Packet 9 Tossups
1. **A student of this artist depicted a whirling couple in *The Waltz* and showed a woman on her knees to allegorize her break with this artist in *The Mature Age*. A branch of the Philadelphia Museum of Art holds the second-largest collection of works by this teacher of Camille Claudel. This artist inspired Alberto Giacometti with the "unfinished," boldly-textured (*)** torso *The Walking Man*. This man depicted *Three Shades* and an entwined Paolo and Francesca da Rimini in a group that includes *Ugolino and His Children* and *The Kiss*. Many of this man's works were studies for a depiction of Dante's *Inferno* called *The Gates of Hell*. For 10 points, name this French sculptor of *The Thinker*.
ANSWER: (François) Auguste (René) **Rodin** <JR>

2. **This structure compresses incoming information using lateral inhibition, which leads to the "center-surround" organization of its cells. An abnormal white reflection from this structure, or leukocoria, can indicate a tumor of this structure resulting from a mutated Rb protein. Horizontal, bipolar, and amacrine cells send input to part of this structure. The second cranial nerve originates in this structure's (*)** ganglion cells. Patients with Tay–Sachs syndrome often have a cherry-red spot in this structure. This structure consists of a macula surrounding the fovea. For 10 points, name this structure containing rods and cones, which senses light at the back of the eye.
ANSWER: **retina**s [prompt on <u>eye</u>s] <HK>

3. **This country's monarchy was established by the Corfu Declaration and ended with the deposition of Peter II in 1945. This country split with a larger ally during the Informbiro period, which ended in 1955. This European country joined India, Indonesia, and Egypt to form the Non-Aligned Movement, marking a break from (*)** Soviet hegemony. After Joseph Stalin expelled this country from Cominform in 1948, it established its own brand of socialism under Josip Broz Tito. Several wars accompanied the early-1990s breakup of—for 10 points—what former Eastern European country governed from Belgrade?
ANSWER: **Yugoslavia** [accept Kingdom of **Yugoslavia** or Socialist Federal Republic of **Yugoslavia** or Federal People's Republic of **Yugoslavia**; accept Kingdom of **Serbs, Croats and Slovenes** before "Informbiro"] <JW>

4. **A player of this instrument included the Charlie Parker tribute "Reincarnation of a Lovebird" on an album that begins with "Haitian Fight Song." Duke Ellington's band circa 1940 is often named for Ben Webster and a player of *this* instrument named Jimmy Blanton. The album *The Clown* was made by a player of this instrument who included (*)** "Tracks" A, B, and C and "Modes" D, E, and F on *The Black Saint and the Sinner Lady*. This instrument often plays in a steady rhythm to create a "walking" part. A player of it included "Goodbye Porkpie Hat" on an album titled [his name] *Ah Um*. Charles Mingus played—for 10 points—what string instrument that's played standing up?
ANSWER: double **bass** [or upright **bass** or string **bass**] <JR>

5. **In a prisoner-of-war camp, this novel's protagonist meets an optimistic, honest peasant named after the philosopher Plato. This novel's protagonist learns numerology from the Freemasons, and "discovers" that his antagonist's name stands for 666. This novel begins with almost a full page of dialogue in (*)** French and includes numerous tangents about its author's disagreements with Great Man history. After breaking off her engagement to Andrei Bolkonsky, Natasha Rostova ends up married to this novel's protagonist. For 10 points, name this massive novel in which Pierre Bezukhov plans to kill Napoleon, by Leo Tolstoy.
ANSWER: _War and Peace_ [or _Vojna i mir_] <JW>

6. **The characteristic energy of these phenomena is proportional to the square of atomic number according to Moseley's law. Charles Barkla and Manne Siegbahn both won Nobel Prizes for studying the elemental spectra of these phenomena. "Photo 51" is an image of DNA produced using _these_ phenomena by Rosalind Franklin, who determined crystal structures via the diffraction of these phenomena, as described by (*)** Bragg's law. The discovery of this radiation won the first Nobel Prize in Physics for Wilhelm Röntgen. Ranging in frequency between UV and gamma rays, these are—for 10 points—what short-wavelength type of radiation that can be used to image bones?
ANSWER: **X-ray**s [or **X-radiation**; or **Röntgen** radiation; prompt on electromagnetic radiation or radiation] <SE>

7. **In 2016, Barack Obama established a monument commemorating _this_ event between Christopher and Grove Streets. Sylvia Rivera and Marsha P. Johnson were two perpetrators of this event, which saw the folk singer Dave Van Ronk arrested by a police unit led by Seymour Pine. This event began after the Bureau of Alcohol, Tobacco, and Firearms ordered the police into an establishment owned by the (*)** Genovese crime family. This event, named for an "inn" in Greenwich Village, was celebrated one year later by the first Pride march. For 10 points, what 1969 riots at a New York City bar began the American gay liberation movement?
ANSWER: **Stonewall** Riots [accept reasonable equivalents indicating unrest at **Stonewall**] <SCW>

8. **This figure's original-language name, which means "myrtle," was adopted by the volunteer organization Hadassah. A cousin of this figure was promoted after exposing a plot by Bigthun and Teresh to murder the king. This figure said "if I perish, I perish" before inviting the king and his vizier to the first of three banquets. The name of (*)** God never appears in the namesake book of this figure, who replaced Vashti. After this woman revealed a genocidal plot to her husband Ahasuerus, Haman was hanged on gallows he had created for Mordecai's execution. A book of the Bible is named for—for 10 points—what Jewish queen who's celebrated on Purim?
ANSWER: **Esther** <MK>

9. **A poem by this author describes how "long rushes break / In a white dust of ibises whose cries / Have wheeled since civilization's dawn." In that poem, this author claims that "upright man / Seeks his divinity by inflicting pain," and describes how "brutish necessity wipes its hands / Upon the napkin of a dirty cause." This man calls himself "poisoned with the blood of both" in a poem that asks how to choose between the title (*)** place and "the English tongue I love." This author of the play _Dream on Monkey Mountain_ wrote a poem asking "How can I turn from Africa and live?" "A Far Cry From Africa" is by—for 10 points—what poet from St. Lucia, who wrote the epic _Omeros_?
ANSWER: Derek (Alton) **Walcott** <JR>

10. **Simon the Shoemaker is best known for his association with one of these people. Writings about one of these people are collected in Xenophon's** *Memorabilia*. **The Cyrenaics were a group of these people. A set of biographies of these people was written by the the 3rd-century writer Laërtius. One person with this vocation used a plucked (*)** chicken to mock other members of this vocation. One of these people founded the Lyceum and started the Peripatetic school. One person with this vocation was accused of "impiety" and forced to drink hemlock. For 10 points, name this vocation of Socrates and Plato.
ANSWER: **philosopher**s [accept word forms] <JW>

11. **This woman's sister paid homage to pioneering funk musician Junie Morrison in a track in which she sings "Hit 'em with a left / Hit 'em when they knock, knock" and André 3000 repeatedly sings "Jump on it." This woman's sister included an interview in which her father describes being "lost in this vacuum between integration and segregation" alongside tracks like "Don't Touch My Hair" and (*)** "Cranes in the Sky" on the 2016 album *A Seat at the Table*. This sister of Solange recorded the album *Everything is Love* with her husband after rebuking him with the album *Lemonade*. For 10 points, name this wife of Jay-Z, the singer of "Crazy in Love" and "Halo."
ANSWER: **Beyoncé** Knowles-Carter (Her sister is Solange.) <JR>

12. **In a film from this country, a nobleman lets his lower-class poacher friend smoke in his face while adjusting his tie. In another film, an enemy officer laments the death of the nobility with an imprisoned officer from this country, who he's later forced to shoot in the stomach. The son of a painter from this country directed and starred in a 1939 film set at an aristocrat's country estate. A film from it ends with its boy protagonist escaping a (*)** juvenile detention center fence and running to the sea. The films *Grand Illusion* and *The Rules of the Game* are from this country, whose New Wave films include *The 400 Blows*. For 10 points, name this home of Jean Renoir [zhaw ruh-NWAHR] and François Truffaut [fraw-SWAH troo-FOH].
ANSWER: **France** <JR>

13. **This country's sacred Tuul River passes through its Gorkhi-Terelj National Park before flowing through its capital. This country is home to the only known variety of horse that has never been domesticated, Przewalski's [pshuh-VAL-skee's] horse. Khalkha is the predominant dialect of this country's official language, whose native script is read (*)** vertically. This country lies north of an autonomous region known as "Inner [this country]." Yurts are a common form of housing among the nomads of this country, which shares the Gobi Desert with China. For 10 points, name this sparsely-populated Asian country with capital Ulaanbaatar.
ANSWER: **Mongolia** [or **Mongol Uls**] <JW>

14. **In a play by this author, one character has to get the title woman a Coke after stuttering through an introduction. One of this author's plays is repeatedly interrupted by a ringing telephone, which is answered by Booster after he takes ownership of a taxi stand following the death of his father. In one of this author's plays, a son is angrily asked "What law is there say[ing] I'[ve] got to (*)** like you?" by his father, who was unable to play Major League Baseball. In that play by this author of *Jitney*, Cory is prevented from playing football by his garbage-collector father, Troy Maxson. *Ma Rainey's Black Bottom* is a play in the "Pittsburgh Cycle" of—for 10 points—what author of *Fences*?
ANSWER: August **Wilson** [or Frederick August **Kittel**] <SCW>

15. **During this century, the first "historical" source to discuss King Arthur was probably written by Nennius. The *Anglo-Saxon Chronicle* was first compiled in this century. A king in this century created a set of defensive forts called "burhs." The Venerable Bede died in the century *before* this one, and Offa of Mercia died five years before it began. In this century, the (*)** Danelaw was created by the first man traditionally called "King of the Anglo-Saxons," Alfred the Great. Just before this century began, the Vikings began to raid Northern Europe. For 10 points, name this century in which Charlemagne died.
ANSWER: **800**s [or **9th** century] <JW>

16. *Description acceptable*. **The disproportionation of an aldehyde occurs under an extreme version of this condition in the Cannizzaro reaction. The Wolff–Kischner reduction acts under *this* condition to achieve the same result as the Clemmensen reduction. Solutions containing Tris are used to maintain reaction conditions of this sort. Under this condition, redox reactions are balanced by adding water and a diatomic (*)** anion. The bicarbonate buffer system maintains a mild version of this condition in human blood. Litmus paper turns blue under this condition. A pH of greater than 7 characterizes—for 10 points—what sort of reaction condition dominated by species that react with acids?
ANSWER: **basic** conditions [or **alkaline** conditions; accept any answer mentioning **base**s; accept **high pH** or **pH greater than 7** before "pH"] <SE>

17. **In Macedon, Heracles was worshipped as the patron of *this* activity under the epithet Kynagidas. In a treatise on this activity, Xenophon discusses how Chiron used it to teach 21 heroes. Agamemnon was forced to sacrifice Iphigenia to atone for a crime he committed while performing *this* activity. Odysseus recalls doing this activity with Autolycus as he receives a footbath from Eurycleia. Gaia sent a giant scorpion to kill (*)** Orion in response to a threat he made while engaging in this activity. After doing this activity, Actaeon saw Artemis bathing, was turned into a stag, and was killed by his own hounds. Artemis used a bow and arrows to perform—for 10 points—what activity?
ANSWER: **hunt**ing [accept more specific answers such as boar, stag, or deer **hunt**s] <JW>

18. **This character describes a dead man's wounds as "like dumb mouths" with "ruby lips" that "beg the voice and utterance of my tongue." At the end of one speech, he pauses for his heart to come back to him from a coffin. This character's companion regrets a time when she was "green in judgment, cold in blood," which she calls her (*)** "salad days." This character says that "The evil that men do lives after them" to explain why he comes to "bury" his friend, and "not to praise him." This man repeats that "Brutus is an honorable man" in the funeral oration "Friends, Romans, countrymen" from *Julius Caesar*. For 10 points, name this Roman who is "betrayed" by Cleopatra.
ANSWER: Mark **Antony** <JR>

19. *Note to moderator: please read all of the phrases in "quotation marks" slowly*. **"This quantity of *X*, divided by a positive number *a*"** gives an upper bound on the probability that *X* is less than *a*, according to Markov's inequality. For a CDF **"*f*-of-*x*,"** this value equals the integral of **"*x f*-of-*x*." "This function of *X*-squared, minus the square of this function of *X*"** is equal to this function of the square of quantity: **"*X* minus this function of *X*,"** which gives the (*) variance of *X*. In the discrete case, this value equals the sum of all outcomes times their probabilities. By the law of large numbers, the sample mean converges to this value. For 10 points, name this value that, for a uniform distribution, equals the sum of the data divided by the number of datapoints.
ANSWER: **expected value** [or **expectation**; or **EV**; accept **mean** until it's mentioned] <JR>

20. **An ancient city in this river's valley was the primary site for the production of large bronze cauldrons with two handles and three legs. Large numbers of Paleolithic and bronze-age remains have been found in this river's Ordos Loop. This river, which was used to grow (*)** millet, is often grouped with Norte Chico, the Fertile Crescent, the Indus, and the Nile as one of the "Cradles of Civilization." This river's periodic, catastrophic floods helped topple Wang Mang. The Shang Dynasty followed a "civilization" situated on—for 10 points—what long river in the north of China, named for its sediment's color?
ANSWER: **Yellow** River [or **Huang He**] <VS>

Tiebreaker
21. **In one story, a man asks this character to remind him of his limitations by recalling events in Norbury. That same man later calls this character "the one fixed point in a changing age." This character uses the qualities "obese, pompous, and slow" to describe Jabez Wilson, a member of "The Red-Headed League." At the end of another story, this character gets engaged to a governess named (*)** Mary Morstan. This former member of the 5th Northumberland Fusiliers rejects stories promoted by Scotland Yard and thus becomes the biographer of his roommate at 221B Baker Street. For 10 points, name this doctor and primary companion of Sherlock Holmes.
ANSWER: Dr. John **Watson** <BY/MK>

Bonuses

1. Common varieties of this stone are colloquially called "potch" and do not display the characteristic play-of-color gem-quality variants exhibit. For 10 points each:
[10] Name these stones that are mostly mined in Australia and come in fire, black, and boulder varieties. These stones are normally cut as cabochons to show off the iridescence for which they're prized.
ANSWER: **opal**s
[10] Opal consists of a hydrated form of *this* element's dioxide. Quartz, the primary component of sand, is made of this element's dioxide.
ANSWER: **silicon** [accept **Si**]
[10] Many forms of silicon dioxide exist as *this* general kind of solid, which has no repeating structure. Glass is an archetypal example of this kind of solid, while quartz is *not* this kind of solid.
ANSWER: **amorphous** solids <HK>

2. This period was marked by the creation of "zombie banks" due to repeated government bailouts. For 10 points each:
[10] Name this period sparked by the 1991 asset bubble collapse, which featured negative GDP growth and near-zero interest rates for the namesake amount of time. "Abenomics" [ah-bay-"nomics"] has largely succeeded in ending this period.
ANSWER: **Lost Decade** [or **Lost 10 Years**; accept **Lost Score** or **Lost 20 Years**]
[10] The Lost Decade refers to the decline of *this* Asian country's economy, which remains the third largest in the world after the U.S. and China. This country saw substantial growth after World War II in its "economic miracle".
ANSWER: **Japan** [or **Nippon**; or **Nihon**]
[10] Prime Minister Keizo Obuchi attempts to end the Lost Decade were cut short when he died from one of *these* events. Ariel Sharon entered a vegetative state after suffering one of these events in 2006.
ANSWER: having a **stroke** <AF>

3. This play's male leads use the excuse of "bunburying" to get out of commitments. For 10 points each:
[10] Name this comedy by Oscar Wilde, in which Jack and Algernon both assume the title name to woo Gwendolyn and Cecily. In it, Lady Bracknell is shocked to discover that the orphaned Jack was found in a "handbag."
ANSWER: The ***Importance of Being Earnest***
[10] *The Importance of Being Earnest* is often described using *this* term, which refers to absurd comedies with improbably elaborate plots and wild exaggerations.
ANSWER: **farce**s
[10] Fill in the missing word from this quotation. When Jack reveals that he's an orphan, Lady Bracknell tells him that: "To lose one parent may be regarded as a misfortune; to lose both looks like [this word]."
ANSWER: **carelessness** <JR>

4. Two of these creatures are named for thought and memory. For 10 points each:
[10] Name these birds. Huginn and Muninn are two of them who fly across the world every day to deliver news to Odin in Norse mythology.
ANSWER: **raven**s [do not accept or prompt on "crows"]
[10] This goddess associated with crows weakened Cuchulain by offering him dog meat. Her three aspects are Badb, Macha, and Nemain, and she serves as a goddess of war and death.
ANSWER: the **Morrigan**
[10] Greek tradition states this god sent a white raven to spy on his lover Coronis. When the raven told this slayer of the Python that Coronis was unfaithful, he turned its feathers black in anger.
ANSWER: **Apollo** <HK>

5. This model of the atom was the first to account for the negative charge of electrons in a neutral atom. For 10 points each:
[10] Name this model of the atom proposed by J.J. Thomson, which explained atoms as a mass of positive charge with electrons embedded in it.
ANSWER: **plum pudding** model
[10] The Rutherford gold foil experiment disproved the plum pudding model by demonstrating the existence of *this* part of an atom. This part of the atom is made up of protons and neutrons.
ANSWER: atomic **nucleus** [or atomic **nuclei**]
[10] After observing that few alpha particles were strongly scattered, Rutherford developed a mathematical model for atomic scattering, which unusually depends on *this function* of the scattering angle over two to the fourth power.
ANSWER: **cosecant** [do not accept or prompt on "secant"] <HK/AF>

6. A pro-Brexit bus advertisement claimed that the "350 million pounds" the U.K. sent every week to the European Union could be used to fund this organization instead. For 10 points each:
[10] Name this organization that provides healthcare to citizens of the United Kingdom.
ANSWER: **National Health Service** [or **NHS**]
[10] The NHS was founded in 1948 under Clement Attlee, a Prime Minister from *this* center-left British political party. Its more recent prime ministers include Tony Blair.
ANSWER: **Labour** Party
[10] The NHS expanded on the 1911 National Insurance Act crafted by *this* Chancellor of the Exchequer, who also passed the "People's Budget." This Welsh member of the Liberal party later became Prime Minister.
ANSWER: David **Lloyd George** <SCW>

7. This poet supposedly wrote one poem by whittling a much longer poem down to only fourteen words. For 10 points each:
[10] Name this American Modernist poet who described "the apparition of these faces in the crowd" as "petals on a wet, black bough" in "In a Station of the Metro." This Fascist and virulent anti-Semite also wrote the *Cantos*.
ANSWER: Ezra (Weston Loomis) **Pound**
[10] Pound, like Amy Lowell, developed the Imagist style by translating poetry in *this* language. Pound's *Cantos* unusually includes writing in this language, which Pound wrongly thought was written with pictographs.
ANSWER: Classical **Chinese** [or **hanyu**; or **zhongwen**]
[10] Pound was an early champion of this bisexual Imagist poet, who asks the sea to "whirl your pointed pines,
 / splash your great pines / on our rocks," in the poem "Oread."
ANSWER: **H.D.** [or Hilda **Doolittle**] <JW>

8. In September 2018, the Supreme Court of India ruled that women could not be denied entrance to Sabarimala Temple for potentially being in this state. For 10 points each:
[10] Identify this temporary state that is considered impure in many religions. A taboo on this state was traditionally used to ban women ages 10 to 50 from the Sabarimala Temple.
ANSWER: **menstruation** [accept equivalents like being on one's **period**; prompt on bleeding]
[10] In India and this neighboring country, menstruating women are often banished to outdoor huts in the practice of *chhaupadi*. Though this country outlawed *chhaupadi* in 2005, a woman died during it in January 2019.
ANSWER: Federal Democratic Republic of **Nepal** [or Sanghiya Lokatantrik Gaṇatantra **Nepal**]
[10] After counter-protesters blocked women from entering Sabarimala Temple, millions of Indian women formed the Vanitha Mathil, a 385-mile one of *these* things crossing the entirety of Kerala State.
ANSWER: **human chain** [or **human wall**; accept **women's wall**, the literal translation of "Vanitha Mathil"] <HK>

9. This man may have commissioned the Portland Vase, and he's depicted at the top of the Great Cameo of France. For 10 points each:
[10] Name this man who commissioned the Ara Pacis. Because this man's reign saw the construction of buildings like the Pantheon, he supposedly boasted "I found Rome a city of bricks and left it a city of marble."
ANSWER: Gaius Julius Caesar **Augustus** [or **Octavian**; or Gaius **Octavius** Thurinus]
[10] Cameos like the Portland Vase are made using *this* physical process, which is also used to make gems called intaglios.
ANSWER: **carving** [accept **engraving**]
[10] Cameos are usually made from *this* material, which was often "stained" to make decorations for Gothic cathedrals.
ANSWER: stained **glass** <JR>

10. This ingredient is ground to make masa. For 10 points each:
[10] Name this ingredient that's produced by soaking a dried ingredient in an alkaline solution, a process called nixtamalization.
ANSWER: **hominy** corn [prompt on corn or maize]
[10] Hominy is featured prominently in *pozole*, a soup that's often made in *this* color. A salsa of this color is made from tomatillos, which share this color with jalapeño and poblano peppers.
ANSWER: **green** [or **verde**]
[10] Hominy is often used as the main ingredient basic building block of *this* porridge. This American dish is usually white, which is basically the only thing that distinguishes it from Italian polenta.
ANSWER: **grits** <JR>

11. Much of the work on this language has been done by Daniel Everett. For 10 points each:
[10] Name this Múra language that Everett controversially claims lacks many features found in most languages, including numerals, kinship terms, and embedded clauses.
ANSWER: Múra-**Pirahã** [or **Pirahá**n]
[10] Everett claims that Pirahã's unusual features provide evidence for *this* controversial linguistic hypothesis. According to this hypothesis, the structure of your native language determines your patterns of thought.
ANSWER: **Sapir–Whorf** hypothesis [or **linguistic relativity**; accept **Whorfian**ism]
[10] Pirahã is spoken in *this* country. This country was home to most of the speakers of Tupian languages, before colonization turned it into the only New World country with Portuguese as an official language.
ANSWER: Federative Republic of **Brazil** [or República Federativa do **Brasil**] <JW>

12. This character finds an island where men become birds once a month. For 10 points each:
[10] Name this character who describes his seven voyages to a porter with the same name. This man was thrown into a pit with his wife's corpse and defeats the Old Man of the Sea by getting him drunk.
ANSWER: **Sinbad** the Sailor [or **Sindbad**]
[10] The tales of Sinbad, Ali Baba, and Aladdin appear in *this* collection of stories, which are narrated by Scheherazade to her husband Shariyar to delay her execution.
ANSWER: One *Thousand and One Nights* [or The *Arabian Nights*; or *Alf layla wa-layla*]
[10] On his second voyage, Sinbad obtains a large number of *these* items by strapping some meat to his back and letting a roc carry him to a valley full of them.
ANSWER: **diamond**s [prompt on gemstones] <HK>

13. These people use palm or kola nuts, or a chain called Opele to perform *ifa*. For 10 points each:
[10] Name these people who originated the worship of orishas.
ANSWER: **Yoruba**
[10] Yoruba *ifa* is this kind of practice, which was performed on animal livers by haruspices in Ancient Rome. This magical practice of reading signs and omens was performed using the *I Ching* or with oracle bones in Early China.
ANSWER: **divination**
[10] Yoruba practices and deities have made their way into many Afro-Caribbean religions described by *this* adjective, which refers to the fusion of two older belief systems.
ANSWER: **syncretic** <JR>

14. These two crops provide a combination of shade and nitrogen fixation. For 10 points each:
[10] Name these two crops that were grown alongside corn as the so-called "Three Sisters."
ANSWER: **squash** AND **bean**s [accept more specific answers for either]
[10] The Three Sisters were staple crops in *this* Native American Confederacy, which absorbed the Tuscarora to become the Six Nations.
ANSWER: **Iroquois** Confederacy [or **Haudenosaunee**]
[10] A primary social unit of Iroquois tribes was *this* kind of structure, which could be home to dozens of families related through their mothers.
ANSWER: **longhouse**s [prompt on just houses] <JR>

15. For 10 points each—answer the following about muons [MYOO-awnz]:
[10] Since they have a spin of one-half and a charge of negative one, muons often behave like super-heavy versions of *these* tiny elementary particles, which orbit the nucleus of an atom.
ANSWER: **electron**s
[10] The Rossi–Hall experiment of 1940 found that fast-traveling muons produced in the upper atmosphere have extended lifetimes, an illustration of *this* consequence of special relativity.
ANSWER: **time dilation**
[10] Muons are actually elementary particles, but they were initially thought to belong to *this* class of composite particles made of a quark and an antiquark. Actual examples of these particles include the pion and the kaon.
ANSWER: **meson**s [prompt on hadrons] <SE>

16. This poet was inspired by Walt Whitman to write Futurist odes under the name Álvaro de Campos. For 10 points each:
[10] Name this early 20th-century poet whose "heteronym" of Ricardo Reis was used as the basis for a 1986 novel.
ANSWER: Fernando (António Nogueira) **Pessoa**
[10] That novel was written by this Portuguese novelist, who died in 2010. He fictionalized the life of airship pioneer Bartolomeu de Gusmão in his novel *Baltasar and Blimunda*.
ANSWER: José (de Sousa) **Saramago**
[10] One of Saramago's best-known novels retells the story of the Gospels from the perspective of *this* man, their protagonist. In the Bible, this man tells the Parables of the Prodigal Son and the Good Samaritan.
ANSWER: **Jesus Christ** [accept either underlined portion; accept *The **Gospel According to Jesus Christ*** or *O **Evangelho Segundo Jesus Cristo***] <JR>

17. This instrument can have anywhere from 18 to 21 strings, and can be played with a mezrab. For 10 points each:
[10] Name this plucked string instrument played by Ravi Shankar.
ANSWER: **sitar**
[10] Sitars are a key component of *this* country's classical music, which is traditionally classified into Carnatic and Hindustani traditions.
ANSWER: Republic of **India** [or **Bharat** Ganrajya]
[10] Both Hindustani and Carnatic classical music use *these* mode-like melodic frameworks, which are often misleadingly described as mere "scales."
ANSWER: **rag**as <HK>

18. A battle sometimes named for this town is more usually known as the Battle of Passchendaele. For 10 points each:
[10] Name this Belgian town, where the Germans first used poison gas during a 1915 battle. Roughly five battles were fought at this town during World War I.
ANSWER: **Ypres** [eepr] [or **Wipers**]
[10] The gas used at Ypres was made of *this* chemical element, which is found with sulfur and carbon in mustard gas. Ignaz Semmelweis pioneered the use of bleaching powder, which contains this halogen, as a disinfectant.
ANSWER: **chlorine**
[10] This German chemist suggested the use of chlorine gas at Ypres. His lab developed the precursor to the Zyklon B gas that was used in the gas chambers at Auschwitz and other Nazi death camps.
ANSWER: Fritz **Haber** <SPQR>

19. Warfarin, despite being a common anti-clotting drug, has no effect on the function of these particles. For 10 points each:
[10] Name these cytoplasmic fragments that undergo activation, adhesion, and aggregation in the coagulation cascade alongside the maturation of fibrin. They are often mistakenly called a kind of blood cell.
ANSWER: **platelet**s
[10] This X-linked recessive clotting disorder has a "royal" form which results from a defective Factor VIII and can cause fatal internal bleeding. It was common in European royal houses in the 1800s.
ANSWER: **hemophilia**
[10] Factor VIII circulates in complex with *this* other non-numerically named glycoprotein, whose defects can cause a namesake hemophilia-like syndrome. Defects in this glycoprotein comprise the most common clotting disorder.
ANSWER: **von Willebrand** factor <HK>

20. Edgar Degas contributed some patches to this painter's *Little Girl in a Blue Armchair*. For 10 points each:
[10] Name this Pennsylvania-born Impressionist who lived most of her life in France. Her most famous works include *The Boating Party* and *The Child's Bath*.
ANSWER: Mary (Stevenson) **Cassatt**
[10] Cassatt's *The Child's Bath* is inspired by woodblock printing art from *this* country, whose *ukiyo-e* artists included Harunobu Hokusai.
ANSWER: **Japan** [or **Nihon** or **Nippon**]
[10] Cassatt more directly copied the style of Japanese prints in a painting titled for one of *these* objects. A Vermeer painting shows a pregnant-looking woman holding one of these objects.
ANSWER: **letter**s <JW>

21. The price of these devices has skyrocketed due to their popularity for mining Bitcoin. For 10 points each:
[10] Name these devices, which are designed for massively parallel operations and are thus perfectly suited for deep learning architectures. The first one of these devices was Nvidia's GeForce 256.
ANSWER: **GPU**s [or **graphics processing unit**s; do not accept or prompt on "CPU"]
[10] Despite those alternative uses, GPUs are designed primarily to process computer graphics, including *this* operation, which is often performed via ray tracing.
ANSWER: **render**ing
[10] The namesake rays of ray tracing pass through a single one of *these* points on the image. These points are the smallest unit of a raster image, and they are more visible in low-resolution images.
ANSWER: **pixel**s <JR>