

### TOSSUPS

1. Emblematic works of this period include the essay “On Sincerity in Literature” and a poem in which a telephone line hooked up to a coffin floats out of a silent room of glass and marble. Movements that began during this broader period include the SMOG group, the “author songs” of the guitar poets, and the Village Prose style. This period’s namesake “generation” of poets gained fame from readings in a square named for a poet who had shot himself 30 years earlier. This period got its name from the title of a novel by the co-author of the *Black Book*, Ilya Ehrenburg. The ending of this period is typically marked by the Sinyavsky–Daniel Trial, which ushered in a crackdown on *samizdat* authors. For 10 points, *Novy Mir*’s publication of *One Day in the Life of Ivan Denisovich* was allowed during what period of relaxed censorship under Khrushchev?

ANSWER: Khrushchev **Thaw** [or **De-Stalinization** or word forms; or **ottepel**; or **destalinizatsiya**; accept First **Thaw** or Second **Thaw**; prompt on **Khrushchev** era until “Khrushchev” is read; prompt on **post-Stalin** era, **Soviet** era, **Cold War**, or equivalents of any] (Clues include Vladimir Pomerantsev, “The Heirs of Stalin” by Yevgeny Yevtushenko, and the Mayakovsky Square poetry readings.)

<European Literature>

2. Above 10-to-the-7 kelvins, this quantity approximately equals 0.2 times the quantity “one, plus the hydrogen mass fraction.” [read slowly to end of sentence] The reciprocal of a form of this quantity is given by the frequency average of its reciprocal, weighted by the temperature partial derivative of the Planck distribution, “B sub nu.” For bound–free and free–free processes, this quantity is proportional to density times temperature to the negative seven-halves power, according to Kramers’s law. As this quantity changes, the oscillation of the partial ionization zone drives the luminosity fluctuations of variable stars in the kappa mechanism, where kappa denotes this quantity. The integral of this quantity with respect to vertical position is the optical depth. For 10 points, what quantity measures the intensity lost by radiation traveling through a star?

ANSWER: stellar **opacity** [accept **absorption** coefficient or **attenuation** coefficient or **extinction** coefficient; accept Kramers’ **opacity** law; accept continuum **opacity**; prompt on **opaqueness**] (The second sentence describes the Rosseland mean opacity.)

<Other Science>

3. A culture from this river drew a stork on a jar that may not be exhibited abroad, among other painted pottery that J. G. Andersson linked to Turkmenistan’s Anau culture. The author of *Art, Myth, and Ritual* proposed shamanistic state formation on this river based on pit burials from 1200 BCE, which suggest that the Northern Zone complex rapidly introduced many-spoked chariots. “Doubters of antiquity” questioned the historicity of this river’s supposed “5,000-year-old civilization,” which was traced from its Neolithic rammed-earth walls by a “chronology project” for three traditional periods. A term for “flower” came to distinguish this river’s settled Central Plain from four directional “foreigners” who did not farm the “five cereals,” like millet. For 10 points, what river’s Bronze Age cultures included the Èrlǐgǎng (“ar-lee-gong”), Èrlítóu (“ar-lee-toh”), and Shāng?

ANSWER: **Yellow** River [or **Huáng Hé**; accept **Yīluò** or **Yīluò** or “**Héluò** kingdom”; accept **Dàtōng**, **Dàxià**, **Fén**, **Huán**, **Huángshuǐ**, **Jī**, **Jīng**, **Táo**, **Wèi**, or **Wúding**; accept **Ordos** Loop or **Èěrdūōsī** or **Hétào**] (Clues include the Yǎngsháo culture, K. C. Chang, Ānyáng’s Shāng chariot pits of Yīnxū, the Xià–Shāng–Zhōu Chronology Project, the Lóngshān culture, and Huáxià and the Huá–Yí distinction.)

<Other History>

4. One of these objects titles a Beethoven-inspired 1981 piece that begins with a gong strike, and then a pedal point G on percussion. Episodes marked “Celestially light” bookend a piece titled for one of these objects, whose many silences exemplify a kind of negative space called *ma*. This kind of object titles Joan Tower’s first orchestral piece, as well as two piano “sketches,” the latter written for the death of Messiaen (“mess-YAWN”), by Tōru Takemitsu. In a piece titled for these objects, the last movement is a march introduced by low strings playing tritones, which builds to the offstage entrance of six ancient brass instruments called *buccine* (“boo-CHEE-nay”). That piece’s third movement uses a phonograph recording of a nightingale to depict these objects on the Janiculum. For 10 points, name these objects that title a Respighi tone poem about Rome.

ANSWER: **trees** [accept **pin**es, **sequoias**, **evergreens**, or **conifers**; accept ***Pines of Rome*** or ***Pini di Roma***; accept ***Rain Tree*** or ***Ame no ki***; accept ***Rain Tree Sketch II*** or ***Ame no ki sobyō II***; prompt on **plants**]

<Classical Music>

5. It’s not magic, but an ethnography by Susanne Kuehling (“KOO-ling”) described “blowing and throwing” in this practice and challenged a canonical description of its participants as “infernally nasty.” A 1986 book described this practice’s “transformation” of “value templates.” Studies of this practice often compare it to maintenance of the UK’s Crown Jewels. A study of women in this culturally-specific practice, the subject of Nancy Munn’s *The Fame of Gawa*, led Annette Weiner to theorize “inalienable possessions.” Objects can “marry” each other via this practice as *soulava* move clockwise. A classic ethnography asks why men would “risk life and limb” in this practice to exchange “seemingly useless trinkets” after crossing the ocean. For 10 points, name this practice of the Trobriand Islanders studied in *Argonauts of the Western Pacific* by Bronislaw Malinowski (“brah-NISS-woff mah-lih-NOFF-skee”).

ANSWER: **Kula** ring [or **Kula** exchange; prompt on **gifts**, **giving**, **trade**, **barter**, **navigation**, **sailing**, **canoeing**, **boating**, **wayfinding**, or word forms or equivalents of any by asking “involved in what specific system of exchange?”; prompt on **exchange** until read by asking “what specific system?”] (The first line refers to Reo Fortune’s infamous judgment in *Sorcerers of Dobu*, which became an anthropological bromide in Ruth Benedict’s *Patterns of Culture*.)

<Social Science>

6. The experience described in this poem also closes the autobiographical story “The Country Mouse,” whose narrator wonders, “*Why* was I a human being?” This poem’s speaker perceives the title location to be “sliding / beneath a big black wave, / another, and another” and attributes an “*oh!* of pain” to a “foolish, timid woman” before realizing “that it was *me*: / my voice, in my mouth.” That speaker tells herself she will be seven in three days to stop “the sensation of falling off / the round, turning world.” In this poem from *Geography III* set in Worcester (“WUST-er”), Massachusetts, in 1918, the speaker sees photos of “the inside of a volcano / black, and full of ashes,” and of “black, naked women” whose “awful hanging breasts” horrify her. For 10 points, the speaker joins Aunt Consuelo at the dentist’s office and reads *National Geographic* in what poem by Elizabeth Bishop?

ANSWER: “**In the Waiting Room**”

<American Literature>

7. This holiday largely coincides with a Telugu festival in which women make mounds of concentrically-arranged flowers and submerge them. In Maharashtra, this festival begins with a container of water being placed on a pile of rice in a ceremony called the “mounting of the jar,” or *ghatasthanana* (“gut-ah-STAH-pah-nah”). This holiday coincides with the Bathukamma festival. Stories central to this holiday are told using stepped displays lined with *golu* dolls. In Telangana, this festival ends with the Kanyā Pūjā, which involves washing the feet of young girls. Gujaratis often perform the Dandiya dance during this festival, which climaxes with performances of *Rām Līlā* when followed by Dussehra (“doo-SHAIR-uh”). This festival celebrates different aspects of Shakti on successive nights. For 10 points, Durgā Pūjā coincides with what Indian festival named for lasting for nine nights?

ANSWER: **Navaratri** [or **Navratri**; accept **Nine Nights** until read; accept **Durgā Pūjā** until read; prompt on **Golu Festival** until read; prompt on **Dussehra**, **Dasara**, **Dashain**, or **Vijayadashami** until “Dussehra” is read by asking “Dussehra often considered the conclusion of what longer festival?”]

<Religion>

8. This compound and its derivatives are both the source of, and the target for, electrons shuttled across the chromaffin granule membrane, because it is typically imported in its oxidized form. Oxidation of this compound is classically said to produce a 1,2,3-triketone (“1-2-3-try-KEE-tone”), although *in vivo* a bicyclic hemiketal (“hemi-KEE-tal”) is formed almost immediately. This compound’s degradation concludes with cleavage of its gamma-lactone ring. This compound can perform one single-electron transfer before undergoing disproportionation and being regenerated by glutathione (“gloo-tuh-THIGH-own”). This compound is capable of rescuing non-heme hydroxylases by reducing their iron(III) (“iron-three”) centers back to the active plus-2 state, making it essential for the function of lysyl (“LYE-sill”) and prolyl hydroxylase. For 10 points, name this cofactor in the synthesis of collagen, a water-soluble dietary vitamin.

ANSWER: **vitamin C** [or **L-ascorbic acid** or **ascorbate**; accept dehydro**ascorbate** or semidehydro**ascorbate** or monodehydro**ascorbate**; accept **C** after “vitamin” is read; prompt on **AAH**, **DHA**, **MDHA**, or **SDHA** by asking “what does that stand for?”]

<Chemistry>

9. The Bir Murayghān inscription may record an attack on this city, whose destruction by Nubians was prophesied in the *Apocalypse* of Pseudo-Methodius. John bar Penkaye (“pen-KAH-yay”) reported that rebels in this city opposed Miaphysites (“my-AFF-uh-zites”) like the Kalb (“kelb”) in a primary account of a war that damaged it in two catapult bombardments. Based on Sebeos, this city was recast as a cradle of messianic Judaism by Patricia Crone (“KRO-nuh”), who denied that it profited from the incense trade. The first *shamsa* crown was stolen in a caravan raid on this city by oligarchic Seveners based in Bahrain’s al-’Ahsā oasis. The Second Fitna ended after a 692 siege of the Zubayrid capital in this city, which was sacked in 930 by the Qarmatians. For 10 points, what city was invaded by Abraha from Ḥimyar in the “Year of the Elephant,” possibly to supplant pilgrimage fairs held by the Quraysh?

ANSWER: **Mecca** [or **Makkah** al-Mukarramah] (The Bir Murayghān inscription records an Arabian expedition by Abraha in 552, rather than 570.)

<World History>

10. *Note to moderator: Read the answerline carefully.* This system's 2012 update rejected calibration from SHRIMP analyses with the "Sri Lanka 13" standard. Thomas Halliday described places separated by this system in *Otherlands*. New Zealand's regional version of this system uses a series named for Wanganui. Siegfried Zielinski's pioneering book on media archaeology borrows a term for the scope of this system coined by John McPhee in *Basin and Range*. Part of this system is disparaged as the "Boring Billion." "Early" sections of this intangible system are demarcated at the "lower" limits of corresponding biozones by "golden spikes." This system's divisions, which are measured in mya ("M-Y-A") and include the Guadalupian, correspond to global boundaries set by the International Commission on Stratigraphy. For 10 points, what system of divisions of the Earth's past defines the Silurian and Mesozoic?

ANSWER: **geological time** scale [or **geological past**; accept **deep time**; accept **geological time periods**, **geological epochs**, **geological eras**, or **eons**; accept **geochronology** or **chronostratigraphy** or word forms; prompt on **stratigraphy**, **strata**, **geology**, **geological**, or **earth** science by asking "what intangible system does it define?"; prompt on **time**, **past**, **chronology**, **periodization**, **epochs**, or **eras**; prompt on **GTS** by asking "what does that stand for?"] (SHRIMP is a sensitive high-resolution ion microprobe used to date zircon.)

<Other Academic>

11. Christopher Wood's book *The Embedded Portrait* connects a Chapter House *Crucifixion* at this complex with the earlier painter Giotto. Until it was bought by the Santa Maria Novella, this complex housed a *Last Supper* with a signature reading "pray for the paintress." Plautilla Nelli spent her career at this complex, where she admired an artist who painted a stark black profile portrait of Girolamo Savonarola. Michelozzo ("mee-kell-OTTS-oh") rebuilt this complex, which titles a *sacra conversazione* commissioned by Cosimo de' Medici with a predella depicting the story of Cosmas and Damian. A daily prayer reminder appears in a fresco at this convent in which a garden is shown left of the Corinthian columns and arches of a *loggia* ("LO-juh") that frame the multicolored wings of Gabriel. For 10 points, what Florentine Dominican convent houses Fra Angelico's *Annunciation*?

ANSWER: **San Marco** [accept **San Marco Altarpiece**; accept Museo Nazionale di **San Marco**; prompt on **Santa Caterina** di Cafaggio by asking "what larger complex was it part of?"; reject "Saint Mark's"]

<Painting & Sculpture>

12. A dialogue starring one of these people and the poet Simonides was the subject of a 1950s correspondence about the feasibility of "Epicurean" isolation for philosophers. A pseudo-mathematical passage calculates these people to be 729 times [emphasize] *less* happy than their counterparts. A Xenophon dialogue titled for one of these people is the subject of a Leo Strauss essay "on" them that kicked off his debate with Alexander Kojève ("ko-ZHEV"). One of these people flouted his tutor's injunction against writing philosophy, according to the Seventh Letter. Plato argued that these people are slaves of their own desires in Book 9 of the *Republic* and attempted to educate one of them in Sicily. Aristotle listed a system named for these people as a "deviant" constitution along with oligarchy and democracy. For 10 points, ancient philosophers debated the virtue of killing what absolute rulers?

ANSWER: **tyrants** [or **tyrannos**; accept word forms like **tyranny** or **tyrannicide**; prompt on **kings**, **despots**, **monarchs**, **dictators**, **autocrats**, or absolute **rulers**; prompt on **unjust**, **wicked**, **evil**, or equivalents; reject other titles like "emperor"] (Strauss's *On Tyranny* analyzes Xenophon's dialogue *Hiero*.)

<Philosophy>

13. Much attention has been drawn to this jazz standard's harmonically-ambiguous 16-bar bridge section, which begins by modulating up a half step from the home key. This is the second track on Ella Fitzgerald's 1981 album, in whose title she "hugs" its composer. Moreover, her 1965 live album *Ella in Hamburg* includes a gender-swapped version of this song. Though its best-known recording is in D-flat, most American musicians play this song in F, with a melody that begins with the descending four-note figure "G, E, E, D." Claus Ogerman arranged this song as the first track on Frank Sinatra's 1967 collaboration album, which also features its composer's songs "Dindi" and "Corcovado." Tom Jobim ("zho-BEEM") composed this song and played the piano part on the 1964 album *Getz/Gilberto* ("gets zheew-BAIR-too"). For 10 points, name this all-time most-recorded bossa nova song.

ANSWER: "The Girl from Ipanema" [or "Garota de Ipanema"]

<Other Fine Arts>

14. An essay by this author lists plucking the sorcerer's flower and veiling one's head like *Judaea Capta* on Roman coins as two tests for the title specter. Another essay by this author discusses exploring a city submerged by an earthquake with a recurring "Dark Interpreter." *Blackwood's Magazine* first published an essay by this author that opens by describing a ritual in which a father lifts a newborn so it can look "as king of all this world." This author of "The Apparition of the Brocken" and "Savannah-La-Mar" named *Mater Lachrymarum* as the eldest among three goddesses in "Levana and Our Ladies of Sorrow." A Dario Argento film is titled for this author's collection *Suspiria de Profundis*. *The London Magazine* anonymously published this author's book about his laudanum addiction. For 10 points, name this author of *Confessions of an English Opium-Eater*.

ANSWER: Thomas de Quincey [or Thomas Penson Quincey]

<British Literature>

15. A state named for this ethnicity ceded parts of a region that once dominated opal mining after the 1939 "Little War." During this ethnicity's national revival, a leader of the Lutheran "trinity" failed to abolish the letter "y." After the Diet rejected this ethnicity's demands, 600 student-aged volunteers led an 1848 uprising galvanized by an anthem about lightning over the mountains. Partisans sent armored trains like *Hurban* against this ethnicity's "clerofascist" Nazi client state, whose Hlinka Guard defended the Catholic priest Jozef Tiso. During World War I, M. R. Štefánik ("SHTAY-fah-neek") represented this ethnicity on a "national council." This ethnic group based in "Upper Hungary" made up less than 10 percent of a volunteer legion led by Tomáš Masaryk ("MAH-sah-reek"). For 10 points, what ethnicity names the eastern country created by the Velvet Divorce?

ANSWER: Slovaks [or Slovák, Slováci, Slovenka, or Slovenky; accept Slovakia or Slovakian or Slovensko; accept Slovak Republic, Slovenská republika, Slovak State, or Slovenský štát; prompt on Slavic peoples or West Slavs; prompt on Czechoslovaks or Českoslovenjci or Čechoslováci; reject "Slovenes" or "Slovenians" or "Slovenjci"] (Clues include the Prešov region and Červenica's mines, the "trinity" of Ľudovít Štúr, Jozef Miloslav Hurban, and Michal Miloslav Hodža, and "Lightning over the Tatras.")

<European History>

16. In rare cases, this process can be induced by repetitive motions like playing the bongos or marching. A disease caused by this process can be identified with the Liley (“LYE-lee”) chart, which plots changes in optical density at 450 nanometers. This process names a disease with “cold” and “warm” types, respectively mediated by IgM (“I-G-M”) and IgG (“I-G-G”). In differential diagnosis, this process is confirmed by labs with elevated LDH, decreased haptoglobin, and elevated reticulocyte count. This process names a “disease of the newborn” that can be identified by agglutination in the direct Coombs test. This process can cause prehepatic (“pre-huh-PAT-ick”) jaundice by triggering autoimmune activation of the complement system. Rh-positive babies born to Rh-negative mothers experience this process’s namesake form of anemia. For 10 points, name this process that kills red blood cells by rupturing their membranes.

ANSWER: **hemolysis** (“hee-MAWL-uh-siss”) [accept (autoimmune) **hemolytic** anemia or **hemolytic** disease of the newborn; prompt on cell **lysis**; prompt on **anemia** until read by asking “caused by what process?”; prompt on cold **agglutination** or **autoagglutination** until “agglutination” is read by asking “what process does it precede?”; prompt on **alloimmunization** or **isoimmunization** by asking “what process is triggered by the antibodies?”]

<Biology>

17. In 2021, a leading manufacturer of these products moved its plastic injection molding facility to Maryville, Tennessee. Ashley Hlebinsky, who curates a museum about these products, testified against their proposed redefinition for the DC Project. Cody Wilson sells CNC mills to make these products from “80 percent lowers.” The comparison microscopy system IBIS classifies models of these products, which are identified from microstamping and toolmarks. Although makers of these products are protected by the 2005 PLCAA, seven of them were sued in 2021 by Mexico. Businesses like LSC resell “parts kits” from these products after nominal destruction of their serial numbers, which are absent from privately assembled, untraceable ones nicknamed “ghosts.” For 10 points, private sales of what objects are exempt from background checks enforced by the ATF?

ANSWER: **guns** [or **firearms**; accept **pistols**, **rifles**, **handguns**, **AR-15s**, or other specific types of firearm; accept **gun** shows or ghost **guns** or 3-D printed **guns**; accept Cody **Firearms** Museum; prompt on conventional **weapons** or **arms** or self-**defense** or equivalents] (Clues include Smith & Wesson, the Integrated Ballistics Identification System, and the Protection of Lawful Commerce in Arms Act.)

<Current Events>

18. Asaka, Blanchet, and Shaposhnikov introduced a “minimal” model named for these particles in a paper that notes the LMA solution concerning them. These particles all have an X charge of either minus 5 or minus 3. Tsutomu Yanagida named an argument involving these particles for the way a constant matrix determinant implies a certain link between two eigenvalues. Some of these particles’ properties are explained using a chiral example of them via the type I (“one”) seesaw mechanism. A hypothetical type of these particles, which are a promising dark matter candidate because their right-handedness lets them only couple to gravity, would increase the dimensions of the PMNS matrix and are termed “sterile.” For 10 points, the Standard Model does not account for oscillations between the electron, muon, and tau flavors of what “ghostly” leptons?

ANSWER: **neutrinos** [accept sterile **neutrinos**, right-handed **neutrinos**, heavy **neutrinos**, electron **neutrinos**, muon **neutrinos**, or tau **neutrinos**; accept **neutrino** flavor oscillations; accept **neutrino** minimal standard model; prompt on **nu**]

<Physics>

19. A first-person plural dissection of a goose ends a proto-modernist interlude titled for these time periods that begins the second half of *The Story of an African Farm* by Olive Schreiner. In a novel titled for one of these periods, the casual way that a policeman with a scarred cheek tossed an orange haunts the protagonist as he drinks brandy in the cat-filled apartment of the journalist Melanie. Anoa prophesies “two thousand” of these periods in a novel by Ayi Kwei Armah. In a novel titled for one of these periods, the family of a “lanie” (“lah-nee”) history teacher is scandalized by a photo of him hugging the widow of his school’s janitor. In that novel titled one of these periods, the Special Branch’s murder of Gordon Ngubene is investigated by the Afrikaner Ben du Toit. For 10 points, André Brink titled a novel for a “dry white” sort of what time period?

ANSWER: **seasons** [accept *A Dry White Season*; accept *Two Thousand Seasons*; accept “Times and Seasons”;

prompt on times or droughts by asking “what sort of time period appears in the title?”]

<World Literature>

20. This man and his wife hosted the first “Afternoon of Jazz” benefit concert at their home so that Wyatt Tee Walker could post bail for imprisoned activists. Robert Kennedy accused this man of being a union-busting tool as vice president of the Chock Full o’Nuts coffee company. This man did not mention his type 2 diabetes in his autobiography *I Never Had it Made*, but did discuss his regret for endorsing Richard Nixon over John F. Kennedy in 1960. This man argued that Black Americans would not support the Soviet Union, refuting Paul Robeson in front of HUAC (“HYOO-ack”). Wendell Smith traveled with this person when he was a member of the Montreal Royals. Due to having “guts enough not to fight back,” this man was tapped by Branch Rickey to debut at Ebbets Field on Opening Day in 1947. For 10 points, the number 42 is retired in Major League Baseball to commemorate what first Black player?

ANSWER: Jackie **Robinson** [or Jack Roosevelt **Robinson**]

<American History>

## BONUSES

1. *Specific term required.* The Sistema de la Nacionalidad created boulevards named for these people and indigenous “precursors.” For 10 points each:

[10h] Identify these people who name holidays in Bermuda, Montserrat, the Turks and Caicos, and the Cayman Islands. Bridgetown’s Trafalgar Square was renamed for these “Right Excellent” people.

ANSWER: national **heroes** [or **héroes** or **heroínas**; accept (National) **Heroes**’ Day, National **Heroes** Square, Order of the National **Hero**, Boulevard of the **Heroes**, Paseo Los **Próceres**, National Heroes and **Benefactors** Day, Boulevard of the **Illustrious**, or Paseo Los **Ilustres**]

[10e] A Venezuelan building with this name honors national heroes like Andrés Bello (“ahn-DRESS BAY-yo”) and Apacuana (“ah-pah-KWAH-nah”). Hallowed cemeteries in Nicaragua and Puerto Rico share this name with a temple of luminaries in Paris.

ANSWER: **pantheon** [or **Panthéon**; accept National **Pantheon**, **Panteón** Nacional, **Panteón** de la Patria, or **Panteón** Nacional Román Baldorioty de Castro]

[10m] A national pantheon inters the poets Salomé Ureña (“sah-loh-MAY oo-RAIN-yah”) and Fabio Fiallo (“fee-AH-yo”) in this city, whose Ciudad Colonial was founded in 1496. This city’s Fortaleza Ozama, Alcázar de Colón, and Lighthouse mausoleum honor the Columbus family.

ANSWER: **Santo Domingo** [or **Santo Domingo** de Guzmán]

<Geography>

2. Gustav I’s clerical property seizures during this movement fueled the Dacke (“dah-KEH”) War, a Dalecarlian peasant uprising, and a rebellion of Westrogothian lords. For 10 points each:

[10e] Name this 16th-century religious movement. It was established across Scandinavia after the Danish Count’s War and the Swedish Diet of Västerås (“vest-uh-ROHSS”), seven years after Archbishop Trolle’s (“troh-LEH’s”) “Stockholm Bloodbath.”

ANSWER: Protestant **Reformation** [accept **Lutheranism** or **Protestantism**; prompt on suppressing monasteries, disestablishing the Catholic church, royal control of the church, or similar descriptions by asking “during what specific European movement?”]

[10h] Christian III plundered Iceland’s monasteries after his forces beheaded this bishop in Skálholt in 1550. He resisted Hans Tausen and Johannes Bugenhagen’s church orders after their ratification by the Althing.

ANSWER: **Jón Arason** [prompt on **Jón** or **Arason**]

[10m] Jón remained loyal to this city’s exiled archbishop Olav Engelbrektsson, who led the Norwegian Riksråd (“reeks-ROAD”) until its 1537 dissolution with the Reformation. Pilgrims visited Saint Olaf’s shrine at this city’s cathedral.

ANSWER: **Trondheim** [or **Nidaros**; accept **Nidaros** Cathedral or **Nidarosdomen** or **Nidaros** Domkirke]

<European History>

3. Answer the following about the artists who founded the Spiral group, a Harlem-based collective of African American artists, for 10 points each.

[10e] The group was co-founded by Romare (“ROH-muh-ree”) Bearden, whose works in this medium include *The Calabash*. This medium was used for Hannah Höch’s *Cut with the Kitchen Knife* as well as synthetic cubist works by Pablo Picasso and Georges Braque.

ANSWER: **collage** [accept **photomontage**]

[10h] This co-founder of the Spiral group shifted from a socialist realist style to the abstract expressionism of political paintings such as *Harlem Turns White* and the jazz-influenced *Twilight Sounds*.

ANSWER: Norman **Lewis** [or Norman Wilfred **Lewis**]

[10m] Spiral group co-founder Charles Alston sculpted a bust of Martin Luther King Jr. that is now exhibited in this room alongside Childe Hassam’s (“HASS-um’s”) *The Avenue in the Rain* and Rembrandt Peale’s “Porthole Portrait.”

ANSWER: **Oval Office** [prompt on the **White House**] (The portrait is of George Washington.)

<Painting & Sculpture>

4. In an octahedral field, these orbitals split into three with t-sub-2g symmetry and two with e-sub-g symmetry. For 10 points each:

[10e] Name these orbitals that metals contribute to the molecular orbitals of a coordination complex.

ANSWER: **d** orbitals

[10h] The Jahn–Teller (“yahn teller”) effect spontaneously breaks a complex’s symmetry at these points on the energy surface, where degeneracy between two states permits vibronic coupling. The geometric phase was introduced to describe motion around these points, which are absent in the pseudo-Jahn–Teller effect.

ANSWER: **conical intersections** [or **diaboloical** points; prompt on potential energy surface **intersections** or PES **intersections**]

[10m] This metal is often subject to Jahn–Teller distortions because its octahedral complexes have three doubly degenerate e-sub-g electrons. This metal has filled 3d orbitals, but one electron in its 4s orbital.

ANSWER: **copper** [or **Cu**; accept **Cu(II)**]

<Chemistry>

5. NYU Press published Jayanta Bhaṭṭa’s satire *Much Ado About Religion* in a set of Sanskrit texts with this name inspired by the Loeb Classical Library. For 10 points each:

[10m] Name this title material of a Sanskrit play by Shūdraka in which the courtesan Vasantasenā fills a toy made of it with jewels to delight the son of the poor brahmin Chārudatta.

ANSWER: **clay** [accept *The Little **Clay** Cart* or ***Mrcchakaṭikā*** or variants; accept **Clay** Sanskrit Library; accept John P. **Clay**; prompt on **ceramics**]

[10h] The Clay Library bundled Harsha’s *Nāgānanda* with *The Shattered Thigh* by this pre-1st-century author, who originated *The Little Clay Cart*’s stock couple. K. M. Panikkar revived this author’s fast-paced play *The Middle One*.

ANSWER: **Bhāsa**

[10e] In Bhāsa’s play, Chārudatta and Vasantasenā meet at a festival of this god, a scene transposed to his temple in *The Little Clay Cart*. This god titles an erotic treatise by Vātsyāyana.

ANSWER: **Kāma** [or **Kāma**deva, **Madana**, **Manmatha**, or **Ananga**; accept **Kāma sūtra**] (Bhāsa’s play is titled *Chārudatta*.)

<World Literature>

6. The first scientist behind this statement regarded it as “very simple” and “of the multiplication-table type.” For 10 points each:

[10e] What statement holds that allele frequencies will stay constant in a large, stable population?

ANSWER: **Hardy–Weinberg** principle [or **Hardy–Weinberg** equilibrium]

[10m] There is debate over whether this specific process can happen without segregation by niche or behavior. This process is hard to distinguish from alternatives in which gene flow occurs through secondary contact, even in the cichlids (“sick-lids”).

ANSWER: **sympatric speciation** [prompt on **speciation**]

[10h] Hybridization causes instant sympatric speciation but is rare in mammals, which this scientist attributed to sex chromosome ratios in triploids and tetraploids. This scientist coined the term “dosage compensation” and elaborated on Dobzhansky’s theory of isolation during speciation.

ANSWER: Hermann **Muller** [or Hermann Joseph **Muller**; accept Dobzhansky–**Muller** model; reject “Paul Hermann Muller”]

<Biology>

7. With Michael Barnett, this scholar created a framework for analyzing international agencies as norm-setting bureaucracies in *Rules for the World*. For 10 points each:

[10h] Name this scholar who, with Kathryn Sikkink, argued that norms undergo a “life cycle” of emergence, cascade, and internalization while structuring international relations.

ANSWER: Martha **Finnemore**

[10e] Finnemore holds that IR is best analyzed in terms of this process, whereby convention and beliefs, and not objective reality, create categories like “gender.”

ANSWER: social **construction** [or word forms of socially **constructed**; accept IR **constructivism**]

[10m] “Anarchy is What States Make of It” argues that this phrase, which denotes the context of how states apply intimidation, is socially constructed. These are the last two words in the title of a 2001 John Mearsheimer book.

ANSWER: **power politics** [or **Machtpolitik**; accept great **power politics** or *The Tragedy of Great **Power Politics***]

(“Anarchy is What States Make of It” is by Alexander Wendt.)

<Social Science>

8. *Specific term required.* Anti-*mui tsai* campaigns in Hong Kong and Malaya sought to replace enslaved bondmaids with these servants, who often came from Goa. For 10 points each:

[10h] Name these colonial governesses and maids who were often abandoned to their namesake poor home in Hackney. Mary Frere’s book *Old Deccan Days* collects bedtime stories from one of them named Anna Liberata de Souza.

ANSWER: **ayahs** [or **amahs**; or variants such as **yaya**, **ā mā**, **aia**, **Amme**, or **avia**; accept under-**ayahs**; accept **Ayahs’ Home**]

[10e] Ayahs received passports to travel from this crop’s plantations in highland Ceylon. The British brought Adivasi migrants to this crop’s estates in North Bengal, Assam, and Darjeeling.

ANSWER: **tea** [or **chai** or **chá**; or *Camellia **sinensis***; accept Darjeeling **tea** or other specific varieties; prompt on *Camellia*]

[10m] Former British tea gardens were often unrepresented by *panchayat* councils, which replaced political parties under this kingdom’s ruler Mahendra. The Raj recruited ayahs and tea pickers from this kingdom’s Rana dynasty.

ANSWER: **Nepal** [or Kingdom of **Nepal** or **Nepal** Adhirajya; accept **Gorkha** Kingdom] (Reforms in the 1990s incorporated North Bengal’s tea gardens into the panchayati raj system.)

<Other History>

9. This collection introduced the phrase “ships that pass in the night” in a narrative poem about Elizabeth Haddon, who waits for John Estauigh to love her back. For 10 points each:

[10m] Name this collection that includes several poems narrated by the Theologian. The landlord of this book’s title structure in Sudbury narrates the poem “Paul Revere’s Ride.”

ANSWER: **Tales of a Wayside Inn** (by Henry Wadsworth Longfellow)

[10e] Echoing Longfellow, this poet wrote that “the ship I seek is passing, passing” in his poem “Ships That Pass in the Night.” His poem “Sympathy” ends “I know why the caged bird sings!”

ANSWER: Paul Laurence **Dunbar**

[10h] Daniel Hoffman traces the opening line of this 1899 collection’s sixth poem, “I explain the silvered passing of a ship at night,” to Longfellow. Its first poem repeats the title sentiment to a maiden, a baby, and a mother.

ANSWER: **War Is Kind** [accept **War Is Kind and Other Poems** or **War Is Kind and Other Lines**] (by Stephen Crane)  
<American Literature>

10. This composer’s 2013 centennial tribute paired his *Bucolics* for violin and cello with two pieces by Steven Stucky. For 10 points each:

[10h] Name this composer whose 1994 death was honored by Magnus Lindberg’s piece *Aura*. This composer’s cello concerto begins with the soloist playing repeated unaccompanied D’s.

ANSWER: Witold **Lutoslawski** (“VEE-told loo-taw-SWAHF-skee”) [or Witold Roman **Lutosławski**; accept *Aura (In memoriam Witold Lutoslawski)*]

[10m] This Finnish student of Lutosławski’s (“loo-taw-SWAHF-skee’s”) conducted the Philharmonia Orchestra’s *Woven Words* festival for his centenary. He preceded Gustavo Dudamel at the LA Phil, and will leave the SF Symphony in 2025.

ANSWER: Esa-Pekka **Salonen**

[10e] Lutoslawski used this composer’s 24th Caprice as the basis for a set of variations that infuses the original material with liberal usage of polytonality and *sforzando*.

ANSWER: Niccolò **Paganini**

<Classical Music>

11. This book compares critical philosophy to Scholasticus’s “wise resolution” to not enter the water until he’d learned to swim. For 10 points each:

[10m] Name this 1812 book with sections on Being, Essence, and Concept. This G. W. F. Hegel book calls its title discipline a “realm of shadows” and rejects the law of non-contradiction.

ANSWER: **Science of Logic** [or **Wissenschaft der Logik**; or **WdL**; accept the **Greater Logic**, the **Shorter Logic**, the **Lesser Logic**, or the **Encyclopedia Logic**; prompt on Hegel’s **Logic** or the **Logic** by Georg Wilhelm Friedrich Hegel]

[10h] In the *Shorter Logic*, Hegel uses this phrase to describe the unity of the “absolute idea.” Give the original Greek, or a reasonable translation, for this repetitious definition of God’s activity from Aristotle’s *Metaphysics*.

ANSWER: **thought thinking** itself [or **noesis noeseos** noesis; or **thought of thought**; accept answers that repeat word forms of **thinking** or **understanding** twice or three times; accept **self-thinking** or **thinking about itself**]

[10e] Hegel’s *Logic* arrives at “pure thought,” which he modestly compares to God “in his essence before the creation of nature,” via this method. The stages of this method are often called thesis, antithesis, and synthesis.

ANSWER: **dialectics** [or Hegelian **dialectic**]

<Philosophy>

12. This man exhibited a tightrope-walking elephant named Lalla Rookh and a horse named Excelsior who could fire a gun by pulling a rope. For 10 points each:

[10h] Name this celebrity who combined trained animals, Shakespeare parodies, and political satire to become one of the most famous antebellum entertainers in America. This circus clown's "Great Show" inspired Barnum and Bailey's slogan "The Greatest Show on Earth."

ANSWER: Dan **Rice** [or Daniel **McLaren**]

[10e] Rice performed wearing a red, white, and blue suit, a top hat, and a goatee, which likely inspired Thomas Nast's image of this symbolic figure.

ANSWER: **Uncle Sam** [prompt on **Sam**]

[10m] Rice leveraged his popularity to run for office in Pennsylvania as part of this political faction. The 1864 DNC adopted most of this faction's policies and nominated its member George Pendleton for vice president.

ANSWER: **Copperheads** [or **Peace Democrats**]

<American History>

13. William Thurston's earthquake theorem states that there is an earthquake map between any two points in this space. For 10 points each:

[10h] Name this space containing the marked Riemann surface structures up to isotopy ("ICE-uh-TOPE-ee") on a closed, orientable surface.

ANSWER: **Teichmüller** space [prompt on **T**]

[10m] Shinichi Mochizuki used inter-universal Teichmüller theory for a purported proof of this conjecture. It holds that the sum of two coprime integers is almost always less than the radical of the product of the two integers and their sum, all to the power one plus epsilon, for any positive epsilon.

ANSWER: **abc** conjecture [accept **Oesterlé–Masser** conjecture]

[10e] If true, an "effective" version of the *abc* conjecture would imply this theorem for all but finitely many exponents. This theorem was first proven by Andrew Wiles in 1995.

ANSWER: **Fermat's last** theorem

<Other Science>

14. The narrator of a story recalls living in one of these objects between decks in a steamer, where he learns to uncork and drink from a schnapps ("sh'nops") bottle. For 10 points each:

[10m] Name these objects contrasted with the "way of humanity" in "A Report to an Academy." A character in a different story leans on two young ladies as he is forced to leave one of these objects every 40 days.

ANSWER: **cages** [or **Käfige**; prompt on synonyms or broader terms like **enclosures** or **pens** or **coops**]

[10e] Max Weber's "iron cage" is often compared to the vision of bureaucracy in works by this author of "A Report to an Academy" and "The Hunger Artist."

ANSWER: Franz **Kafka** [or František **Kafka**]

[10h] The most popular of Kafka's 109 *Zürau Aphorisms* imagines a cage performing this specific action. This action titles a 2024 anthology of "Kafkaesque stories" by writers like Yiyun Li and Ali Smith.

ANSWER: going in **search** of a **bird** [or **searching** for a **bird**; or "Ein Käfigging einen **Vogel suchen**"; accept *A Cage Went in **Search** of a **Bird***; accept **looking** or synonyms in place of "searching"; prompt on **searching** or synonyms by asking "for what?"]

<European Literature>

15. Saint Jerome noted widespread doubts about this epistle's authenticity due to its author's citing of apocryphal texts. For 10 points each:

[10m] Name this epistle allegedly written by a "brother of James" but now widely considered pseudepigraphal ("pseud-epi-graph-al"). It attacks false teachers who "reject authority" and "heap abuse on celestial beings."

ANSWER: Epistle of **Jude** [accept **Judah** or **Judas** or '**Ioúdas**]

[10e] Jude quotes a book that only became canonical in Ethiopia in which this great-grandfather of Noah sees fallen "Watchers" breeding with humans. Genesis states that this father of Methuselah "walked with God."

ANSWER: **Enoch** [or **Hänök** or **Hēnok**; accept Book of **Enoch**, 1 **Enoch**, Sēfer **Hänök**, or Maṣḥafa **Hēnok**]

[10h] Jude also cites Satan and Michael's fight in an apocryphal text named for a "testament" or one of these events "of Moses." John Damascene is called "Doctor" of one of these events discussed in the text *Munificentissimus* ("moo-NEE-fee-ken-TEE-see-mus") *Deus*.

ANSWER: **assumptions** [or word forms of **assume** or **transitus**; accept **Assumption** of Mary; accept **Assumption of Moses**; prompt on descriptions of being taken to Heaven]

<Religion>

16. During this leader's exile, his brother Ahmed led the UFD opposition party, which splintered when Haratin activists formed El-Hor. For 10 points each:

[10h] Name this "Islamic socialist" who jointly occupied Western Sahara's Sahrawi Arab Democratic Republic with Morocco to achieve his vision of a "Greater Mauritania."

ANSWER: Mokhtar Ould **Daddah** [accept Ahmed Ould **Daddah**] (The UFD was the Union of Democratic Forces.)

[10m] Ould Daddah settled a border dispute with Modibo, an "African socialist" scion ("SY-on") of this Mandinka dynasty traced from before the 1200s. This family's members included Aoua ("OW-ah"), a midwife and women's activist, and Salif, the "Golden Voice of Africa."

ANSWER: **Keïta** dynasty [accept Modibo **Keïta**; accept Salif **Keïta**; accept Aoua **Kéïta**] (The family claims descent from Sundiata Keita.)

[10e] Côte d'Ivoire pushed a state named for this kingdom to withdraw from Modibo Keïta's Mali Federation. The People's Republic of Benin overthrew a republic named for this kingdom, whose Mino were nicknamed "Amazons."

ANSWER: **Dahomey** [or Kingdom of **Dahomey**; accept **Dahomey** Amazons; accept Republic of **Dahomey** or République du **Dahomey**; accept Colony of **Dahomey** and Dependencies or Colonie du **Dahomey** et dépendances]

<World History>

17. In *Artforum*, Greil Marcus wrote about the "irreducible dignity" of this photographer's images of interiors at Graceland, comparing them to Walker Evans's photojournalism of Alabama sharecroppers. For 10 points each:

[10h] Name this photographer who depicted three white wires converging on a light fixture in a room painted in the title color in *The Red Ceiling*.

ANSWER: William **Eggleston**

[10m] Walker Evans also influenced an Eggleston photo taken at one of these businesses, in which a man walks away from the viewer. A pioneering photobook by Ed Ruscha ("roo-SHAY") is titled for capturing *Twentysix* of these businesses.

ANSWER: **gas stations** [or **filling stations**, **fuel stations**, **petrol stations**, or **service stations**; accept *Twentysix Gasoline Stations*; prompt on stations]

[10e] In an interview, Eggleston recalled feeling devastated when this photographer, one of his heroes, told him that "color is bullshit." This French street photographer published the book *The Decisive Moment*.

ANSWER: Henri **Cartier-Bresson**

<Other Fine Arts>

18. The “magnetic” type of these particles is a theorized alternative to computer bits. For 10 points each:

[10h] Name these topologically-protected soliton particles that were initially introduced to describe nucleons.

ANSWER: **skyrmions** [accept magnetic **skyrmions**]

[10e] Magnets without the “centro-” form of this property can stabilize magnetic skyrmions. *s* orbitals have the “spherical” form of this property with respect to the nucleus because electron density only depends on distance from the nucleus.

ANSWER: **symmetry** [or **symmetrical**; accept (non)centros**symmetrical**, (non)centros**symmetry**, spherical **symmetry**, or spherically **symmetrical**]

[10m] The skyrmion model of the nucleon reproduces the standard one-pion exchange potential, which improves on this spherically-symmetric screened Coulomb potential. Named for a physicist, it varies like “*e* to the minus *kr* all over *r*.”

ANSWER: **Yukawa** potential

<Physics>

19. This island names the fragmentary Epic Cycle’s lost first poem, whose conclusion describes the murder of Palamedes near the start of Trojan War. For 10 points each:

[10e] Name this island where the birth of Aphrodite is celebrated by a stone at Paphos called the Petra tou Romiou (“PET-ruh too ro-mee-YOO”). It may be named for its copper deposits.

ANSWER: **Cyprus** [or **Kýpros** or **Kibris**; accept **Kyprida** Aphrodite; accept **Cypria** or **Kúpria**] (The lost poem is Stasinus’s *Cypria*.)

[10m] The Cypriot city of Salamis was legendarily founded by this archer, whose descendant Anaxarete (“uh-NAX-uh-REE-tee”) turns to stone for rejecting Iphis. This half-brother of Ajax shares his name with a forefather of the Trojans.

ANSWER: **Teucer** [or **Teúkros**, **Teucris**, **Teucrus**, or **Teucros**; accept **Teucrids** or **Teucrians**]

[10h] In Ovid, this group of Cypriot women become the first prostitutes as punishment for rejecting Venus, which so offends Pygmalion that he retreats into sculpting and makes a statue that comes to life.

ANSWER: **Propoetides** [or **daughters** of **Propoetus** or equivalents; accept **children** of **Propoetus** or equivalents]

<Mythology>

20. A book collecting these texts begins with an analysis of Caedmon’s *Genesis* and ends with eight lines printed in red that state, “I started making maps when I was small.” For 10 points each:

[10e] Name these kinds of texts anthologized in a book by Alasdair Gray. William Wordsworth wrote one for *Lyrical Ballads* that calls poetry the “spontaneous overflow of powerful feelings.”

ANSWER: **preface** [accept **preface** to *Lyrical Ballads*; accept *The Book of Prefaces*; prompt on **essays**]

[10m] The last lines of *The Book of Prefaces* come from Gray’s novel *Lanark* (“LAN-urk”), which is set in this city and its hellish parallel, Unthank. *Shuggie Bain* and *How Late It Was, How Late* are also set here.

ANSWER: **Glasgow**

[10h] A story by Gray takes the form of the diary of this Scotsman, who proposes healing mankind using a universal language. In real life, he explored similar themes in 1653’s *Logopandecteisio* (“LO-go-pan-deck-TAY-see-on”) and translated Rabelais into English.

ANSWER: Sir Thomas **Urquhart** [prompt on “Sir **Thomas**’s Logopandocy”]

<British Literature>