

2021 WORKSHOP: How did I never notice that your username is Santa Claus and mine is reindeer?

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Packet 10

Tossups

1. **It's not related to enlightenment, but one figure achieved this task for the first time by spending ten years in a dream learning to retain his semen. In some tellings, the woodcutter Wu Gang is tasked with chopping a tree forever because he is too lazy to learn how to do this task. As punishment for stealing the materials needed to perform this task during a banquet, one character is boiled by Laozi ("LAO-tzuh") for 49 days. In addition to creating rice cakes, the Jade (*) Rabbit spends its time creating resources to achieve this task. Shortly after performing this task, Chang'e began to float and eventually drifted to the moon. The end goal of Daoists was to accomplish this task, which could be done by eating the peaches of Heaven. For 10 points, name this task that Sun Wukong performed by erasing his name from the book of death.**

ANSWER: becoming immortal [or renewing immortality; accept prolonging life, achieving longevity, living for a long time, or xiān; accept stealing or consuming the elixir of immortality or immortality pills; accept stealing or eating peaches of immortality or peaches of Heaven until "peaches" is read]

<KW, Mythology>

2. **A character with this trait narrates a novel that contains an entirely blank chapter and another accusing the reader of being the only flaw in the book. In the epilogue of a novel titled for figures with this trait, a character contracts a hand infection and recounts her time in the "doghouse," where she receives a notebook from Ana. It's not deafness, but both the *burro* driver Abundio and hostess Eduvigis Dyada have this trait. Juan Preciado learns that most of the residents of (*) Comala have this trait in the novel *Pedro Páramo*. Along with the Mora sisters, Clara Trueba communicates with characters who have this trait in a novel by Isabel Allende. For 10 points, what trait is shared by the title figures of *The House of the Spirits* and *The Posthumous Memoirs of Brás Cubas*?**

ANSWER: dead characters [accept ghosts; accept answers similar to narrating beyond the grave; accept spirits until "*The House of the Spirits*" is read]

<RW, World Literature>

3. **A schism in this organization centered on its first director's support for the Contra-aligned militia group YATAMA. The CIA planted Douglas Durham in this organization to spread misinformation that eventually led to the murder of Annie Mae Aquash. Myrtle Pooh Bear perjured herself in testimony that led to one member of this group being convicted for the murder of two FBI agents. This organization's first director was Russell (*) Means. To oppose the government of Dick Wilson and his FBI-backed paramilitary organization, known as GOONs, this organization occupied a Pine Ridge town. The Trail of Broken Treaties was organized by, for 10 points, what Native American activist group that occupied Wounded Knee in the 1970s?**

ANSWER: American Indian Movement [or AIM]

<HG, American History>

4. **In a film by this director, a mentally-ill man is run over by a train after being coaxed down from a telephone pole. Another film by this director repeatedly mentions its characters' past failed attempts at opening up fried chicken restaurants and cake shops. This director created an inspector who realizes that the local radio station plays the same song each night that a nearby (*) murder is committed in a 2003 film. A man confined to an underground bunker flickers a stairway light to communicate with his wife in a film by this director in which a chauffeur dresses up as a Native American chief at a child's birthday party. That film by this director of**

Memories of Murder follows a poor family's attempts to infiltrate the wealthy Park household. For 10 points, name this South Korean director of *Parasite*.

ANSWER: **Bong** Joon-ho

<VP, Other Arts>

5. The Newton–Wigner and Fokker–Pryce definitions of this entity differ on whether it identifies a worldline or has vanishing phase space Poisson brackets, since this entity cannot be defined in a consistent manner in special relativity. Physically determining this entity for an arbitrary object can involve computing two “total roll” integrals of a linear planimeter, or by finding the intersection of two (*) plumb lines. Two-body problems are solved by working in the reference frame named for this entity. The formula: “volume integral of density times the position vector over the total mass” gives the location of this entity for a continuous body. The total external force on a system equals the mass times the acceleration of this point. For 10 points, name this point about which an object will balance.

ANSWER: **center of mass** [or **CM**; accept **center of gravity**, **center of inertia**, **centroid**, or **barycenter**]

<AF, Physics>

6. Two answers required. Rebecca Zorach claims that one of these two figures functions as an identifying attribute of the other in a painting that depicts them at its center, elaborating on Edgar Wind's analysis of that painting. One of these two figures holds a honeycomb while being attacked by bees and “complaining” to the other in a Lucas Cranach the Elder painting. In a (*) Jean-Antoine Watteau painting, several figures named for one of these characters fly above a group of travelers who embark for the other's birthplace. These two figures kiss in the foreground of an allegorical painting by Agnolo Bronzino that depicts them alongside personifications of Folly and Time. The center of Sandro Botticelli's *La Primavera* depicts, for 10 points, what goddess of love and her son?

ANSWER: **Venus** AND **Cupid** [accept **Aphrodite** instead of **Venus**; accept **Cupid** Complaining to **Venus**; accept **Venus**, **Cupid**, *Folly*, and *Time*]

<FW, Visual Arts>

7. A character created by this author notes that “a picture-postcard is a symptom of loneliness” before attempting to call the British Consul while being beaten by two policemen. Before reading the poem “Lord Ullin's Daughter,” a character in a novel by this author devours raw meat after fighting with an injured dog over a bone. A character uses Lamb's *Tales from Shakespeare* to decode messages sent by his boss (*) Hawthorne in a novel by this author that features the secretary Beatrice Severn. While hiding in a barn, the title character of a novel by this author learns Morse code from Coral Fellows, and is later betrayed by a yellow-toothed mestizo while on the run from the lieutenant. For 10 points, what Catholic author created the whiskey priest in his novel *The Power and the Glory*?

ANSWER: (Henry) Graham **Greene** (The other novel is *Our Man in Havana*.)

<RW, British Literature>

8. Buscarello de Ghizolfi was sent as an ambassador of this state to Philip IV of France under a ruler baptized as Nicholas. This state's founder commissioned a namesake *zij* book of astronomical tables to be compiled at the Maragha observatory to improve astrological predictions. An alliance between Berke and Baybars targeted this state, which resulted in a rout of this state's army by Nogai at the Terek River. This non-Chinese state's (*) Buddhist founder was a son of Tolui who conquered territory southwest of the Chagatai Khanate. That founder of this state defeated the Assassins and lost the Battle of Ain Jalut to the Mamluks. For 10 points, name this Mongol khanate located south of the Golden Horde, which sacked Baghdad under the rule of Hülegü.

ANSWER: **Ilkhanate** [accept **Ilkhanid**, **Hülegüin uls**, or **Ilkhānān**; prompt on **Mongol** Empire until read]

<MM, World History>

9. Marx's writings on this field are the subject of a book by John Bellamy Foster that introduced the term "metabolic rift." A Felix Guattari-coined portmanteau that combines this field and philosophy inspired Arne Næss ("AR-nuh NESS") to formulate an anti-capitalist variant of this field. A book titled for this field "of Freedom" uses analysis of hierarchies to develop the author's conception of this field's "social" form, which makes use of dialectical naturalism. (*) Murray Bookchin has applied anarcho-libertarian thought to this field, which a Gregory Bateson collection applies to the "mind." The "deep" form of this field values the well-being of all life equally. Green socialists apply Marxism to sustainability theories in, for 10 points, what scientific field, the study of the environment?

ANSWER: ecology [accept social ecology, deep ecology, ecosocialism, or ecosophy; accept *Steps to an Ecology of Mind*, Marx's Ecology, or *The Ecology of Freedom*; prompt on environmentalism until "environment" is read by asking "what is the associated scientific discipline?"]

<HG, Social Science>

10. These events are responsible for the only site of upwelling on the western boundary of an ocean. Short and long-term variances in the intensity and timing of these events are termed "bursting" and "vagaries" respectively. The troughs of these events roughly align with the ITCZ, whose northward movement causes trade winds that cross the equator to approach land from the southwest. The conventional theory of these events relies on differences in specific heat between sea and land. The presence of these events defines the Am ("A-M") (*) tropical climate in the Koppen system, which has distinct wet and dry seasons. For 10 points, name these periodic changes in wind patterns that bring intense rain to regions like Southeast Asia and India.

ANSWER: Indian monsoon seasons [or South Asian monsoon seasons; accept the African, Arabian, Asian, East Asian, Southwest, Northeast, Indo-Australian, or North American monsoon seasons; accept monsoon trough or monsoon currents; prompt on wet seasons, rainy seasons, dry seasons, or seasons until read]

<KW, Other Science>

11. The Lipan pastor Robert Soto has led a lengthy battle to legalize his church's use of these objects. Shaker practices influenced a religion named for these objects founded in Oregon by the prophet Jake Hunt, whose followers spun while holding these objects. A law colloquially named for these objects allows for them to be obtained from a national "repository" near Denver. Sweetgrass is (*) fanned with one or several of these items in smudging rituals. These objects are the main decoration of "war bonnets," one of the uses that makes owning them legal only for members of recognized Native American tribes. For 10 points, name these decorative items that Indigenous peoples of the Great Plains often took from golden and bald eagles.

ANSWER: eagle feathers [accept plume or plumage; accept feathers of any specific bird, such as golden eagle or bald eagle; accept feather religion or eagle feather law; prompt on bald or golden eagles, birds, or eagle parts]

<JB, Religion>

12. Furnaces named for this process can be used to intentionally introduce impurities as part of the semiconductor manufacturing process. Plotting peak current versus the square root of the scan rate can be used to quantify the rate of this process for the analyte in a cyclic voltammetry experiment. The Belousov–Zhabotinsky reaction is an example of a system in which this process competes with local reactions, an idea first explored by Alan (*) Turing. Enzymes whose rate is only limited by the rate of this process are called catalytically perfect. The flux of this process is proportional to the negative derivative of concentration according to Fick's first law. For 10 points, name this process in which molecules move down a concentration gradient.

ANSWER: diffusion [accept diffusion furnaces or diffusion coefficient]

<AF, Chemistry>

13. This politician's name appeared in a blue circle in the center of an infamous PowerPoint slide presented by Deltan Dallagnol. The documentary *Beyond Citizen Kane* revisited a controversial debate highlight reel

that this politician blamed for his loss in a 1989 election to Fernando Collor. A program in which poor families receive cash transfers if their children are enrolled in school was introduced in 2003 as part of this politician's (*) Bolsa Familia program. In 2019, *The Intercept* exposed a plan to convict this leader as part of Operation Car Wash in order to prevent his Workers' Party from returning to power. For 10 points, name this former president of Brazil who was succeeded by Dilma Rousseff ("JEEL-ma hoo-SAYF").

ANSWER: Luiz Inácio Lula da Silva

<HG, CE/Geo/Other>

14. The fact that the wife forms the "audience of one" in this text suggests that its romantic elements were intended for women in an argument by L. E. Doherty. A goddess in this text with "cornrows in her hair" appears in a translation that describes a many-turned "scalawag." In a novella inspired by this text, the defendant argues in court that since the "best-looking" and "most beddable" of (*) twelve maids had sex without his permission, he is justified to hang them. In 2017, Emily Wilson translated this text, and Samuel Butler argued that it was written by a young Trapani woman. To avoid 108 suitors, the wife of this text's protagonist unravels Laertes's burial shroud at night. For 10 points, name this epic poem about a hero's journey home to his wife Penelope by Homer.

ANSWER: *The Odyssey* (The book is Atwood's *The Penelopiad*.)

<PS, European Literature>

15. The Bedside Schwartz equation uses a child's height to assess this organ's function by estimating a quantity whose gold standard is found using inulin. The CKD-EPI and MDRD formulas controversially added race as a factor to the Cockcroft–Gault equation, which was the first to consider the role of sex when measuring the amount of creatinine passing through this organ. Approximated clearance rates are routinely up to 20 percent over the true value of this organ's (*) GFR, which measures the rate of flow into the Bowman's capsule. Countercurrent multiplication in this organ facilitates the passive reabsorption of salts in the descending limb of the loop of Henle. For 10 points, nephrons are the functional unit of what paired organ, which filters blood to produce urine?

ANSWER: kidneys

<DB, Biology>

16. A character in this play criticizes her husband for shooting birds and then throwing their carcasses away because "it's wicked to shoot food just because you like to shoot." A character in this play dreams of acquiring a stable in Savannah and comments that his greatest pleasure will be to see "the bricks grow" for a project organized by Mr. William Marshall. The central family of this play intends to (*) arrange a marriage between the first cousins Leo and Alexandra, which Birdie reveals before getting slapped. The theft of railroad bonds is used as blackmail material against Benjamin and Oscar by their sister in this play. For 10 points, Horace Giddens dies of a heart attack in front of his wife Regina in what play about the ruthless Hubbard family, by Lillian Hellman?

ANSWER: *The Little Foxes*

<JVN, American Literature>

17. This concept was compared to a "map... we steer by" by Frank Ramsey, who originated the "Dutch book argument" with his theory that "partial" forms of this concept must accord with the axioms of probability. A paper titled for this concept uses the example of Pierre disliking London. Statements that both assert "P" and deny this state about "P" are the subject of Moore's paradox. A type of logic that deals with this state is called (*) "doxastic." Saul Kripke introduced a "puzzle about" this state. Unlike a related, stronger state, this state [emphasize] *is* possessed by Smith about the man who gets a job while having ten coins in his pocket, in a case introduced by Edmund Gettier. For 10 points, knowledge is often defined as a "justified true" state of what sort?

ANSWER: **belief** [or **credences**; accept justified true **belief**; prompt on propositional attitudes, opinions, or word forms of justifications]

<JB, Philosophy>

18. A 2010 Ruth Harris book about an event during this government begins by describing how a cleaning lady stole a memorandum from a waste basket. The English skills of a leader of this regime upset the balance between parties to an event in this government's capital, according to a 2001 Margaret MacMillan book subtitled "Six Months That Changed the World." This non-German government's "freakish" birth begins a book on its collapse by William L. Shirer, who discussed the popularity of (*) Boulangism ("boo-LAWN-zhism") among its populace. *The Man on Devil's Island* discusses an "affair" during this government centered on the Jewish army officer Alfred Dreyfus. The Franco-Prussian War and the Vichy regime bookend, for 10 points, what numbered French government?

ANSWER: French **Third Republic** [or La **Troisième République**; prompt on France or French Republic by asking "what specific regime?"; do not accept or prompt on "Vichy France"]

<CSI, Other History>

19. In 2018, the multimedia artist Cauleen Smith created a conceptual art exhibition about this musician called *Give It or Leave It*. After a 26-year hiatus, this musician was inspired by the declaration that trance "means to transcend. It means to become transcendental!" to record one final studio album titled *Translinear Light*. This musician began going by the name (*) Turiyasangitananda ("turiya-sangit-ananda") in the 1980s after becoming a *swamini*. While playing in Terry Gibbs's quartet, this musician married a man whose quartet she began playing piano in after replacing McCoy Tyner. Her growing spirituality influenced both the naming of her child Ravi as well as her husband's work on the album *A Love Supreme*. For 10 points, name this jazz harpist whose saxophonist husband recorded *Giant Steps*.

ANSWER: Alice Coltrane [or Alice **McLeod**; accept **Turiyasangitananda** until read; prompt on Coltrane]

<WJ, Auditory Arts>

20. Two brothers of a murdered governor based in this modern-day country won a civil war despite an early loss at Abancay. Four years after this country's capital was founded as "City of the Kings," it was besieged by a general from the Yupanqui ("yoo-PAN-kee") family. The third chapter of *Guns, Germs, and Steel* recounts a "collision" in this modern-day country where a ruler was captured from his litter after throwing a Bible to the ground. Despite paying the largest (*) ransom in history, that ruler was killed in this country after ordering the death of his brother Huáscar. The last remnant of an empire based in this country was destroyed when the Spanish conquered Vilcabamba and killed Túpac Amaru. For 10 points, name this country where Francisco Pizarro captured Atahualpa, the Inca Emperor.

ANSWER: **Peru** [or Republic of **Peru**; or República del **Perú**; prompt on Incan Empire by asking "what modern-day country was it based in?"]

<CSI, European History>

Bonuses

1. Answer the following about the history of unicameralism in the United States, for 10 points each.

[10e] This document established the first unicameral legislature in the United States at the federal level. The eventual New Jersey Plan took influences from this first constitution of the United States.

ANSWER: **Articles of Confederation** [or The **Articles of Confederation** and Perpetual Union]

[10m] This state began using a unicameral state legislature in 1937 and still does today. The move to create “The Unicameral” in this state was part of an initiative to lower governmental expenses following the Great Depression.

ANSWER: **Nebraska**

[10h] This person is considered the originator of Nebraska’s unicameral legislature. As a senator from Nebraska, this person campaigned for unicameralism as well as the direct election of senators as a progressive Republican.

ANSWER: George W. **Norris**

<EL, American History>

2. This religion is the largest religion based on panentheistic (“pan-EN-thee-IST-ick”) doctrine. For 10 points each:

[10e] Name this religion, whose spiritual leadership followed a line of succession that started with Guru Nanak and continues today with the Guru Granth Sahib.

ANSWER: **Sikhism** [or **Sikhi**]

[10m] The Golden Temple is a central place of worship for Sikhs and still stands today in this city in Punjab.

ANSWER: **Amritsar**

[10h] Some Sikhs are members of a ritual order of orthodox believers, called the Khalsa, whose membership often includes commitment to external signals with hidden meaning. For example, Kara refers to wearing *this* kind of object to symbolize unbreakable unity with one’s creator.

ANSWER: **bracelet** [accept **bangle**]

<ABD, Religion>

3. In a novel titled for one of these buildings, a character forgives his sister by taking her on a fishing trip after his rabbits die when she forgets to feed them. For 10 points each:

[10h] Name this type of building that titles a novel whose closing epigraph reads, “in their death, they were not divided.” After defaulting on his debts, a character beats the owner of one of these buildings with a horsewhip.

ANSWER: **mill**s [accept *The **Mill** on the Floss* or Dorlcote **Mill**]

[10e] This author of *The Mill on the Floss* created Edward Casaubon, who forbids his wife Dorothea Brooke from marrying Will Ladislaw after his death, in her novel *Middlemarch*.

ANSWER: George **Eliot** [or Mary Ann **Evans**]

[10m] Margaret Hale rejects mill owner John Thornton’s proposal of marriage after she saves him from a mob of mill workers in this other Victorian author’s novel *North and South*.

ANSWER: Elizabeth (Cleghorn) **Gaskell**

<RW, British Literature>

4. A history book by Mike Rapport claims that the events of this decade saw the “germinating bulbs” of European authoritarianism. For 10 points each:

[10m] Name this decade whose events, such as the Frankfurt Parliament, prompted the famous quote that “the great questions of the age” would be decided by “iron and blood.”

ANSWER: **1840s**

[10e] The years 1848 and 1849 saw a pan-European “Spring of Nations” that included a revolution centered in this country. Lajos Kossuth briefly ended the rule of the Austrian Hapsburgs in this country.

ANSWER: **Hungary** [or **Magyarország**]

[10h] Rapport contrasts the strong leadership of statesmen like Clemens von Metternich with the rule of this mentally-disabled but “benevolent” Austrian emperor, who abdicated in 1848.

ANSWER: **Ferdinand** I [accept **Ferdinand V** of **Bohemia** or **Ferdinand** the Benevolent]
<CSI, European History>

5. 2020 was an unpredictable year for U.S. national parks. For 10 points each:

[10h] When most parks closed to slow the spread of COVID-19, this island's Kalaupapa National Historical Park stayed operational because it's home to former residents of a leper colony that was originally founded in the 1860s.

ANSWER: **Moloka'i**

[10e] Strong earthquakes near Boise and Salt Lake City refueled speculation about a cataclysmic eruption of this national park's supervolcano, which is located in Wyoming.

ANSWER: **Yellowstone** National Park

[10m] In September, Yosemite National Park closed due to poor air quality from smoke caused by this largest single fire in California's history, which started near Shaver Lake.

ANSWER: **Creek** Fire [or **Creek** Wildfire]

<JE, CE/Geo/Other>

6. Activation of bonds between these two elements typically has an organometallic intermediate. For 10 points each:

[10e] Name these *two* elements. In organic chemistry, reductions most commonly manifest as an increase in the number of bonds between these two elements, such as in the reduction of ethylene to ethane.

ANSWER: **carbon** AND **hydrogen** [or **C** AND **H**; accept **C-H** bonds; prompt on partial answer]

[10m] Some C-H bond activations, such as the Murai reaction, make use of these groups, which influence a reaction's stereochemistry. Ortho/para or meta activators in EAS reactions also are examples of these groups.

ANSWER: **directing** groups [accept ortho/para **directors**]

[10h] This series of reactions is an efficient method of functionalizing the C-H bonds of alkanes. This system uses potassium tetrachloroplatinate ("tetra-chloro-platinate") and potassium hexachloroplatinate ("hexa-chloro-platinate") as catalysts and has a similar mechanism to the enzyme methane monooxygenase ("mono-oxygen-ase").

ANSWER: **Shilov** system

<AF, Chemistry>

7. A paper by Robin Lee analyzes this phenomenon in the early 2000s video game industry by studying the impact of console-exclusive games. For 10 points each:

[10m] Name this phenomenon in which one firm owns or controls multiple stages of production at various points of the supply chain. "Bundling" hardware and software is often seen as an example of this process.

ANSWER: **vertical integration** [or word forms like **vertically integrated**; prompt on integration]

[10e] In 2020, this cabinet department co-issued new Vertical Merger Guidelines with the Federal Trade Commission. Headed by the Attorney General, this department and the FTC prosecute violations of antitrust law.

ANSWER: Department of **Justice** [or the **DOJ**]

[10h] The guidelines discuss evaluating whether a merger will "eliminate" this phenomenon, in which two firms upstream and downstream in a supply chain both mark up prices above cost, raising the cost to the consumer twice.

ANSWER: **double marginalization** [accept elimination of **double marginalization** or **EDM**; prompt on marginalization]

<JK, Social Science>

8. Marloes Janson explores the roles of female and male griots ("gree-OHS") in narrating this work in an article titled "The Narration of [this work] as a Gendered Activity." For 10 points each:

[10m] Name this work about a hunchbacked child who grows up to defeat the sorcerer-king Soumaoro Kanté and to found the Mali empire.

ANSWER: *Epic of* **Sundiata** [or *Epic of* **Sunjata** or **Sundiata Keita**]

[10e] The *Epic of Sundiata* is usually conveyed through this manner by griots. Milman Parry and Albert Lord theorized that the *Iliad* was composed this way, rather than through a written tradition.

ANSWER: **oral** tradition [accept descriptions indicating it is **spoken** or **sung**]

[10h] In *The Epic of Sundiata*, Soumaoro Kanté uses this kind of object as an oracle after receiving it from Jinna Maghan. The griot Balla Fasséké then sneaks into the palace and plays this instrument, impressing Soumaoro.

ANSWER: **balafon** (“BAA-luh-fawn”) [prompt on **xylophone**]

<CM, World Literature>

9. The PiggyBac one of these entities outperforms the Frog Prince and Sleeping Beauty systems in mammalian cell lines and was used by Woltjen to introduce the Yamanaka factors into fibroblasts. For 10 points each:

[10m] Name these DNA sequences. The 1983 Nobel Prize in Physiology or Medicine was awarded for the discovery of these sequences in maize, where they vary the distribution of pigmentation in leaves.

ANSWER: **transposons** [or **Tns**; accept **transposable elements** or **TEs**; accept **transposases**; prompt on, but DO NOT REVEAL, **jumping genes**]

[10h] *Gypsy* elements in the *flamenco* locus of *Drosophila* are silenced by these small RNAs, which target any transposons that accidentally land in their part of the chromosome. These non-coding RNAs skip pre-processing with Dicer and are amplified by ping-ponging between members of a namesake subfamily of Argonaute proteins.

ANSWER: **piRNAs** [or **Piwi-interacting** RNAs; accept “ribonucleic acid” in place of “RNA”]

[10e] Transposons are called “jumping” examples of these basic units of inheritance, which code for proteins.

ANSWER: **genes** [accept jumping **genes**]

<CSH, Biology>

10. Léonin, the composer of the “great organum book” *Magnus Liber*, was the earliest member of this group of composers, which also included Pérotin. For 10 points each:

[10m] Name this musical school of polyphony that worked during the *ars antiqua* period. The place that this school is named for also titles a famous Guillaume de Machaut mass.

ANSWER: **Notre Dame** school of polyphony [accept **Notre Dame** de Paris; accept *Messe de **Notre Dame***]

[10h] Much of what we know today about the Notre Dame school was collected in a treatise on medieval music theory by this unknown person, who was given his enigmatic designation by musicologist Edmond de Coussemaker.

ANSWER: **Anonymous IV** (“four”)

[10e] Much of Léonin’s *Magnus Liber* is devoted to *clausulae* (“CLAW-zoo-lie”), which are melismatic sections of descant found in this type of monophonic religious chant.

ANSWER: **Gregorian** chant [prompt on **plainchant**]

<WJ, Auditory Arts>

11. Countless contemporary works about “natural kinds” have borrowed the metaphor of “carving nature at its joints” from this dialogue. For 10 points each:

[10h] Name this Platonic dialogue in which Socrates imagines the soul being pulled by two horses while discussing topics like rhetoric and madness with the title character.

ANSWER: **Phaedrus**

[10e] In the *Phaedrus*, Socrates compares the process of dividing reality into classes to meat-carving while trying to define this concept. Forms of this concept such as *eros* and *philia* are discussed in the *Symposium*.

ANSWER: **love**

[10m] This philosopher used Butcher Ding’s ability to carve meat at its joints as an example of effortless skillful action. A book titled for this thinker contains parables about “happy fish” and a talking skull.

ANSWER: **Zhuangzi** (“JWONG-dzuh”) [or Master **Zhuang**; or **Chuang** Tzū]

<JB, Philosophy>

12. This essay claims that “love takes off the masks that we fear we cannot live without and know we cannot live within,” before asking, “do I really want to be integrated into a burning house?” For 10 points each:

[10h] Name this essay that recounts its author's experiences with his church and a majority-white Jewish school. This essay critiques Elijah Muhammad's belief in racial separatism during a dinner party with the Nation of Islam.

ANSWER: "**Down at the Cross**" [or "**Down at the Cross: Letter from a Region in my Mind**"]

[10m] The author of "Down at the Cross" titled an essay recounting his father's funeral during a Harlem race riot after this novel. The essay "Everybody's Protest Novel" is part of that author's collection titled for this novel.

ANSWER: **Native Son** [accept "Notes of a **Native Son**"]

[10e] In "Everybody's Protest Novel," James Baldwin criticized this author for depicting a kind of "virtuous sentimentality," perpetuating an association between whiteness and purity, in her novel *Uncle Tom's Cabin*.

ANSWER: Harriet Beecher **Stowe**

<RW, American Literature>

13. A 2012 book on *The Wars of* this country by diplomat Peter Tomsen describes it as a "shatter zone." For 10 points each:

[10h] Name this country, where Tomsen claims a "complicated mosaic" acted to replace the modernizing King Amanullah with a ruler who oversaw a nearly-fifty-year "era of tranquility."

ANSWER: **Afghanistan** [or Islamic Republic of **Afghanistan**]

[10e] Tomsen describes this country's unsuccessful invasion of Afghanistan as "one state model... forced onto another." The American backing of the Mujahideen during that 1980s invasion turned it into a proxy war.

ANSWER: **Soviet Union** [or **Union of Soviet Socialist Republics** or **U.S.S.R.** or **C.C.C.P.**; prompt on **Russia**]

[10m] According to Tomsen, the "complete lack" of an American policy towards Afghanistan prior to 9/11 contributed to the later delegitimizing of this Afghan president, whose selection the U.S. had strongly supported.

ANSWER: Hamid **Karzai**

<CSI, Other History>

14. This song, which alternates between 5/8 ("five-eight") and 6/8 ("six-eight") time, compares its title figures to a "Son of Steel and Daughter of Air" and declares, "He's a hero, a lover, a prince / She's not there." For 10 points each:

[10h] Name this song in which a character sings, "I wish I could fly / And magically appear and disappear."

ANSWER: "**Superboy and the Invisible Girl**"

[10e] "Superboy and the Invisible Girl" is a song from this 2009 Tom Kitt and Brian Yorkey musical about Diana's struggle with bipolar disorder. This musical won the 2010 Pulitzer Prize for Drama.

ANSWER: **Next to Normal**

[10m] In *Next to Normal*, Diana undergoes a hypnotic therapy session during which she sees Gabe singing about having this trait. In a song titled for this trait from Stephen Sondheim's musical *Company*, Bobby implores, "Somebody crowd me with love / Somebody force me to care."

ANSWER: being **alive** [or equivalents; accept "I'm **Alive**"]

<EGU, Other Arts>

15. Linear versions of these machines consist of a series of hollow cylinders that get progressively longer to account for length contraction, since the objects inside these machines travel at relativistic speeds. For 10 points each:

[10e] Name these devices that often include loops several kilometers in diameter. Experiments using the largest of these devices provided evidence for the Higgs Boson in 2012.

ANSWER: **particle accelerator**s [or **atom smasher**s; accept **linear accelerator**s; accept **linacs**; accept **synchrotrons** or **cyclotrons**; accept (Large Hadron) **colliders**; prompt on **LHC**]

[10m] Discoveries made at this facility include CP violation, the muon neutrino, and, with SLAC ("slack"), the J/psi ("jay-sigh") meson. This Long Island facility houses the Relativistic Heavy Ion Collider, which researches early universe matter.

ANSWER: **Brookhaven** National Laboratory [or **BNL**]

[10h] This model is widely used to estimate geometric quantities in heavy ion collisions, based on participation of nucleons in sub-collisions. Its namesake also pioneered the field of quantum optics.

ANSWER: **Glauber** model

<BW, Physics>

16. Ram Prasad Bismil planned a robbery of one of these places that aimed to fund the socialist Hindustan Republican Association. For 10 points each:

[10h] Name this type of place that was the target of the 1925 Kakori Conspiracy. The death of 64 prisoners from the Malabar Rebellion in one of these places led to massive protests against the British Raj.

ANSWER: **train** [accept **wagon** or **locomotive** or any synonym]

[10e] The HRA formed in the aftermath of this man's arrest in 1922. Later, this man led a salt march against British colonial rule and espoused a philosophy of nonviolent resistance called satyagraha.

ANSWER: Mohandas Karamchand **Gandhi** [accept Mahatma **Gandhi**]

[10m] Another group that used violence to fight British rule was the second iteration of the Japanese-supported Indian National Army, led by this man. This man also led the Forward Bloc of the Indian National Congress.

ANSWER: Subhas Chandra **Bose**

<AT, World History>

17. A character tells a man with this job, "You are reason and your wife is instinct," after he complains about wearing a chef's hat in a play that has "nine or ten" people with this job in "bright cheerful clothes." For 10 points each:

[10h] Name this profession. At the beginning of a play, a woman with this profession arrives late "dressed in white from head to foot, with... a charming lapdog in her arms."

ANSWER: **actors** [or **actresses**; accept **leading** lady or **leading** man; prompt on **theatre**]

[10m] The actors encounter this group of people, one of whom claims to be possessed by a "Demon of Experiment." These people laugh at the actors for their flawed imitation of them.

ANSWER: the **six characters** [accept **Six Characters in Search of an Author** or **Sei personaggi** or **Sei personaggi in cerca d'autore**; prompt on **characters**]

[10e] This Italian playwright of a "theatre in the theatre" trilogy wrote *Six Characters In Search of an Author*.

ANSWER: Luigi **Pirandello**

<FW, European Literature>

18. A 1928 paper discusses how this phenomenon breaks the "cake of custom" and creates the "marginal man." For 10 points each:

[10m] Name this phenomenon, which David Card argued does *not* lower wages. Sociological discussions of this phenomenon often analyze its causes in terms of "push" and "pull" factors.

ANSWER: human **migration** [or **immigration**; or **emigration**; accept more specific answers like mass **migration** or descriptions like people **moving** or **resettling**]

[10h] This mentor of Everett Stonequist originated the "marginal man" theory. This researcher's 1925 collaboration with Ernest Burgess, *The City*, made them the leaders of the Chicago School of sociology.

ANSWER: Robert Ezra **Park**

[10e] Loïc Wacquant ("lo-EEK wack-WANT") studied "advanced marginality" in "hyper" places of this sort, which are impoverished inner city areas inhabited by minorities. A Louis Wirth book studies the Jewish quarters traditionally known by this term.

ANSWER: **ghettos** [prompt on **slums**]

<EL, Social Science>

19. Candidates for this process can be assessed by how much translocation occurs from their roots to their leaves, which can happen to an extreme degree in hyperaccumulators. For 10 points each:

[10h] Name this process, which can be performed by phytostabilizers and phytoextractors. Fast-growing, fast-transpiring species like poplars can efficiently perform this process via volatilization (“volatil-ization”).

ANSWER: phytore**mediation** [or biore**mediation**; accept environmental **remediation**]

[10m] Potential phytoremediators *Avicennia* and *Rhizophora* are members of these communities, which are the largest sinks of blue carbon. These ecosystems can protect from the physical weathering of extreme weather.

ANSWER: **mangrove** forests [accept **mangrove** swamp or **mangal**; prompt on wetlands]

[10e] Mangrove forests can be found in these marine ecosystems defined by their brackish water. These habitats can be found at the mouths of rivers and provide a wide variety of salinities for shellfish and juvenile fish.

ANSWER: **estuaries** [or **estuarine** habitats; prompt on drowned river valleys]

<KT, Other Science>

20. Louis Wain’s popular illustrations of these animals gradually became more bizarre as his mental health deteriorated, possibly as a result of parasites he contracted from these animals. For 10 points each:

[10e] A black one of what kind of housepet stands on the bed of the title courtesan in Eduard Manet’s *Olympia*?

ANSWER: **cats**

[10m] A Wain illustration of one of these events depicts two cats surrounded by a flock of owls. A black horse with blank white eyes peers through a red curtain in a painting titled for one of these events.

ANSWER: **nightmares** [prompt on dreams; prompt on bad dreams, night terrors, or related terms] (*The Nightmare* is by Henri Fuseli.)

[10h] Like Louis Wain, this other Victorian artist spent time in Bethlem hospital, where he was sent after mistaking his father for the Devil in disguise and stabbing him. A Queen song is titled in homage to this artist’s major painting, *The Fairy Feller’s Master-Stroke*.

ANSWER: Richard **Dadd**

<JB, Visual Arts>