

## **(This) Tournament is a Crime**

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Packet 2

Tossups

1. Words that illustrate this concept are classified according to their “dryness,” “wetness,” “lightness,” or “darkness” in a 1926 paper by Harold Conklin examining the Hanunoo language. A controversial Winawer et al. study found that English speakers were slower than Russian speakers in differentiating two similar varieties of this concept. A 1969 book that formulated a seven-stage hierarchy by which languages develop words for this concept was authored by Brent Berlin and Paul Kay. The development of words for this concept is explored in Guy Deutscher's (\*) *Through the Language Glass*. Two English words for this concept are often grouped as a single word in examples such as the Japanese word "aoi" and the Chinese word "qing." Examples of words that express this concept include the German "schwarz," the French "vert," and the Spanish "azul." For 10 points, identify this concept expressed in English by words such as "red" and "yellow."

ANSWER: **color** [do not prompt or anti-prompt on specific answers such as blue or green]

<EK, Social Science>

2. Inclusions of polyomaviruses such as BK and JC are found in a type of these cells often detected in urine, known as decoy cells. The diuretic amiloride is specific to a sodium channel expressed in these cells. The SCRIB complex localizes to the opposite end of these cells as the PAR and CRUMBS complexes. Reticular cells of this type in the thymus are crucial in preventing T cells from recognizing self proteins. These cells are (\*) polarized into “apical” and “basolateral” domains. These cells are held together by the protein E-cadherin, whose loss triggers their transition into mesenchymal stem cells. These cells can freely contract and expand in “transitional” tissue, and form two or more layers in “stratified” tissue. These cells come in squamous, columnar, and cuboidal shapes. For 10 points, name these cells which constitute a basic animal tissue type that lines the cavities and surfaces of organs and blood vessels.

ANSWER: **epithelial** cells [accept **endothelial** cells; accept **mesothelial** cells]

<AG, Biology>

3. The narrator of a novel by this author covers the nose and mouth of a screaming woman during a fraught river crossing, but ends up drowning her. A woman is inspired to paint a cockfight-watching drunkard after numerous sessions sitting as a nude model for the artist Catherine, at the end of a story by this author. In another story by her, a boy reads lines from a play about revolutionaries over the corpse of his father, who had leapt to his death from a hot air balloon. Sebastien Onius is separated from his lover (\*) Annabelle Desir in a novel by this author of “A Wall of Fire Rising.” The protagonist of her best-known novel impales herself on a spice-pestle to thwart her mother Martine’s repeated testing of her virginity. At the end of that novel by this author, Sophie Caco attacks stalks in the cane field where her mother had been raped by a Tonton Macoute. For 10 points, name this author whose books *The Farming of Bones*, *Krik? Krak!*, and *Breath, Eyes, Memory* contend with the violent history of her native Haiti.

ANSWER: Edwidge **Danticat**

<AG, Long Fiction>

4. A chain of descending arpeggios begins an E minor organ piece in this genre by Johann Pachelbel. Three of these pieces, each labelled “for the Elevation,” are found in the *Missa della Domenica*, the *Missa degli Apostoli*, and the *Missa della Madonna*. One of these pieces begins each of the three masses in the collection *Fiori musicali*. These pieces comprise the bulk of the output of Johann Jakob Froberger, who learned the genre from Girolamo Frescobaldi. One of these pieces opens J.S. Bach’s Partita No. 6 in E minor. This name is given to the fanfare-like opening section of the opera (\*) *L’Orfeo*. The authorship of one of these pieces has been called into question due to its composer’s unusual usage of parallel octaves in the opening bars. These pieces were often written for a keyboard instrument such as the organ or the

harpsichord, in order to show virtuosic and improvisatory skill. For 10 points, name this genre exemplified by a D minor J.S. Bach piece that pairs it with the fugue.

ANSWER: toccata [prompt on toccata and fugue by asking “Which one?”]

<EK, Music/Opera>

5. The speaker of this poem observes that just as a fruit “changes into delight through dissolution” when it is eaten, “so to my melted soul the heavens declare / All bounds transfigured into a boundless air.” This poem states that “Love” and “hatred of self” are equally valid names for “the real-flesh eater, worm unanswerable,” about which the speaker reveals: “Life is his meat, and I am still his host.” At the start of this poem, its speaker takes a break from thought to luxuriate in the (\*) “long vistas of celestial calm!” The speaker of this poem writes that “the wave / Dares to explode out of the rocks in reeking / Spray” in its twenty-fourth and final stanza, just after dramatically declaring that: “The wind is rising! ... We must try to live!” This poem is set by “this quiet roof, where dove-sails saunter by.” For 10 points, name this poetic meditation spurred by a coastal burial place, by Paul Valery.

ANSWER: “The Graveyard by the Sea” [or “The Cemetery by the Sea”; or “Le cimetière marin”]

<AG, Poetry>

6. This philosopher holds that the “bourgeois symptom” of a text is the “euphoric reference” to “style” as one of “Literature’s eternal values” in a piece about “Neither/Nor Criticism.” This author attacked a documentary on “the East” called *Lost Continent*, because its “vague ethnographic” pretext perpetuates “exoticism”; that appears in a book which discusses a “nostalgic and patriotic” crunchy food that this author calls the “alimentary sign of (\*) Frenchness.” Men who appear to be “pantomimes” of “human weakness,” such as “the effeminate teddy-boy,” are analyzed in a work by this philosopher that discusses a sport called “the demonstration of excellence.” An analysis of “Steak and Chips” using the relationship between signifier and signified, and a discussion of the semiotics of wrestling appear in, for 10 points, what French philosopher’s book *Mythologies*?

ANSWER: Roland Barthes [or Roland Gerard Barthes]

<IJ, Thought>

7. One member of this family was so hated by Tammany Hall that even though he ran unopposed, more than 1,000 votes were cast for non-candidate Peter Buell Parker. A member of this family teamed up with John Sullivan to ravage the Finger Lakes region in a scorched earth campaign of the lands belonging to the Iroquois Confederacy. The secession of Vermont was strongly opposed by a man from this family, who later became the first person to (\*) die in office while holding an executive position. After Aaron Burr resigned following his duel with Alexander Hamilton, a member of this family filled his position. A member of this family brought a barrel of water from the Atlantic Ocean to Buffalo to mark the completion of the Erie Canal, the construction of which was spearheaded by that man. For 10 points, name this family prominent in early American politics, whose members included vice-president George and Governor of New York DeWitt.

ANSWER: Clinton family [accept James Clinton; accept George Clinton; accept DeWitt Clinton]

<BL, American History>

8. A close-up photo of two of these performers in a taxi was taken by Nan Goldin, who began her career capturing these performers. Labels in the shape of black cat heads were distributed to these performers to protect them from arrest by Jose Sarria, who founded the Imperial Court System. Jean-Michel brings his in-laws to Saint-Tropez, an establishment employing several of these performers, in the Harvey Fierstein musical *La Cage aux Folies*. A charity organization of these performers modeled after an order of nuns, known as the Sisters of Perpetual (\*) Indulgence, was established in 1979 in the Castro district. Precursors to these performers include *travesti* roles in theater, such as pantomime dames and trouser roles. These performers lob insulting observations in a practice called “reading” and may engage in “tucking” by hiding parts of their body under their costumes. For 10 points, name these performance artists who dress in defiance of expected gender roles, and are classified into “kings” and “queens.”

ANSWER: drag artists [or drag kings; or drag queens; accept female impersonators; reluctantly prompt on cross-dressers; prompt on transvestites]

<AG, Other Art>

9. **Matroids named after this man have a rank that, when incremented by one, is divisible by the cardinality of the underlying set. Hierholzer's algorithm and Fleury's algorithm compute structures named for this scientist. The number of those structures named for this scientist is given by the following formula: the number of arborescences times the product of "the degree of each vertex in the graph minus one" factorial. That formula, is the subject of the so-called (\*) BEST theorem and gives the number of unicursal trails named for this scientist. This mathematician proved that an even number of vertices will have an odd degree in all undirected graphs. That result, the handshaking lemma, was proved by him when he discussed namesake tours in which every edge of a graph is visited exactly once. The Seven Bridges of Konigsberg problem was solved by, for 10 points, what Swiss mathematician?**

ANSWER: Leonhard Euler

<IJ, Math/Other Science>

10. **A massive 1906 meeting of more than three thousand people of this ethnicity at the Empire Theater protested a law forcing them to carry fingerprinted passes with them at all times. The ships *Truro* and *Belvedere* each carried a batch of 342 indentured servants of this ethnicity, whose treatment was condemned in a 1910 speech by Lord Hardinge. The Green Pamphlet detailed workplace abuse and discrimination of these people, whose treatment inspired a nonviolent movement headquartered at (\*) Tolstoy Farm. These people formed a stretcher-bearer corps during the Bambatha Rebellion. The largest overseas agglomeration of this ethnicity is in the port city of Durban. For 10 points, what people, along with blacks and "coloured," suffered discrimination in South Africa under apartheid, and had their civil rights championed by Mohandas Gandhi?**

ANSWER: Indians in South Africa [accept South Asians; prompt on Asians; anti-prompt on specific groups of Indians like Tamils]

<BL, World History>

11. **An essay about this period of time argues that its paintings convey both a sense of "appetite" and "restraint." That essay, Simon Schama's "An Unruly Realm," opens by discussing a painting from this historical period in which a basket with playing cards hangs from the ceiling, and a woman stomps on the pages of a Bible. During this period, the chaotic painting *Dissolute Household* was produced, and an artist made a self-portrait in which a painting of a fiddling man was positioned behind a depiction of (\*) herself. That painting, like all of that artist's work from this period, was wrongly attributed to a male contemporary until 1893. Judith Leyster was inducted into the Guild of St. Luke during this period; the guild's other members during this period include a man who depicted a crazy woman with an owl on her shoulder in *Malle Babbe*, and made a misleadingly-titled portrait of a smiling mustachioed militia officer. For 10 points, name this flourishing age during which Frans Hals worked.**

ANSWER: Dutch Golden Age

<AG/IJ, Painting/Sculpture>

12. **This quantity can be estimated using Bennett's overlapping distribution method. This quantity is calculated in the second step of COSMO-RS after COSMO calculates the screening charge density. The difference between 2 values of this quantity is found in the numerator of the osmotic coefficient. The modern derivation of Maxwell's equal area construction for Van der Waals' equation begins by constraining this value. This quantity is zero for a (\*) photon gas, which is why black bodies can be described with two state functions. The grand canonical ensemble is dependent on temperature, volume, and this quantity, which is equal for all components of a system at the binodal curve. A form of this quantity applied to electrons in a solid is the Fermi level. The Gibbs-Duhem equation relates pressure and temperature to this conjugate of particle number. For 10 points, name this intensive quantity which is the change in energy of a system when a particle is added.**

ANSWER: chemical potential [accept partial molar free energy; prompt on free energy difference]

<AW, Physics>

13. In 1973, this group held a council at Kampala and established a set of principles that it would follow, such as justice, creativity, and honesty. This organization consolidated the philosophy of Ernest Seton in establishing a "lore" program for various "braves," "maidens," and "princesses"; that program featured "Indian Guides." It most recently updated its principles by adopting the "Challenge 21" initiative in 1997; almost 140 years earlier, this organization adopted the Paris Basis of 1855 as a group of principles to uphold. This organization was founded by the London clothmaker (\*) George Williams, who sought to promote "muscular Christianity" during the Industrial Revolution. James Naismith invented the game of basketball while at the Springfield, Massachusetts training school run by, for 10 points, what Christian organization, known for its association with recreational sports?

ANSWER: YMCA [or the Young Men's Christian Association]

<IJ, Religion>

14. Prior to one battle, this man's cavalry swore an oath to "not be received under a roof, nor have access to his children, parents or wife" unless they had "ridden twice through the enemy's column." Due to the pleas of his allies, this man broke off his scorched earth strategy to defend the fortified town of Avaricum. In a Lionel Royer painting, this leader, mounted on a white horse, surrenders by throwing his arms down at the feet of his victorious opponent, dressed in a red cloak. A key stronghold, or *oppidum*, held by forces under this leader fell after it was surrounded by an inward-facing (\*) circumvallation and was prevented from receiving reinforcements with the use of an outward-facing contravallation. Though this man was able to repel a siege of Gergovia, his forces were finally overcome at the Siege of Alesia. For 10 points, name this Arverni chieftain who led Gallic resistance to the conquests of Julius Caesar.

ANSWER: Vercingetorix

<BL, European History>

15. This book's narrator realizes that his story had essentially already been told in Hermann Hesse's *Journey to the East*. A character in this book constantly tosses his sledgehammer and catches it behind his back. Whenever they need questions answered, the main characters of this book throw three *I Ching* coins thrice each. Several characters in this book slather an object with Day-Glo paint and give it the misspelled name (\*)

"Furthur." Participants aim to attain "intersubjectivity" at this book's title series of events, the last of which happens at a "graduation" through which a man tries to clear his name after being arrested for marijuana possession. The main characters of this book fail to meet with Timothy Leary after journeying for days on their school bus. For 10 points, name this book in which the Merry Pranksters, led by Ken Kesey, use copious amounts of LSD, a chronicle by Tom Wolfe.

ANSWER: *The Electric Kool-Aid Acid Test*

<AG, Short Fiction/Miscellaneous>

16. A full-page advertisement in the Wall Street Journal on April 20, 2016 promoting this stance features three hands in the colors of three different nations at its bottom and declares "Truth = Peace." After he gave an interview for the documentary *Screamers* criticizing this stance, a journalist was assassinated outside his newspaper office by a 17-year-old student. Adam Schiff proposed a yet-unpassed measure, known as House Resolution 106, that would formally condemn this stance. Stating the contrary to this stance is forbidden by one country's Article (\*) 301, which considers it part of the vaguely-defined crime of insulting its national character. This stance argues that death marches through the desert during one event were simply "temporary relocations" and that a certain Christian group was "a security threat" during World War I. For 10 points, name this official stance of the Turkish government, which denies the fact that the Ottomans massacred over 1.5 million people of a certain ethnicity.

ANSWER: denial of the Armenian Genocide [or equivalents saying that Turkey does not acknowledge that Armenian Genocide really happened; accept answers like Turkey not calling the Armenian Genocide a genocide; answers must include the phrase Armenian Genocide and that its veracity is being denied; prompt on simply genocide denialism; do not accept or prompt on Holocaust denial; do not accept or prompt on answers from Turkish ultranationalists like "lies about the Armenian incident" or whatever]

<BL, Other History>

17. **This character explains that her own beauty is superfluous given her family's overall radiance, just before abruptly ending the novel mid-sentence. Early in the novel, she rescues a child whose head is stuck between the railings of a banister. This character's maid removes all the mirrors from her surroundings to prevent her from seeing her smallpox-disfigured face. She symbolically buries her doll just before Kenge takes her from her godmother's house at age fourteen. This woman is revealed to be the illegitimate daughter of Krook's (\*) dead lodger Captain Hawdon and the mistress of Chesney Wold, Lady Dedlock. Mr. Guppy makes one final cringeworthy proposal to this character on the eve of her wedding to the doctor Allan Woodcourt, whom she still loves despite accepting the proposal of her guardian John Jarndyce. For 10 points, name this heroine of Charles Dickens's novel *Bleak House*.**

ANSWER: Esther Summerson [or Esther Summerson; or Esther Hawdon; prompt on Hawdon before it is mentioned]

<AG, Long Fiction>

18. **At low concentrations, the Cheng-Prusoff equation provides a biased estimate of this process's equilibrium constant. The selectivity of this process can be probed against hundreds of targets at once in ABPP-MudPIT analysis. Different mechanisms for this process can be modeled by setting the parameter alpha to almost zero, exactly one, or to a very large value. Irreversible complexes consisting of covalently-bonded analogues participate in the (\*) "suicide" form of this process. The IC50 measure indicates the concentration at which this process is at half of its maximal effectiveness. By inspecting the x-axis of a Lineweaver-Burke plot, one can differentiate between the oft-confused uncompetitive and non-competitive forms of this process. For 10 points, name this process in which molecules bind to enzymes, decreasing their activity.**

ANSWER: enzyme inhibition [prompt on enzyme modulation; prompt on answers along the lines of changing the activity of an enzyme]

<AG, Chemistry>

19. **One text claims that 18,000 worlds orbit this god's left arm, while his right arm is orbited by 120,000 worlds he will later create. According to another text, this god sits on a throne made of half-fire and half-snow; below that throne is a collection of sapphires, which he used to create the world. After this god wept, the tears mixed with the ocean to create the demonic sea beast Rahab. Prayers to this god are assembled into a "garland" and placed on his head by his loyal servant Sandalphon and a scribe named (\*) Metatron. So-called "shells of evil" named Qliphoth were created by this god, one of whose aspects is the *keter*. This god's infinite form is known as the Ein Sof, which manifests itself through the ten *sefirot* according to Kabbalah mysticism. In more traditional lore, this god is served by Raphael, Michael, and Gabriel, three archangels. For 10 points, name this only god of Judaism.**

ANSWER: the Judaic God [accept specific names of God, such as Yahweh or Jehovah; accept Adonai]

<IJ, Legends>

20. **This commodity is the subject of the report "The Illusion of Control," which notes how Elizabeth Quat called for legislation to regulate it. A "room" named for this good is depicted in the film *The End of the Wild*, in which the basketball player Yao Ming argues that both its legal and illegal sale are harmful. In June 2016, officials seized a Malaysia-bound plane that contained sponge-wrapped pouches of this good in the South Sudan airport. A documentary about this good's (\*) "Last Days" was made by Kathryn Bigelow and argues that the Al Shabaab's terrorism is financed by its illegal sale. China announced that it would phase out and ban this commodity by the end of 2017, and Uhuru Kenyatta ordered that 172 million dollars' worth of this commodity was set on fire in Nairobi National Park alongside the similarly-valuable rhinoceros horn. For 10 points, name this valuable material sought by elephant poachers.**

ANSWER: ivory

<IJ, Geography/Current Events/Other>

Bonuses

1. In essays found in the collection *Virtues and Vice*, this philosopher argued that no one “could be indifferent to morality without error,” holding that self-interest and virtues were linked. For 10 points each:

[10] Name this author, whose only book length philosophical work was *Natural Goodness*. This author’s articles “Moral Arguments” and “Moral Beliefs” argued against the prescriptivism of R. M. Hare.

ANSWER: Philippa **Foot** [or Philippa Ruth **Foot** or Philippa **Bosanquet**]

[10] Philippa Foot proposed a thought experiment in ethics involving this kind of vehicle, which will either kill one person or five people depending on the track that it goes down.

ANSWER: **trolley** problem

[10] This view of ethics resolves the trolley problem by solely looking at the repercussions of each action. It is usually contrasted with duty-driven or deontological ethics.

ANSWER: **consequentialism**

<IJ, Thought>

2. This character has numerous flings with stable boys on his brother-in-law’s estate in a Tennessee Williams play titled for his *Notebook*. For 10 points each:

[10] Name this fictional writer, played by Konstantin Stanislavski in the 1898 Moscow Arts Theater premiere of the play he appears in, who effortlessly seduces a nineteen-year old girl after watching her perform solo in a poorly-written symbolist drama.

ANSWER: Boris **Trigorin** [or **Boris** Alexeevich Trigorin]

[10] Trigorin later abandons Nina in this Russian dramatist’s play *The Seagull*, published eight years before he wrote *The Cherry Orchard*.

ANSWER: Anton **Chekhov** [or Anton Pavlovich **Chekhov**]

[10] In his essay “Birth of an Art,” Tennessee Williams proclaimed all of Chekhov’s major plays, particularly *The Seagull*, to be tragedies describable by this word, because their plots are a “tangle in which all are helpless victims; no one is really to blame.”

ANSWER: tragedies of **inaction**

<AG, Drama>

3. This act is called a “heinous sin of self-pollution” according to the 1712 pamphlet by the theologian Balthazar Bekker that warns of “All [its] Frightful Consequences”. For 10 points each:

[10] Name this activity, which *Coming of Age in Samoa* claimed was practiced by girls starting at the age of six or seven. *Coming of Age in Samoa* also claims that boys did this in public groups.

ANSWER: **autoeroticism** [or **masturbating**]

[10] Women mutually touch the mouth down south in a process called *Ngweko* according to this book, whose other chapters describe a “system of land tenure.” Though its author never saw the operation, this book defends the act of female genital mutilation in the author’s homeland.

ANSWER: **Facing Mount Kenya**

[10] This sexpert wrote a cultural history of autoeroticism called *The Solitary Sex*. His book *Making Sex* advanced the theory that 18th-century European society shifted from viewing women being “imperfect men” to men and women being separate sexes.

ANSWER: Thomas **Laqueur**

<IJ, Social Science>

4. Name these operettas and composers thereof, for 10 points each.

[10] This composer’s satirical operetta *Orpheus in the Underworld* rewrites Eurydice as a woman who hates Orpheus and runs away to elope with Jupiter instead.

ANSWER: Jacques **Offenbach**

[10] Today, this Austrian composer is best-known for the overtures to his several dozen operettas, which include *Light Cavalry* and *Poet and Peasant*.

ANSWER: Franz von **Suppé** [or Francesco Ezechiele Ermenegildo Cavaliere di **Suppé-Demelli**]

[10] In this Hungarian composer’s operetta *Die Csárdásfürstin*, the cabaret singer Sylva and the nobleman Edwin unwittingly travel to the United States just before the outbreak of World War I.

ANSWER: Emmerich **Kálmán** [or Imre **Kálmán**; or Imre **Koppstein**]

<EK, Music/Opera>

5. Since grain storage facilities for the products of this campaign were wholly inadequate, millions of tons of grain produced from this initiative were left to rot. For 10 points each:

[10] Name this 1950s plan to turn Kazakhstan and other arid steppe lands into the breadbasket for the Soviet Union.

ANSWER: **Virgin Lands** Campaign

[10] The Virgin Lands Campaign was the brainchild of this Soviet leader, who denounced his predecessor in the “Secret Speech.”

ANSWER: Nikita **Khrushchev**

[10] Khrushchev was interested in the secret to American farms’ productivity, and thus visited this Iowa corn farmer in 1959. Though he insulted Khrushchev, telling him “for a peasant, you’re a damned poor horse trader,” Khrushchev took a liking to this man, inviting him to the Soviet Union six times to teach agricultural methods.

ANSWER: Roswell **Garst**

<BL, European History>

6. Over sixty members of this ensemble were killed in a plane crash on Christmas Day 2016. For 10 points each:

[10] Name this orchestral, choral, and dance ensemble founded by the Soviet Union to perform classical music, folk songs, and patriotic hymns for its military.

ANSWER: **Red Army Choir** [or **Alexandrov** Ensemble; or **Akademicheskyy** ensemble; or **Academic Ensemble of Song and Dance of the Russian Army named after A. V. Alexandrov**; or **Akademicheskyy ensemble pesni i plyaski Rossiyskoy Armii imeni A. V. Alexandrova**; do not accept “MVD Ensemble”]

[10] Red Army Choir tenor Vladislav Golikov is known for his performances of this third-act aria from Turandot, in which Calaf triumphantly declares that “none shall sleep.”

ANSWER: **“Nessun dorma”**

[10] The *bayan* used by the Red Army Choir is one of these instruments. These instruments use a keyboard, unlike the closely-related *bandoneon* featured in tango music.

ANSWER: **accordion**

<EK, Other Art>

7. While in exile in London, this man published the newspaper *Kolokol* as part of his Free Russian Press, which was banned in his homeland due to its liberal ideas. For 10 points each:

[10] Name this “father of Russian socialism.” This supporter of the revolutions of 1848 satirized Russian society through his characterization of the “superfluous man” in his novel *Who is to Blame?*

ANSWER: Alexander **Herzen**

[10] When Herzen was 22, he was arrested by this early Russian secret police founded in the aftermath of the Decembrist revolt. Nicholas I appointed Alexander Benckendorff to head this organization intended to enforce his policy of “Orthodoxy, Autocracy, and Nationality.”

ANSWER: the **Third Section** [or the **Third Department**; or **Tret'ye Otdeleniye**]

[10] While still in exile in London, Herzen hosted a party where he planned to toast this tsar for liberating the serfs. Unfortunately for this ruler, Herzen changed his mind upon hearing of this tsar’s brutal repression of the January Uprising.

ANSWER: **Alexander II** [prompt on **Alexander**]

<BL, European History>

8. These proteins are categorized as either nickel-iron, iron-iron, or iron depending on the metals found in their active site. For 10 points each:

[10] Name these enzymes that are studied for use in enzyme fuel cells. They can either perform redox upon or heterolytically cleave an extremely light gas.

ANSWER: **hydrogenases**

[10] Hydrogenases which can perform heterolytic cleavage contain cofactors conceptually simple to these mixtures of bulky compounds such as PCy<sub>3</sub> and BCF. Steric hindrance found in the components of these mixtures prevent them from forming an adduct.

ANSWER: **frustrated Lewis pairs** [or **FLPs**]

[10] The metal centers in hydrogenase enzymes are coordinated by ligands consisting of cyanide and this diatomic molecule whose toxicity stems from its extremely high affinity for hemoglobin.

ANSWER: **carbon monoxide** [accept **CO**; accept **carbonyl** ligand]  
<AW, Chemistry>

9. This author wrote that “the land wreathes in rhythm / with your soul, caressed by history / and cruel geography,” in his poem “Had Death Not Had Me in Tears.” For 10 points each:

[10] Name this Ghanaian author of the collection *The Promise of Hope* and the poetic novel *This Earth My Brother*, who was killed in the 2013 Westgate shopping mall attack while attending a literary festival in Nairobi.

ANSWER: Kofi **Awoonor** [or George **Awoonor**-Williams; or Kofi Nyidevu **Awoonor**]

[10] Awoonor was among the writers whose career was kickstarted by the pan-African literary magazine *Black Orpheus*, which was edited by this Nigerian playwright of *Death and the King's Horseman*.

ANSWER: Wole **Soyinka** [or Akinwande Oluwole Babatunde **Soyinka**]

[10] Awoonor's collection *The House by the Sea* draws from this kind of experience, which also informed Soyinka's memoir *The Man Died*. Ngugi wa Thiongo underwent this experience as a direct result of his play *I Will Marry When I Want*.

ANSWER: **imprisonment** [or **being in jail**; or **detention**; or **incarceration**; accept other synonyms]  
<AG, Poetry>

10. This mode of inheritance underlies orofaciodigital syndrome type I, which is lethal for males and requires extensive facial reconstructive surgery for females. For 10 points each:

[10] Identify this uncommon mode of inheritance. In this pattern, assuming complete penetrance, none of the sons of an affected father and unaffected mother will have the disease, but all of the daughters will.

ANSWER: **X-linked dominant** inheritance [prompt on partial answers, such as **X-linked** and **dominant**]

[10] CHAOS surgery can treat a form of X-linked dominant rickets resistant to ingestion of this vitamin, whose deficiency causes normal rickets. This vitamin regulates the concentration of calcium and phosphate in the bloodstream.

ANSWER: vitamin **D** [or **cholecalciferol**; or **ergocalciferol**; accept answers with a number after it, like vitamin **D<sub>3</sub>** and vitamin **D<sub>2</sub>**]

[10] As it is caused by a mutation in the gene *MECP2* on the X chromosome, this X-linked dominant neurological disease almost always affects only females. It usually presents with small hands and feet, microcephaly, and a range of autism-like symptoms.

ANSWER: **Rett** syndrome  
<AG, Biology>

11. Segments of the lines that describe these entities can be said to be “jogs” and “kinks”. For 10 points each:

[10] Name these crystallographic defects that come in “edge” and “screw” varieties. They typically consist of the sudden termination of a plane or bending of a plane in the crystal.

ANSWER: **dislocations**

[10] A dislocation can be described by this vector whose magnitude typically equals half the unit cell length times the square root of the sum of components h, k, and l.

ANSWER: **Burgers** vector

[10] For a lattice with the simple form of this geometry, the burgers vector is simply unit cell length times the components h, k, and l. The face-centered form of this lattice is tied for the densest possible arrangement of spheres.

ANSWER: **cubic** [or face-centered **cubic**]  
<AW, Physics>

12. In this state, a girl named Littless playfully implores her brother to marry her, stating that it would be permitted by the Unwritten Law invented by Harry Thaw when he murdered Stanford White. For 10 points each:

[10] Name this state, which is euphemistically called “The Last Good Country” in that story. Jim Gilmore drunkenly gropes Liz Coates, a waitress who had a crush on him, in a story set “Up in” this state.

ANSWER: **Michigan** [if this is being played at the main site, allow players to point at the ground, say **here**, etc]



[10] Northern Michigan is the implied setting of this story by the same author, published as two separate parts in the collection *In Our Time*, in which the shell-shocked Nick Adams heals from the trauma of the First World War by going on a fishing trip in the woods.

ANSWER: "**Big Two-Hearted River**"

[10] This economical author drew on his boyhood camping and fishing trips in Michigan to write several of his early stories, such as "Up in Michigan" and "Big Two-Hearted River," before turning his eye abroad with stories such as "The Snows of Kilimanjaro."

ANSWER: Ernest **Hemingway** [or Ernest Miller **Hemingway**]

<AG, Short Fiction/Miscellaneous>

13. An Erwin Panofsky essay argues that this painting's title object was inspired by Norse mythology, in contrast to Theophilus Stringfellow Jr., who argued that it is a "microcosm of man." For 10 points each:

[10] Name this landscape by Thomas Cole that depicts a vast sea, a Greek temple, and architectural ruins within and on the rim of the title object.

ANSWER: *The **Titan's Goblet***

[10] Thomas Cole is a member of the school of painting named for this river in New York. Its other painters included Albert Bierstadt and Frederic Church.

ANSWER: **Hudson** River School

[10] In an article about *The Titan's Goblet*, Ellwood Parry argued that the painting was inspired by this artist's *Ulysses Deriding Polyphemus*; his other classical-inspired paintings include *Ovid Banished from Rome*.

ANSWER: J. M. W. **Turner**

<IJ, Painting/Sculpture>

14. This object and a spear gifted from Atalanta are taken to a meeting with Hypsipyle, the foul-smelling queen of Lemnos. For 10 points each:

[10] Identify this purple garment sewn by Athena. A 47-line *ekphrasis* describes how its embroidery depicts seven scenes including the war of the sons of Electryon, the punishment of Tityus, and the rescue of Phrixus.

ANSWER: the **cloak of Jason** [or the **mantle of Jason**; or obvious equivalents; prompt on partial answer]

[10] After being afflicted with a dreadful stink, the residents of Lemnos murder this type of people. Fifty sisters who murder these people must forever pour jugs of water into a bottomless jar as punishment.

ANSWER: **men** [or **male relatives**; or **husbands**; or obvious equivalents]

[10] This goddess curses the women of Lemnos with a nasty stench for neglecting her worship. An image on Jason's cloak depicts Ares's love affair with this wife of Hephaestus.

ANSWER: **Aphrodite** [do not accept "Venus"]

<EK, Legends>

15. The English actress Claire Bloom chronicled her troubled marriage to this writer in her memoir *Leaving the Doll's House*. For 10 points each:

[10] Name this Jewish-American author often criticized for populating his novels with unflattering female characters, such as the anarchist Merry in *American Pastoral*, and the overly-nurturing mother of the title character of *Portnoy's Complaint*.

ANSWER: Philip **Roth**

[10] Roth took revenge on Bloom by fictionalizing her the actress Eve Frame, who destroys her husband Ira Ringold's career as a radio personality by publishing this expose of their relationship, which titles the novel.

ANSWER: ***I Married a Communist***

[10] In *Goodbye, Columbus*, Roth engenders the reader's sympathy with Brenda Patimkin in her relationship with her controlling lover Neil Klugman, who eventually torpedoes the affair by compelling her to perform this action.

ANSWER: get a **diaphragm** [or get **birth control**]

<AG, Long Fiction>

16. A treatise explicating this system, the *Uttara Kalamrita*, may have been written by the playwright Kalidasa. For 10 points each:

[10] Describe this system, known as *vyotisa*, which analyzes elements such as *rasas*, *bhavas*, and the *navagraha*.

ANSWER: Hindu **astrology** [or Hindu **horoscopy**; or Vedic **astrology**; do not accept or prompt on “astronomy”, which is actually real]

[10] Traditional Hindu astrology uses this Sanskrit word, meaning “to unite,” to denote combinations or arrangements of planets. In an entirely different pseudoscientific context, this word preceded by “hatha” describes a bunch of physical exercises of inconclusive health benefit popular in the West.

ANSWER: **yoga**

[10] Many precepts of *yoga* were laid out in the *Yoga Yajnavalkya*, a dialogue between the female philosopher Gargi and one of these sages. An early astrological text was written by Bhrigu, one of the *sapta*, or seven, of these sages regarded as patriarchs of the Vedic religion.

ANSWER: **rishis**

<AG, Religion>

17. This dynasty’s last king enjoyed debauchery, such as filling up a pool with wine and hanging meat from trees, and rowing around said pool with concubines while his party drank from the pool and ate from the trees. For 10 points each:

[10] Name this dynasty. Many artifacts from it were uncovered in its last capital of Yinxu, including many oracle bones, on which are the earliest evidence of Chinese characters.

ANSWER: **Shang** Dynasty

[10] The last king of the Shang, Di Xin, was defeated by Jiang Ziya at this 1046 BC battle, which ended the Shang Dynasty. True to his reputation, Di Xin put on all his jewelry and self-immolated when he lost this battle.

ANSWER: Battle of **Muye**

[10] Many scholars of this early-20th century school of historiographical thought believed that the Shang Dynasty and other parts of early Chinese history did not actually exist and questioned the authenticity of all pre-Qin records. The discovery of solid archaeological evidence helped discredit the views of this school.

ANSWER: **Doubting Antiquity** School [or **yi gu pai**]

<BL, World History>

18. For 10 points each, answer the following about maneuvering a vehicle in outer space.

[10] Once a vehicle is in outer space, it may use its movement relative to a large moon, planet, or some other similar object to alter its trajectory using this method, which exploits the object’s large mass to conserve fuel.

ANSWER: **gravity assist** [or **gravitational slingshot** or **swing-by**; prompt on **slingshot** or **assist**]

[10] NASA’s MESSENGER probe made use of a series of gravity assists to reach this planet, which has an orbital period of 88 days.

ANSWER: **Mercury**

[10] To rotate spacecraft, either control moment gyroscopes or these devices are used. The namesake spinning component of these devices has a variable speed and is used to alter the spacecraft’s torque.

ANSWER: **reaction wheels** [prompt on **flywheels**]

<IJ, Math/Other Science>

19. Name some things about affluent African-Americans before the civil rights era. For 10 points each:

[10] This man’s book *The Story of the Negro* includes several success stories of black entrepreneurs. This leader of the Tuskegee Institute told blacks “cast down your bucket where you are” in his Atlanta Exposition speech.

ANSWER: Booker T. **Washington**

[10] This first self-made female millionaire in American history developed a line of beauty and hair products tailored to black women. She donated much of her wealth to black organizations like the NAACP and the Tuskegee Institute.

ANSWER: Madam C.J. **Walker** [accept Sarah **Breedlove**]

[10] This city’s prosperous Greenwood district—nicknamed “Black Wall Street”—was burned to the ground in a 1921 race riot that occurred after Dick Rowland supposedly raped white elevator operator Sarah Page.

ANSWER: **Tulsa** [accept **Tulsa** Outrage; accept **Tulsa** Race Riot]

<BL, American History>

20. An essay that appeared in this magazine proposes the equation Internet video - pornography = Youtube and argues that unlike television, youtube is not a "capitalist-intensive" medium. For 10 points each:

[10] Name this arts magazine partly started by the author of *The Art of Fielding*, Chad Harbach. Many of its Mark Greif-penned articles appeared in the volume *Against Everything*.

ANSWER: **n + 1**

[10] Another essay in *Against Everything* compares this amateur porn star, whose real name is Natalie Suleman, to Bernie Maddoff in discussing the paradox of treating babies as a "commodity."

ANSWER: **Octomom**

[10] In another essay, Greif notes that the key myth about this word is that "the word has no definition." This term often denotes a subculture that fetishizes "indie" and "alternative" entertainment and lifestyles.

ANSWER: **hipster**

<IJ, Geography/Current Events/Other>