

2020 Terrapin Open

Packet 2

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Tossups

**1. In a 2019 race, Bill Ayers’s adopted son narrowly won a position with this name in San Francisco over Suzy Loftus. The first African-American woman to hold a position with this name in Massachusetts controversially referenced sexual assault allegations against Governor Charlie Baker’s son in a press conference; that woman is Rachael Rollins. After initially winning a 2019 primary election for a position with this name, a candidate lost to Melinda Katz by twenty votes when a judge ruled that over a hundred provisional ballots were invalid because they failed to specify a party affiliation. In 2019, (\*) Tiffany Cabán and Chesa Boudin (“CHAY-suh boo-DEEN”) both contested positions with this name, one of which in Philadelphia is held by Larry Krasner. In Manhattan, an office with this name is held by Cyrus Vance Jr., who has been criticized for petitioning on behalf of Jeffrey Epstein, and for failing to bring charges against Harvey Weinstein. For 10 points, name this type of elected office whose holders are responsible for prosecuting criminals.**

ANSWER: **District Attorney** [or **DA**; accept more specific answers, such as **DA for Manhattan**]

<CK, Modern World>

**2. Coupling constants of negative-3 to positive-3 hertz are observed in this group in a form of four-bond NMR coupling sometimes known as W-coupling. A mixed product distribution is obtained in nucleophilic substitutions of compounds containing this group owing to a competing SN2-prime reaction. The crotyl group can be considered as a methyl added to one of these groups. Palladium complexes to one of these groups in the first state of the (\*) Tsuji–Trost reaction. The first [3,3]-sigmatropic rearrangement to be discovered involves heating a vinyl ether of this group to generate a gamma-delta-unsaturated carbonyl (“car-bo-NEEL”) and is named for Claisen. This group’s non-bonding molecular orbital gives rise to the stability of its cation, radical, and anion, which have 2, 3, and 4 electrons delocalized across this group’s three atoms. For 10 points, name this three-carbon group with formula CH<sub>2</sub>–CH–CH<sub>2</sub>, which consists of a methylene bridge attached to a vinyl group.**

ANSWER: **allyl** groups [accept **allylic** strain]

<EM, Chemistry>

**3. In a poem, this author wrote that “some words live in my throat, breeding like adders,” while “others, know sun, seeking like gypsies, over my tongue.” This author wrote a poem whose speaker asserts “I do not speak French kissing,” and declares, “we shall love each other here if ever at all.” That poem, “Martha,” appears in a collection by this author whose title poem begins: “I, is the total black, being spoken, from the earth’s inside.” In a book by this author, Sister Mary of Perpetual Help divides the protagonist’s classroom into “Brownies” and “Fairies.” This author, who wrote the poetry collection *Coal*, called poetry the “skeleton architecture of our lives” in her essay (\*) “Poetry Is Not a Luxury.” She penned an autobiography titled for a Carriacou (“CARE-ee-uh-koo”) name, which describes a group called “the Branded” at Hunter College High School. For 10 points, name this African-American author who wrote *Sister Outsider* and the “biomythography” *Zami: A New Spelling of My Name*.**

ANSWER: Audre **Lorde**

<VS, American Literature>

**4. After an MP was arrested for involvement in a conflict over this resource, police clashed with Fabian Society protesters in Trafalgar Square on Bloody Sunday. Arthur Balfour’s opponents dubbed him “Bloody**

**Balfour” after police officers killed three protesters during a conflict over this resource in the Mitchelstown Massacre. The papal encyclical *Saepe Nos* condemned a phase of a conflict over this resource called the Plan of Campaign. This resource named a league that espoused the (\*) “Three Fs” led by Michael Davitt. A conflict over this resource witnessed the social ostracism of Charles Boycott, coining the expression “boycott.” Charles Parnell ended a war over this resource in the Kilmainham (“kill-MAY-num”) Treaty. Many Irish radicals subscribed to a view of this resource known as Georgism. For 10 points, name this resource, which in Ireland was leased to Catholic tenant farmers by Protestant landlords.**

ANSWER: **land** [or **real estate**; or **property**]

<CK, British/Commonwealth History>

**5. The Landau–Lifshitz–Gilbert equation for magnetization dynamics can be generalized to fast dynamics by a term including this mathematical construct. In the center-of-mass frame, this mathematical construct defines the surface of Poinso’s (“pwann-SOH’s”) ellipsoid. Off-diagonal elements of this mathematical construct are defined as a sum of the product of two different coordinates times a (\*) mass, and when those elements of this tensor are nonzero, angular momentum is not parallel to angular velocity. The smallest and largest eigenvalues of this tensor correspond to stable axes of rotation according to the tennis racket theorem. Rotational kinetic energy is one-half omega dot this tensor dot omega. For 10 points, name this tensor that generalizes the rotational mass of a rigid body.**

ANSWER: moment of **inertia tensor** [accept moment of **inertia** after “tensor” is read; prompt on partial answer]

<GR, Physics>

**6. After his companions fail to follow his instruction, a man in this location declares, “The spirit is willing, but the flesh is weak.” Margaret Mary Alacoque (“al-uh-COKE”) had a vision in which she was instructed to meditate on an event that occurred in this location for an hour every Thursday, giving rise to the Catholic devotion of the “Holy Hour.” In this location, one figure prays imploring God, “if it is possible, let this cup pass from Me.” While praying in this place, an angel strengthens a figure whose (\*) sweat is described as “great drops of blood falling down to the ground.” In this place, Jesus heals the servant Malchus’s severed ear and declares “all who take up the sword shall perish by the sword.” When Jesus finds Peter sleeping in this place, he chastises him: “What! Could you not watch with Me one hour?” After his “agony” in this place, Jesus is betrayed here with a kiss from Judas. For 10 points, name this place where Jesus goes to pray after the Last Supper.**

ANSWER: Garden of **Gethsemane** (“geth-SEH-muh-nee”) [or Mount of **Olives**; prompt on **garden**]

<CK, Religion: Christianity>

**7. This piece’s second section is a double fugue whose opening phrase has a very long melisma and opens with the disjunct melody [read slowly] “A, A, F, high B-flat, low C-sharp.” Quiet modulations to A-flat minor then F major end an A minor section of this piece that opens with sequences of forceful rapid stepwise ascents and descents of thirds in the strings trading with *sotto voce* (“VO-chay”) pleas. This piece’s opening section, whose bassoon melody begins on the second beat, borrows from “Zion do Mourn,” part of a piece in the same genre composed “for Queen Caroline” by (\*) Handel. In this work, a bass soloist echoes a descending B-flat major triad played by solo trombone. An undulating *Larghetto* 12/8 movement closes this D minor piece’s *Sequentia* section. Franz Xaver Süssmayr completed that “Lacrimosa” from this work after its composer’s 1791 death. For 10 points, name this mass for the dead, the unfinished final work by the composer of *The Magic Flute*.**

ANSWER: **Mozart’s Requiem** [or Wolfgang Amadeus **Mozart’s Requiem** Mass in D minor, K. 626; prompt on partial answer] (The first four clues are from the Kyrie, Confutatis, Introit, and Tuba Mirum sections.)

<ES, Classical Music>

**8. In a story by this author, a man repeatedly toasts to his neighbor on an airplane, a beauty who spends the whole flight asleep. This author wrote of a man with gold teeth who laughs while dying of a snakebite, puffing**

up severely before taking an antidote that he calls “the hand of god in a bottle.” In a story by this man, the “Wise Doctors of the Law” spend days searching for a law allowing the President of the Republic to attend the title matriarch’s funeral. In a story by this author, citizens who bury the title figure make his memory “eternal” by painting their housefronts in “gay colors” and expanding their small (\*) fishing village. This author of “Big Mama’s Funeral” wrote a story in which a shockingly tall, beautiful corpse has a handkerchief removed from his face, revealing him to be Esteban. For 10 points, name this author of *Leaf Storm*, which contains many stories set in Macondo.

ANSWER: Gabriel García Márquez [prompt on partial answer] (The first line is about “Sleeping Beauty and the Airplane,” the second line is about “Blacaman the Good, Vendor of Miracles,” and the penultimate line is about “The Handsomest Drowned Man in the World.”)

<VS, World/Other Literature>

9. This philosopher is criticized for postulating a “purpose without a purposive actor” in a paper attacking him for not adhering to methodological individualism. Peter Singer wrote the entry on this thinker from Oxford’s *Very Short Introductions* series. A 1978 book about this philosopher divides his core idea into a “Primacy Thesis” and a “Development Thesis,” and argues that that idea attempts to provide “functional explanations.” That book about this thinker led to the creation of the (\*) September Group, whose members included John Elster and Gerald Cohen. In one work, he distinguished “use-value,” which is tied to the “physical properties of the commodity,” unlike its “exchange-value.” This thinker argued that the ideological superstructure is an expression of the economic base, and posited that the forces of production give rise to social contradictions. For 10 points, name this philosopher who defended historical materialism in *Das Kapital*.

ANSWER: Karl Marx

<CK, Philosophy>

10. This leader’s handling of the memory of his country’s independence movement was attacked in *Roots of Freedom* by his political adversary Bildad Kaggia. Before rising to power, this leader published the newspaper *Muigwithania*, or “The Reconciler,” to help forge a national political identity for his people. This leader is suspected to have ordered the assassination of Tom Mboya, who masterminded the mixed-economy policies this leader implemented. This leader, who appointed many cabinet ministers who hailed from his home region of Kiambu, was arrested during Operation (\*) Jock Scott, and was tried by colonial governor Evelyn (“EEV-lin”) Baring. This leader, who coined the term “Harambee” to encourage the building of a new nation, outlawed the opposition KPU party, which had been founded by his vice president Jaramogi Odinga Odinga. This leader, the most prominent politician tried as part of the Kapenguria Six, was succeeded by Daniel Arap Moi. For 10 points, name this leader, the first President of Kenya.

ANSWER: Jomo Kenyatta

<EL, World History>

11. For a node in a Bayesian (“BAY-zee-in”) network, the node’s children and co-parents form a “blanket” that generalizes one of these structures. Shannon’s noiseless coding theorem applies to sources modeled as one of these systems. Queuing theory models are based on a continuous-time version of these structures. One of these structures has a uniform invariant distribution if and only if its (\*) transition matrix is doubly stochastic. The Metropolis–Hastings algorithm exemplifies a class of probabilistic algorithms that use one of these structures. These structures are irreducible if every state is accessible from every other state. These structures are often defined in discrete time, and their transition matrix must be “memoryless.” For 10 points, name these mathematical structures that model stochastic processes as a “chain” of states.

ANSWER: Markov chains [or Markov process; accept Markov blanket; accept Markov after “chain” is read; prompt on stochastic process]

<GR, Other Science: Mathematics>

12. **Derek Jarman designed the half-blue, half-red costumes for a work by this choreographer that includes movements named for the days of the week and a *pas de deux* (“pah duh doo”) set to blues music. This choreographer used an almost-fresh ballet score by Igor Stravinsky for a ballet that can be seen from any angle. Dancers imitate Greek statuary in his physically taxing piece set to music by César Franck (“say-zar fronk”). He choreographed the 1948 *Scènes de ballet* (“sen duh ballet”) and (\*) *Symphonic Variations*. A *pas de deux* in which the two principal dancers wrap each other in a pink ribbon, and a Lancashire-inspired clog dance, are part of his popular version of *La fille mal gardée* (“la fee mal gar-DAY”). An *arabesque* followed by a *développé* (“dave-luh-PAY”), then a *pas de bourrée* (“pah duh boo-RAY”) ending on a *pas de chat* (“pah duh SHAH”), is his namesake “step.”** For 10 points, name this British dancer, the first choreographer of the Royal Ballet.

ANSWER: Frederick **Ashton** [prompt on the Fred step] (The first clue is about *Jazz Calendar*.)

<CK, Other Arts: Dance>

13. **The US responded to proliferation of this profession among Chinese immigrants with the first federal immigration restriction, the 1875 Page Act. During the Civil War, William Rosencrans and George Spalding expelled everyone who worked in this profession from Nashville by sending them on a boat down the Mississippi. After the boat was forced to return to Nashville, Rosencrans and Spalding instituted the first regulations of this profession in US history. People in this profession were arrested en masse under the terms of the Chamberlain–Kahn Act. Transporting people who worked in this profession across state lines was banned by the 1910 (\*) Mann Act. Women such as Lulu White and Josie Arlington gained fame while working in this profession in the Storyville neighborhood of New Orleans. A term to describe workers in this profession was apocryphally coined due to services provided to the Army of the Potomac under the command of Joseph Hooker. For 10 points, brothels were home to workers in what profession?**

ANSWER: **prostitution** [or word forms; or equivalents like sex work; accept hookers until read]

<AE, American History>

14. **In a sonnet, a poet compares his memory of this person to a “pilgrim-spirit” that goes “beyond the sphere that spreads to the widest space.” In one work, this person’s death is foreshadowed by a scene where the narrator, lying ill, closes his eyes and sees the faces of disheveled women warning him “You too will die.” To distract himself from this person, that work’s narrator has a relationship, which he describes as a “screen.” After his first encounter with this person, the narrator of that work is visited by a “fiery cloud” who declares (\*) “ego dominus tuus,” or “I am your lord.” A prosimetrum (“pro-zih-MET-trum”) dedicated to this person begins by discussing its narrator’s “book of memory” on whose first page is written “here begins new life.” In another work, after ascending through a sphere of fire, this woman guides the narrator through nine spheres to reach the Empyrean. For 10 points, name this woman, the dedicatee of *La Vita Nuova*, who acts as Dante’s guide in the *Paradiso*.**

ANSWER: **Beatrice** (“bay-ah-TREE-cheh”) Portinari

<CK, European Literature>

15. **The Aguayo group showed that autologous PN grafts enhanced regrowth of this structure after transection. Hypoplasia of this structure is suspected from a DM/DD ratio higher than 3. Mutations in a namesake IMM fusion gene cause dominant atrophy of this structure. The regeneration patterns of this structure after resecting it and rotating an attached structure 180 degrees provided the basis of Sperry’s chemoaffinity theory. A disease affecting this nerve may be detected with (\*) gonioscopy and the presence of cupping at its head. Axons from this paired nerve terminate in the lateral geniculate nucleus after partially decussating at a namesake chiasm. It is also called cranial nerve 2. For 10 points, name this paired nerve containing retinal ganglion cells that relay information from photoreceptors.**

ANSWER: **optic** nerve [or **cranial nerve 2** or **CN 2** or **optic chiasma** until read; or **optic tract**; or **optic disc**; prompt on **retinal ganglion** cells until read; do not accept or prompt on “optical nerve”]

<JS, Biology>

16. **Karl Vind proved one of this man’s conjectures using Lyapunov’s theorem and a technique known as the “integration of correspondences.” That conjecture posited by this man was proven for a market with a continuum of traders by Robert Aumann. For a Leontief production function, a set of functions developed by this man are all L-shaped and feature collinear discontinuities. This economist conjectured that for an infinite number of agents, the (\*) core of an economy equals the set of Walrasian equilibrium allocations. For two agents, the contract curve is formed by the points of tangency of a set of functions developed by this economist; the slope of those functions is equal to the negative marginal rate of substitution. This economist developed a 2-dimensional construct that shows all the possible allocations of goods in a market. For 10 points, name this Irish economist who developed indifference curves and a namesake “box” for use in general equilibrium theory.**

ANSWER: Francis Ysidro **Edgeworth** [accept **Edgeworth** box; accept Robert **Aumann** until read]

<KS, Social Science: Economics>

17. **A historian who studied this specific group wrote about a woman who was forced to have an abortion after having an affair with her brother-in-law in his essay “Chandra’s Case.” This group names a group of historians at the University of Sussex including Eric Stokes and Ranajit Guha. This group titles an essay that likens Freud scapegoating women to the sentence “white men are protecting brown women from brown men.” That essay argues that this group can achieve equality through “strategic (\*) essentialism.” This group titles an article that develops a theory of pluralized “subject-effects,” and begins by criticizing a conversation between Michel Foucault and Gilles Deleuze (“zheel duh-LOOZ”). That essay, which discusses a woman who waited until she was menstruating to commit suicide, concludes that this group cannot communicate. For 10 points, Gayatri Spivak (“GUY-uh-tree SPIV-uk”) wrote an essay asking if what group can speak?**

ANSWER: the **subaltern** [accept “Can the **Subaltern** Speak?”; accept **Subaltern** Studies Group; prompt on Indian **peasants** or the **colonized** by asking “what specific term did the author use to describe them?”]

<CK, Other Academic>

18. **An outdoor work by this artist shows animals symbolizing solitude, including a bittern, a hare poking its head out, and a heron standing on some rocks, as well as the title figure, who stands in front of a grapevine with barely visible stigmata on his right hand. This artist painted a kingfisher and Bacchus as a baby, which likely refer to the wedding of Alfonso d’Este (“DESS-tay”), in a piece inspired by Ovid’s *Fasti*. John Ruskin declared the “two greatest pictures in the world” were this artist’s *Frari Triptych* and his *sacra conversazione for the convent at (\*) San Zaccaria*, which shares details with his brother-in-law’s *San Zeno* altarpiece. Antonello da Messina introduced this man to oil painting, which he popularized in Italy and taught to Giorgione. This man painted Silenus creeping on the sleeping Lotis in a painting later updated by Dosso Dossi. The Frick Collection holds this artist’s *Saint Francis in Ecstasy*. For 10 points, name this Venetian painter whose student Titian finished his painting *The Feast of the Gods*.**

ANSWER: **Giovanni Bellini** [or **John Bellini**; prompt on **Bellini** or **G. Bellini**; do not accept or prompt on “Gentile Bellini”] (Giovanni Bellini was referred to as John Bellini by Ruskin; his brother-in-law was Andrea Mantegna.)

<GR, Painting/Sculpture>

19. **This author depicted Johnny and Annie-Belle’s incestuous relationship in a story that imagines American director John Ford adapting John Ford’s *Tis Pity She’s a Whore*. In another story by this author, the protagonist imagines using the title character’s hair to string a fiddle that can be played without using one’s hands. A story by this author ends with the protagonist expressing thanks that a blind piano tuner named Jean-Yves (“zhawn-EEV”) cannot see the mark that her husband made by pressing a blood-stained key onto**

**her forehead. This author wrote about the journalist (\*)** Jack Walsler becoming enamored with Sophie Fevvers, a woman who was hatched from an egg with wings. She wrote a story whose protagonist finds the corpses of three former wives of her groom, a French marquis. That story, which appears in the same collection as “The Erl-King,” retells the Bluebeard legend. For 10 points, name this author who wrote *Nights at the Circus* and *The Bloody Chamber*.

ANSWER: Angela Carter [or Angela Olive Carter-Pearce; or Angela Olive Stalker]

<VS, British Literature>

**20. Reforms such as annual visitations and unified rites were included as fundamental principles in this group’s guiding document, which contains the line “we may live by one charity, one Rule, and like usages.” The Charter of Charity laid out the guiding principles of this monastic order, whose members were nicknamed for the white robes they wore, in contrast to the black robes of unreformed Benedictine monks. Founders of this group include St. Alberic and St. Stephen Harding, who left Molesme (“mo-LEM”) Abbey in a desire to return to a stricter interpretation of the (\*) Benedictine rules. A notable member of this monastic order feuded with Peter Abelard at the Council of Sens (“sawnce”), helped draft the rules for the Knights Templar at the 1129 Council of Troyes (“twah”), and promoted the Second Crusade on behalf of Pope Eugene III. For 10 points, Cîteaux (“see-TOH”) Abbey was the medieval headquarters of what Catholic monastic group whose members included St. Bernard of Clairvaux?**

ANSWER: Cistercians [or The Order of Cistercians; or OCist; or SOCist; accept White Monks until “white” is read; accept Bernardines until “Bernard” is read]

<AE, European History>

## Bonuses

1. Duke Pearson composed this album's nearly 15-minute-long dream-like opening track, which is followed by the more uptempo track "Jean De Fleur." For 10 points each:

[10] Name this 1965 hard bop album by jazz guitarist Grant Green.

ANSWER: ***Idle Moments***

[10] The third track on *Idle Moments* is a John Lewis standard dedicated to this man, which begins with a dirge-like 20-bar eulogy to this jazz guitarist who composed "Nuages" ("noo-AHZH") and "Minor Swing."

ANSWER: Django **Reinhardt** [prompt on **Django**]

[10] Django Reinhardt popularized this style of jazz characterized by a highly rhythmic style of guitar accompaniment known as "la pompe."

ANSWER: **gypsy** jazz [or **gypsy** swing; or **hot club** jazz; or jazz **manouche**]

<CK, Other Arts: Music>

2. An author with this surname wrote a thousand-page 2019 stream-of-consciousness novel that describes a housewife who runs a baking business in Newcomerstown, Ohio. For 10 points each:

[10] Give this surname shared by the author of *Ducks, Newburyport* and her father, who wrote the acclaimed 1959 biography *James Joyce*.

ANSWER: **Ellmann** [or Richard **Ellmann**; or Lucy **Ellmann**]

[10] Many reviewers compared the narrator of Lucy Ellmann's *Ducks, Newburyport* to this character who repeats "yes I said yes I will Yes" in a long stream-of-consciousness soliloquy at the end of *Ulysses*.

ANSWER: **Molly** Bloom [prompt on **Bloom**]

[10] Richard Ellmann's final collection of essays is titled for this conjoined word. This is the first word in Joyce's *Finnegans Wake*, which describes the Liffey's course "past Eve and Adam's."

ANSWER: **riverrun**

<CK, British Literature>

3. In *Swift v. Tyson*, Justice Story argued that when operating under this jurisdiction, federal courts were bound solely by state law, not the state's common law, effectively allowing the federal government to create federal common law. For 10 points each:

[10] Give this type of jurisdiction that allows federal courts to rule on matters between parties from, generally speaking, different states, if the value in question is more than 75,000 dollars.

ANSWER: **diversity** jurisdiction

[10] *Swift v. Tyson* occurred during this chief justice's term. He ruled that slaves were not citizens and could not sue in *Dred Scott v. Sanford*.

ANSWER: Roger **Taney** ("TAW-nee")

[10] *Swift v. Tyson* was overturned in *Erie Railroad v. Tompkins*, a case whose majority opinion was written by this justice. Building upon his earlier work, this justice argued for the "right to be left alone" in his dissenting opinion in *Olmstead v. US*.

ANSWER: Louis **Brandeis**

<EL, American History>

4. This process typically produces long curved parallel strips with similar mineral composition called belts. For 10 points each:

[10] Name this process in which the lithosphere is deformed through convergence or subduction.

ANSWER: **orogeny** [or **orogenesis**]

[10] There are two main types of structures formed through orogeny: collisional orogens, and this other type, which is formed by the subduction of an ocean plate under a continental plate.

ANSWER: **accretionary** orogen

[10] Orogeny can produce the thrust type of these features, in which older rock is pushed above younger rock. Subduction zones are the largest examples of these structures in which the hanging wall can move up or down relative to the foot wall.

ANSWER: tectonic **faults** [accept thrust or overthrust **faults**]

<GR, Other Science: Earth Science>

5. The speaker flees arm-in-arm with the addressee from the title place in a poem by this author that opens, “Is the governor falling / From a great height?” titled “The Brassiere Factory.” For 10 points each:

[10] Name this New York School poet. The speaker tells the addressee, “I love you as a sheriff searches for a walnut, that will solve a murder case unsolved for years,” in his poem “To You.”

ANSWER: Kenneth **Koch** (“coke”)

[10] In Koch’s poem “Fresh Air,” hecklers interrupt a panel of “mediocres” convened to discuss the love of these creatures in poetry. Wallace Stevens claimed that the “soul flies beyond parks” in an “invective” against them.

ANSWER: **swans**

[10] In a Koch poem titled “variations on a theme” of this poet, the speaker states: “Last evening we went dancing and I broke your leg. Forgive me.” That work parodies this Imagist’s poem “This Is Just To Say.”

ANSWER: William Carlos **Williams**

<CK, American Literature>

6. While in power during this period, the Social Democratic Party or SPD controversially employed the far-right *Freikorps* to suppress uprisings by the Spartacus League and the Ruhr Red Army. For 10 points each:

[10] Name this government established after World War I that preceded the rise of Nazi Germany. It is named for the German town where its constitution was established.

ANSWER: **Weimar** Republic [or **Weimar** Germany]

[10] The SPD called a general strike that ended this attempted 1920 coup. This right-wing coup began when Walther von Lüttwitz refused to dissolve the Marinebrigade Ehrhardt (“ma-REEN-uh-brih-GAH-duh AIR-hart”), after which he ordered them to occupy Berlin and replace Ebert with the namesake Prussian civil servant.

ANSWER: **Kapp Putsch**

[10] After the failure of the Kapp Putsch, many members of the Marinebrigade Ehrhardt joined this far-right group that assassinated liberal Foreign Minister Walter Rathenau (“VAHL-ter RAH-tuh-now”) and Finance Minister Matthias Erzberger (“mah-TEE-ahss AIRTS-bair-guh”).

ANSWER: **Organization Consul** [or **O.C.**]

<CK, European History>

7. The Caspar–Klug quasi-equivalence principle classifies some objects with this shape as P-equals-1, P-equals-3, or skew based on their triangulation number. For 10 points each:

[10] Name this shape with 5-fold rotational symmetry through each of its 12 vertices. A common gene vector has 60T copies of VP-1, 2, and 3 arranged as 12 pentamers and 10T minus 10 hexamers in this shape.

ANSWER: **icosahedron** [or convex regular **icosahedron**; or **icosahedra**]

[10] This viral structure is frequently an icosahedral arrangement of capsomeres forming a “shell” around the genome. It may be further enrobed by an envelope.

ANSWER: **capsid** [or nucleocapsid]

[10] The DJ variant of this non-pathogenic *Dependoparvovirus* has a chimeric capsid that confers high tissue tropism and transduction efficiency. This vector’s serotype 2 naturally integrates on human chromosome 19 but it cannot replicate without a helper virus, unlike lentiviruses.

ANSWER: **adeno-associated virus** [or **AAV**; do not accept or prompt on “adenovirus”]

<JS, Biology>

8. In one work, this artist claimed that he preferred both the cakewalk and Loie Fuller's dancing to other dance forms. For 10 points each:

[10] Name this artist who wrote about the desire to "demolish museums and libraries, fight morality, feminism and all opportunist and utilitarian cowardice" in one of the 11 central points of another document.

ANSWER: Filippo Tommaso **Marinetti** [or F. T. **Marinetti**]

[10] Marinetti described his desire to destroy museums in this document, which calls a moving car more beautiful than the Winged Victory of Samothrace. It outlined the ideology of a violence-obsessed Italian art movement.

ANSWER: "The **Futurist Manifesto**" [or "The **Founding and Manifesto of Futurism**"; or "**Fondazione e Manifesto del Futurismo**"; or "**Manifeste du futurisme**"]

[10] She's not Mina Loy, but this artist pushed back against Marinetti's misogyny in a feminist Futurist manifesto proclaiming: "The majority of women are neither superior nor inferior to the majority of men... They all merit the same scorn." She created and performed the multimedia dance piece *La Métachorie* ("may-tah-ko-REE").

ANSWER: Valentine de **Saint-Point** ("san-pwann")

<VS, Painting/Sculpture>

9. Endel Tulving posited the three defining characteristics of this type of memory: subjective sense of time, connection to the self, and auto-noetic ("auto-no-ET-ick") consciousness. For 10 points each:

[10] Tulving posited that declarative memory can be divided into semantic memory, which stores knowledge about the world, and what other type of memory, which stores personal experiences?

ANSWER: **episodic** memory

[10] Memories are stored for later retrieval in this process. Tulving argued that recall is easier in contexts that resemble those in which this process occurred, a principle known as its namesake "specificity."

ANSWER: **encoding** [or word forms; accept **encoding** specificity]

[10] These particularly vivid episodic memories are formed when something surprising or consequential occurs. A common example is people remembering where they were during the 9/11 attacks.

ANSWER: **flashbulb** memory

<CK, Social Science: Psychology>

10. This figure's sons, including Eyjolfr and Alfr, are slain during a campaign to obtain weregild for this figure. For 10 points each:

[10] Name this Saxon king whose clan is engaged in a blood feud with the Volsungs. With Lyngvi, this king leads an invasion that results in Sigmund's death, after which Sigurd retaliates by killing all of this king's sons.

ANSWER: **Hunding**

[10] This son of Sigmund gains his epithet by killing Hunding. Dag kills this figure with Odin's spear, after which this figure and his wife, the valkyrie Sigrun, are reborn twice more.

ANSWER: **Helgi** Hundingsbane

[10] Another Helgi, who appears in Hrolfr Kraki's saga, was a king of this Scandinavian country. The early history of this country was documented by Saxo Grammaticus in a semi-legendary account of the "deeds" of its people.

ANSWER: **Denmark**

<JSH, Mythology>

11. The Israeli NGO Chotam ("kho-TAHM") has claimed that Knesset member Shai Piron is an enemy of religious Zionism due to his efforts to include Arab viewpoints of this event in Israeli schools. For 10 points each:

[10] Give this Arabic term used to describe the mass exodus of Palestinians during the 1948 War of Israeli Independence. Politicians and historians continue to argue about whether this event was voluntary or not.

ANSWER: The **Nakba** [or *al-Nakbah*]

[10] This group of Israeli historians, who push back against traditional interpretations of Israeli history, used declassified documents in the 1980s to argue against a voluntary Palestinian exodus. This group's name was coined by member Benny Morris; its other members include Ilan Pappé ("ee-LON pah-PEH") and Tom Segev ("SEG-ev").

ANSWER: **New Historians**

[10] As evidence of a forced exodus, historians have frequently cited a 1937 letter written by this longtime Chairman of the Jewish Agency to his son, which contains a phrase often translated as "We must expel the Arabs...."

ANSWER: David **Ben-Gurion**

<AE, World History>

12. This poet wrote a work advising anyone threatened by "advertising, air pollution, television, or the police" to chant the title figure's "war spell," which repeats "drown their butts" and "crush their butts." For 10 points each:

[10] Name this Beat poet of the "Smokey the Bear Sutra" and the collection *Riprap*. This "Poet Laureate of Deep Ecology" recalled the advice of Lu Ji's *Wên Fu* and his teacher Shih-hsiang Chen in the poem "Axe Handles."

ANSWER: Gary **Snyder**

[10] *Riprap* is often published alongside Snyder's translation of poems by this man. In one such poem, the speaker asks "Who can leap the world's ties / And sit with me among the white clouds?" after "clambering" up a path on the location that this poet derived his name from.

ANSWER: **Hánshān** [or **Kanzan**; or **Cold Mountain**]

[10] This novel is dedicated to Hánshān, and ends with a vision of him atop a mountain that "you can't fall off" of. Snyder inspired the character of Japhy Ryder in this novel, which Jack Kerouac wrote a few years after *On the Road*.

ANSWER: *The **Dharma Bums***

<AP, World/Other Literature>

13. Graphite and potassium vapor can undergo a topochemical one of these reactions to form a compound with overall stoichiometry KC<sub>8</sub>. For 10 points each:

[10] Name these reactions in which a guest species is inserted into a host lattice.

ANSWER: **intercalation**

[10] Anion de-intercalation from transition metal oxides can be accomplished at high temperatures under low partial pressure of oxygen in one of these reactions. These reactions share their name with reactive materials placed in ultra-high vacuum systems to react with free gas particles.

ANSWER: **getter** reactions

[10] John Goodenough won the 2019 Nobel Prize in Chemistry for his work on a rechargeable one of these devices that relies on the reversible intercalation of lithium ions into electrode materials.

ANSWER: **battery**

<EM, Chemistry>

14. In 2015, Chi-Chi Nwanoku founded Europe's first orchestra for black and minority ethnic musicians, Chineke! ("chee-NECK-eh"), based in this city. For 10 points each:

[10] Name this city where black classical musicians like Fela Sowande, Rudolph Dunbar, George Bridgetower, and Samuel Coleridge-Taylor trained and flourished, performing at venues like the Barbican Centre, Wigmore Hall, and Royal Albert Hall, which hosts the annual Proms.

ANSWER: **London**

[10] This 2016 BBC Young Musician of the Year's passionate playing at the 2018 royal wedding caused a cello sensation in Britain. He and his 6 prodigy siblings, all students at London's Royal Academy, played a medley on *Britain's Got Talent*.

ANSWER: Sheku **Kanneh-Mason** [prompt on **Sheku** or **Sheku** effect; prompt on partial answer]

[10] In 1610s London consorts, the viola da gamba and lute were popular, but when Inigo Jones tried to import this tall re-entrant bass lute with 14 courses and 2 pegboxes, customs confiscated it as a suspected Popish Plot. Visée and Kapsberger were virtuosos of this powerful instrument invented by the Greek-drama-inspired Florentine Camerata to accompany early opera.

ANSWER: **theorbo** (“thee-OR-bo”) [or **tiorbo**; or **tiorba**; or **théorbe**; or **chitarrone**; do not accept or prompt on “archlute”] (In Rome, Johannes Hieronymus Kapsberger was nicknamed “the German theorbist.”)

<OL, Classical Music>

15. This philosopher argued that quantifying over names and descriptions in opaque contexts requires both “notional” and “relational” quantifiers in his paper “Quantifying In.” For 10 points each:

[10] Name this philosopher whose best-known paper identifies a proposition’s meaning with its “character,” a function that maps a proposition to a “content,” which is itself a function from worlds to truth-values.

ANSWER: David **Kaplan**

[10] In that 1989 article, Kaplan used the distinction between “content” and “character” to give a two-dimensional semantics for these context-sensitive expressions exemplified by “here” and “you.”

ANSWER: **indexicals** [or true **demonstratives**; or **deictic** expressions]

[10] Kaplan argued that indexicals, like names, are these terms in his paper “Dthat” (“D-that”). Saul Kripke coined the two-word name for these terms, which refer to the same object in every possible world.

ANSWER: **rigid designators**

<CK, Philosophy>

16. Research by Michael Waters and Thomas Stafford Jr. used new radiocarbon dating to provide evidence against the “[this culture] First” theory, which claimed that this was the oldest culture in the Americas. For 10 points each:

[10] Name this culture named after a site in New Mexico that produced distinctive stone spear tips and projectiles. Genetic testing has revealed that most indigenous Americans are probably descended from this culture, whose other sites include Anzick and Cactus Hill.

ANSWER: **Clovis** culture [accept **Clovis** First]

[10] While some scholars believe that humans migrated throughout the Americas via land travel through the interior of the continent, this competing model posited by Knut Fladmark claimed that humans also migrated to the Americas via boat by traveling through archipelagos such as California’s Channel Islands.

ANSWER: Pacific **coastal** migration model

[10] Jon M. Erlandson posited this corollary to the coastal migration theory, which claims that “highways” made up of the namesake marine structures provided safe passage and vibrant fishing grounds for humans migrating to the Americas.

ANSWER: **kelp** highway hypothesis [accept **kelp** forests]

<AE, Archaeology>

17. Jonathan Franzen wrote an English translation of this play, which ends with the protagonist being visited by the ghost of his friend Moritz who carries around his own decapitated head. For 10 points each:

[10] Name this play by Frank Wedekind (“VAY-duh-kind”) about the 14-year-old Melchior, who is sent to a reformatory after being expelled from school after writing an essay on sex, and impregnating Wendla.

ANSWER: **Spring Awakening** [or **Frühlings Erwachen**]

[10] Franzen also translated this man’s essays into English in a book titled for this author’s “project.” He wrote a post-apocalyptic play framed as a conversation between the “Optimist” and the “Grumbler.”

ANSWER: Karl **Kraus** [accept *The Kraus Project*] (The play is *The Last Days of Mankind*.)

[10] Franzen’s *The Kraus Project* includes Kraus’s essay about this poet “and the Consequences.” He wrote about a woman “combing her golden hair,” who lures sailors to their deaths, in his poem “Die Lorelei” (“dee LOR-uh-lye”).

ANSWER: Heinrich **Heine** (“HY-nuh”)

<CK, European Literature>

18. Conservation laws and symmetries are important and intertwined concepts in physics. For 10 points each:

[10] This theorem from classical mechanics guarantees the existence of a conservation law corresponding to each symmetry of the action for a physical system.

ANSWER: **Noether**'s ("NUR-tuh's") theorem

[10] Locally, conservation laws are expressed as a continuity equation for the conserved quantity. In differential form, a continuity equation sets this function of the conserved quantity equal to the negative time derivative of its density.

ANSWER: **divergence** [accept **del dot**; do not accept or prompt on "del"]

[10] Invariance of physics under a gauge ("gayj") transformation described by this Lie ("lee") group implies the conservation of charge. Quantum electrodynamics is thus a gauge theory with this symmetry group.

ANSWER: **U(1)** ("U-one") [or **unitary** group of degree **one**]

<GR, Physics>

19. These bills, which may carry images of the Jade Emperor, are often denominated in dollars even in countries where the dollar is not legal tender. For 10 points each:

[10] Name this type of imitation money that is designed to be burned at East Asian funerals.

ANSWER: **joss paper** [or **hell money** or **ghost money** or **spirit money**; accept synonyms in place of "money"]

[10] This fragrant substance is burned in religious ceremonies in many cultures. In East Asia, this substance is often burned in the form of joss sticks.

ANSWER: **incense**

[10] Joss sticks are common offerings at this Buddhist ceremony, which commemorates the birthday of the Buddha.

ANSWER: **Vesak** ("vay-SAHK") [or **Vesākha** or **Vaiśākha** or **Buddha Jayanti** or **Buddha Purnima** or **Fodan** or **Hanamatsuri** or **Phật Đản**; do not accept or prompt on "Vaisakhi"]

<NC, Religion: Buddhism>

20. In 2007, a Russian submersible planted a flag on the seabed beneath the northernmost point of this ocean. For 10 points each:

[10] Name this ocean whose melting ice caps have allowed ships to traverse the Northern Sea Route from the Bering Strait around the coast of Russia.

ANSWER: **Arctic** Ocean

[10] This Russian archipelago can be considered as a northern extension of the Ural Mountains. The most powerful nuclear explosion in history occurred in 1961 when the Tsar Bomba was detonated over this archipelago.

ANSWER: **Novaya Zemlya** [or **Nova Zembla**]

[10] Soviet drifting ice stations discovered an undersea ridge named for this man that divides the Arctic Ocean into two basins. Moscow State University is officially named after this man.

ANSWER: Mikhail **Lomonosov** [or Mikhail Vasilyevich **Lomonosov**]

<EM, Modern World>