

TOSSUPS

1. Paul Lafargue (“lah-FARG”) claimed that Marx liked to compare himself to the main character of this short story, which climaxes with the image of a “Parian Venus rising out of the ruins of a city burned to ashes.” This story repeatedly describes the scene of Mary of Egypt paying her passage to Jerusalem, which a raggedy Norman man sketches in exchange for coins to buy a new coat. The two parts of this story are titled “Gillette,” after a young model, and “Catherine Lescaut (“less-KOH”),” after a courtesan nicknamed *la belle noiseuse* (“nwah-ZEWZ”) that Mabuse’s only student has obsessed over for ten years. In this story, Porbus and Poussin (“poo-SAN”) look on in confusion as a disheveled old man shows them a “chaos of colors, shapes, and vague shadings” whose only figurative element is a foot. For 10 points, name this Honoré de Balzac story titled for the painter Frenhofer’s magnum opus.

ANSWER: “The **Unknown Masterpiece**” [or “Le **Chef-d’œuvre inconnu**”]
<European Literature>

2. Hou Hsiao-hsien’s *Café Lumière* pays homage to this film and celebrates its director’s centenary. A wide shot in this film shows two people seated on a seawall facing the ocean before wistfully deciding to go home. In this film, that couple sits in a park before parting ways to stay with different hosts in a scene bookended by two tracking shots, this film’s only camera movement. After a woman’s family learns she will die before dawn, this film cuts to a series of its director’s signature “pillow shots.” This 1953 film uses static low-angle shots to evoke sitting on a tatami mat. In this film, Kyoko is angered when her siblings leave after their mother’s funeral, and Shige sends her parents to a hot spring to avoid spending time with them, unlike her widowed sister-in-law Noriko. For 10 points, a couple visit their children in the title city of what film by Yasujirō Ozu?

ANSWER: **Tokyo Story** [or **Tōkyō Monogatari**]
<Other Fine Arts>

3. A writer of this ethnicity alluded to Buzuku’s *Missal* in the humanist text *Cuneus Prophetarum*. Toma Raspasani led this ethnicity in a revolt that caused the first of a [emphasize] *different* ethnicity’s two Great Migrations. Kelmendi raiders of this ethnicity were starved into submission by Mahmut Pasha. A [emphasize] *different* ethnicity’s 19th-century historians misrepresented an “invitation” from Leopold I to justify this ethnicity’s expulsion from the Morava Valley. This ethnicity’s Bushati and Muzaka families fought a series of 18th-century proxy conflicts named for *sanjaks* of Scutari and Berat. Like Croatian Uskoks, pirates of this ethnicity based in Ulcinj (“OOL-tseen”) terrorized Venetian trade on the Adriatic Sea. Lekë Dukagjini (“LAY-kuh doo-kah-JEE-nee”) led this ethnicity’s League of Lezhë (“leh-ZHUH”) against the Ottoman Empire. For 10 points, identify this ethnicity of the national hero Skanderbeg.

ANSWER: **Albanians** [or **shqiptaret** (“sh’cheep-TAH-rut”); accept **Ghegs** or **Gegët**; accept **Tosks** or **Toskët**; accept **Kosovars**, **Kosovarët**, **Kosovo** Albanians, or Shqiptarët e **Kosovës**] (Pjetër Bogdani wrote the *Cuneus Prophetarum*.)
<European History>

4. Two-dimensional Gaussian models of the transport of these substances estimate their standard deviations by selecting one of six alphabetically-named stability classes, and then reading a value from a Pasquill–Gifford curve. The motion of these substances is classified into patterns such as coning or looping depending on the temperature profile. The long-range dispersion of these substances is limited by the mixing height, which coincides with the planetary boundary layer height. The trapping of these substances below a height corresponding to a local temperature minimum is the main negative effect of inversion layers. In the NowCast method, hourly measurements of a type of these substances abbreviated “PM” are rescaled to calculate the AQI. For 10 points, name these atmospheric substances released from industrial stacks and vehicle exhausts.

ANSWER: air **pollutants** [or air **pollution**; accept **polluting** gases, **flue gases**, **particulate** matter, **particulates**, **particle** pollution, **smog**, **smoke**, or **ozone**; accept **stack** gas until “stacks” is read; accept **exhaust** gases until “exhausts” is read; prompt on **gases** or **vapors**] (PM is particulate matter. The AQI is the air quality index.)

<Other Science>

5. A gay aesthete (“ESS-theet”) with this surname designed gardens for a Port Lymgne (“lim”) mansion that hosted David Lloyd George. Rachel, a member of this family who married Frederick A. Beer, reported Major Esterhazy’s confession in the Dreyfus affair as editor of *The Observer*. A Ba’ath Party scholar wrote a 2022 history of this family’s global legacy, such as funding Shanghai’s Cathay Hotel with opium profits and building early docks in Mumbai. The Kadoories rivaled these other descendants of Baghdadi Jews, who were called the “Rothschilds of the East.” An author from this family who was named for his mother’s love of opera was treated for “neurasthenia” (“nur-uss-THEE-nia”) by W. H. R. Rivers, as depicted in Pat Barker’s *Regeneration*. For 10 points, an author from what family fictionalized his posh youth in *Memoirs of a Fox-Hunting Man* and evoked trench warfare in “Counter-Attack”?

ANSWER: **Sassoon** family [or **Sassoons**; accept Siegfried **Sassoon**, Siegfried Loraine **Sassoon**, **Sassoon** Dock, **Sassoon** House, E. D. **Sassoon** & Co., (Ellice) Victor **Sassoon**, Albert **Sassoon**, Albert Abdullah David **Sassoon**, (Elias) David **Sassoon**, Joseph **Sassoon**, Rachel **Sassoon**, Philip **Sassoon**, or Philip Albert Gustave David **Sassoon**]

<Other Academic>

6. Commoners’ stelae in this city led to the disputed theory of a “democratization of the afterlife.” Effaced tombs in this city may corroborate “disasters” under Semerkhet reported by Manetho. Merneith’s mastaba in this city honors her regency for the first *nesu-bit*, Den. This city’s last royal tombs depict Set in the *serekhs* of Peribsen and Khasekhemwy. Nekhen rivaled this city, whose Tomb U-j (“U-J”) may house the Predynastic Naqada III ruler King Scorpion I near its tombs of the First Dynasty’s Thinite kings. Djer’s tomb at this Upper Egyptian city’s Umm El Qa’āb necropolis celebrated a so-called “passion play” for the “Chief of the Westerners.” This city’s Temple of Seti I contains its namesake King List and a cenotaph for its chief god, whose body was mythically recovered from Byblos. For 10 points, what cult center claimed to house the head of Osiris?

ANSWER: **Abydos** (“uh-BY-doss”) [or **Abdju**, **AbDw**, **Abīdūs**, **Afūd**, or **Ebōt**; accept **Abydos** King List or **Abydos** Table; accept **Umm El Qa’āb** until read; accept **El Balyana** or **Tpolubianē** or **Kom El Sultan**; prompt on **Thinis**, **Thinite** nome, **Tjenu**, **This**, **Tin**, **Girga**, **Digirga**, or **Digurga** until “Thinite” is read by asking “its rulers are known from what excavated city within its nome?”] (Nekhen is also called Hierakonpolis. The cenotaph is the Osireion.)

<Other History>

7. This poem speculates that man, the “greatest wonder,” might be “the sacred vision that the Eagle / of the Evangelists saw in Patmos.” The speaker of this poem sees three maidens transformed into birds with “bare drab membranes for wings” for “having disobeyed the divine Bacchus,” one of its images taken from a translation of *Metamorphoses*. In this poem, the Soul resolves to understand Creation through Aristotle’s ten categories. This poem’s mixed seven- and 11-syllable lines are preserved in the Norton translation by Edith Grossman. This poem begins with the image of a “pyramidal, funereal” shadow “aspiring to highest Heaven.” This 1691 poem in *silva* form refers to the speaker with a female inflection for the first time with its last word, *despierta*, or “I awake.” For 10 points, name this long Spanish-language poem by Sor Juana (“HWAH-nuh”).

ANSWER: *First Dream* [or *Primero sueño* or *El sueño*]

<World Literature>

8. This concept is the subject of Alexander George’s operational code theory. This concept is the [emphasize] *first* word in the title of a 1957 Philip Selznick book that claims it promotes “distinctive competence.” The “babble hypothesis” concerns this concept’s emergence. J. MacGregor Burns popularized dividing this concept into “transactional” and morally engaged “transformational” subtypes. It’s not motivation or personality, but “trait” theories of this concept contrast with “situational” theories like the Vroom–Yetton–Jago and Full-Range Models. Stereotypical male preferences for “agentic” styles of this concept over “communal” ones may hamper working women. A classic study by Kurt Lewin (“leh-VEEN”) divided this concept into autocratic, democratic, and laissez-faire styles. For 10 points, name this ability to effectively manage a team or guide subordinates.

ANSWER: **leadership** [or word forms of **leading**; accept **governance** or word forms; accept **decision-making**; prompt on **management**, **supervision**, or word forms until “manage” is read by asking “what concept describes the ability to manage?”] (The “babble hypothesis” posits that group leaders emerge simply by talking more than others.)

<Social Science>

9. Self-dual nets can be created free of catenation by using these molecules to assist in linker exchange. PLATON/SQUEEZE is a tool that finds the volume occupied by these molecules and is directly compatible with SHELXL (“shell-X-L”). Single-crystal-to-single-crystal transformations triggered by the motion of these molecules can cause cell volume to vary in an example of “breathing.” The shrinkage that characterizes xerogels can be mitigated by gradually replacing harsher examples of these molecules with milder ones. These compounds carry precursors during the hydrothermal synthesis of crystalline materials. The process of activation removes these guest molecules from metal–organic frameworks, whose pore size determines the surface area “accessible” to them. For 10 points, name these compounds that include DEF, DMF, and DMSO.

ANSWER: **solvents** [accept **solvent-accessible surface area** or **solvent-accessible volume**; accept **solvent-assisted linker exchange**; prompt on **guest** molecules until “guest” is read; prompt on **adsorbates**]

<Chemistry>

10. Saul warns this nation of his attack on the Amalekites to reward its *hesed* (“HESS-ed”). In Judges, Jael’s (“JAY-ell’s”) husband Heber descends from this nation, which settles Arad with Judah to fight the Negev’s Canaanites. This nation is called the “companions of the wood” in the Qur’ān, in which an earthquake strikes it for rejecting the only Arabian prophet with a standard biblical correlate, Shu’aib. This nation’s five kings are blamed for Moab’s corruption of Israel in God’s call for “holy war” against it in Numbers Chapter 31. These nomads, whose merchants sell Joseph into slavery, are routed with 300 men by Gideon. The Kenite hypothesis claims that Yahweh was originally the tribal god of this nation, since Mount Horeb is near the pastures grazed by its shepherdess Zipporah. For 10 points, what nation’s priest Jethro shelters his son-in-law Moses in Exodus?

ANSWER: **Midian** [or **Midianites** or **Madyan** or **Mīdyān**; accept **Kenites** or **Kenite** hypothesis or **Qēinī** until “Kenite” is read; prompt on **Ishmaelites**]

<Religion>

11. A composer from this country used three gong strokes to begin the slow “Hope in the Night” movement of a “folk symphony.” A composer from this country began his First Symphony with a *Moderato assai* movement whose first theme is introduced by a muted solo trumpet. A nine-movement cantata by a composer from this country is styled as a “Ballad” of the Magus Balthazar. Movements named “Longings” and “Aspirations” appear a symphony by a composer from this country based on sketches from his unfinished opera *Rashana*. A composer from this country featured a “Juba” dance movement in her First Symphony. A composer from this country included a banjo in a First Symphony titled for his racial background. For 10 points, name this home country of William Dawson, William Grant Still, Florence Price, and other composers of the Harlem Renaissance.

ANSWER: **United States** [or **USA** or **United States** of America; accept **America**]
<Classical Music>

12. The phenotypes of G6PD and an enzyme in this class allowed Stanley Gartler to identify the first known HeLa contamination. Two enzymes in this class bookend the Leloir (“leh-LWAR”) pathway, in which they activate the substrate for phosphorylation and then process the results of uridylation. A catalytically-perfect example of these enzymes provides an alternate name for the alpha/beta barrel fold. Two enzymes in this class come just before and just after transketolase (“trans-KETO-lase”), with the order being swapped between the pentose phosphate pathway and the Calvin cycle. One of these enzymes adds a fourth iron atom to its active site to complex an aconitate (“uh-CON-ih-tate”) intermediate and performs sequential hydrations and dehydrations to convert G3P to DHAP. For 10 points, name these enzymes that interconvert aldose and equivalent ketoses, like one that transforms glucose into fructose.

ANSWER: **isomerases** [accept **epimerases** or **mutarotases** or **mutases**; accept specific isomerases like glucose-6-phosphate **isomerase**; prompt on phospho**transferases**] (Gartler used G6PD and phosphoglucomutase.)
<Biology>

13. Long-serving Senator Robert Byrd claimed only to regret votes on the Civil Rights Act, the Patriot Act, the Vietnam War, and a bill concerning this industry sponsored by Nevada Senator Howard Cannon. Alvin Feldman committed suicide facing a hostile takeover in this industry led by notorious predatory executive Frank Lorenzo. Douglas and Miller’s study on load factor in this industry contributed to a critical 1978 decision that created the SIFL formula. Bob Crandall foretold “legalized warfare” on “trunk” companies after this industry’s deregulation was overseen by the CAB (“C-A-B”). Over 10,000 workers in this industry’s PATCO union were fired in 1981. For 10 points, what industry’s early 1990s “fare wars” coincided with the replacement of point-to-point systems by central hubs?

ANSWER: **aviation** industry [or **air**line industry or **air** transport industry or **air** travel; accept **airplanes** or **air**craft; accept **air** traffic controllers; accept **Air**line Deregulation Act; prompt on **travel** industry or **transportation** or equivalents of each; reject “aerospace” or “tourism”] (The SIFL is the standard industry fare level.)
<American History>

14. *Note to moderator: Read the answerline carefully. Note to players: Description acceptable.* A short poem written for this event describes how “Helen clung to her brother’s arm, / And her own spasm made her shake.” The narrator of a work written for this event is instructed to throw a ring into the Bay of Eleusis (“eh-LEW-sis”) by Augustus Darvell, who dies in a Turkish cemetery as a stork flies away. That “Fragment of a Novel” written for this event was adapted into a story whose central figure was named after a rakish villain in Caroline Lamb’s *Glenarvon*. This event occurred after a group of friends read the anthology *Fantasmagoriana* (“FAN-taz-muh-gor-ee-AH-nuh”) at the Villa Diodati near Lake Geneva during the Year Without a Summer. This event resulted in John William Polidori’s vampire story about Lord Ruthven and a novel in which Captain Walton’s crew sees a giant man in the Arctic. For 10 points, identify this 1816 competition that produced a Gothic novel by Mary Shelley.

ANSWER: **Frankenstein** ghost story **contest** [or descriptions of a **contest** and any of **Frankenstein**, “The **Vampyre**,” the **Villa Diodati**, Mary **Shelley**, Percy Bysshe **Shelley**, Lord **Byron**, George Gordon **Byron**, John William **Polidori**, or **ghost stories** until each is read; prompt on **Year Without a Summer** until read by asking “what specific event during it?”; prompt on writing **contests** or equivalents]

<British Literature>

15. The AWF and Maisha Consulting privatized this job in Dzanga-Sangha. Survival International reported this job’s torture of Bayaka people in Odzala-Kokoua. This job was militarized after its Hippotrague (“ee-po-TRAHG”) unit was killed while praying in Zakouma. This job’s services in a W-shaped tri-border area occupied by Ansarul Islam were taken over by the NGO that runs it in “anchor” areas like Bangweulu and Boma. In the 1980s, the CAMPFIRE program began community-based training to challenge this job’s “fortress” model, as promoted by Bernhard Grzimek (“BAIRN-hart JIM-eck”) and typified by Lobéké. This job’s helicopters controversially culled a “charismatic” member of the Big Five. This job’s all-female Black Mambas enforce CITES (“SY-tees”) in the Great Limpopo transfrontier area. For 10 points, what job operates reserves like the Tsavo, Maasai Mara, and Serengeti?

ANSWER: park **rangers** [accept **park** officers, game **wardens**, **game guards**, or **game farmers**; accept **anti-poaching** units, **safari** guides, **conservationists**, **conservancies**, fortress **conservation**, **eco-guards**, or equivalents of any; accept World **Wildlife** Federation or **WWF**; prompt on **guides**, **scouts**, **patrols**, **naturalists**, **guards**, or equivalents of any; reject “ecologists” or “biologists” or “farmers”] (The AWF is the African Wildlife Foundation. The NGO is African Parks Network.)

<Geography>

16. The reciprocal rate of this process equals [read slowly] the sum of the reciprocals of the rates of its charge- and temperature-limited variants according to Longo’s equation. The ready occurrence of this process is the main commercially-relevant property of lanthanum hexaboride, which is often placed behind a Wehnelt (“VAY-nult”) cylinder. An applied field causes an increase in the rate of this process in the Schottky effect, as can be explained using Richardson’s law. This process occurs at the “hot” component of a “gun” used in old-style oscilloscopes and televisions. The outputs of this process move downward before being reflected off the sample to be imaged in a type of “scanning” microscope. For 10 points, cathodes can undergo what process in which heating a material causes it to produce a stream of negatively-charged particles?

ANSWER: **electron emission** [or **thermionic** emission or **thermionic** effect; or descriptions of **emitting electrons**, **producing electrons**, **releasing electrons**, or equivalents; accept **cathode** rays in place of “electrons” until “cathodes” is read; prompt on **emission** or **emitting** or equivalents]

<Physics>

17. *Two answers required.* One of these artists broke with the other and began exhibiting at Schomberg House after his portrait *Three Eldest Princesses* was hung “above the line.” The artistic quotation used by one of these artists was mocked by an artist who supported the other in a painting where prints are burned by the title *Conjuror*. One of these artists called the other’s late work “fancy pictures” but praised his *Girl with Pigs*. One of these artists said “Confound the nose, there’s no end to it!” of a model the other painted between figures holding a dagger and poisoned chalice. A myth claims that the color theory in one of these artist’s *Eighth Discourse* caused the other to paint a portrait of Jonathan Buttall. For 10 points, name these 18th-century British rivals, one of whom painted *The Blue Boy* while the other was the first president of the Royal Academy.

ANSWER: Joshua **Reynolds** AND Thomas **Gainsborough** [accept answers in either order] (*The Conjuror* was painted by Nathaniel Hone as an attack on Joshua Reynolds.)

<Painting & Sculpture>

18. The Langford–Church Translation Test was developed to fail this thinker’s account of propositional attitudes. This thinker assigned zero priors to all universal generalizations in an inductive logic based on the c-function, which was undermined by Hilary Putnam’s diagonal argument. This logical pluralist declared, “It is not our business to set up prohibitions, but to arrive at convention,” in his Principle of Tolerance. This thinker was derided for aiming at a “fancifully fanciless medium of unvarnished news” in his attempts to represent a pre-theoretical “observation language” with protocol sentences, an effort that his friend W. V. O. Quine attacked in “Two Dogmas of Empiricism.” This thinker’s magnum opus is often simply called the *Aufbau* (“OWF-bao”). For 10 points, *The Logical Structure of the World* is by what member of the Vienna Circle?

ANSWER: Rudolf **Carnap**

<Philosophy>

19. A figure in this play casually reads a newspaper’s comic section as a man is executed offstage, and then states, “That makes a total of 2,137 black eyes for Jeff.” At a party in this play, the men and women talk in separate circles before they unite in a racist outburst of “My Country ’Tis of Thee.” That party in this play ends with police arresting a man whose wife thinks that the bloodstains on his collar are red ink. Just before a murder in this play, part of the stage spins like a merry-go-round and the music drowns out a man who is last heard repeating the word “business.” This play’s protagonist learns of his past lives as a monkey and a Roman galley slave after leaving Daisy Diana Dorothea Devore and Shrdlu in the Elysian Fields. For 10 points, Mr. Zero kills his boss after the title device replaces him in what Expressionist play by Elmer Rice?

ANSWER: *The **Adding Machine***

<American Literature>

20. *Translations or word forms acceptable.* The Sufi sultan Ibrahim II punned on terms for “learning” and this concept to tout his city’s scholarship, like *Stars of the Sciences*. The siris tree symbolized this concept, which titles a eulogy of Prithviraja Chauhan. A king of Ruhuna took a name from this concept and then rebuilt Polonnaruwa. In the *Mahāvamsa*, an exiled prince named for this concept marries the *yakṣī* Kuveni and founds the ruling house of Tambapaṇṇī and Anurādhapura. This concept named the capital of the ‘Ādil Shāhī sultans and a city that was said to uphold Virupaksha’s dharma to repent for its founding brothers’ conversion to Islam. Ferishta recorded the Bahmani Sultanate’s siege of a city named for this concept where Bukka and Harihara built the temples of Hampi. For 10 points, a late medieval Hindu empire was based in what concept’s namesake Carnatic city, or “nagara”?

ANSWER: **victory** [or **vijaya** or **vaagai** or **vaakai**; or **triumph** or **winning** or synonyms; accept **Vijayanagar**, **Vijayanagara**, **Bijanagar**, **Bisnegar**, **Vijayapura**, **Bijapur**, **Vijapur**, **Vjayabāhu I**, **Vijayarajapura**, or *Prithviraja Vijaya*; prompt on **Hampi** or **Hampe** or **Pampapura** until “Hampi” is read by asking “what was it renamed?”] (Ibrahim ‘Ādil Shāh II addressed Bijapur as Vidyapur, or “city of knowledge,” for works like the *Nujum-ul-Ulum*.)

<World History>

BONUSES

1. Auguste Rodin (“roh-DAN”) wrote “their classics are as great as ours” after he saw this troupe perform with a *pinpeat* (“pin-pee-utt”) ensemble on a 1906 visit to France. For 10 points each:

[10h] What classical troupe’s Apsara dancers portray a man, woman, giant, and monkey in sequined costumes with gold headdresses? It was revived by a king who danced *The Nutcracker* in Prague.

ANSWER: **Royal Ballet** of **Cambodia** [or **Cambodian Royal Ballet**; accept **Robam** Preah Reach Trop or **robam** boram; accept **Lakhon** Preah Reach Trop or **lakhon** boram; accept Kingdom of **Cambodia** or Réachéanachâkr **Kâmpŭchéa** or **Cambodge** in place of “Cambodia”; prompt on **Royal Ballet** or **Ballet royal** by asking “of what country?”] (King Norodom Sihamoni trained as a classical ballet instructor.)

[10e] A student at Cambodia’s Royal University of Fine Arts choreographed a *robam krama* dance with these objects, which define a Cham dance. One of them strangled Isadora Duncan.

ANSWER: **scarves** [or **scarf**; accept **scarf** dance; prompt on **clothes** or **garments** or equivalents]

[10m] The Khmer Rouge killed royal ballerinas and elevated *lakhon bassac* folk operas influenced by *cải lương* (“KYE LOO-ung”), which modernized this story. *Yuèjù* (“yew-way-JEW”) versions of this “great folktale” inspired a violin concerto by Chén Gāng (“chun gahng”) and Hé Zhànháo (“huh jahn-HOW”).

ANSWER: *The **Butterfly Lovers*** [or **Liáng Zhù**, **Liang Chu**, **Loeng Zuk**, **Liáng Shānbó yǔ Zhù Yīngtái**, **Liang Shan-po yǔ Chu Ying-t’ai**, or **Loeng Saan-baak jyu Zuk Jing-toi**, accept **Butterfly Lovers’ Concerto**, **Butterfly Lovers’ Violin Concerto**, **Liáng Zhù xiǎotíqín xiézòuqǔ**, or **Liáng Shānbó yǔ Zhù Yīngtái xiǎotíqín xiézòuqǔ**]
<Other Fine Arts>

2. Enzymatic systems used to degrade this compound can decolorize dyes in spent cultivation substrates. For 10 points each:

[10h] Name this compound broken down with laccases and peroxidases. Degradation of this compound begins with oxalate accumulation to promote Fenton reactions, which form the hydroxyl radicals necessary for its first steps.

ANSWER: **lignin** [or **lignocellulose**; accept mono**lignols**; reject “cellulose”]

[10e] Mushrooms perform the “white” form of this process by degrading lignin. Wood moisture must exceed the saturation point in the “dry” form of this process, whose “noble” form afflicts grapes infested with grey fungus.

ANSWER: wood **rot** [accept white **rot**, brown **rot**, dry **rot**, noble **rot**, or soft **rot**; prompt on wood **decay**]

[10m] Oyster mushrooms deliver the paralytic 3-octanone into the amphid of these animals, while other carnivorous fungi use snares. A kilo of soil hosts thousands of animals in this phylum, including parasitic species that target pets and barefoot humans.

ANSWER: **nematodes** [or **Nematoda**; accept **roundworms** or **eelworms**; accept **hookworms**; accept **nematophagous** fungi; prompt on **worms**]

<Biology>

3. Jonas's alter ego, the Sleeper, communicates with him by video in a post-apocalyptic novel in this language, Thomas Glavinic's ("GLAH-vuh-nitch's") *Night Work*. For 10 points each:

[10e] Name this language of *The Cloud*, a nuclear disaster novel that traumatized the "Pausewang ("PAO-zuh-vang") generation" of schoolchildren. This language was used to write a novel set in the 25th century about the Magister Ludi.

ANSWER: **German** [or **Deutsch**] (Joseph Knecht becomes a Magister Ludi in *The Glass Bead Game* by Herman Hesse.)

[10h] This 1963 German-language novel is often read as a feminist take on post-apocalyptic fiction. In this Marlen Haushofer novel, a woman tends to a cow after a cataclysm leaves her sealed inside an invisible barrier in the Alps.

ANSWER: *The Wall* [or *Die Wand*]

[10m] A post-apocalyptic Casbah ("KAZ-bah") is the setting of *Eumeswil* ("OY-muss-vill"), a novel by this author that theorizes the self-reliant "anarch." This German militarist wrote *Storm of Steel*.

ANSWER: Ernst **Jünger**

<European Literature>

4. Francisco Macías Nguema's ("ung-GHEM-uh's") daughter Mónica wrote a memoir about being a "Black Girl from" this country's capital, whose mass games were introduced to Rwanda, Burundi, and Togo. For 10 points each:

[10e] Isaias Afwerki's Eritrea is nicknamed "Africa's" version of what longtime ally of Uganda? It funded Juche ("JOO-chay") study groups across Africa.

ANSWER: **North Korea** [or **DPRK** or Democratic People's Republic of **Korea**; or **Chosŏn** Minjujuŭi Inmin Konghwaguk; or **Bukhan** or **Ibuk**; prompt on **Korea** or **Koryŏ**]

[10h] Many Windhoek ("wind-hook") landmarks were built by this North Korean art studio, which created memorials to Agostinho Neto ("ah-gose-CHEEN-yo NEH-too"), Samora Machel ("mah-SHELL"), and Derg soldiers, as well as Dakar's African Renaissance Monument.

ANSWER: **Mansudae** ("mahn-soo-day") [or **Mansudae** Art Studio or **Mansudae** Changjaksa; accept **Mansudae** Overseas Projects or **Mansudae** Haeoe Gaebal Hoesa] (The Tiglachin Monument commemorates the Ogaden War.)

[10m] Mansudae built the National Heroes Acre, which inters many perpetrators of this genocide. North Korea trained the Fifth Brigade that led this genocide of the Ndebele ("un-day-BEH-lay") for Robert Mugabe's ZANU ("ZAH-noo") in Bhalagwe ("buh-LAH-gway").

ANSWER: **Gukurahundi** ("GOO-koo-ruh-HOON-dee") [accept translations such as "early **rain** that washes away the **chaff**" or "**early rain** that washes away the chaff" or "**spring rain** that washes away the chaff"; prompt on **rain**]
<World History>

5. *Sanskrit-derived term required.* Lal Dēd's mystical poetry inspired Nund's Kashmiri Sufi order named for this title, whose female equivalent is given to the leprous poet Ghoshā. For 10 points each:

[10m] Name these Vedic sages whose seven greatest hymnists included Atri and Vasishṭha ("vuh-SISH-tuh").

ANSWER: **rishis** [or **resh** or **rsi** or **rikhis**; accept **rishikās** or **rishi-patni**; accept Saptar**rishi** or Saptar**rsi**; accept **Rishi** Order; accept Nund **Rishi** or Nund **Reshi**]

[10e] The *rishikā* Maitreyī ("may-TRAY-yee") and her *rishi* husband Yājñavalkya ("yaj-nuh-VULK-yuh") debate the nature of *ātman* in one of these Vedic commentaries. Like the Āraṇyakas ("ah-RUN-yuh-kuh's"), they are appended to the Brāhmaṇas.

ANSWER: **Upanishads** ("oo-PUN-ih-shud's") [accept **Vedanta**; accept *Brihadaranyaka Upanishad* or *Bṛhadāraṇyaka Upaniṣad*]

[10h] In an Upanishad titled for this word, the *rishi* Nachiketa ("nah-chee-KAY-tuh") learns the nature of *brahman* as a boon from Yama. A word with the same transliteration names a genre of exegetical storytelling that titles Somadeva's "ocean of rivers."

ANSWER: **kathā** ("cut-tuh") [accept **Kathā Upanishad** or **Kathopaniṣad**; accept **kathās** or **kathakas** or **Kathā-saritsāgara**]

<Religion>

6. In a letter to Tsrirnhaus (“CHIRN-house”), this book’s author illustrated one of its points by imagining a stone that thinks it chose to fly through the air. For 10 points each:

[10m] Name this book that argues we only believe in free will because we are ignorant of the causes of our desires. This book instead identifies human freedom with mastery of the passions via the precepts of reason.

ANSWER: **Ethics** [or **Ethics, Demonstrated in Geometrical Order**; or **Ethica, ordine geometrico demonstrata**]

[10h] Spinoza’s determinism was part of a perspective he denoted with this three-word Latin phrase. Wittgenstein’s *Tractatus* identifies this phrase with an ethical view that takes the world as a “limited whole.”

ANSWER: **sub specie aeternitatis** (“sub SPEH-chee-ay ay-ter-nee-TAH-tiss”) [or **sub specie aeterni**; prompt on translations like “from the standpoint of **eternity**” or “under the aspect of **eternity**”]

[10e] An appendix to the *Ethics* holds that our inadequate knowledge of causal chains also leads us to the “sanctuary of ignorance,” in which we believe in these violations of the laws of nature.

ANSWER: **miracles**

<Philosophy>

7. Luminol detects this compound in blood and in the bloody feces of sick people. For 10 points each:

[10e] Name this ring-shaped prosthetic group that binds ferrous iron in a namesake globular protein.

ANSWER: **heme** [or **haem**]

[10m] The excitation of luminol requires replacing its hydrazide with peroxide through elimination of this gas. This gas is extruded by a retro-Diels–Alder reaction after inverse electron Diels–Alder reactions involving tetrazine.

ANSWER: **nitrogen** gas [or **dinitrogen**; or **N2**]

[10h] This gas is extruded in a classic cheletropic reaction in which it is added to butadiene

(“BYOO-tuh-DYE-eeen”) to form a five-membered ring. The Ramberg–Bäcklund reaction forms alkenes by eliminating a halogen and extruding this gas.

ANSWER: **sulfur dioxide** [or **SO2**]

<Chemistry>

8. A chapter on the “impulse” represented by these objects in Svetlana Alpers’s *The Art of Describing* connects a depiction of one of them to later paintings by Jasper Johns and Albert Bierstadt. For 10 points each:

[10m] What sort of object created by Claes Visscher (“clahss VISS-er”) bears the Latin inscription “Descriptio” in a painting in which it appears behind a golden chandelier?

ANSWER: **maps** [or word forms of **mapping**; accept **charts** or **atlases**; accept **cartography** or word forms; reject “globes”]

[10e] That detailed map appears in this Vermeer painting, which depicts an artist and a model in blue who holds a trumpet and a book.

ANSWER: *The **Allegory of Painting*** [or *The **Art of Painting***, *The **Painter in His Studio***, *The **Artist’s Studio***, *The **Painter and His Model***, *De **Schilderkunst***, *Allegorie op de **Schilderkunst***, or *De schilder en zijn model*]

[10h] Alpers’s analysis of the “mapping impulse” discusses landscapes by this virtuosic Dutch Mannerist engraver. During a trip to Rome, this friend of Karel van Mander created an engraving of the back of the Farnese (“far-NAY-zay”) Hercules.

ANSWER: Hendrik **Goltzius**

<Painting & Sculpture>

9. An Athenian saint of this name who wrote an epic about Cyprian of Antioch infamously signed Paulinus's death warrant by regifting him a giant apple. For 10 points each:

[10h] Give this name of the wives of Theodosius II and Valentinian III. During Tribigild's revolt, Arcadius arrested the eunuch Eutropius for his wife of this name, who organized the Synod of the Oak to exile John Chrysostom ("kriss-AW-stum").

ANSWER: **Eudoxia** [or **Eudocia**, **Eudokía**, **Eudoxía**, or **Evdokia**; accept Aelia **Eudoxia**; accept Licinia **Eudoxia**; accept Saint **Eudocia** or Aelia **Eudocia** Augusta; prompt on **Aelia** or **Licinia** by asking "what was her *nomen*?"]

[10e] Aelia Eudoxia destroyed Gaza's pagan Marneion for a saint of this name. Chrysostom denounced the Augustaion's ("aw-GUST-ee-un's") silver statue of Eudoxia on a pillar of this purple type of rock.

ANSWER: **porphyry** ("POR-fuh-ree") [accept Saint **Porphyrius**, Saint **Porphýrios**, *Life of **Porphyry***, or *Vita **Porphyrii***]

[10m] Licinia Eudoxia asked this king of Africa to depose Petronius Maximus after he widowed and remarried her. Her daughter Eudocia married this king's son Huneric after he sacked Rome in 455.

ANSWER: **Gaiseric** [or **Genseric**; or **Gaisericus**] (Malchus reports Eudoxia's journey to the Vandal Kingdom.)
<Other History>

10. In a book-length essay, this author says that he bars Jeremy Clarkson from the house and needs the title place because it is perhaps the only area where *Top Gear* is not on TV. For 10 points each:

[10h] Name this author of *Zona: A Book About a Film About a Journey to a Room*, which presents a scene-by-scene analysis of Andrei Tarkovsky's *Stalker*. He also wrote *But Beautiful: A Book About Jazz*.

ANSWER: Geoff **Dyer**

[10e] In *Out of Sheer Rage*, Dyer details his struggles to produce a book about this author, who wrote about the Brangwen sisters in *The Rainbow* and *Women in Love*.

ANSWER: D. H. **Lawrence** [or David Herbert **Lawrence**]

[10m] *Out of Sheer Rage* repeatedly cites this admirer of D. H. Lawrence, who even owned a Lawrence mug. He wrote of how "every life became / a brilliant breaking of the bank" after "the end of the Chatterley ban."

ANSWER: Philip **Larkin** [or Philip Arthur **Larkin**] (The poem is "Annus Mirabilis.")

<British Literature>

11. A type of point process named after this distribution models events that occur at a constant rate. For 10 points each:

[10e] The mean equals the variance for variables following what distribution named after a French scientist?

ANSWER: **Poisson** ("pwah-sahn") distribution [accept **Poisson** point process]

[10m] If the number of events that occur in a given interval has a Poisson ("pwah-sahn") distribution with mean μ , what is the probability, in terms of μ , that zero events occur? You have 10 seconds.

ANSWER: **e to the negative mu** [or the **exponential of negative mu**; or **one over e to the power mu**; or **one divided by e to the power mu**; or **one over the exponential of mu**; or **one divided by the exponential of mu**; accept **minus** in place of "negative"] (The probability is $e^{(-\mu)} * \mu^0 / 0! = e^{(-\mu)}$.)

[10h] Poisson processes are discussed in the book *Point Processes* by Valerie Isham and this creator of the proportional hazards survival model. His own namesake processes are a doubly-stochastic extension of Poisson processes.

ANSWER: David **Cox** [or David Roxbee **Cox**; accept **Cox** processes]

<Other Science>

12. All three movements of this concerto are played *attacca*, with the second and third movements linked by a 14-bar *Allegretto non troppo* passage for just strings and the soloist. For 10 points each:

[10m] Name this E-minor concerto that premiered in 1845. Unusually for its time, the soloist in this concerto enters in the second bar, playing a theme that begins with three B's.

ANSWER: Felix **Mendelssohn**'s **Violin** Concerto in E minor, Op. 64 [accept Jakob Ludwig Felix **Mendelssohn** Bartholdy in place of "Felix Mendelssohn"; prompt on Felix **Mendelssohn**'s concerto by asking "for what instrument?"]

[10e] This kind of unaccompanied virtuosic passage is fully written out in Mendelssohn's violin concerto, instead of allowing for the soloist to improvise.

ANSWER: **cadenza** [reject "cadence"]

[10h] This violin concerto features a lengthy cadenza between adjacent Passacaglia and Burlesque movements. Its first movement is an unsettling nocturne introduced by low strings.

ANSWER: Dmitri **Shostakovich**'s Violin Concerto No. **1** in A minor, Op. 77 [accept Dmitri **Shostakovich**'s **A-minor** Violin Concerto; accept Dmitri Dmitriyevich **Shostakovich** in place of "Dmitri Shostakovich"; prompt on **Shostakovich**'s violin concerto by asking "which one?"]

<Classical Music>

13. In a novel by Vincent Eri, the World War II carrier Hoiri kills one of these animals whose control by sorcerers represents ANGAU's colonial rule. For 10 points each:

[10h] Name these animals who love indulging in cream puffs in a novel composed of "notebooks," in which they represent Lāzi's ("LAH-tzuh's") lesbianism.

ANSWER: **crocodiles** [accept **alligators** or **crocodilians** or specific species like saltwater **crocodile**; accept *Notes of a Crocodile* or **Èyú shōuji**; prompt on **reptiles**] (Qiū Miàojin wrote *Notes of a Crocodile*.)

[10e] Crocodiles symbolize corrupt landlords in Amado Hernandez's novel *Crocodile Tears*, which is in this language. Romantic "pocketbooks" are written in this language of the largest cultural-linguistic group in the Philippines.

ANSWER: **Tagalog** ("tuh-GAH-log") [or Wikang **Tagalog**; prompt on **Filipino**]

[10m] The protagonist recalls ghost stories about the land crocodile in *Crocodile Fury*, a novel by this country's Malaysian-born author Beth Yahp. In a Joan Lindsay novel set in this country, girls from Mrs. Appleyard's College go missing on a day trip.

ANSWER: **Australia** [or Commonwealth of **Australia**] (The novel is *Picnic at Hanging Rock*.)

<World Literature>

14. The Anglo-Saxon poem *Deor* ("DAY-or") begins by recounting the ordeal of this character, whose deeds are praised in the two *Waldere* ("WAL-duh-ray") fragments. For 10 points each:

[10h] Name this character who also appears in *Thidreks saga*, in which his father Vadi sends him to stay with two dwarves for two years, after which he murders them and sails off in a log.

ANSWER: **Wayland** [or **Völundr**, **Velent**, **Wieland**, or **Wiolant**]

[10e] Afterwards, Wayland is captured and given this physical condition to keep him from escaping. In Greek mythology, Hephaestus is cast out of Olympus for being an ugly baby with this condition.

ANSWER: **limp** [or **inability to walk** or equivalents; accept being **hamstrung**; accept **lameness** or being **crippled**; prompt on **disability** or **handicap** or word forms; reject "amputation" or "leglessness"]

[10m] In *Thidreks saga*, Wayland escapes by crafting an object made of this material. Loki borrows an object of this material to travel to Jötunheim ("YO-tun-hyme") on two occasions, once to find Mjöllnir and once to rescue Idun.

ANSWER: **feathers** [accept **feather** cloak; accept **wings**; accept **down**, **plumes**, **plumage**, or equivalents; prompt on **cloak**, **mantle**, **cape**, or equivalents by asking "what is it made of?"]

<Mythology>

15. Answer the following about women who spied for the Union during the American Civil War, for 10 points each.
[10e] While working in this industry, Pauline Cushman gave a fake toast to Jefferson Davis in Louisville and took names of Confederate sympathizers. Laura Keane managed this industry's production of *Our American Cousin*.

ANSWER: **theater** [or **stagecraft** or **drama** or **plays**; accept **actors**, **actresses**, **acting**, **thespians** or equivalents; accept **comedians** or **comedy**; prompt on **performers**, **entertainers**, **artists**, or **players**]

[10h] This woman's Richmond spy ring trained the freedwoman Mary Bowser to infiltrate the Davis household after sending her on a Liberian mission. She nursed Union soldiers at Libby Prison, but probably did not feign madness.

ANSWER: Elizabeth **Van Lew** [accept "Crazy Bet" **Van Lew**] (Elizabeth R. Varon's *Southern Lady, Yankee Spy* examines claims of her reputation as "Crazy Bet.")

[10m] Sarah E. Edmonds joined the rolls of recipients of these things thanks to an exaggerated memoir of her wartime spying. Grover Cleveland vetoed many expansions of these things promoted by the Grand Army of the Republic.

ANSWER: **pensions** [or **retirement funds** or equivalents; or **pensioners**; accept veterans' **pensions**, soldiers' **pensions**, private **pensions**, or **pension** rolls; accept Dependent and Disability **Pension** Act; prompt on **funds**, **funding**, **payment**, **financing**, **benefits**, **relief**, or equivalents of any]

<American History>

16. A poem in this form opens, "WHAT YOU HAVE HEARD is true," and describes a man who spills a sack of human ears on the table before sweeping them to the floor. For 10 points each:

[10m] Name this form used in Carolyn Forché's ("for-SHAY's") "The Colonel" and in Elizabeth Smart's book about her affair with George Barker, *By Grand Central Station I Sat Down and Wept*. This form often resembles a block of text.

ANSWER: **prose** poetry [or **prose** poems]

[10h] The Minister of Culture "lies on his bed and tries to think of nothing" in a prose poem from this author's book *Almost Invisible*. This Canadian-American poet won a 1999 Pulitzer Prize for *Blizzard of One*.

ANSWER: Mark **Strand**

[10e] This American expatriate described objects like "a carafe ("kuh-RAFF"), that is a blind glass" and "a piece of coffee" in prose poems that appear in her book *Tender Buttons*.

ANSWER: Gertrude **Stein**

<American Literature>

17. These experiences predicted early-onset antisocial behavior in the 15-year Dunedin ("duh-NEE-din") study, though their retrospective reports are often invalid. For 10 points each:

[10m] A Kaiser Permanente study codified what psychosocial risk factors for many chronic conditions? Abuse and neglect are among these harmful "childhood experiences."

ANSWER: **adverse** childhood experiences [or **ACEs**, **adverse** psychosocial experiences, **adverse** family experiences, or word forms of **adversity**; accept **ACE** scores or **Adverse** Childhood Experiences International Questionnaire or **ACE-IQ**; prompt on **traumas** or word forms]

[10e] ACEs predict both diabetes and this organ's "diseases of modernity." High-cholesterol "Western diets" in stage four of the nutrition transition raise the risk of this organ's ischemic ("iss-KEE-mick") failure.

ANSWER: **heart** [accept **cardiovascular** system; accept **cardiovascular** disease, ischemic **heart** disease, **coronary** artery disease, **CAD**, **coronary** heart disease, or **CHD**]

[10h] High Pacific heart disease rates may result partly from food imports in an example of these population-wide factors that influence health inequities. They include health literacy, family income, and upstream discrimination.

ANSWER: **social determinants** of health [or **SDHs** or **SDOHs**; accept **non-medical determinants** of health; prompt on **determinants**] (Many Pacific countries are net food importers and rely on cheap, high-fat items like mutton flaps.)

<Social Science>

18. A proposed European Commission law against these suits is named for the murdered Maltese journalist Daphne Caruana Galizia. For 10 points each:

[10m] Name these lawsuits often assumed to chill journalists by burdening them with costly legal fees. In 2023, the UK passed its first regulation of these suits, which are known by an acronym.

ANSWER: **SLAPP** lawsuits [or **Strategic Lawsuit Against Public Participation**; accept anti-**SLAPP** laws]

[10h] The Anti-SLAPP Coalition attacked this firm's "libel tourism" for Russian oligarchs. This firm's managing partner Nigel Tait represented Rosneft Oil in a defamation suit over Catherine Belton's book *Putin's People*.

ANSWER: **Carter-Ruck**

[10e] The Human Rights Court ruled that libel defendants may merit legal aid after this company sued British environmentalists Helen Steel and David Morris. Jerome Jacobson rigged this company's Monopoly promotion.

ANSWER: **McDonald's** [accept **Mickey D's**; accept **McLibel** Case or **McDonald's Corporation v. Steel & Morris**]
<Current Events>

19. Blanche of Castile commissioned an extant text of this type known as Vienna 2554 to include primarily female imagery, including scenes in which Ecclesia and the Virgin both physically give birth. For 10 points each:

[10h] Identify these 13th-century French texts that were often laden with illustrations of heretics partaking in sinful activities.

ANSWER: **moralizing Bibles** [or **moralized Bibles**; or **Bible moralisée**; prompt on picture **Bibles** or illuminated **manuscripts**; prompt on **scripture** or **holy books**]

[10e] Moralizing Bibles depicted generic heretics, but were likely influenced by this sect that was active in Southern France. Pope Innocent III launched a crusade against this sect in 1209.

ANSWER: **Cathars** [or **Albigensians**; or **bons hommes**, "**good men**," **bons chrétiens**, or "**good Christians**"; accept **Cathar** Crusade or **Albigensian** Crusade or Croisade des **albigeois**]

[10m] As an homage to Blanche, Louis IX gifted a moralizing Bible completed in this city to her nephew, Ferdinand III. A medieval "school of translators" in this Castilian city was instrumental in preserving Arabic scientific texts.

ANSWER: **Toledo** [accept **Toledo** School of Translators or Escuela de Traductores de **Toledo**; accept **Toledo** Bible or Bible of **Toledo**]

<European History>

20. Christiaan Huygens ("HOY-guns") observed that two of these devices attached to the same beam will quickly synchronize. For 10 points each:

[10e] Name these devices whose period is roughly equal to [read slowly] "two pi, times the square root of length over local gravitational acceleration."

ANSWER: **pendulums** [or **pendula**; or simple **pendulums** or simple **pendula**; accept **pendulum** clocks; prompt on **clocks**]

[10m] This mathematician edited part of Huygens's complete works and provided a mathematical model of pendulum synchronization. He is the first of two scientists who co-name an integrable equation that models water waves.

ANSWER: Diederik **Korteweg** ("KOR-tuh-veck") [or Diederik Johannes **Korteweg**; accept **Korteweg**-de Vries equation; prompt on **KdV** equation]

[10h] A 2017 article on pendulum synchronization by Willms, Kitanov, and Langford discusses "toroidal" solutions of this type. These soliton ("SOL-uh-ton") solutions vary periodically but are localized in physical space.

ANSWER: **breathers** [accept toroidal **breathers**]

<Physics>