

Harvard Fall Tournament XII

Edited by Raynor Kuang

Questions by Raynor Kuang, Jiho Park, Robert Chu, Alex Cohen, Michael Yue, Erik Owen, Jonathan Suh, Roger Jin, Michael Horton, Sriram Pendyala, and Josh Xiong



Round 5

Tossups

1. This poet described how the stars “go waltzing out in blue and red” in a poem punctuated with the parenthetical phrase “(I think I made you up inside my head).” In a poem by this writer, “The peanut-crunching crowd / Shoves in to see / them unwrap me hand and foot.” This person wrote a poem in which the speaker claims to (*) “eat men like air” and metaphorically rises from the dead. This author of “Mad Girl’s Love Song” and “Lady Lazarus” calls the title figure a “bastard” in a poem in which she declares “I’m through.” For 10 points, name this author of the poem “Daddy” and the novel *The Bell Jar*.

ANSWER: Sylvia Plath <Cohen>

2. Ryōji Noyori won the 2001 Nobel Prize for developing an “asymmetric” reaction where this compound is added to a ketone. Palladium can store over 900 times its volume of this gas in an interstitial mixture, and Raney nickel catalyzes a reaction where this gas is added to alkenes. This gas is evolved when zinc is dropped into (*) hydrochloric acid, and three molecules of this compound are used per molecule of nitrogen in the Haber process. When this diatomic gas is combusted, it produces only water. For 10 points, name this elemental gas that was replaced by helium in the use of balloons.

ANSWER: hydrogen gas (accept H₂ [“H-two”]) <Pendyala>

3. In an experiment examining this phenomenon, an average of two to six inches was reported by participants in a darkened room, and a study investigating this concept contrasted “true” and “compromise” partners. Muzafer Sherif used the autokinetic effect to investigate this phenomenon, and one experiment observed it by having people (*) answer A, B, or C after showing pairs of cards. Confederates gave incorrect answers when comparing line lengths in the Asch experiment that studied this phenomenon. For 10 points, give this social phenomenon in which people tend to defer to a majority opinion.

ANSWER: conformity (accept word forms) <Yue>

4. The Anielewicz Mound commemorates a mass suicide in a bunker in one of these places at 18 Mila Street. Hans Biebow was derisively given the epithet King while administering one of these places, and a speech given in one of them pleaded to “Give me your children.” After the ZOB engineered a (*) revolt in one of these places, Jürgen Stroop was forced to burn that area block by block, and the one at Łódź was notably productive in industry. One of these areas in Warsaw carried out an “Uprising.” For 10 points, describe these limited city quarters in which Jewish people were confined by the Nazis.

ANSWER: Jewish ghettos <Jin>

5. A geographic feature with a name meaning “Great White Place” can be found in this region, which is also home to the Dragon’s Breath Cave. The cities of Marienthal and Ghanzi are located in this region, which lends its name to an ecoregion containing many *Baikiaea* and acacia trees. The (*) Okavango River flows through this region and previously flowed into Lake Makgadikgadi. The Namib Desert lies to the west of this region, which is also home to the Herero and San peoples. For 10 points, name this large African desert that covers most of Botswana, along with parts of Namibia and South Africa.

ANSWER: Kalahari Desert <Park>

6. **These particles interact by an effective potential that is about constant at short distances but linear at large distances, explaining why particle collisions result in their pair production. Regularities in the SU(3) classification scheme led to their proposal, and these charged particles cannot exist in (*) isolation due to color confinement. A combination of this particle and its antiparticle make up a meson, and three of them form a baryon. Gluons mediate the strong interaction between two of these particles. For 10 points, name this particle that comes in “flavors” such as up, top, charm, and strange.**

ANSWER: quark <Xiong>

7. **In a book by this writer, Mina Purefoy gives birth as the prose style rapidly shifts among different periods of the English language. One of this man’s protagonists is lashed by a teacher for breaking his glasses, and that protagonist writes a villanelle for his crush E.C. A novel by this man begins by describing a “moocow” and a (*) “baby tuckoo.” This writer created his alter-ego Stephen Dedalus, who appears in *A Portrait of the Artist as a Young Man* and a stream-of-consciousness laden book by this author that follows Leopold Bloom over a 24-hour period in Dublin. For 10 points, name this Irish author who wrote *Ulysses*.**

ANSWER: James (Augustine Aloysius) Joyce <Cohen>

8. **A prominent journalist of this ethnicity was killed during a Vietnam War rally when a police tear gas canister struck him in the head. MEChA campaigned for the rights of these people whose immigration to the U.S. had been curtailed by an “Operation” led by Joseph Swing. These people were discriminated against following the (*) Sleepy Lagoon murder, and they’d been encouraged to move to the U.S. through the Bracero program. Two people of this ethnic group founded the United Farm Workers, which went on strike against California grape growers. For 10 points, name this ethnic group whose members include Cesar Chavez and other Chicanos.**

ANSWER: Mexican-Americans (or Mexicano/a(s); or Chicano/a(s) before mention; prompt on Hispanics; prompt on Latino/as) <Chu>

9. **The former Xanadu Gallery in this city houses a spiraling white ramp that Frank Lloyd Wright used as a prototype for the Guggenheim Museum, and the most notable Victorian houses termed “Painted Ladies” are in this city. A classically styled rotunda sits atop the Palace of Fine Arts in this city’s (*) Marina District, and a beacon called the “Crown Jewel” sits atop the Transamerica Pyramid in this city. One structure that begins in this city is so large it must be continually repainted in its characteristic International Orange hue. For 10 points, name this west coast city, the location of one end of the Golden Gate Bridge.**

ANSWER: San Francisco, CA (accept SF in place of San Francisco) <Kuang>

10. **This figure’s brother Clymenus of Arcadia committed incest with his daughter Harpalyce. Medea healed a wound this figure suffered at Colchis, and the centaurs Hylaeus and Rhoecus attempted to assault her. She and her husband were turned into lions after failing to properly worship Aphrodite, and after being abandoned by King Oeneus, she was suckled by a (*) she-bear. Meleager fell in love with this woman during the Caledonian Boar Hunt, and her eventual husband received magic fruit from Aphrodite to woo her. For 10 points, name this heroine who lost a race to Hippomenes after being distracted by golden apples.**

ANSWER: Atalanta <Owen>

11. **One campaign during this dynasty was fought to pacify the Jinchuan ["jeen-chwan"] hill peoples, and another led to the genocide of three-quarters of the Dzungar people. The Ten Great Campaigns were carried out by the Qianlong ["CHIN-long"] emperor during this dynasty that used the Eight Banners military system. The conquest of (*) Tibet and several border conflicts with Russia occurred in this dynasty. This dynasty's last ruler was the puppet emperor Puyi, who was a member of the Manchu people that established it. This dynasty followed the Ming and led to the establishment of the Republic of China. For 10 points, name this last dynasty of China.**

ANSWER: Qing ["Ching"] Dynasty (do not accept Qin ["Cheen"]; ask players to spell if necessary) <Jin>

12. **A notable instance of this action occurs for two-and-a-half minutes in the film *Notorious* directed by Alfred Hitchcock. A painting showing a man in a feathered cap and this action occurring at the bottom of some stairs was made by Francesco Hayez, and a rectangular sculpture of this action was made by (*) Constantin Brâncuși. Gold leaf decorates a work titled for this action made by Gustav Klimt, and Paolo and Francesca feature prominently in a sculpture of this action by Auguste Rodin. A photograph of Times Square on V-J Day depicts a sailor and a total stranger performing this action. For 10 points, describe this romantic action.**

ANSWER: kissing (or any synonymous answer that implies the act of lips touching lips) <Cohen>

13. **This man wrote a book about Tristran Thorn, who meets a fallen star that turns out to be the girl Yvaine. The first novel by this author of *Stardust* was a collaboration with Terry Pratchett about the Antichrist titled *Good Omens*. This man won the Newbery award for a book about a boy threatened by "the man Jack" and raised by supernatural spirits. A 2001 novel by this author of (*) *The Graveyard Book* centers on Shadow, who learns the conman Mr. Wednesday is the god Odin, and this man authored a comic series about the manifestation of Dream. For 10 points, name this English author of *American Gods* and the *Sandman* comic series.**

ANSWER: Neil Gaiman <Kuang>

14. **This man was told by God to "build up my house," which he took literally and reconstructed the chapel at San Damiano, before founding an order that would come to be nicknamed the greyfriars. A prayer named for this man requests "make me an instrument of your peace," and his feast day falls on (*) October 4th. The *Fioretti*, or "Little Flowers," describe the works of this man, and he emphasized human reverence of nature in his *Cantic of the Sun*. This man is the patron saint of Italy, and he's often depicted preaching to birds. For 10 points, give this namesake of the current pope as of 2017, a saint from Assisi.**

ANSWER: Saint Francis of Assisi <Horton>

15. **NASA's Parker Probe, which is set to launch in July 2018, will study this region. Wave heating and magnetic reconnection are proposed solutions to this region's namesake heating problem, and polar plumes follow open magnetic field lines in this region's namesake "holes." Examination of the spectrum of this region led to the discovery of (*) helium. This region's temperature reaches in excess of one million Kelvin, even though the lower layer chromosphere only reaches six thousand Kelvin. Solar flares accompany this layer's namesake "mass ejections." For 10 points, name this outermost layer of the Sun.**

ANSWER: solar corona (prompt on solar atmosphere; prompt on just sun or Sol; prompt on outer layer of sun, but do not accept any other specific terms or anything not indicating the outermost layer) <Xiong>

16. **In an *Andante cantabile* from a symphony of this number, a solo horn introduces a melody beginning [*read slowly*] "D-C sharp-B-D-C sharp," and Sibelius's symphony of this number contains a swan-call motif. A symphony of this number that was labeled "a Soviet artist's response to justified criticism" was written by (*) Shostakovich, and a work by Schubert for *this many performers* was nicknamed "The Trout." A symphony of this number ends with 29 C-major chords and opens with a motif of "fate knocking at the door." For 10 points, give this number of the Beethoven symphony opening with a "short-short-short-long" motif.**

ANSWER: five (accept word forms like fifth) <Yue>

17. In this book, Nacho goes to Oquedal and stands over an open grave, and the words “Zeno of Elea” are whispered at a train station in it. One character in this book plans a “feminist revolution” requiring a Cimbrian novel that Professor Uzzi-Tuzii asserts is from Cimmeria. The author Silas (*) Flannery writes a diary in this book containing chapters titled *In a network of lines that enlase* and *Outside the town of malbork*. Ludmilla assists You, the Reader, after you only ever manage to read the first chapter of the various fictional books that form every other chapter of this novel. For 10 points, name this book by Italian writer Italo Calvino.

ANSWER: *If on a winter's night a traveler* (anti-prompt on *Outside the town of malbork* or *In a network of lines that enlase* until read; anti-prompt on *Leaning from the slope*, *Without fear of wind or vertigo*, *Looks down in the gathering shadow*, *In a network of lines that intersect*, *On the carpet of leaves illuminated by the moon*, *Around an empty grave*, *What story down there awaits its end?*) <Yue>

18. The first species within this clade to have its genome sequenced was *Picea abies*, and the stimulant ephedrine can be obtained from one genus within this clade. Organisms within this group typically possess tracheids instead of vessel elements, and characteristically lack (*) endosperm in their seeds. The only extant species in one subclass of this group is the *Ginkgo biloba*, and the reproductive structures of these plants are found in strobili, or cones. These plants are exemplified by cycads and conifers, and they produce unenclosed or “naked” seeds. For 10 points, name this group of plants contrasted with angiosperms.

ANSWER: gymnosperms <Park>

19. Some periods named after these items included the Jomon period and the Beaker culture, and ostracons and sherds refer to pieces of these items. A substance called the slip can be used in the making of these items, which are often also made by “throwing.” Many ancient cultures used (*) “coiling” to make them, and kraters and amphorae were examples of them. The Greek examples of these items were often red or black and depicted mythological scenes, and Chinese examples were noted for their beauty and fragility. For 10 points, name these products of ceramic art exemplified by Ming vases.

ANSWER: pottery (accept vases before read; prompt on ceramics; prompt on porcelain) <Kuang>

20. In the most recent work by this author, Nero Golden moves with his three eccentric sons to “the Gardens,” a community in Greenwich Village. This author of *The Golden House* wrote a book in which three sisters all pretend to give birth to the protagonist. One book by this author of *Shame* depicts an airplane explosion leading Gibreel and Saladin to take on the roles of (*) angel and devil and led to a fatwa. This author’s most famous book features Saleem Sinai, who gains special powers from being born at the moment of India’s independence. For 10 points, name this British-Indian author of *The Satanic Verses* and *Midnight’s Children*.

ANSWER: (Ahmed) Salman Rushdie <Cohen>

21. Proximate analysis and vitrinite reflectance are two ways of determining this substance’s rank. This substance’s moisture content can be measured by heating it with toluene, and Hilt’s law applies to this substance. The free swelling index is used to determine this substance’s (*) coking value. An integrated gasification combined cycle is used in a “clean” technology named after this substance. Ranks of this substance include lignite and anthracite, and it can be found in namesake beds or seams. For 10 points, name this black sedimentary rock that forms from dead plant matter.

ANSWER: coal <Park>

Bonuses

1. This man co-authored *The Subjection of Women* with his wife, Harriet Taylor. For 10 points each:

[10] Name this English philosopher known for works such as *On Liberty*.

ANSWER: John Stuart **Mill**

[10] Mill was a prominent thinker in this school of philosophy that determines how best to make the most people happy. Mill's predecessor Jeremy Bentham studied the "pleasure principle" in this school.

ANSWER: **utilitarianism** (accept word forms)

[10] One form of utilitarianism described by *this* adjective prioritizes reducing suffering. Arguments against this type of utilitarianism have noted a "benevolent world exploder" could reasonably reduce suffering by eliminating people.

ANSWER: **negative** utilitarianism (do not accept or prompt on synonyms) <Jin>

2. For 10 points each, answer some questions about American chemist Stephanie Kwolek:

[10] Kwolek won the Lavoisier Medal for inventing this high-strength synthetic fiber marketed by DuPont. This material is found in bulletproof vests, racing canoes, and bicycle tires.

ANSWER: **Kevlar**

[10] The two monomers used to make Kevlar both feature a benzene ring with this substitution pattern. In EAS, electron donating groups result in products with this non-*ortho* pattern, where the 1 and 4 carbons are substituted.

ANSWER: **para**

[10] Because Kevlar is water-insoluble, this corrosive compound is used in Kevlar's industrial production. This strong diprotic acid is formed in the contact process, and it was once called oil of vitriol.

ANSWER: **sulfuric** acid (accept **H₂SO₄**) <Park>

3. Animals have it rough, often in the name of human understanding. For 10 points each:

[10] This man brought a pet parrot named Lorrita with him when he made his voyage on the *Kon-Tiki*, a raft this man sailed from South America to Polynesia to prove that pre-Columbian peoples could have done the same.

ANSWER: Thor **Heyerdahl**

[10] A much more extraordinary voyage was taken by this Soviet dog to outer space in the shuttle Sputnik 2. She sadly perished, though the Soviets hadn't really tried to keep her alive either.

ANSWER: **Laika**

[10] The first mammalian clone was one of these animals named Dolly. Whether or not Dolly's quality of life was different because she was a clone is up to philosophy and the movies.

ANSWER: **sheep** (accept **lamb**) <Kuang>

4. For 10 points each, answer some questions about moment-generating functions, or MGFs:

[10] You can obtain the n^{th} moment of a random variable by applying this operation n times on the MGF. The fundamental theorem of calculus essentially describes it as the "reverse" of integration.

ANSWER: **differentiation** (accept word forms; accept taking the **derivative** and word forms)

[10] The third standardized moment of a probability distribution is this measure, which describes the asymmetry of a probability distribution. When this measure is positive, the mean is usually greater than the median.

ANSWER: **skewness** (accept word forms)

[10] Meanwhile, the first moment of a probability distribution is this measure, which appears in Jensen's inequality. The law of the unconscious statistician is sometimes used to calculate this measure.

ANSWER: **expected value** (accept **expectation**, **mean** value, and **average**) <Park>

5. The staging for Lars von Trier's film *Dogville* makes use of this playwright's concept of Epic Theater. For 10 points each:

[10] Name this German playwright and poet, who wrote plays like *The Good Person of Szechwan* and *Saint Joan of the Stockyards*.

ANSWER: Bertolt **Brecht**

[10] In this Brecht play, the title character enters pulling a cart with her children Eilif, Katrin, and Swiss Cheese in tow and ends the play by singing a lullaby to Katrin's corpse.

ANSWER: ***Mother Courage and Her Children*** (or ***Mutter Courage und ihre Kinder***)

[10] Brecht collaborated with Kurt Weill to make a "Threepenny" one of these productions. Gaston Leroux first wrote a novel about a masked "phantom" of one of these productions.

ANSWER: **opera** <Cohen>

6. For 10 points each, answer some questions about the literary inspirations of musical works:

[10] This composer used three short stories of E. T. A. Hoffmann in his *opéra fantastique* *The Tales of Hoffmann*, which contains a notable Barcarolle. His most famous tune comes from his operetta *Orpheus in the Underworld*.

ANSWER: Jacques **Offenbach**

[10] Tchaikovsky wrote a "Symphonic Fantasy" after a noblewoman depicted in one of this author's works. Franz Liszt wrote a program symphony on that same work and a *fantasia quasi sonata* for piano "after a reading of" this author.

ANSWER: **Dante** Alighieri

[10] This composer wrote a piano suite for the 200th anniversary of the birth of playwright Ludvig Holberg that he later arranged for string orchestra. He also wrote incidental music for Henrik Ibsen's play, *Peer Gynt*.

ANSWER: Edvard **Grieg** <Yue>

7. For 10 points each, answer some questions about mutilation in Norse myth:

[10] This demonic wolf frightened the gods so much they bound him in chains, though they had to trick him by offering Tyr's hand as a pledge to let him go later. When this creature realized the trick, he promptly bit the hand off.

ANSWER: **Fenrir**

[10] This wiseman was exchanged as a prisoner in the Aesir-Vanir War, after which he was beheaded. Nicely, though, he lived on as a talking head that Odin used for advice.

ANSWER: **Mimir** (or **Mim**)

[10] At some point, Mimir tells Odin he must give up one of these body parts to drink from the Well of Urd to gain cosmic wisdom, which Odin then did.

ANSWER: one of his **eyes** <Cohen>

8. During one part of this battle, the general Aristides slaughtered a garrison of enemy soldiers stationed on the island of Psyttaleia ["sy-TAY-lee-uh"]. For 10 points each:

[10] Name this mostly naval battle in which the allied Greek states led by Themistocles defeated the forces of Xerxes I. Xerxes' brother, Ariabignes, was killed during this battle.

ANSWER: Battle of **Salamis**

[10] This empire's military conflicts against the Greeks began when it tried to crush a revolt in Ionia, followed by successive invasion attempts.

ANSWER: First **Persian** Empire (accept **Achaemenid** Empire)

[10] The second Persian invasion ended with the Battle of Plataea and this *other* naval battle, both of which allegedly occurred on the same day.

ANSWER: Battle of **Mycalae** ["mye-KALL"] <Suh>

9. This school narrowly lost a 1988 game against Notre Dame that was nicknamed “Catholics vs. Convicts” due to its bad-boy image. For 10 points each:

[10] Name this ACC school. Its most recent FBS championship came in 2001 thanks to a ridiculously stacked team featuring Clinton Portis, Jeremy Shockey, Andre Johnson, Ed Reed, Vince Wilfork, Frank Gore, and Sean Taylor.

ANSWER: University of Miami Hurricanes (accept either underlined portion; accept UMiami; accept The U;

Writer’s note: accept someone sticking out their thumbs and index fingers on both hands, then touching the tips of their thumbs together to make a U)

[10] For 70 years, Miami played its home games at a “Bowl” whose name featured this color. Along with green, this color is present in the logo of Miami athletics.

ANSWER: orange (accept the Orange Bowl)

[10] Miami lost a 1984 game to Boston College after a Hail Mary touchdown pass from this BC quarterback as time expired. In 2006, he became the first player to successfully convert a drop-kick extra point since 1941.

ANSWER: Doug Flutie (or Douglas Richard Flutie; accept Hail Flutie) <Chu>

10. At one point, the narrator of this book arrives on an island that seems to eat people. For 10 points each:

[10] Name this novel by Yann Martel. The title Indian boy is stranded on a raft with a tiger named Richard Parker, and it was made into a film by Ang Lee.

ANSWER: Life of Pi

[10] *Life of Pi* won the 2001 incarnation of this award given to works of English fiction. It was controversially widened from Commonwealth books to any English-language novel in 2014.

ANSWER: Man Booker Prize for Fiction

[10] The 2017 prize was won by this author for *Lincoln in the Bardo*. This author delivered the commencement speech “Congratulations by the Way” and published the short story collection *Tenth of December*.

ANSWER: George Saunders <Horton>

11. Even if you ignore *Kind of Blue*, 1959 was still a really good year for jazz. For 10 points each:

[10] This saxophonist on *Kind of Blue* released his own album *Giant Steps* in 1959, in which he pioneered the fast arpeggios dubbed “sheets of sound.” This man also released albums like *A Love Supreme*.

ANSWER: John Coltrane

[10] The Dave Brubeck quartet recorded their landmark album *Time Out* in 1959, which contains a song titled “Take [this number].” That song is titled for its unusual time signature with this number of beats per measure.

ANSWER: five

[10] In 1959, Ornette Coleman released his album *The Shape of Jazz to Come*, which featured atonal improvisation and abrupt tempo shifts that formed the basis of this highly influential approach to jazz. This style emphasizes melodic lines over preset chord changes.

ANSWER: free jazz <Yue>

12. William H. Macy and this playwright developed the acting technique of practical aesthetics. For 10 points each:

[10] Name this playwright. His plays like *Oleanna* and *Speed-the-Plow* demonstrate his characteristic style of dialogue.

ANSWER: David Mamet

[10] Mamet wrote this play that follows four Chicago real estate agents. It was adapted into a film with Alec Baldwin, who famously announces that “coffee’s for closers.”

ANSWER: Glengarry Glen Ross

[10] In another Mamet play, Don suspects a nickel he sold to a customer for \$90 is actually worth much more and conspires to steal it back. That nickel has this animal on its reverse, opposite an American Indian’s profile.

ANSWER: buffalo (accept bison; accept American Buffalo) <Cohen>

13. This company's merger with Humana was blocked by a federal judge in January 2017. For 10 points each:

[10] Name this American company based in Hartford, Connecticut. Its CEO Mark Bertolini claimed that the Affordable Care Act was in a death spiral shortly after the merger was blocked.

ANSWER: Aetna Inc.

[10] Among other things, Aetna sells this product, which most Americans are required to have due to the Affordable Care Act's individual mandate. Other companies that sell this product include Blue Cross Blue Shield.

ANSWER: health insurance (prompt on just insurance; do not accept any other specific types of insurance like "life insurance" or "auto insurance")

[10] This pharmacy and healthcare company is reportedly in talks to buy Aetna. This competitor to Walgreens discontinued the sale of all tobacco products in October 2014.

ANSWER: CVS Health <Park>

14. In one of these texts, Huineng totally schools a rival by noting that because Buddha-nature is always perfect, it cannot be compared to a mirror which may get dusty. For 10 points each:

[10] Name these texts. A "Platform" one is central to Zen Buddhism, and a "Kama" one is famous for its treatment of sexual topics.

ANSWER: sutras (accept *Platform Sutra*; accept *Kama Sutra*)

[10] An influential Mahayana sutra is named for one of these plants. Statues of the Buddha often depict him in the yoga position named for this object in which the practitioner sits with their feet resting on the opposite thigh.

ANSWER: lotus flower (accept *Lotus Sutra*; accept lotus position)

[10] A famous illustration of the doctrine of expedient means in the *Lotus Sutra* describes how a man saves his children from a burning house by luring them out with the promise of playing with these objects.

ANSWER: toy carts (or yana; accept vehicles; accept goat-carts; accept deer-carts; accept ox-carts; prompt on toys) <Chu>

15. You are now a radiologist. Answer some questions about your job, for 10 points each:

[10] Much of your work involves reading radiographs, which are created using radiation from this part of the electromagnetic spectrum. William Röntgen used this type of radiation to image the bones in his wife's hand.

ANSWER: X-rays (or X-ray radiation)

[10] When taking a radiograph, you may ask your patient to raise their arms so that these large triangular bones, commonly known as the shoulder blades, don't block part of the image.

ANSWER: scapula (accept wing bone)

[10] You'll often ask patients to take a namesake "meal" of this element's sulfate to study their GI tracts.

ANSWER: barium (prompt on Ba) <Chu>

16. This man erected the "Common Program," in which his party allied with the Communist Party. For 10 points each:

[10] Name this politician. He was twice forced into cohabitive governments in the 80s and 90s.

ANSWER: François Mitterrand

[10] Mitterrand controversially authorized the annual laying of a wreath on this Frenchman's grave. This man had gained honor as Marshal during World War I, but was convicted of treason after presiding over Vichy France.

ANSWER: Philippe Pétain

[10] Mitterrand also authorized the destruction and subsequent cover-up of the *Rainbow Warrior*, a ship chartered by this environmentalist group. In 2014, members of this group moronically trampled over the Nazca Lines.

ANSWER: Greenpeace <Kuang>

17. Like many of its author's works, this play is set in the Aran Islands. For 10 points each:

[10] Name this play by John Millington Synge. By the end of this play, every single one of Maurya's sons die.

ANSWER: **Riders to the Sea**

[10] In *Riders to the Sea*, this is how all of Maurya's sons die. Maurya's last surviving son, Bartley, dies at the end of the play by falling off his horse into the sea, quickly dying in this fashion.

ANSWER: **drowning** (accept word forms)

[10] Synge is most famous for a play about Christy Mahon, who is one of these characters "*of the Western World*." That Synge play notoriously inspired riots on its premiere that were named after this term.

ANSWER: *The **Playboy** of the Western World* (accept **Playboy** riots) <Cohen>

18. After this man became president, many of his opponents called him "His Fraudulency." For 10 points each:

[10] Name this president who was elected over Samuel Tilden by agreeing to the Compromise of 1877. His election marked the end of Reconstruction.

ANSWER: Rutherford B. **Hayes**

[10] Hayes fired three Stalwarts, including future president Chester A. Arthur, from the Custom House of this state. Political machines operating in this state included the Boss Tweed-led Tammany Hall.

ANSWER: **New York**

[10] When this man was selected to be Hayes' running mate, Hayes did not know him very well, even asking, "Who is [*this man*]?"

ANSWER: William A. **Wheeler** <Suh>

19. A Modigliani painting of this title sold for \$170 million in 2015. For 10 points each:

[10] Describe this type of erotic subject. Jean-Auguste-Dominique Ingres added several vertebrae to a subject of this type in *La Grande Odalisque*, and Manet's *Olympia* caused a scandal upon showing this subject.

ANSWER: reclining **nude** (accept synonyms like **naked**; prompt on **woman** or similar answers)

[10] Diego Velázquez showed a reclining nude from behind while Cupid holds up a mirror in his *Rokeby Venus*. Velázquez also made this painting of members of the Royal Court of Philip IV.

ANSWER: *Las **Meninas***

[10] This British artist painted an exaggeratedly detailed woman named Sue Tilley dozing off nude on a couch in *Benefits Supervisor Sleeping*, which sold for a then-record \$33.6 million in 2008. This man was also the grandson of an Austrian psychoanalyst.

ANSWER: **Lucian** (Michael) **Freud** (prompt on **Freud**) <Chu>

20. The Herschel Space Observatory is located at one of these points for the Sun-Earth system. For 10 points each:

[10] Name this set of five equilibrium points where a small mass can orbit in a constant pattern with two larger masses. The third, fourth, and fifth of these points form an equilateral triangle.

ANSWER: **Lagrangian** points (accept **Lagrange** points, **L**-points, or **libration** points)

[10] Objects described by this term orbit 60 degrees ahead or behind a more massive object, since they are located at L4 or L5. Asteroids described by this term include 624 Hektor and 588 Achilles.

ANSWER: **trojan** (accept **trojan** asteroids, **trojan** moons, or **trojan** minor planets)

[10] The trojan asteroids share their orbit with this gas giant and largest planet in the Solar System. Galileo discovered this planet's four largest moons, which are Io, Europa, Ganymede, and Callisto.

ANSWER: **Jupiter** <Park>

21. These reactions are associated with a gain in electrons, decrease in oxidation state, or increase in the number of hydrogen atoms. For 10 points each:

[10] Name this class of reactions that is contrasted with oxidation.

ANSWER: **reduction** (accept word forms)

[10] Reduction of carbonyl compounds is often accomplished with reagents containing boron or this metal. The MPV reduction employs alkoxide salts of this metal, which is produced in the Hall-Héroult process.

ANSWER: **aluminum** (or **aluminium**; prompt on Al)

[10] LAH reduces nitriles to amines, but this bulky organoaluminum reducing agent converts nitriles into aldehydes. Unlike sodium borohydride, this reagent acts as an electrophilic hydride donor.

ANSWER: **DIBAL**-H (accept **diisobutylaluminum hydride** or **diisobutylaluminium hydride**) <Park>