

## Tossups

0. **Along with gray, these are the two colors found among the six gems on the body of a creature said to have hauled the continents with ropes. Celio tasks the player with retrieving items of these two colors to power a Network Machine. Those items can be found in chambers containing Braille inscriptions in the Dotted Hole and Mt. Ember. These are the two colors of a magnetic creature based on the Easter Island moai that possesses a prominent mustache. (\*)** Flashing lights of these two colors in the infamous *Electric Soldier Porygon* episode caused hundreds of seizures. Drew's signature Pokémon holds roses of these two colors. The two varieties of Basculin, Plusle and Minun, and regular and Shiny Gyarados all differ by these two colors. For 10 points, name these two colors that give their name to the first two *Pokémon* games released in the U.S.

ANSWER: red and blue [or ruby and sapphire] <KG>

1. **These things are the subject of Steve Reicher's influential St. Paul's study. A book about these things opens with a section on the fear of being touched. The idea that these things go through the stages of submergence, contagion, and suggestion was theorized by Gustave Le Bon. Sand and forests are among the symbols of these things proposed in a book which examines in detail the memoirs of (\*)** Daniel Paul Schreber. The emergent norm theory of these things has been criticized by proponents of the deindividuation theory. Charles Mackay wrote a book about "extraordinary popular delusions" and the madness of these groups, who are also the subject of a book by Elias Canetti. For 10 points, name these groups which include audiences and mobs.

ANSWER: crowds [prompt on "groups" before mentioned; accept riots before "touched"] <WN>

2. **Xuanzang theorized that one of these beings lived in the Pothigai hills. In Chinese tradition, one of these beings received eleven heads and a thousand arms. One of these beings was once a maiden and is usually depicted carrying a staff and holding a wish-granting jewel. These beings underwent either king-like, boatman-like, or shepherd-like paths. These beings must embody six (\*)** *paramita*, or "perfections," and undergo ten stages called *bhumi*. Dharmakara was one of these beings when he took his forty-eight vows. These beings include Avalokiteshvara and Maitreya, the latter of whom will appear when the world has lost all *dharma*. For 10 points, name these enlightened beings venerated by Mahayana Buddhism who stay on Earth to help others achieve nirvana.

ANSWER: bodhisattvas <KG>

3. **An essay on this philosophy distinguishes between tools and the projects they are used for and notes that tools are less subject to innovation than projects. Six canons defining this philosophy, including "affection for the proliferating variety and mystery of human existence," are laid out in a book on this philosophy. The history of this philosophy is the subject of a 2011 book by Corey Robin, and (\*)** Russell Kirk wrote a book about its "mind." In France, this philosophy is often traced back to Louis de Bonald and Joseph de Maistre. This philosophy was defined as the tendency to prefer "the familiar to the unknown" and "present laughter to utopian bliss" in an essay by Michael Oakeshott. Edmund Burke is held to be the modern father of this philosophy. For 10 points, name this political philosophy contrasted with liberalism.

ANSWER: conservatism [accept word forms] <WN>

4. **When this phenomenon occurs between a region and its compliment, entropy has a leading term proportional to the area of the boundary and subleading terms which depend on the shape of the boundary. Anton Zeilinger is best known for experiments on particles which experience this phenomenon. It's not mixing, but when a Hamiltonian may be split into the direct product of two factors, the entropy due to this**

**phenomenon is equal to the (\*) negative partial trace of the reduced density matrix times the log of that matrix.** This phenomenon is absent if the density matrix can be factorized, which is the case for product states. Bell states experience the maximal amount of this phenomenon. Particles in this state were discussed in a paper by Einstein, Podolsky, and Rosen. For 10 points, name this phenomenon which Einstein described as “spooky action at a distance.”

ANSWER: quantum entanglement <BM>

**5. This man convinced his city to let the general Diopceithes keep his position in Thrace. This man committed suicide using poison from a reed on the island of Kalaureia after Antipater ordered him captured. After Meidias slapped this man at the Dionysia festival, he accused Meidias of hubris. This man and his rival, a member of the Amphictyonic League, worked to broker the Peace of Philocrates. This man blamed his rival, (\*) Aeschines, for inciting the Fourth Sacred War, during a trial in which he defended Ctesiphon. According to Plutarch, this man placed pebbles in his mouth to improve his speaking ability, which was demonstrated in *On the Crown*. For 10 points, name this Greek orator who inspired Cicero through his speeches critical of Alexander the Great’s father, the *Philippics*.**

ANSWER: Demosthenes <KG>

**6. A woman in this play quips about her past life as an “Irish rat” who was rhymed to death. One character in this play learned to swear “by his honor” from a knight who swore by his honor of the tastiness of rotten pancakes and mustard. On the eve of launching a military expedition, one of the villains of this play takes up the monastic life after a chance encounter with a holy man. The most famous speech in this play describes a “second childishness and mere oblivion, (\*) sans teeth, sans eyes, sans taste, sans everything.”** Phoebe weds Silvius and Duke Senior regains the throne from his brother Duke Frederick at the end of this play, which is mainly set at the Forest of Arden, where Jacques delivers the “seven ages of man” speech. For 10 points, name this Shakespeare comedy in which Orlando and Rosalind get together, and we learn that “all the world’s a stage.”

ANSWER: As You Like It <AG>

**7. During a tense standoff in this battle, a man named Elias Brown sold hard cider to troops from both sides. One side in this battle accidentally set a local meetinghouse on fire, but helped put out the fire. This battle, as well a previous battle, was the subject of the engravings which launched Amos Doolittle’s career. Forces withdrawing after losing this battle were rescued by a future Duke of Northumberland named Hugh Percy. (\*) John Buttrick ordered his soldiers to fire at this battle. Isaac Davis was killed at the North Bridge during this battle, which started after Thomas Gage sent troops after munitions hidden on Barrett’s Farm. Ralph Waldo Emerson wrote about “the shot heard round the world” in a poem named for this battle. For 10 points, name this battle of the American Revolution which followed the Battle of Lexington.**

ANSWER: Battle of Concord [prompt on “Battles of Lexington and Concord”] <WN>

**8. The musicologist Rudolf Steglich identified the ascending fourth as a unifying motif throughout this composition. Only the current Watkins Shaw edition of this work assigns an Air in 3/4 time from it to the alto. Trumpets enter “da lontano e un poco piano,” or “from afar and somewhat quietly,” for the first time several sections into this work. Purely instrumental segments in this work include an opening E minor French overture for oboes and strings called the “Sinfony,” and an interlude inspired by (\*) shepherd-bagpipers known as the “Pifa.” The first of its three parts includes the arias “Comfort ye my people” and “Ev’ry valley shall be exalted.” Audience members stand in this oratorio’s most famous section in a tradition originated by a London performance attended by King George II. For 10 points, name this oratorio containing the “Hallelujah Chorus,” by Handel.**

ANSWER: George Handel’s Messiah [or HWV 56] <AG>

9. When a priest in this novel makes a dramatic pause in his sermon, a girl says “If that story about hell is a lie, we’re all fucked,” and the priest declares she is possessed. This novel ends with a woman writing while sitting in a mansion beside the body of her grandfather, and with the revelation that she is pregnant by an unknown man. Nana dies of fright in an earthquake in this novel which breaks all of the bones of another character. This novel begins with the announcement that the (\*) dog Barrabás “came to us by sea.” In this novel, Rosa dies by drinking poison meant for her politician father; Clara blames herself for predicting the death, and stops speaking for nine years. This novel is about the del Valle and Trueba families, the latter of whom lives in the hacienda Las Tres Marías. For 10 points, name this debut novel by Isabel Allende.

ANSWER: The House of the Spirits [or La casa de los espíritus] <WN>

10. 30 Doradus is the most active location for this process in the local group. Larson’s laws relate the size and mass of structures where this occurs to velocity dispersion and density, and the depletion time describes the rate of this process in those structures. This process will only begin if a certain energy is below the critical value of three fifths times  $G M^2$  over  $R$ , and the distribution of this process’ result is described by an initial mass function. The (\*) Orion nebula is an important close site for this process, which occurs in Bok globules. It begins when molecular clouds exceeding their Jeans length collapse, and it ends with its product entering the main sequence. For 10 points, name this process which results in the birth of objects like the sun.

ANSWER: star formation [prompt on gravitational collapse] <BM>

11. A novel by this author begins with the question “What makes Iago evil?” and is about a woman whose father taught her that if you overturn a rock, there’s likely to be a rattlesnake underneath. The protagonist of that novel by this author compulsively drives on the freeway, going nowhere in particular. She wrote a novel about the actress Maria (“Mar-eye-uh”) Wyeth. This author’s husband John (\*) Gregory Dunne died while her daughter Quintana Roo lay unconscious in a hospital. One of her essays begins with the line “We tell ourselves stories in order to live.” For 10 points, name this author of the novel *Play It As It Lays* and the memoir *The Year of Magical Thinking*, as well as essay collections like *The White Album* and *Slouching Towards Bethlehem*.

ANSWER: Joan Didion <WN>

12. Lina Stern was the only survivor of an event in which members of this profession were murdered. A member of this profession was supported by Giangiacomo Feltrinelli as well as the CIA, which did so by giving out objects to Soviet tourists in Western Europe. A trial targeting members of this profession was documented in the report *The White Book*, and sparked a public demonstration called the Glasnost Meeting. Two members of this profession were targeted in the Sinyavsky-Daniel (\*) show trial. Stalin referred to members of this profession as “engineers of the human soul.” A member of this profession was forced to refuse a 1958 Nobel Prize. Unauthorized reproduction of products of this profession was called *samizdat*. For 10 points, name this oft-censored profession whose members included Boris Pasternak.

ANSWER: writers [or authors; accept specific types, like poets or novelists] <WN>

13. One of these items is being held up at the back of Judith Leyster’s *The Last Drop*. In Ambrogio Lorenzetti’s *Allegory of Good and Bad Government*, the figure of Temperance holds one of these objects. One of them sits on a table in front of the musicians in Veronese’s *Wedding at Cana*. The figurehead on the boat in Thomas Cole’s *Voyage of Life* series holds one of these items. One of them is just to the left of the (\*) magic square in Dürer’s *Melencolia I*, and another is held by Death in *Knight, Death and the Devil*. One of them is tucked behind the head of a bald, bearded man in Bronzino’s *Venus, Cupid, Folly and Time*. For 10 points, name these objects representing the passage of time.

ANSWER: hourglasses [or sand timers] <WN>

14. The pioneering female anthropologist Gertrude Caton-Thompson was targeted with a lot of hostility for her assertions about this city. After the destruction of this city, the craftsmanship it pioneered moved to Khambi to its south. The earliest written record of this city was made by Vicente Pegado, captain of the garrison at Sofala. Robert Gayre is the most prominent historian to claim that this city was built by a Jewish-descended group called the (\*) Lemba. The “Conical Tower” at this site was constructed between the two walls of its “Great Enclosure.” One of the eight soapstone bird carvings recovered from this site appears on the flag of a modern-day country. For 10 points, name this Shona-constructed fortified city located in the hills of a namesake southern African country.

ANSWER: Great Zimbabwe <AG>

15. An anthropomorphic sculpture of one of these animals from ancient Mesopotamia is the fifth-most expensive sculpture ever sold, and is named after the Guennol collection. The *Marzocco* is a sculpture of one of these animals which is a symbol of Florence, which is also the site of two of these animals named after the Villa Medici. Frédéric Bartholdi sculpted one of these animals to commemorate the Siege of Belfort. One of these animals lying in a hole in a (\*) cliff commemorates the Swiss Guards killed during the 1792 storming of the Tuileries Palace, and was sculpted by Bertel Thorvaldsen. Edwin Landseer sculpted four of these animals at the base of Nelson’s column. E. C. Potter sculpted two of these animals named Patience and Fortitude at the entrance to the New York Public Library. For 10 points, name this animal whose body was combined with a human head to make the Sphinx.

ANSWER: lions [or lionesses] <WN>

16. Cloanthus wins the first contest in the funeral games for Anchises by praying to this god. The seven-line Homeric Hymn to this god calls him the “lord of Helicon and wide Aegae.” During the Gigantomachy, this god killed Polybotes by hurling part of the island of Kos at him. Shortly after his birth, this god was raised on Rhodes by the Telchines. This god disguised himself as Enipeus to mate with (\*) Tyro, and turned Caeneus into a woman after raping him. This god and Apollo temporarily lost their divine authority and were forced to build walls for Laomedon, king of Troy. The blind Polyphemus prays to this god, his father, for revenge against Odysseus. This god’s gift of a salty spring was judged inferior to Athena’s gift of an olive tree when Athens was looking for a patron deity. For 10 points, name this Greek god of horses, earthquakes, and the ocean.

ANSWER: Poseidon [or Neptune] <AG>

17. A formylation reaction of this type in which the reactant is treated with hexa-methylene-tetramine in an acidic catalyst is named for Duff. The iminium cation produced in the first step of the Vilsmeier-Haack reaction then undergoes a reaction of this type. A carbocation historically known as the sigma complex or Wheland intermediate forms during this type of reaction. Sulfuric acid catalyzes a (\*) nitration in a commonly-taught example of these reactions. Different substituents in these reactions are either ortho/para or meta-directing. A Lewis acid catalyst such as aluminum chloride is used in a reaction of this type that broadly comes in acylation and alkylation types. For 10 points, name these reactions, such as one named for Friedel and Crafts, in which a substance attracted to electrons replaces hydrogen on an aromatic ring.

ANSWER: electrophilic aromatic substitution [or EAS; or electrophilic substitution; prompt on “substitution”; prompt on Friedel-Crafts acylation or alkylation even though those don’t apply to everything] <AG>

18. This country was where 17-year-old Sohane Benziane died after being doused in gasoline and burned. A resident of this country named Samira Bellil wrote the book *In Gang Rape Hell* and co-founded a group named “Neither Whores Nor Doormats.” In 1989, three middle schoolers in this country’s city of Creil were suspended for refusing to remove their headscarves. Fadela Amara advocates for the rights of women living in this country’s often-impoorished suburbs, called (\*) *banlieues*. A 2010 face-covering ban outlawed this

country's residents from wearing niqabs or burqas. For 10 points, name this country home to the right-wing politician Marine Le Pen, who placed third in an election won by François Hollande.

ANSWER: France [or French Republic; or République Française] <KG>

19. An N-acetyl modified version of this compound is administered to treat acetaminophen overdose. A “string protein” named for this compound interacts with several SNAREs and is heavily palmitoylated on this residue near the C-terminus. It's not lysine, but ubiquitin is first attached to this amino acid in the E1 ubiquitin activating enzyme, and then transferred to this amino acid again on the E2 ubiquitin conjugating enzyme. Papain is an example of this amino acid's namesake class of proteases. Beta-(\*)mercaptoethanol is used to cleave bonds formed by this amino acid. This amino acid is oxidized in the endoplasmic reticulum by the protein PDI. This amino acid's side chain is a thiol group, which allows it to form disulfide bonds. For 10 points, name this amino acid that is the only standard one other than methionine to have a sulfur.

ANSWER: cysteine [or Cys; prompt on “C”] <SD>

20. In one of these poems, a deserted lover prays for apocalyptic changes in nature, such as wolves fleeing from sheep and apples growing on oak trees, as he leaps from a high mountaintop. In the third of these poems, two friends first exchange insults, then compete in a singing contest, and finally each pose a riddle, and are both judged winners. In the sixth one, the Muses award a reed pipe to the celebrated contemporary soldier-poet (\*) Gallus. The injunction “Love conquers all; let us, too, yield to love,” or “Omnia vincit Amor,” appears in the tenth and last of these poems, which are modeled after the *Idylls* of Theocritus. The fourth of these poems prophesies the birth of a divine child who will save and rule the world, often thought to refer to Jesus. For 10 points, name this first major work by Virgil, a set of rustic poems written before his *Georgics*.

ANSWER: Eclogues [or Bucolics] <AG>

Tiebreaker: This man originally meant to leave his estate to his supposed homosexual lover Neville Pickering, but Pickering died after a riding accident. The Polish princess Catherine Radziwill, who was obsessed with this man, was convicted of forging his signature. This man is buried in Matobo National Park alongside members of the Shangani Patrol and Leander Starr (\*) Jameson. This man conned King Lobengula through the Rudd Concession, sparking a war with the Matabele. This man was depicted in *Punch* as a “colossus” with one foot on the Cape Colony and the other on Cairo, representing one of his unfinished plans. For 10 points, name this founder of the diamond company De Beers who lent his name to the British colonies that became Zambia and Zimbabwe.

ANSWER: Cecil Rhodes [or Cecil John Rhodes] <KG>

MLK 2016: Amusing Subtitle

Packet 8

## Bonuses

1. This document outlined the five “Giant Evils” of squalor, ignorance, want, idleness, and disease. For 10 points each:

[10] Name this document that paved the way for the establishment of the National Health Service and much of the British welfare state.

ANSWER: Beveridge Report

[10] The suggestions of the Beveridge Report were implemented under this Labour Prime Minister who succeeded Winston Churchill after World War II, then lost to Churchill six years later.

ANSWER: Clement Attlee [or Clement Richard Attlee, 1st Earl Attlee]

[10] This Welshman was the Minister of Health under Attlee, using his position to promote the National Health Service. He resigned after fellow Cabinet member Hugh Gaitskell introduced prescription charges to NHS programs.

ANSWER: Aneurin **Bevan** [or Nye **Bevan**] <KG>

2. Answer the following about Van Gogh, for 10 points each.

[10] This painter bought *The Red Vineyard*, which is said to be the only painting Van Gogh sold during his lifetime. Van Gogh made a portrait of her brother called *The Poet*.

ANSWER: Anna **Boch**

[10] Van Gogh's most famous painting is probably this one, which shows the swirly skies outside of the insane asylum where he was staying.

ANSWER: *The **Starry Night***

[10] Van Gogh's wheat field series includes several paintings of wheat fields with this kind of tree.

ANSWER: **cypresses** <WN>

3. Eight years after this speech was given, the speaker gave the "Irrepressible Conflict" speech, where he described a certain "collision... between opposing and enduring forces." For 10 points each:

[10] Name this Senate speech where the speaker claims as "stewards" of the "Creator of the universe," the listeners have a responsibility that overrides Constitutional regulations, giving the speech its common two-word name.

ANSWER: William Henry Seward's "**Higher Law**" Speech [prompt on "**Seward's speech**"]

[10] Seward's speech came a few days after a speech given on behalf of this politician from South Carolina. He had earlier advocated nullification and blasted the so-called "Tariff of Abominations."

ANSWER: John Caldwell **Calhoun**

[10] Another famous speech, Daniel Webster's *Second Reply to Hayne*, ends by calling these two things "one and inseparable." Calhoun famously claimed one was more dear than the other.

ANSWER: **liberty** and the **Union** [accept in either order] <SD>

4. When these maps are one-to-one, they are called faithful, and they are irreducible if their vector space cannot be expressed as the product of two invariant subspaces. For 10 points each:

[10] Name these homomorphisms from a group to the general linear group over their target vector space.

ANSWER: **representations**

[10] A map between two representations of a group is invertible or it is zero if it commutes with this object according to Schur's lemma. This type of map from a group and a set to the set produces orbits.

ANSWER: group **action**

[10] A nice corollary to Schur's lemma states that all irreducible representations of this kind of group are one dimensional. The integers under addition have this property, meaning that two plus four equals four plus two.

ANSWER: **abelian** [or **commutative**] <BM>

5. A poem about a song contest between a cuckoo and nightingale, titled "Lob des hohen Verstands," is briefly quoted by the bassoons at the start of this symphony's fifth movement "Rondo-Finale." For 10 points each:

[10] Name this symphony whose fourth movement "Adagietto" played by harp and strings may be a love song to the composer's wife Alma. This symphony has no nickname.

ANSWER: Gustav **Mahler**'s *Symphony No. 5* [or **Mahler's Fifth** Symphony; grudgingly accept **Mahler**'s Symphony in **C-sharp minor**]

[10] The trumpet solo that begins Mahler's Fifth plays a "short-short-short-long" figure that is similar to the fifth symphony by this other composer, whose opening has been described as "fate knocking at the door."

ANSWER: Ludwig van **Beethoven**

[10] The scherzo of Mahler's Fifth begins with this instrument playing a solo before transitioning into a landler and a waltz. Mahler's Third Symphony begins with a passage for eight of these instruments.

ANSWER: French **horns** [do not accept or prompt on "English horns"] <AG>

6. Infuriated by the sound of his bully drinking beer, the younger character in this story strangles him against a tree, and then stumbles delirious through an Alpine landscape. For 10 points each:

[10] Name this story about the sexual tension between an unmarried senior military commander and his young orderly Schoner.

ANSWER: "The **Prussian Officer**"

[10] In this story by the same author, Paul helps finance his mother's irresponsible spending by feverishly riding the title object to divine how his uncle Oscar should place his bets on the races.

ANSWER: "The **Rocking-Horse Winner**"

[10] This author of "The Prussian Officer" and "The Rocking-Horse Winner" scandalized British society with the frank sexuality of his novel *Lady Chatterley's Lover*.

ANSWER: D. H. **Lawrence** [or David Herbert Richards **Lawrence**] <AG>

7. Highlights of the 1885 Lev Ivanov co-staged production of this ballet include the use of live chickens on stage as well as the "Pas de ruban," in which the ballerina dances with ribbons. For 10 points each:

[10] Name this originally-French comic ballet, staged in its best-known version by Frederick Ashton in 1960, in which the Widow Simone tries in vain to separate the lovers Lise and Colas.

ANSWER: *La **Fille mal gardee*** [or *The **Wayward Daughter***; or *The **Girl Who Needed Watching***; or *Le **ballet de la paille**, ou Il n'est qu'un pas du mal au bien*; or *The **Ballet of Straw**, or There is Only One Step from Bad to Good]*

[10] This longtime ballet master of the St. Petersburg Imperial Ballet co-staged *La Fille mal gardee* with Ivanov, and choreographed the original versions of *The Nutcracker* and *The Sleeping Beauty*.

ANSWER: Marius **Petipa** [or Marius Ivanovich **Petipa**; or Victor Marius Alphonse **Petipa**]

[10] *La Fille mal gardee* features a sequence called "When I'm Married" which is performed by Lise using this technique, in which a story is acted out non-verbally using body motions.

ANSWER: **mime** [accept word forms, such as **miming**] <AG>

8. Answer the following about the *One Thousand and One Nights* and its influence on later literature, for 10 points each.

[10] Antoine Galland added the story of this woodcutter who uses the phrase "Open sesame" to enter a den of thieves.

ANSWER: **Ali Baba**

[10] This Naguib Mahfouz novel is a continuation of the *One Thousand and One Nights*, including such stories as "The Invisibility Cap."

ANSWER: **Arabian Nights and Days** [or **Layali alf layla**; accept **Nights of a Thousand Nights**]

[10] The *One Thousand and One Nights* also inspired *Two Years Eight Months and Twenty-Eight Nights*, the most recent novel by this author, who also wrote the memoir *Joseph Anton*.

ANSWER: Salman **Rushdie** <WN>

9. In a Wada test, this procedure is carried out simultaneously with the injection of a barbiturate. For 10 points each:

[10] Name this monitoring method in which electrodes are placed in several places along the scalp. It has several applications, such as characterizing seizures.

ANSWER: **EEG** [or **electroencephalogram**]

[10] Slow waves with frequency of 1 Hz or less are observed on an EEG during stage III of the non-REM type of this process. Dreams happen in the REM type of this process.

ANSWER: **sleep**

[10] This wave, which is generated on an EEG when neurons fire at a frequency of 8-12 Hz, corresponds to motor actions. It is suppressed when watching someone else performs a motor action, in a process that V.S. Ramachandran theorizes is controlled by mirror neurons.

ANSWER: mu waves [or mu rhythms; or comb rhythms; or wicket rhythms; or arciform rhythms] <AG>

10. This prophet's name comes from a root meaning "to make a pilgrimage." For 10 points each:

[10] Name this minor prophet who insists on the importance of rebuilding the Second Temple, and who predicts that Zerubbabel will be God's servant.

ANSWER: Haggai

[10] This other minor prophet is asked by God to prophesy the destruction of Nineveh, but tries to weasel out of it. He gets swallowed by a giant fish, sometimes described as a whale.

ANSWER: Jonah

[10] This prophet's book is the shortest in the Bible, with only a single 21-verse chapter. His book is the only one to mention the mysterious location of Sepharad.

ANSWER: Obadiah <WN>

11. The thermodynamic square is a mnemonic depicting conjugate variables and potentials that is used to remember these statements. For 10 points each:

[10] Name these statements that equate second derivatives of various thermodynamic potentials, which arise due to the equality of mixed partials, i.e. that the order of taking partial derivatives doesn't matter.

ANSWER: Maxwell relations [do not accept "Maxwell equations"]

[10] These two quantities are thermal conjugate variables, and a Legendre transform from internal energy to Helmholtz free energy involves subtracting their product.

ANSWER: temperature and entropy [accept in either order; accept T and S in either order]

[10] This thermodynamic quantity equals enthalpy minus the product of temperature and entropy. In order for reactions to be spontaneous, this quantity must be negative.

ANSWER: Gibbs free energy [accept G; prompt on just "free energy"] <SD>

12. This concept is associated with the "eruption of the real" in a book about it called *The Powers of Horror*. For 10 points each:

[10] Identify this term, which is used to refer to the process by which a child rejects their mother in the book *Desire in Language*.

ANSWER: abjection

[10] The aforementioned books are by Julia Kristeva, who was greatly influenced by this French psychoanalyst, who postulated the mirror stage and delivered many influential seminars.

ANSWER: Jacques Lacan [or Jacques Marie Emile Lacan]

[10] Lacan also influenced a book by Deleuze and Guattari named after this mythological character. Julia Kristeva wrote about his namesake complex, which refers to a male's desire to have sex with his mother.

ANSWER: Oedipus <WN>

13. This dynasty's Ranuccio I was the first in line to the Portuguese throne after the death of Sebastian I, but Philip II of Spain assumed the position instead. For 10 points each:

[10] Name this dynasty whose members included Pope Paul III, who called the Council of Trent. This family produced several Dukes of Parma.

ANSWER: Farnese family

[10] At the end of the Wars of Castro, this pope ordered the city of Castro razed after blaming Ranuccio II for the death of a bishop he appointed. He opposed the terms of the Peace of Westphalia.

ANSWER: Innocent X



[10] Alexander Farnese was a governor of this country when it was still under Spanish control. William the Silent fought for its independence.

ANSWER: the Netherlands [or Nederland] <KG>

14. Answer the following about some places frequently used for filming, for 10 points each.

[10] Forrest Gump's cross-country run ends with this location in the background, which was featured in several John Ford films. This set of sandstone formations lies on the border between Utah and Arizona.

ANSWER: Monument Valley

[10] Bronson Canyon, a location featured in many sci-fi films, is found in this park. It contains and shares its name with an observatory where a prominent fight scene in *Rebel Without a Cause* takes place.

ANSWER: Griffith Park

[10] This city is home to the Griffith Observatory. The shot of the half-submerged Statue of Liberty from *Planet of the Apes* was filmed at Point Dume State Beach in its affluent suburb of Malibu.

ANSWER: Los Angeles, California <KG>

15. The product of one of these operators with the other equals the particle number operator, and canonical quantization involves expanding fields as a fourier transform of these operators. For 10 points each:

[10] Name these operators whose commutator equals one.

ANSWER: raising and lowering operators [or creation and annihilation, accept in either order, or ladder operators]

[10] The ladder operators were used by Dirac to solve this common example in quantum mechanics. Its classical version corresponds to a mass on a spring.

ANSWER: quantum harmonic oscillator

[10] Ladder operators can also represent this quantity in quantum mechanics because they raise the eigenvalue of this quantity's z-component by one. The square of this operator has eigenvalue j times j plus one.

ANSWER: angular momentum [or spin] <BM>

16. One of these two families built massive walls at Dong Hoi to protect against the other's offensives. For 10 points each:

[10] Name these two families that warred for much of the 1600s. In the late 1700s, one of these two families fell to the other after being weakened by the Tay Son Rebellion.

ANSWER: the Trinh lords and the Nguyen lords [accept in either order]

[10] The Trinh and Nguyen families fought in territory that became this present-day country. The Nguyen dynasty survived until its last monarch was overthrown by his prime minister, Ngo Dinh Diem.

ANSWER: Vietnam [or Socialist Republic of Vietnam]

[10] This emperor, who spent much of his life in exile in Alsace and Monaco, was the aforementioned last Vietnamese monarch.

ANSWER: Bao Dai [or Nguyen Phuc Vinh Thuy] <KG>

17. The speaker of this poem informs its addressee that "There is something / something urgent / I have to say to you / and you alone / but it must wait / while I drink in / the joy of your approach, perhaps for the last time." For 10 points each:

[10] Name this three-part love poem to the poet's wife, published in triadic stanza form in the collection *Journey to Love*. Its title object is "like a buttercup / upon its branching stem - save that it's green and wooden."

ANSWER: "Asphodel, That Greeny Flower"

[10] This American poet envisioned "Asphodel, That Greeny Flower" as the fifth volume of his epic *Paterson*, and wrote the minimalist poem "The Red Wheelbarrow."

ANSWER: William Carlos Williams

[10] Williams departed from this poetic movement, whose practitioners included H.D., by publishing the experimental book *Kora in Hell*. The iconic poem from this movement simply reads “The apparition of these faces in the crowd; petals on a wet, black bough.”

ANSWER: **Imagism** [accept word forms, such as **Imagist**] <AG>

18. According to the Cherokee, these animals gained a distinctive feature after eating from briar bushes created by the Flower People. For 10 points each:

[10] Name these animals that in a different myth were fooled into thinking it was raining. In order to escape the rain, they got into a calabash, which was then sealed, trapping them in.

ANSWER: **bees** [or **hornets**]

[10] Along with the bees, Anansi, a figure who takes the shape of this kind of arachnid, also captured a python and a leopard so he could become the god of all stories.

ANSWER: **spiders**

[10] In Native American myth, the Spider Grandmother successfully completes this task after the failures of an opossum, a buzzard, and a crow. Only humans decide to reap the fruits of her labor.

ANSWER: **stealing fire** [accept anything that is equivalent to **procuring fire**] <SD>

19. These languages often use reduplication to form plurals. For 10 points each:

[10] Name these simplified languages which arise when groups which do not have a language in common need to communicate. When learned as a native language, they often develop into creoles.

ANSWER: **pidgins**

[10] The creole language Tok Pisin, is spoken in this country, which is the most linguistically diverse in the world. Its indigenous languages which are not Austronesian or Australian belong to its namesake group of languages.

ANSWER: **Papua New Guinea**

[10] This term refers to the process whereby a pidgin or creole replaces much of its vocabulary with that of a different language.

ANSWER: **relexification** [accept word forms] <WN>

20. Answer the following about the French dandy Robert de Montesquiou, for 10 points each.

[10] Montesquiou was the basis for this aristocratic character from *In Search of Lost Time*. The narrator ponders the nature of homosexuality after seeing this uncle of Robert de Saint-Loup have sex with Jupien.

ANSWER: Baron de **Charlus** [or **Palamède**]

[10] *In Search of Lost Time* is a novel by this author.

ANSWER: Marcel **Proust**

[10] Montesquiou also inspired Des Esseintes, the decadent main character of *Against the Grain*, a novel by this French author. He wrote about Satanism in his novel *Là-bas*.

ANSWER: Joris-Karl **Huysmans** [or Charles-Marie-Georges **Huysmans**] <WN>

Extra: Claudian, Statius, Josephus, Virgil, and Ovid are among those who stand atop columns in this structure, which is built atop a massive bedrock of ice inscribed with names. For 10 points each:

[10] Name this structure inhabited by a many-tongued, many-eyed, many-eared goddess whose judgments are accompanied by blasts from one of Aeolus’s two trumpets.

ANSWER: the **House of Fame**

[10] This Middle English poet wrote *The House of Fame* and *The Canterbury Tales*.

ANSWER: Geoffrey **Chaucer**

[10] This other Chaucer poem, which also takes the form of a dream vision, a poet encounters a dog belonging to Octavian’s hunting party and consoles a knight that lost a game of chess.

ANSWER: *The **Book of the Duchess*** <AG>