration. For 10 points each:

[10] Name these gods and spirits worshipped in Shinto, which often correspond to features in the natural world of Japan. The chief one is the sun goddess Amaterasu.

ANSWER: **kami**

[10] This brother of Amaterasu and Tsukuyomi offended her by flinging a flayed horse into her abode. This slayer of an eight-headed serpent is the *kami* of the sea and storms.

ANSWER: **Susano'o** [or **Susanowo**]

[10] Amaterasu handed down one of these objects, along with the Kusanagi blade and a string of beads, among three imperial regalia to the Japanese emperors. Another is embedded in an Aztec jaguar god's foot or chest.

ANSWER: a **mirror**

<Jackson>

14. This composer wrote his twelfth string quartet, the "American," in the town of Spillville, Iowa. For 10 points each:

[10] Name this Czech composer whose ninth symphony in E minor is called “From the New World.”

ANSWER: Antonin **Dvorak**

[10] Inspired by the *Hungarian Dances* of his friend Johannes Brahms, Dvorak composed these sixteen pieces based on the music of his native Bohemia.

ANSWER: **Slavonic Dances**

[10] Following the death of his daughter Josefa, Dvorak composed this religious work, a setting of a hymn to the Virgin Mary. Giovanni Pergolesi composed a setting of the same text for soprano, alto, and strings.

ANSWER: **Stabat Mater**

<Rosenberg>

15. Answer the following about recent cases judged by the International Criminal Court, for 10 points each.
[10] Controversy continues over whether Saif al-Islam Gaddafi should stand trial before the ICC or be tried by the new government of this country, which his father used to rule.

ANSWER: **Libya**

[10] In April 2012, this former Liberian president was convicted by the ICC of 11 counts of crimes against humanity associated with the civil wars in Liberia and Sierra Leone.

ANSWER: Charles **Taylor**

[10] This country's richest citizen and former deputy prime minister is among four men who will stand trial before the ICC for orchestrating ethnic violence in the wake of this country's 2007 presidential election, in which the Orange Democratic Movement lost because of probable fraud.

ANSWER: **Kenya**

<Haddad-Fonda>

16. Developed by an American geologist and his team at Geophysical Laboratories in Washington D.C, it was created to explain the association patterns of certain mineral classes in rocks. For 10 points each:

[10] Name this diagram divided into discontinuous and continuous branches, which sorts minerals by their crystallization temperature.

ANSWER: **Bowen's reaction** series [Prompt on partial answer]

[10] The continuous branch of Bowen's reaction series moves from plagioclase feldspars that are rich in sodium to those rich in this element, whose carbonate is a principal component of limestone.

ANSWER: **calcium** [or **Ca**]

[10] At the end of the discontinuous branch is this mineral, whose gem-grade variety is called peridot. Its solid solution series contains forsterite and fayalite.

ANSWER: **olivine**

<Lasker>

17. Answer the following about *The Prince*, for 10 points each.

[10] This Italian scholar wrote *The Prince* and dedicated it to Lorenzo de' Medici.

ANSWER: Niccolo **Machiavelli**

[10] In a late chapter of *The Prince*, Machiavelli advises a middle road between ignoring all advice and relying on the counsel of these individuals, who might take advantage of self-absorbed princes.

ANSWER: **flatterers** [or those who engage in **flattery**]

[10] This quality is contrasted with prudence throughout *The Prince*. Machiavelli compares it to a woman who must be beaten if necessary. In an earlier work, Boethius compared it to a goddess spinning a wheel.

ANSWER: **fortune** [or **Fortuna**; accept synonyms such as **luck**]

<Jose>

18. This process is commonly performed using an indicator like phenolphthalein, and adding more of the analyte is a common way of compensating when the equivalence point is overshoot. For 10 points each:
[10] Identify this chemical technique which attempts to find the amount of an analyte in a solution by dripping in a standard solution. Finding the concentration of an acid by adding a base is a common example.

ANSWER: **titration** [prompt on "gravimetric analysis" or "gravimetry"]

[10] Acid-base titrations commonly use this graduated cylindrical piece of glassware with a stopcock on the bottom.

ANSWER: **buret**

[10] Another piece of glassware with a stopcock is a separatory funnel, which is commonly used in this procedure. In this procedure, a sample is purified by putting an immiscible aqueous and organic phase together and removing the phase containing the product you want.

ANSWER: liquid-liquid **extraction**

<Mukherjee>

19. In 1712, this man was impeached for corruption and imprisoned in the Tower of London by his Tory opponents. For 10 points each:

[10] Identify this politician, active during the reigns of George I and George II. He was forced out of power for opposing the War of Jenkins' Ear.

ANSWER: Sir Robert **Walpole**, 1st Earl of Oxford

[10] Robert Walpole was the first man to hold this post. The holder of this post lives at 10 Downing Street.

ANSWER: The **Prime Minister** of the United Kingdom of Great Britain and Northern Ireland

[10] Robert Walpole is credited with keeping England out of this country's 1733 to 1738 succession war, which followed the death of Augustus the Strong.

ANSWER: Kingdom of **Poland** [or **Polska**; or War of **Polish** Succession]

<Bentley>

20. Its first poem describes how the speaker will be happy "when those lily hands" are like "captives trembling at the victor's sight", and it was published with its author's *Epithalamion*. For 10 points each:

[10] Name this set of eighty-nine sonnets, written to correspond to the Scriptural readings prescribed by the *Book of Common Prayer* for the days leading up to the author's marriage to Elizabeth Boyle.

ANSWER: **Amoretti**

[10] This English poet wrote the *Amoretti*, but he may be better known for describing Archimago and Duessa's attempts to waylay the Redcrosse Knight in his epic *The Faerie Queen*.

ANSWER: Edmund **Spenser**

[10] Elizabeth I was the inspiration for this title character of *The Faerie Queen*, who sends the Redcrosse Knight on his quest to liberate Una's kingdom from a monstrous dragon.

ANSWER: **Gloriana**

<Gioia>

21. Answer these questions about using derivatives to find special points on functions, for 10 points each:

[10] If a differentiable function has a minimum or maximum along an interval, Rolle's Theorem guarantees that its first derivative, and therefore its slope, will equal this value at the extremum.

ANSWER: zero

[10] A function's *second* derivative equals 0 and changes sign from positive to negative or vice versa at this kind of point, which is neither a maximum nor minimum.

ANSWER: point of inflection [or inflection point; anti-prompt "saddle point"]

[10] To find extrema of a multivariable function along a constraint curve, these values, symbolized lambda, are found. The product of this value and the constraint curve's gradient equals the original function's gradient.

ANSWER: Lagrange multipliers

<Jackson>

22. Identify the following about some works set during Roman times, for 10 points each.

[10] Robert Graves wrote two historical novels about this Roman emperor. In those novels, this emperor informs the reader of his knowledge of Etruscan and describes the death of his predecessor, Caligula.

ANSWER: Tiberius Claudius Drusus Nero Germanicus

[10] This Henryk Sienkiewicz novel, set during the reign of Nero, sees Marcus Vinicius convert to Christianity after hearing a speech given by Saint Peter. Vinicius and his lover Lygia flee to Sicily near the end of this novel.

ANSWER: Quo Vadis: *A Narrative of the Time of Nero* [or Quo vadis: *Powieść z czasów Nerona*]

[10] The eruption of Mount Vesuvius saves Glaucus from death in the Coliseum in this British author's novel *The Last Days of Pompeii*. His other novels include *Paul Clifford*, which infamously begins "It was a dark and stormy night".

ANSWER: Edward George Earle Lytton Bulwer-Lytton, 1st Baron Lytton

<Bentley>

23. This battle marked the end of concerted attempts to press the Roman border beyond the Rhine. For 10 points each:

[10] Name this 9 CE slaughter, in which the Cherusci leader Hermann destroyed the Roman army of Publius Quinctilius Varus.

ANSWER: Battle of Teutoberger Forest [or Teutoberger Wald]

[10] This author of *The Lives of the Caesars* depicts Augustus crying out "give me back my legions!" upon learning of the disaster at Teutoberger Wald.

ANSWER: Gaius Suetonius Tranquillus

[10] In the book and miniseries *I, Claudius*, Augustus more memorably demands to know the location of these items, the symbolic figures of birds which stood atop the Roman battle standards.

ANSWER: eagles [or aquilae, I guess, even though the works mentioned are in English]

<Weiner>