

CMST II

Packet 12

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1. *Specific term required.* **This strategy was championed by the editorialist James J. Kilpatrick, who argued that state governments have a right of “interposition.” Despite initially supporting this policy, Governor J. Lindsay Almond appointed the Perrow Commission, which replaced it with a plan based on “freedom of choice.” Nancy MacLean argued that James M. Buchanan’s development of public choice theory was influenced by this policy in her 2017 book *Democracy in Chains*. As part of this strategy, a state legislature adopted the (*) Stanley Plan, which created a Pupil Placement Board. Elements of this strategy took advantage of the ambiguous phrase “with all deliberate speed.” Endorsed in the Southern Manifesto, this strategy led to the two year long closure of public schools in Prince Edward County. For 10 points, Senator Harry Byrd, Jr. championed what strategy of closing public schools to prevent desegregation in Virginia?**

ANSWER: **massive resistance** [prompt on descriptions like closing schools in Virginia to prevent desegregation or resisting *Brown v. Board*; prompt on segregation and word forms or on Jim Crow]

<CK - History: American>

The fastest growing wavelength in systems undergoing this phenomenon equals half the square root of the second derivative of free energy over the gradient energy coefficient. For 10 points each:

[10h] Name this mechanism of phase separation that occurs in thermodynamically unstable states, unlike nucleation and growth, which occurs in metastable states.

ANSWER: **spinodal decomposition**

[10m] Analytic solutions to the van der Waals equation admit unstable states that, rather than undergoing spinodal decomposition, are treated as unphysical and removed using a construction named for this scientist. This scientist also names a set of relations between second derivatives of the four thermodynamic potentials.

ANSWER: James Clerk **Maxwell** [accept **Maxwell** construction or **Maxwell** equal area rule; accept **Maxwell** relations]

[10e] Thermodynamic states that aren’t stable, by definition, lack this property possessed by systems at their free energy minimum. Systems with this property have no net flow of matter or energy.

ANSWER: thermodynamic **equilibrium**

<SS - Science: Chemistry>

2. **A piece named for this composer begins in rapid 12/16 time with E minor 7 and A minor 7 arpeggios alternating between the right and left hands each measure, introducing a central A-G-A trill motif. A technical treatise by this composer includes some of the latest preludes for his favored instrument using only whole notes and long curves without specified rhythmic values, called “unmeasured.” A program piece by this composer represents Mercury warning (*) another composer of Apollo’s arrival in the Elysian fields. This composer named that trio sonata for Jean-Baptiste Lully a year after titling another *Apothéose* for Arcangelo Corelli. This composer of *The Mysterious Barricades* (emphasize) inspired a piece featuring *Forlane*, *Rigaudon*, and *Toccata* movements dedicated to friends lost in WWI. For 10 points, name this French Baroque composer and harpsichordist whose *Tombeau* titles a work by Maurice Ravel.**

ANSWER: François **Couperin** “le Grande” (“koo-PRAW”) (The mentioned treatise is *L’art de toucher le clavecin* or *The Art of Playing the Harpsichord*.)

<JM - Arts: Classical Music>

This book argues that anthropologists don't recognize "coevalness" with their subjects because of "schizogenic" deployment of one of its title concepts, and thus that anthropology can only be "allochronic." For 10 points each: [10h] Name this Johannes Fabian book that examines the power dynamic latent in the way Western anthropologists see themselves as existing in a "here and now" and their subjects in a "there and then."

ANSWER: ***Time and the Other: How Anthropology Makes its Object***

[10m] Fabian critiques the way this anthropologist's functionalist program restricts analyzing time to the bounds of "separate" cultural systems in this thinker's book *The Social System*, which discusses his AGIL paradigm.

ANSWER: Talcott **Parsons**

[10e] This earlier social scientist claimed that native Hopi speakers experience time differently on account of their language's idiosyncratic grammar. With Edward Sapir, he names a general hypothesis about linguistic relativity.

ANSWER: Benjamin Lee **Whorf** [accept Sapir-**Whorf** Hypothesis]

<JM - Thought: Soft Social Science>

3. **When this quantity equals n , a presentation of the fundamental group exists using one relation between $2n$ generators. For a divisor D , (read slowly) the degree of D minus this quantity plus one equals the dimension of a vector space minus a correction term, by the Riemann-Roch theorem. The square root of "one plus 48 times this quantity" is a lower bound on the chromatic number. For a graph, this quantity characterizes the difficulty of (*) embedding the graph without crossings. Formally, this quantity equals the max number of cuts along closed simple curves that preserve connectedness. An orientable object for which this quantity equals n can be written as the connected sum of n tori. Two minus twice this quantity equals the Euler characteristic. This quantity is zero for a sphere, one for a torus, and two for a solid figure eight. For 10 points, give this number of holes or "handles" in a surface, written lowercase g .**

ANSWER: **genus** [or **genera**; prompt on **g** before mentioned; prompt on number of holes or number of handles before mentioned]

<TM - Science: Mathematics>

Answer the following related to Black conservative George Schuyler, whose autobiography is fittingly titled *Black and Conservative*, for 10 points each:

[10h] Schuyler's essay "The Negro-Art Hokum" accused "the Aframerican" of being "merely a lampblack Anglo-Saxon," prompting a response by Langston Hughes titled for "The Negro Artist and [this two-word phrase]." Hughes allegorizes the "urge within the race to whiteness" to this allegorical obstacle.

ANSWER: **racial mountain** [accept "The Negro Artist and the **Racial Mountain**"]

[10e] A few months after Schuyler and Hughes' essays were published, this author gave the speech "Criteria of Negro Art." Though he later co-authored *The Negro in the South* with Booker T. Washington, their feud over racial assimilationism inspired a critique in this author's *The Souls of Black Folk*.

ANSWER: W.E.B. **Du Bois** [or William Edward Burghardt **Du Bois**]

[10m] George Schuyler is frequently compared to this author, whom John McWhorter hailed as "Black people's favorite Black conservative." *Mule Bone* was a collaboration between Hughes and this author, who was controversial for endorsing Robert Taft and opposing Brown v. Board of Education.

ANSWER: Zora Neale **Hurston**

<CS - Literature: American>

4. **A religious healer named Aua told an explorer that these people “do not believe,” but “fear.” These peoples’ mythology includes a skeleton being who drums on himself to produce tidal waves named Ahkiyyini. In the folklore of this culture, children are discouraged from wandering by stories of long-haired, green-skinned monsters that steal them in their coats. An adage of these people laments that the “peril of existence” lay in the fact that their “diet consists entirely of souls,” reflecting their tradition that life emerges as part of a cosmological ether called (*) “Silla.”** The languages of these people are written using a syllabary adapted from Cree based on rotations of figures like hook shapes, triangles, and arcs. These peoples’ pantheon includes the wolf Amarok and the bear-master Nanook, along with a sea goddess who lives in the Adlivun underworld called Sedna. For 10 points, name these circum-arctic peoples indigenous to Greenland, Alaska, and northern Canada.
ANSWER: **Inuit** peoples [or **Inuuk**; accept sub-groups like **Iñupiat**, **Inuvialuit**, and **Inughuit**; reject “Eskimo” because that also applies to Yupik and Aleut peoples] (The child-stealing creatures are Qallupilluit.)
<JM - Geography (Mythology)>

Answer some questions about Thrasybulus, the arch-democrat who repeatedly thwarted Athenian oligarchic regimes such as the short-lived 400 and the more durable and brutal Thirty Tyrants, for 10 points each:

[10m] Thrasybulus prevented the 400’s takeover of this island, led in a namesake war against Athens by the philosopher Melissus. Polycrates had The Tunnel of Eupalinos, an advanced underground aqueduct, built on it.

ANSWER: **Samos**

[10e] Thrasybulus was behind the recall of this statesman. This advocate of the Sicilian Expedition defected to Sparta after accusations that he mutilated the Herms and profaned the Eleusinian Mysteries.

ANSWER: **Alcibiades**

[10h] Thrasybulus was demoted after this battle, Lysander’s first naval victory. Alcibiades’s helmsman here ignored his sole order of “do not attack Lysander’s ships,” and Thrasybulus’s replacement then lost the war at Aegospotami.

ANSWER: Battle of **Notium** [accept the Battle of **Ephesus**]

<JG - History: Ancient/Other>

5. **In *Of Reality*, Gianni Vattimo argued that philosophy must reckon with a “radical critique” of this subject “to be something more than merely essay writing” or “historiography” in a chapter titled for this subject “and Violence.” A 2020 Theodore Sider book argues that “first-order” work in this field is less important for science than “choice of tools” in it. The author defends conceptual analysis in Frank Jackson’s book titled for going “From” this subject “to Ethics.” The argument that all statements about this topic are (*) meaningless appears in *Language, Truth, and Logic*, in which A.J. Ayer argued for abandoning this field. Kant asked “how” this subject “in general” is “possible” in a *Prolegomena to Any Future* such theory. This subject includes theories of possibility and actuality, as well as sub-fields like mereology and ontology. For 10 points, give this term for the philosophical study of reality and existence as such.**

ANSWER: **metaphysics** (Sider’s book is *The Tools of Metaphysics and the Metaphysics of Science*.)

<JM - Thought: Philosophy>

This saxophonist's song "Going Home" has become such a ubiquitous soundtrack for closing time in China that when he played it at a concert there mid-set, much of the audience got up and left. For 10 points each:

[10e] Name this American smooth jazz saxophonist with iconic long curly hair, known by his nickname and last initial, who is one of the best-selling musical artists of all time.

ANSWER: Kenny **G** [or Kenneth Bruce **G**orelick]

[10m] Some critics trace the origin of the smooth jazz idiom to this other saxophonist, whose album *Winelight* and its hit single "Just the Two of Us" with Bill Withers are credited with popularizing the style.

ANSWER: Grover **Washington** Jr.

[10h] In 2021, Kenny G controversially released a single using modern AI tech to feature "The Sound of" this earlier saxophonist, who died in 1991.

ANSWER: Stan **Getz** [or Stanley **G**ayetski]

<JM - Arts: Jazz>

6. **In a short story by this author, a character notes that "whoever marries off a son loses a son, but whoever marries off a daughter gains a son." In that story by this author, Tony addresses his mother-in-law by her first name while seeing her off. Catherine awkwardly says goodbye to her mother Severina, who constantly checks her suitcases, in a short story that titles this author's collection *Family Ties*. This author wrote a novel in which the title character claims that "the world's continual breathing is what we hear and call silence." In another novel by this author, a European man's promise to (*) Macabéa is represented by the yellow Mercedes that runs her over. The title character of a novel by this author enters a former maid's room to find a cockroach, whose entrails she eventually puts in her mouth. For 10 points, name this Brazilian author of *The Hour of the Star* and *The Passion According to G.H.***

ANSWER: Clarice **Lispector** [or Chaya Pinkhasivna **Lispector**]

<VA - Literature: World>

One of the earliest Chinese examples of these things is the "ant-nose" variety, and one of the rarest and most prized varieties is the "three-holed spade" type. For 10 points each:

[10m] Name these objects, that include the *bàn liǎng* that originated during the Qin ("chín") Dynasty and the later Wǔ zhū. Wang Mang supposedly created 28 new types of them.

ANSWER: **coins** [or *yìngbì*; accept **cash coins** or *fāng kǒng qián*; prompt on **money**, **currency**, **huòbì**, **qián**, and other more general answers]

[10e] A cash coin shortage under this dynasty led to the development of "flying cash" precursors to banknotes. This dynasty's Salt Commission enforced a state tax to make up for loss of land revenue from the An Lushan rebellion.

ANSWER: **Táng** dynasty [or *Tángcháo*]

[10h] Wǔ zhū cash coins were also manufactured in this Tocharian-speaking kingdom in the Tarim Basin. The monk Kumārajīva introduced the Mādhyamaka ("mud-HYUM-uh-kuh") school of Buddhist thought to China from this oasis kingdom.

ANSWER: **Kucha** [or **Kuche**; accept **Kuchar**, **Qiūcí**, or **Kūcīna**]

<VA - History: World>

7. **A play by this author begins with the Duchess and Huspar discussing how the protagonist uttered the word “pip-squeak” in a delirium. After learning that he threw his childhood best-friend down a flight of stairs and slept with his brother’s wife Valentine, the protagonist of that play by this author befriends an English boy and uses a scar beneath his shoulder-blade to convince everyone that he is a Madensale. This author divided his work into “pink” and “black” plays. Darius Milhaud (“mee-YO”) wrote incidental music to accompany a play by this author about the (*) amnesiac veteran Gaston, who discovers he was the cruel Jacques Renaud. Guards wear military helmets and oilcloth trench coats in this author’s reinterpretation of a Greek tragedy that notably omits the role of Tiresias. For 10 points, name this playwright who wrote *The Traveler Without Luggage* and satirized Vichy France in his adaptation of *Antigone*.**
ANSWER: Jean (Marie Lucien Pierre) **Anouilh** (“AHNOY”)
<CK - Literature: European>

Catholics gather for a yearly ceremony in the Naples Cathedral to observe the temporary liquefaction of this substance in a miracle attributed the city’s patron saint Januarius. For 10 points each:

[10e] Name this substance preserved in some Christian relics, from which a Basilica in Bruges (“BROOZH”) gets its name. In Catholicism, the eucharistic wine is thought to transubstantiate into this substance.

ANSWER: **blood** [accept answers of “Precious/Holy **Blood** (of Christ)”]

[10m] According to tradition, this man, who assumed responsibility for Christ’s burial in the Gospels, preserved the Holy Blood relics. Many medieval legends developed around the idea that this man spread Christianity to Britain.

ANSWER: **Joseph of Arimathea** [prompt on **Joseph**]

[10h] According to legend, Joseph of Arimathea stuck his staff in the ground near the abbey he founded in this town to miraculously produce a “Thorn” named for this town, a “Holy” type of tree.

ANSWER: **Glastonbury**, Somerset, England [accept “**Glastonbury** Thorn” and “**Glastonbury** Abbey”]

<JM - Religion (Mythology)>

8. **A critique of this concept which notes that “piety requires us to honor truth above our friends” rebuts a dichotomy dividing this concept into types “in itself” and “for the purpose of something else.” This concept is made indefinable by the “unsystematic and inexhaustible variety of the world” according to an Iris Murdoch essay that discusses an earlier thinker’s metaphors about it. This concept gives “the power to know to the knower” according to a passage that calls it “the last thing to be seen.” A 1986 book titled for this concept includes chapters on (*) “Aeschylus and Practical Conflict” and on Alcibiades’ speech at the end of the Symposium. An analogy in the *Republic* comparing the sun to this concept is discussed in Martha Nussbaum’s book on “The Fragility of” this concept. Plotinus argued that this Platonic concept is synonymous with “the One.” For 10 points, Plato viewed the Form of what concept as the highest Form?**
ANSWER: **goodness** [or word forms like the **good**; accept *agathós*; accept the Form of the **Good**; accept *The Sovereignty of Good*; accept *The Fragility of Goodness*; prompt on **Forms** or **Ideas** by asking “which one?”] (The critique in the first sentence is from the *Nicomachean Ethics*.)
<TM - Thought: Other Philosophy>

Friedrich's ataxia is caused by one of these mutations in the first intron of frataxin. For 10 points each:

[10m] Name these mutations which give rise to a namesake set of disorders including myotonic dystrophies. These mutations often occur because of slippage during DNA replication, which leads to the creation of additional copies of codons.

ANSWER: **trinucleotide repeat** expansion [or **triplet repeat** expansion; accept **trinucleotide repeat** disorders or **microsatellite expansion** diseases; prompt on **repeats**; prompt on **triplet** or **trinucleotide** without "repeat" with "what process occurs with those nucleotides?"]

[10h] Even though trinucleotide repeats may not occur in exons, they are still dangerous because of this ribosomal process. The occurrence of this non-canonical process at C9orf72 has been linked to neurodegeneration in ALS.

ANSWER: **RAN translation** [or **repeat associated non-AUG translation**; or **repeat associated non-ATG translation** because codons]

[10e] A CCG repeat expansion characterizes a trinucleotide repeat disorder named for a "fragile" variety of this chromosome, the larger of the two sex chromosomes.

ANSWER: **X** chromosome [accept Fragile **X** syndrome or Fragile **X** disorders]

<VA - Science: Biology>

9. **A yellow pigment derived from buckthorn berries used up through the Renaissance was often called the "Dutch," "English," or "Italian" version of *this other color*, or this color's name with a silent "e" at the end. A Jean-Étienne Liotard pastel depicts a woman wearing a bonnet of this color holding cocoa. The Sèvres ("SEV-ruh") porcelain company created a namesake shade of this color at Madame de Pompadour's request. This color dominates the bottom half of Lawrence Alma-Tadema's painting of a (*) banquet hosted by Heliogabalus. A portrait of Sarah Barnett Moulton nicknamed for this color by Thomas Lawrence hangs opposite Thomas Gainsborough's *Blue Boy*. The infant Christ offers flowers of this color in a namesake Raphael *Madonna*. For 10 points, give this color of the dress worn by the central woman in Jean-Honoré Fragonard's *The Swing*.**

ANSWER: **pink** [accept direct synonyms like **rose**; accept **Pinkie**; prompt on (light) **red**]

<JM - Arts: Painting and Sculpture>

These things structure a poem in which the lover Amans converses with Venus's chaplain Genius, who intersperses explanatory stories like Apollonius of Tyre. For 10 points each:

[10h] Name these things that provide a common subtitle for John Gower's poem *Confessio Amantis*. In the fifth "passus" of *Piers Plowman*, these things deliver speeches one at a time before Piers gives a crowd directions to visit Saint Truth.

ANSWER: seven **deadly sins** [or seven **cardinal sins**; or seven **capital sins**; accept "vices" in place of "sins;" prompt on mortal **sins**]

[10e] This author, who dedicated his poem *Troilus and Criseyde* to Gower, included a sermon on the seven deadly sins in "The Parson's Tale."

ANSWER: Geoffrey **Chaucer** (The collection is *The Canterbury Tales*.)

[10m] In a different poem, this man visits the House of Pride, in which Lucifera and her six counselors are stand-ins for the seven deadly sins. This man is tricked by the wizard Archimago and imprisoned by the giant Orgoglio.

ANSWER: **Redcrosse Knight** [prompt on Saint **George**] (from *The Faerie Queene*)

<TM - Literature: British>

10. **In the 1970s, a company from this country wasted millions on a clearly fraudulent “oil sniffer plane.” *The Chained Duck*, a satirical newspaper, revealed that a politician from this country gave his family fake jobs in “Penelopegate.” An ex-president of this country was convicted for payments to the PR firm Bygmalion. Bribes regarding this country’s sale of six frigates to Taiwan caused the Clearstream Affair, and arms sales to the MPLA led Charles (*) Pasqua and an ex-president’s son to be imprisoned in “Angolagate.” An aide to this country’s current president beat up protestors with riot troops, and the 2005 electrocution of two youths in a power station spawned riots in its capital. A president of this country allegedly accepted Jean-Bédél Bokassa’s diamond bribes. For 10 points, name this site of “Yellow Vest” protests once led by Nicolas Sarkozy and François Mitterand.**
ANSWER: **France** [accept *La République Française*] (The “son” in the fourth sentence is Jean-Christophe Mitterand, and the incident with Bokassa and Giscard d’Estaing is the “diamonds affair.”)
<JG - History: European>

In one economic theory, this variable is equal to the sum of the intrinsic capital in resources and tools, the amount of socially necessary labor, and its “surplus” form which is extracted as profit. For 10 points each:

[10e] Name this quantity possessed by economic goods and services that classical Marxian economics follows Adam Smith in deriving from labor. Some economists study how this concept relates to market prices.

ANSWER: **value**

[10h] The nature of the relationship between labor-derived value and market prices is the target of this problem, a major topic of debate in Marxian economics.

ANSWER: **transformation** problem

[10m] A British socialist movement named for this economist came to similar conclusions about exploitation and the value/price discrepancy, following his critique that Adam Smith conflated labor value and wages. This economist names an “equivalence” regarding the relation between taxation and spending.

ANSWER: David **Ricardo** [accept “**Ricardian** Socialism”]

<JM - Hard Social Science: Economics>

11. **In the differential-geometric viewpoint, an effect due to this quantity is a consequence of the monodromy of a curvature-free connection along the path of a particle. To correct for the motion of point charges, this quantity is computed at retarded times in the Liénard-Wiechert model. A term proportional to the spacelike part of this quantity is subtracted from momentum in the minimal coupling Hamiltonian. “ $d \mu$ this quantity minus $d \nu$ this quantity μ ” equals the (*) field strength tensor. The Aharonov-Bohm effect is often used to argue that this quantity has intrinsic physical significance. The d’Alembertian of this quantity is set to zero in the definition of the Lorenz gauge. A vector calculus formulation of Maxwell’s equations sets the E-field equal to the negative gradient of the timelike portion of this quantity minus the time derivative of the spacelike portion of this quantity. For 10 points, name this quantity, the relativistic combination of a magnetic vector quantity denoted A and a scalar quantity denoted ϕ .**
ANSWER: **four-potential** [prompt on magnetic vector potential by asking “what quantity is that a component of?”; prompt on Δ]
<DE - Science: Physics>

The public response to this ballet's Paris premiere led Ezra Pound to yell "You are all imbeciles!" For 10 points each:

[10m] Name this ballet which is "danced" by 16 synchronized pianolas, 2 pianos, electric bells, sirens, propellers, bass drums, and tam-tam. It began life as a score for a film by Dudley Murphy and Fernand Léger ("lay-ZHAY"), but Georges Antheil's ("ANN-tile's") final score was over twice as long as the movie.

ANSWER: ***Ballet mecanique***

[10e] Antheil's *Ballet mecanique*, like butoh, Erik Satie's *Parade*, and Sophie Tauber-Arp's dancing at the Cabaret Voltaire, is usually classified under this art movement, whose name comes from the French for "hobbyhorse."

ANSWER: **Dadaism** [accept word forms]

[10h] This American choreographer of *Three Satie Spoons* and *Trio A* wrote a Dada-inspired "'No' manifesto" in which she said "No to spectacle" and "No to moving or being moved."

ANSWER: Yvonne **Rainer**

<CS - Arts: Misc>

- HALFTIME -

12. **This thinker critiqued assumptions of unity, universality, and indispensability as three problematic "postulates" of functionalism in the social sciences. This thinker called independent discoveries "multiples" and observed how discoverers are forgotten as their knowledge becomes more widespread, which he called "obliteration by incorporation." This thinker proposed communism, universalism, disinterestedness, and organized skepticism as a set of guiding principles of science abbreviated (*) CUDOS, his namesake "norms."** With Harriet Zuckerman, this thinker generalized the observation that famous scientists get disproportionate credit for new discoveries into the "Matthew Effect" of accumulated advantage. Inspired by Weber ("VAY-bur"), this thinker's namesake "Thesis" proposes a link between the rise of Pietism and experimental science. This sociologist advocated "middle-range" theories, distinguished latent and manifest functions, and proposed a "strain" theory of deviance. For 10 points, name this author of *Social Theory and Social Structure* who coined the terms "role-model" and "self-fulfilling prophecy."

ANSWER: Robert (King) **Merton** [or Meyer Robert **Schkolnick**]

<JM - Thought: Soft Social Science>

The STRUCTURE method for quantifying admixture proportions is identical to one subtype of these models. For 10 points each:

[10h] Name this type of statistical model that simultaneously attempts to identify themes across documents and classify them according to theme. The most common model of this type assumes a Dirichlet prior for both themes in documents and words in themes.

ANSWER: **topic** model(ing) [prompt on latent Dirichlet allocation or LDA with "what general class of models is that an example of?"]

[10e] Topic models are commonly used for classification in this field, which, broadly speaking, uses machine learning to make sense of text. Subfields of this discipline include machine translation and speech recognition.

ANSWER: **NLP** [or **natural language processing**]

[10m] Titov and McDonald pioneered the use of topic modeling for this process, which is often applied to customer reviews. The simplest form of this process identifies the polarity of a given word or phrase.

ANSWER: **sentiment** analysis/mining [accept **opinion** analysis/mining; accept **emotion AI**; prompt on descriptions like getting emotions from text]

<AF - Science: Computer Science>

13. **Within two years of conquering one region, this general had to sail back to it to put down a mutiny by the bodyguard Stotzas. During that conquest, the admiral Calonymus secretly violated this general's orders to return his spoils. This general came out of retirement to win the Battle of Melantias with a mere 300 men by having local peasants hit trees to spook the Kutrigurs' horses. This general won one battle after John the Armenian's vanguard killed the opposing leader's brother Ammatas. During the (*) Lazic war, this general tricked opponents not to attack by stoking fears of a plague. This general brought Gelimer to Rome in triumph. This victor at the Battle of Ad Decimum was supposedly tricked by spies disguised as messengers who had been sent by Totila, who then used the intel to sack Rome. This general helped Mundus put down the Nika Riots. For 10 points, name this conqueror of the Vandals and rival of Narses, a Byzantine general under Justinian.**

ANSWER: Flavius **Belisarius**

<JM - History: Ancient/Other>

Two collections of *Selected Poems*, respectively translated by Doris Dana and Langston Hughes, appeared after this poet's 1957 death. For 10 points each:

[10m] Name this romantic partner of Dana. Hughes's book opens with "Cradle Songs" drawn from this poet's *Desolación*.

ANSWER: Gabriela **Mistral** [or Lucila Godoy **Alcavaga**]

[10h] "Li'l Manuel" is critiqued for "all data English you used to know" in Hughes's Black vernacular translation of a poem from this author's *Motives de son*. Eartha Kitt recorded a reading of Hughes's translation of this other Black poet's "Chant for Killing a Snake."

ANSWER: Nicolas **Guillen** [or Nicolas Cristobal **Guillen** Batista] (The latter poem is *Sensemaya*.)

[10e] Hughes translated *Masters of the Dew* after the death of author Jacques Roumain, a Marxist from this home country of Edwidge Danticat ("dah-tee-KAH"). A revolution in this non-Cuban country is the setting for Alejo Carpentier's *The Kingdom of This World*.

ANSWER: (Republic of) **Haiti** [or *République d'Haïti*; or *Republik d'Ayiti*]

<CS - Literature: World>

14. **This text's punitive requirement that a man who refuses a certain obligation must be spat upon and take "the unsandaled" as his family name ironically lives on in the modern Jewish ritual of Halizah, which is used to deliberately avoid Levirate marriage. Frank Moore Cross proposed a widely accepted two-revision model based on Martin Noth's theory that this text shares a common editorial or authorial origin with Joshua, Judges, Samuel, and Kings, which together are called this book's eponymous (*) "history." 2nd Kings's story of the discovery of a "book of the law" during Josiah's reign is likely a reference to this text and its legitimation of his religious reforms. This text is the origin of the Shema ("shem-AH") prayer, and narratively ends at Mount Nebo with the death of Moses. For 10 points, name this Hebrew Bible text whose name comes from the Greek for "second law," the last book of the Pentateuch ("PENT-uh-took") after Numbers.**

ANSWER: (Book of) **Deuteronomy** [or *Devarim/Debarim*; accept the **Deuteronomist** or the **Deuteronomistic** History/Historian; accept the **Deuteronomic/Deuteronomistic** code on the first clue]

<JM - Religion>

This opera's overture was re-used for the first movement of its composer's 63rd symphony, which modified the overture's open-cadence ending to resolve to the tonic. For 10 points each:

[10h] Name this comic opera by Joseph Haydn that sets a Carlo Goldoni libretto about the fraudulent astronomer Ecclitico. Portions of this opera concerning the title celestial body are consistently in E-flat.

ANSWER: *Il **Mondo Della Luna*** [or *The **World on the Moon***; or *Die **Welt auf dem Monde***]

[10m] *Il Mondo Della Luna* is sometimes performed in German in this operatic format, where spoken dramatic scenes are interspersed with sung arias.

ANSWER: **singspiel** ("ZING-shpeel")

[10e] This modern composer punned on "singspiel" with his Mahagonny-Songspiel which, like his *Threepenny Opera*, was a collaboration with dramatist Bertholt Brecht.

ANSWER: Kurt (Julian) **Weill** ("VILE")

<JM - Arts: Classical Music>

15. **The Henderson lab at Cornell coupled a material with this property to a piezoelectric cantilever to form a micro-battery. A gold- and silver-plated dioxide with this property generates a current that decreases when volatile airborne particulates cause scattering in an ionization chamber. A molecule with this property was introduced to a "lollipop" before the *Chlorella* alga inside was killed with methanol and analyzed with 2D (*) thin layer chromatography. In that experiment, 3-phosphoglycerate was identified as the first molecule to obtain this property, revealing it to be the first intermediate in the Calvin-Benson cycle. Glucose usage can be tracked in PET scans by incorporating a fluorine isotope with this property, which allows it to act as a tracer. Ionization smoke detectors rely on this property of americium. For 10 points, name this property possessed by isotopes like carbon-14 that gradually decreases as they decay.**

ANSWER: **radioactivity** [accept word forms]

<SS - Science: Chemistry>

Søren Kierkegaard wrote that this concept, which titles a later book in which Constantine Constantius observes a quasi-autobiographical "Young Man," arises "(w)hen ideality and reality touch each other." For 10 points each:

[10e] Give this term for the concept of the same thing, word, or idea appearing multiple times. "*Difference and*" this word are the title notions of a Gilles Deleuze ("ZHEEL duh-LOOZ") book on the metaphysics of representation.

ANSWER: **repetition** [accept word forms like "**repeating**," "**repeatability**," etc.; accept *Gjentagelsen*]

[10m] In this book addressing the *Discursive Limits of "Sex,"* Judith Butler used the related concept of "iterability" to clarify the way sex and gender can be "performed" without the subject having active citational intentions.

ANSWER: ***Bodies That Matter: On the Discursive Limits of "Sex"***

[10h] Butler borrowed the term "iterability" from this Jacques Derrida essay, which argues that J.L. Austin was wrong to take "nonserious" performances like theater as "parasitic" on true ones in his theory of illocutionary acts.

ANSWER: "**Signature Event Context**"

<JM - Thought: Philosophy>

16. After going to jail, a character originally from this contemporary country laments that his family could not be imprisoned with him because jail is “a place where the snow could not beat in.” The assertion that “things that were quite unspeakable went on” in a place where “there was no difference in color between master and slave” foreshadows the rape of another character originally from this modern-day country by alluding to an illicit prostitution ring run by Miss (*) Henderson. After drinking too much and getting locked overnight in a building, a teenage boy originally from this contemporary country is eaten alive by rats. An immigrant from this contemporary country meets a criminal named Jack Duane in jail after he is imprisoned for assaulting his wife’s rapist, a foreman named Phil Connor. Ona and Jurgis Rudkus immigrate to Chicago from—for 10 points—what contemporary Baltic country in Upton Sinclair’s novel *The Jungle*?

ANSWER: (Republic of) **Lithuania** [or **Lietuva**; or **Lietuvos Respublika**; accept **Lithuanian** Soviet Socialist Republic or **Lietuvos Tarybų Socialistinė Respublika** or **Litovskaya Sovetskaya Sotsialisticheskaya Respublika**]
<WJ - Literature: American>

This speech’s author “helped make Haiti and Cuba a decent place for the National City Bank boys to collect revenues” during the Banana Wars, saying he “might have given Al Capone a few hints.” For 10 points each: [10m] Name this speech by US Marine Corps general Smedley Butler that decried the way American imperialist warfare subsidized and protected profiteering interests, calling for restrictions on naval operations and war funding.

ANSWER: “**War is a Racket**”

[10e] This president deployed Butler to Haiti at City Bank’s urging. This president eventually reversed course on keeping the US out of WWI after extensive interventions in Latin America during his first term.

ANSWER: (Thomas) Woodrow **Wilson**

[10h] Wilson sent troops to Haiti to suppress the rebel *cacos* whose leaders included this Haitian national hero. An iconic photo of this leader’s corpse in a Christ-like pose was taken in a poor attempt at American propaganda.

ANSWER: Charlemagne (Masséna) **Péralte**

<JM - History: American>

17. A musician with this first name played saxophone for Cedar Walton’s *Pentagon* project and Eastern Rebellion quartet. That man with this first name chanted “John Coltrane” on a track of that title for his influential 1972 record *Glass Bead Games*, and came to fame with a 1957 release pitting him against John Gilmore titled *Blowing in from Chicago*. After three weddings to his wife Emma Larue, a musician with this first name titled the standard “Joy Spring” after her nickname. Benny Golson composed a standard in tribute to that trumpeter titled (*) “I Remember” this name. That trumpeter with this name released seminal 50s hard bop records alongside a collaborator with titles like their-names-“*Incorporated*” and -“*at Basin Street*” before his death at age 25 in a car accident that also killed Ritchie Powell. Max Roach got his start in a duo with—for 10 points—a player with what first name shared by saxophonist Jordan and trumpeter Brown?

ANSWER: **Clifford** [accept **Clifford** Jordan or **Clifford** Brown; prompt on **Cliff**]

<JM - Arts: Jazz>

Muammar Gaddafi called this massive infrastructure project the “eighth wonder of the world,” overseeing its development after oil prospecting efforts discovered huge fossil water deposits instead. For 10 points each:
[10h] Name this extensive network of underground pipes developed over the 1980s, the largest irrigation project on earth, which takes fresh water from the Nubian Sandstone Aquifer System north to coastal cities like Tripoli.

ANSWER: **Great Man-Made River** [or *alnahr alsinaeiu aleazim*]

[10e] The GMMR supplies 70% of the fresh water consumed in this North African country which, prior to a 2020 agreement, had competing governments following a 2011 civil war precipitated in part by events in Benghazi.

ANSWER: (State of) **Libya** [or (*Dawlat*) *Lībiyā*]

[10m] Much of the GMMR’s supply comes from the Fezzan region, thought to be the historical home of this ethnic group. Their language predominates in the Libyan city of Zuwara, along with the Nufasa mountains.

ANSWER: **Berber** [or *Imazighen*; or *Amazighs*; or *'amazighi-barbir* (accept either underlined portion); prompt on **Tuaregs** by asking “which are members of what larger group?” even as Zuwaras and Nufasas are not Tuaregs]

<JM - Geography>

18. **This ruler wrote a musical composition with a title meaning “Sharing Joy With the People” that is still performed today. This ruler instituted the “Peasants Relocation Policy” to attract people to newly conquered northern areas of his kingdom. This ruler ran a 5-month public opinion poll before implementing a new taxation system that responded to agricultural downturns, and instituted parental leave for members of the enslaved *nobi* class. Opponents of a successful a coup by this ruler’s son against his grandson included the (*) “Six Martyred Ministers.” On his father’s orders, this ruler made a deal with the Sō clan after launching the Ōei Invasion of Tsushima to deal with *wokou* (“wah-KOH”) piracy. This ruler presided over the creation of a system a “wise man” could learn in a morning and a “stupid” one in ten days with the help of his Hall of Worthies. For 10 points, name this monarch who introduced the Hangul script as leader of the Joseon Dynasty.**

ANSWER: **Sejong** the Great [accept (Grand Prince) *Chungnyeong* or *Yi Do*]

<JM - History: World>

Though the primary sources for this once-popular movement survive only in quotations, the first chapter of Mādhavāchārya’s (“mud-huh-vuh-CHAR-yuh’s”) *Compendium of all the Philosophical Systems* examines their theories in detail. For 10 points each:

[10h] Name this radically skeptical hedonist school of ancient Indian philosophy traditionally founded by Brihaspati that controversially denied the reality of karma, reincarnation, and all other immaterial phenomena.

ANSWER: **Cārvāka** school (“CHAR-vuh-kuh”) [or *Cārvākas*; or *Lokāyatas/Lokāyata* school]

[10e] The Cārvākas have been compared to this Greek thinker’s lineage, the hedonistic and atomistic teachings of which are preserved in Lucretius’s *De Rerum Natura*.

ANSWER: **Epicurus** [accept answers of *Epicureanism*]

[10m] Scholars have also compared the Cārvākas to this skeptical school of Greek thought, whose eponymous founder traveled to India with Alexander’s campaigns. Its ideas were largely preserved by Sextus Empiricus.

ANSWER: **Pyrrhonism** [accept *Pyrrhonian* Skepticism]

<JM - Thought: Other Philosophy>

19. In a 2019 *Nature* study by Kimura et al., a receptor for this compound with a unique “side-extended cavity” was crystallized for the first time in a complex with zotepine (“ZOH-teh-peen”). Poisoning resulting from excess production of this compound can be diagnosed with the Hunter criteria, which emphasizes the presence of clonus. In rats, activation of a receptor for this compound causes the “head-twitch response.” Unlike benzodiazepines, buspirone treats anxiety disorders by agonizing a receptor for this (*) neurotransmitter. Tyrosine, L-DOPA, and this compound are the products of the aromatic amino acid hydroxylases. This neurotransmitter primarily *circulates* in dense granules of platelets, and is secreted in the brain by the Raphe (“rah-FAY”) nuclei. MAO inhibitors metabolize this neurotransmitter into 5-HIAA, which may explain their effectiveness as second-line depression treatments. For 10 points, name this neurotransmitter whose reuptake is inhibited by SSRIs like Zoloft or Prozac.

ANSWER: serotonin [or 5-hydroxytryptamine (5-HT)]

<JM - Science: Biology>

In Adam Erlich Sachs’s 2019 novel *The Organs of Sense*, Gottfried Leibniz scrutinizes the sanity of an astronomer with this characteristic as they wait to see if an eclipse he predicted occurs. For 10 points each:

[10e] Give this characteristic. In a José Saramago novel titled for it, a city is overtaken by an “epidemic” of this ailment after a citizen comes down with it in traffic.

ANSWER: blindness [accept obvious descriptive equivalents like “inability to see” or “loss of vision,” accept *Ensaio sobre a cegueira*]

[10m] As a stylistic device, the characters of Saramago’s *Blindness* are presented *without* this literary feature, also lacked by the protagonists of *The Road* and *In Search of Lost Time*.

ANSWER: they do not have proper names

[10h] In this other Saramago novel, the only named character is Senhor José, who works in the Central Registry of Births, Marriages, and Deaths and tries to track down an “unknown woman” using their endless archives.

ANSWER: All the Names [or Todos os nomes]

<JM - Literature: European>

20. In a film titled for this name, several women flirt with a man dining alone as the protagonist mockingly narrates through a mirror. At that film’s end, a woman using this name remarks “But so am I, darling, so am I” when a man she nicknames “Hopsie” confesses that he’s married. A woman with this name who dreams of “waves of love pouring over the footlights” is caught lying about the Shubert Theater in San Francisco by a man who says she “belongs” to him. On a cruise ship, a con artist played by (*) Barbara Stanwyck adopts this alias to seduce Henry Fonda’s character in a Preston Sturges comedy. A film titled for this name is the origin of the line “Fasten your seatbelts, it’s going to be a bumpy night.” In that Joseph Mankiewicz film, an aspiring actress of this name ingratiates herself with theater veteran Margo Channing. For 10 points, Anne Baxter and Bette Davis star in a 1950 film titled “All About” what name?

ANSWER: Eve [accept *The Lady Eve* or *All About Eve*; accept Lady Eve Sidwich; accept Eve Harrington; prompt on Gertrude Slojinski by asking “what is her assumed name?”]

<TM - Arts: Film>

Two divisions under this general prevented Count von Wurmser's Austrian army from escaping the besieged city of Mantua. For 10 points each:

[10h] Name this Irish general who served under Napoleon during the First Italian Campaign. The Directory placed him in command of the Armée d'Angleterre where he planned a never-executed French invasion of Britain.

ANSWER: Brave **Kilmaine** [or Charles Edward **Jennings**]

[10m] A small French army led by Jean Humbert proclaimed the Republic of Connacht after winning the Battle of Castlebar during this uprising, sometimes named for a secret society founded by Wolfe Tone.

ANSWER: Irish **Rebellion of 1798** [or **United Irishmen** Rebellion; accept equivalents mentioning the year **1798**; prompt on '98]

[10e] Any further French campaigns in Britain and Ireland were prevented by this battle, whose winning commander died aboard the *HMS Victory* as his forces decisively defeated Pierre-Charles Villeneuve.

ANSWER: Battle of **Trafalgar**

<CK - History: European>

21. **An influential paper by Christa Brunnschweiler and Erwin Bulte called this phenomenon a statistical “red herring.” An alliance of fishermen, chambers of commerce, and environmentalists helped one country avoid this phenomenon’s “structural trap” according to a 1997 Terry Karl book. A 2006 study by Mehlum, Moene (“MAY-nuh”), and Torvik argued that “producer-friendly” institutions eliminated this phenomenon’s effects, and thus that its true cause is “grabber-friendly” institutions. Jeffrey Sachs and Andrew Warner found that its effect on (*) growth resulted in there being “no overlap” between high-GDP countries and countries that experienced export “bonanzas.” Norway and Botswana are canonical examples of countries limiting this phenomenon, whose sectoral manifestation led to the original “Dutch Disease.” This phenomenon is often encapsulated by Juan Pablo Perez Alfonso’s quip that Venezuela is “drowning in the devil’s excrement.” For 10 points, give this phenomenon where a country’s economy or politics is harmed by mineral endowments like the substance regulated by OPEC.**

ANSWER: **resource curse** [or the **paradox of plenty**; accept **Dutch disease** or **bonanzas** before mentioned; accept resource **booms** or **windfalls**; accept answers describing the presence of **oil or other valuable natural resources or primary commodities (e.g. diamonds)** or negative effects thereof; prompt on **rent-seeking**, **civil wars**, **rebellions**, or political **instability** with “caused or worsened by what?”]

<JG - Hard Social Science: Other>

According to Bertrand's theorem, the only central-force potentials for which bound orbits are also closed are the harmonic oscillator potential and the potential that depends on distance to this power. For 10 points each:

[10e] Name this power of distance that generates the *potential* that governs both electrostatics and gravitation. Since force is the derivative of potential, potentials that depend on this power of distance are equivalent to inverse-square forces.

ANSWER: **negative one** [or **minus one**; accept **one-over-r** potential or **one over the distance**]

[10m] All central-force potentials conserve energy, momentum, and angular momentum, but the one-over-r potential additionally conserves this vector. This vector points from the center of mass towards the periastron of the orbit.

ANSWER: **Laplace-Runge-Lenz vector** [or **LRL** vector or (Laplace-)Runge-**Lenz** vector; accept **eccentricity vector** but do NOT prompt on eccentricity alone]

[10h] This process, the subject of an incorrect “inverse-cube” law of Newton, causes the LRL vector to rotate in the orbital plane. Planets slowly undergo this process due to the effects of GR and perturbations from other planets.

ANSWER: **apsidal precession** [prompt on orbital **precession**; do NOT accept or prompt on other types of precession]

<DE - Science: Physics>

22. **This character says that she “always lacked common sense when taken by surprise” while reflecting on the time her suitor offered an umbrella and she awkwardly replied, “No, thank you, I don’t mind the rain.” This character is forced to stay home for six consecutive Sundays so that she cannot see a man whom another character jealously calls an “ugly blockhead.” This character makes remarks about others feeling entitled to “persecute the lower creation” after another character ecstatically tortures baby (*) birds in a nest and she uses a stone to put them out of their misery. Long after caring for her as a child, this character promises not to reveal Rosalie’s engagement to Sir Thomas Ashby so she can keep flirting, but Rosalie then begins flirting with this character’s eventual husband Edward Weston. For 10 points, name this title governess of Anne Brontë’s debut novel.**

ANSWER: **Agnes Grey** [accept either underlined portion]

<JM - Literature: British>

The MOMA houses this painter’s *Hide-and-Seek*—depicting a tree shaped from mushrooms, infant heads, and other body parts—which strangely figured in cult practices of The Temple of the True Inner Light. For 10 points each:

[10h] Name this Russian-born surrealist artist, a student of Alexandra Ekster patronized by his friend Gertrude Stein, who depicted similar ambiguous conglomerations of objects in *The Juggler* and the rainbow landscape *Phenomena*.

ANSWER: Pavel (Fyodorovich) **Tchelitchew** (“cheh-LIT-chev”)

[10m] Tchelitchew’s use of “simultaneous images” in the aforementioned works has been compared to this early Italian painter, who created a portrait of Rudolf II made of vegetables and a librarian made of books.

ANSWER: Giuseppe **Arcimboldo** [or Giuseppe **Arcimboldi**]

[10e] Octavio Ocampo, a surrealist from this home country of Frida Kahlo, depicted a young couple forming the profiles of an elderly pair in *Forever Always*, one of his many Arcimboldo-esque works.

ANSWER: **Mexico** [or the United **Mexican** States; or Estados Unidos **Mexicanos**]

<JM - Arts: Painting and Sculpture>