

## TOSSUPS

1. A group stylized as either the WWW or the Association of the W's invited this person to be the public face of a counter-rally outside the Astrodome. This person often criticized Bill Clinton's "web" of global treaties, scapegoating his influential Georgetown professor Carroll Quigley. Eunie Smith succeeded this person as head of an organization that split into factions over the endorsement of Donald Trump. This person likened "using an atomic bomb to exterminate mice" to legislation sponsored by Michigan representative Martha Griffiths. Barry Goldwater's campaign promise to offer "a choice, not an echo" was drawn from a book written by this person, who used the slogan "Stop Taking Our Privileges" in an antifeminist campaign. For 10 points, name this activist who created the Eagle Forum to oppose the Equal Rights Amendment.

ANSWER: Phyllis **Schlafly** ("SHLAFF-lee") [or Phyllis Stewart **Schlafly**; or Phyllis **Stewart** or Phyllis McAlpin **Stewart**] (The Women Who Want to be Women organized the Pro-Family Rally in response to the National Women's Conference.)  
<American History>

2. *Description acceptable.* A verse written with a planchette suggests that this object is lying under an "old pine" after its disappearance causes its owner to lose his wits. A man on a boat realizes the significance of this object after having a vision of his son in a crimson robe, walking barefoot in the snow and singing about Greensickness Peak. In the first chapter, a priest and a monk carry this object to the fairy Disenchantment's palace in the Land of Illusion through an arch inscribed with the words "Truth becomes fiction when the fiction's true." After a goddess neglects to use it to repair the sky, this object and its beloved Crimson Pearl Flower are born into the human world, where it shows up in a newborn boy's mouth. For 10 points, Jiǎ Bǎoyù is an incarnation of what object that alternately titles Cáo Xuěqín's ("tsao shway-cheen's") *Dream of the Red Chamber*?

ANSWER: **stone** [or **jade**; or **shitou**; or **yù**; or descriptions of the magic **stone** that is born as Jiǎ Bǎoyù, Jiǎ Bǎoyù's piece of **jade**, or the **stone** from *Story of the Stone*, *Dream of the Red Chamber*, *Shítou Jì*, or *Hónglóu Mèng*; accept **rock**, **gem**, **jewel**, or equivalents of any; accept Jiǎ **Bǎoyu** until read; prompt on **Jiǎ** until read]  
<World Literature>

3. The only non-diegetic music in a film from this country is the "music from the future" that two girls share before a scene in which they row an inflatable raft to a pyramid in a lake. A director from this country played a song by The Kills over a tracking shot that floats around a motor show before focusing on a showgirl dancing on a 1984 Cadillac painted with flames. In a film from this country, Nelly builds a stick fort with a girl she recognizes is her mother as a child. The second Palme d'Or winner with a female director is a body horror film set in this country in which Alexia is impregnated by a car. Vivaldi's "Summer" serves as a motif in a period film from this country, in which a betrothed woman falls for the painter Marianne. For 10 points, name this home country of Julia Ducournau ("doo-koor-NO") and Céline Sciamma ("see-ah-mah"), who directed *Titane* ("tee-TAHN") and *Portrait of a Lady on Fire*?

ANSWER: **France** [or **French** Republic or République **française**] (The first film is Céline Sciamma's *Petite Maman*.)  
<Other Fine Arts>

4. This input enables oxidations to generate a “pool” of carbocations (“carbo-cat-ions”) with umpolung reactivity that can be regenerated *in situ*. This input drives a low-temperature dimerization named for Hermann Kolbe, which joins two radicals formed through decarboxylation. Reactors receiving this input may undergo flooding due to changes in their wettability. A cobalt catalyst is used instead of this input in the Fowler process for perfluorinating hydrocarbons. A total yield of 200 percent per unit of this input is possible in paired reactions consisting of two spatially separated parts. Two steps involving this input are interspersed with conventional chemistry in an ECE reaction. The output of the Hall–Héroult process depends on the supply of this input and the length of reaction. For 10 points, name this input used to cleave bonds near either the anode or cathode.

ANSWER: **electricity** [or word forms; accept electrical **power**; accept **electrodes** or **electrochemistry** or **electrolysis**; accept electric **current** or **I**; accept **voltage**] (ECE stands for electrode–chemical–electrode.)  
<Chemistry>

5. A member of this family attributed his visions of a mummy-like “epileptic patient” to the “French correspondent.” Bernard Williams analyzed a character created by a member of this family to argue that all seemingly “external” reasons are actually “internal.” The moral philosophy of a member of this family is the subject of Martha Nussbaum essays like “Finely Aware and Richly Responsible” and “Flawed Crystals.” A member of this family imagined the Mahdī posing him a version of Pascal’s wager, which would be in vain because faith in the Mahdī is a “dead hypothesis” for him. A member of this family distinguished types of “options” in a lecture critiquing a maxim condemning belief “without sufficient evidence” proposed by W. K. Clifford. For 10 points, name this family of a novelist and his brother, the author of “The Will to Believe.”

ANSWER: **James** family [accept William **James**; accept Henry **James**] (The first sentence is from *The Varieties of Religious Experience*. Williams used “Owen Wingrave” as the main example of “Internal and External Reasons.”)  
<Philosophy>

6. In a story by this author, Timon of Assens is told that salt water in the form of sweat, tears, or sea is the “cure for everything” after learning that his singing is only popular because he’s a baron’s illegitimate son. In a story by this author, lessons at the “yellow house” are canceled after a teacher singing the “seduction duet” kisses his pupil. The title character of a story by this author says that her heart cries out, “Give me leave to do my utmost!” after explaining that “a great artist, Madame, is never poor.” In a story by this author, the singer Jonathan weds Countess Calypso in a hayloft. In another story by this author, the opera star Achille Papin (“ah-SHEEL pa-PAN”) sends two sisters a chef who uses her lottery prize to give them a lavish dinner. For 10 points, “Deluge at Norderney” is one of the *Seven Gothic Tales* of what author of “Babette’s Feast”?

ANSWER: Isak **Dinesen** (“DIN-uh-sen”) [or Karen **Blixen**]  
<European Literature>

7. This culture's name became a term akin to "Renaissance man," evoking their skill in "red and black ink" and rainbow cotton fields. This culture formerly named Arkansas's Plum Bayou Mounds. Charles Di Peso misattributed Paquimé's ("pah-kee-MAY's") Medio period to turquoise merchants from this culture, whose possible artifacts include skull racks and butterfly pectorals. This culture's Corral ("ko-RAHL") phase, whose diaspora may coincide with the Nicarao and Pipil ("pee-PEEL") migrations, preceded its innovations of serpent columns and basalt Atlantean warriors in Hidalgo ("ee-DAHL-go") during a Postclassic phase named for a mythic "place of reeds." A discredited theory held that this culture of circa 950 to 1150 CE invaded the Maya city of Chichén Itzá. This culture was conflated with Teotihuacán ("tay-oh-tee-wah-KAHN") in later Nahua codices. For 10 points, what culture inspired the Aztec paradise of Tōllān with its city of Tula?

ANSWER: **Toltecs** [or **toltecas** or **Tōltēkah** or **Tōltēkatl**; accept **Toltec** Empire or **Toltec** Mounds; accept **Tula** Grande or **Tula** Chico or **Tula** de Allende until "Tula" is read; accept **Tōllān** until read; accept **toltecatoyotl** or **toltequidad**; prompt on **Nahuas** or **Nahuatl** or **Nahuan** until "Nahua" is read; prompt on **Aztatlan** interaction sphere; reject "Mexico" or "Aztlán"] (Scholars still debate much about the Toltecs, including if Tōllān was primarily identified with Tula or with many great cities. The idea that they ruled an "empire" is largely disfavored.)

<Other History>

8. Students are compared to four types of this food in a quote attributed to Gamaliel the Elder. An emblematic debate between the Beit ("bait") Hillel and Beit Shammai ("shah-MYE") concerned the precise point at which this food could become ritually impure. A recipe for this food is sweeter west of a namesake line that divides Litvak and Galician dialects of Yiddish. That preparation of this food is a common Sabbath dish because it avoids bans on *borer* ("boh-RAIR"), or "picking and separating." In the Book of Tobit, this food cures the title patriarch's blindness. This is the main [emphasize] *animal* to be considered *pareve* ("PAR-iv"), though Sephardim often still do not consume it with milk. After an encounter with one of these animals, a prophet declares that "in 40 days Nineveh will be overthrown." For 10 points, a "large" example of what animals appears in the Book of Jonah?

ANSWER: **fish** [or **dag**; accept **carp**, white**fish**, **pike**, or other specific fish; accept **gefilte** fish or "**Gefilte** Fish Line"; accept **whales** or **cetaceans**; prompt on **gallbladder** by asking "of what animal?"; reject "meat" or "flesh"] (In the original Hebrew, Jonah is described as being eaten by a "large fish," although it is often translated as "whale.")

<Religion>

9. The approximation of Jones polynomials is "this complexity class complete." This complexity class's subroutine theorem proves that algorithms for promise problems in it can be queried as oracles. Scott Aaronson's concept of "forrelation" ("for-eh-LAY-shun") was used to show that there is an oracle relative to which this complexity class is [emphasize] *not* a subset of PH. Upper bounds on this class can be established by tracing out computation trees as a sum over histories. The canonical problem used to show the oracle separation of this class and BPP is Simon's problem. The discrete logarithm problem and the integer factorization problem belong to this class because they are solved by Shor's algorithm. For 10 points, name this class of problems decidable in polynomial time by a quantum computer with bounded error probability.

ANSWER: **BQP** [accept **BQP**-complete; accept **bounded-error quantum polynomial time** until "time" is read] (PH is the polynomial hierarchy.)

<Other Science>

10. Mary Emma Harris described how a structure created at this place was called “Supine” after the Venetian blinds used for it collapsed. While at this place, Alex Reed collaborated on “anti-jewelry” from materials like metal washers found at hardware stores. *Matière* (“maht-YAIR”) exercises at this place led to a series of leaf studies, while Pre-Columbian ruins inspired an artist to paint the *Variant/Adobe* series here. For a performance at this place, M. C. Richards translated *The Ruse of Medusa* by Erik Satie. After watching basket makers in Toluca, looped-wire hangings were created at this place by Ruth Asawa. This school was the site of *Theater Piece No. 1*, a happening by John Cage, and was where its founder created studies for his series *Homage to the Square*. For 10 points, Josef and Anni Albers founded what experimental liberal arts college in North Carolina?

ANSWER: **Black Mountain** College [or **BMC**; accept **Black Mountain**, North Carolina; prompt on North Carolina or NC until “North Carolina” is read]

<Painting & Sculpture>

11. A poem names this person and a goddess as “fine women” who “eat a crazy salad with their meat whereby the Horn of Plenty is undone.” That poem laments that this person “found life flat and dull and later had much trouble from a fool.” Another poem claims that, if we lived in this person’s time, we like the rest would have given but “a word and a jest.” This person had a mind “that nobleness made simple as a fire,” according to a poem that refuses to blame her for teaching “ignorant men most violent ways.” This woman’s parents title a poem in which “a shudder in the loins” leads to “the broken wall, the burning roof and tower / and Agamemnon dead.” That poem describes this woman’s mother as “the staggering girl” beneath “the great wings beating still.” For 10 points, name this stand-in for Maud Gonne whom W. B. Yeats wrote about in “No Second Troy.”

ANSWER: **Helen** of Troy [or **Helena** or **Helénē**; or **Helen** of Sparta; prompt on Maud Gonne until read by asking “what mythological figure is a stand-in for Maud Gonne in these poems?”] (The unnamed poems are “A Prayer for My Daughter,” “When Helen Lived,” and “Leda and the Swan.”)

<British Literature>

12. This company, which was the first one occupied by Soviet-style “factory councils” in 1920, ended its 1980 strike with the “March of the 40,000.” In 1969, this brand took over an upscale competitor whose Aurelia appears in the era-defining film *The Easy Life*. This brand’s 1958 contract for a plant in Kragujevac (“KRAH-goo-yeh-VOTS”) created Zastava’s Fića (“fee-chah”). A RAI (“rye”) game show awarded a prize nicknamed the “Mickey Mouse” from this brand, which was led by a menswear icon dubbed the “Rake of the Riviera.” This brand’s billion-dollar 1966 “deal of the century” produced VAZ’s Lada product line in the Soviet city of Tolyatti. This brand, which got 15 million dollars in the largest Marshall Plan loan, built the Seicento (“say-CHEN-toh”) and Cinquecento (“chin-kway-CHEN-toh”) at its factory in Lingotto. For 10 points, the postwar Italian economic miracle relied on what Turin-based maker of affordable cars?

ANSWER: **Fiat** [or **Fiat** Automobili S.p.A; or **Fabbrica Italiana Automobili di Torino**; or **Italian Automobile Factory of Turin**; reject “Fiat Chrysler” or “Stellantis”] (Clues include Lancia’s Aurelia in *Il Sorpasso*, the Fiat 500’s nickname of “Topolino,” *Lascia o raddoppia?*, Gianni Agnelli, and the Fiat 600 and Fiat 500.)

<European History>

13. The “thin sandwich” approach to these equations’ constraints was made practical by J. W. York, who co-names an approach to finding their initial conditions with André Lichnerowicz (“leesh-nair-oh-VEETS”). Chi (“kye”), which equals “gamma to the negative one-third,” can be used to rewrite these equations in the BSSN system. Manuela Campanelli’s team at Brownsville, which created the “moving puncture” method, was one of three teams behind a 2005 breakthrough in solving these equations under the ADM formalism. Birkhoff’s theorem concerns the spherical symmetry of a solution to these equations involving a “one minus the quantity ‘ $r$ -sub- $s$  over  $r$ ” term. Despite being nonlinear and second-order, a solution to these equations with a singularity was quickly found by Karl Schwarzschild. For 10 points, what equations of general relativity are named after the theory’s creator?  
ANSWER: **Einstein** field equations [or **EFE**; or **Einstein**’s equations; accept **Einstein** constraint equations; prompt on field equations or vacuum field equations]  
<Physics>

14. An island of this name, which led the world in exports of arrowroot and Sea Island cotton, was the site of 1935 riots that stormed a courthouse near both Fort Charlotte and the oldest botanic garden in the Americas. The Portuguese gave this name to a captaincy founded [emphasize] *before* São Paulo and to a Barlavento island in Cape Verde that was discovered on a January 22nd feast day. This name identifies a “ceded island” that hosts a summertime “Mas” and a cape in the Algarve that is Europe’s southwesternmost point. The Garifuna people descend from “Black Caribs” who rebelled on an island of this name after sailing from Bequia. The society of a French priest of this name operates many thrift shops. A Windward Island of this name is governed from Kingstown. For 10 points, give this name of the Caribbean island that forms a country with the Grenadines.  
ANSWER: Saint **Vincent** [accept **Vincent** of Saragossa or São **Vicente** or San **Vicente**; accept Saint **Vincent** and the Grenadines or **Youloumain**; accept Saint **Vincent** de Paul or “St. **Vinnie**’s” or Society of Saint **Vincent** de Paul; accept Cape St. **Vincent**, Cabo de São **Vicente**, **Vicentine** Coast, Costa **Vicentina**, **Vincy** Mas, or Captaincy of São **Vicente**; reject “Saint Vincent Ferrer”]  
<Geography>

15. An unaccompanied horn solo opens a 1993 piece in this genre based on hymns and Bach chorales that reminded the composer of Abraham Lincoln. Three movements inspired by the *Odyssey*, such as “Immortal thread, so weak,” make up a piece in this genre titled *Wine-Dark Sea* by John Mackey. *Give Us This Day* is a “short” piece in this genre by David Maslanka. A fugue marked “Rather broad” is the third movement of a B-flat-major piece in this genre by Paul Hindemith. It’s not a requiem, but an optional chorus appears in the martial third movement “Apotheosis” of a piece in this genre written for the tenth anniversary of the July Revolution. A “*grande*” piece in this genre subtitled “*funèbre et triomphale*” (“few-NEB ray tree-awn-FALL”) was written by Hector Berlioz. For 10 points, name this genre of large-scale music for an orchestra without strings.  
ANSWER: **symphony** for concert **band** [or **symphony** for **wind** ensemble; or **symphony** for **wind** band; prompt on **band** or **wind** ensemble by asking “what kind of piece?”; prompt on **symphony** or short **symphony** by asking “for what type of ensemble?”; reject “symphony for brass band”]  
<Classical Music>

16. In Albanian folklore, this domain's "beauty" names a goddess who makes unreasonable demands and has a kulshedra guardian. The chant "erçe erçe erçe" ("AIR-kay AIR-kay AIR-kay") addresses this domain in the Anglo-Saxon metrical charm *Æcerbot* ("ACK-er-boat"). This domain is personified by the Hittite "genius" Dagan-zipaš, the Lithuanian goddess Žemyna, and the Thracian goddess from whom Semele likely originates. The obscure nymph Plataea is cognate with this domain's Vedic goddess, Prithvi. Moreover, both of those names reflect the reconstructed epithet for this domain's Proto-Indo-European mother goddess \*D<sup>h</sup>éǵh<sup>ō</sup>m ("DEG-yoam"), who is wedded to \*Dy<sup>é</sup>us ph<sup>₂</sup>tér ("DAY-oos puh-TAIR"). In the *Bibliotheca*, Athena discards the semen of Hephaestus into this realm, whence it begets a snakeman king of Athens. For 10 points, identify this origin of the autochthonous ("uh-TOCK-thuh-nuss") kings.

ANSWER: **earth** [or **ground**, **land**, **soil**, or equivalents; accept **field** or **farm**; reject "rock" or "stone"] (The epithet is \*p<sup>l</sup>th<sup>₂</sup>éwih<sup>₂</sup> ("pult-HEH-wee"), or "broad one.")

<Mythology>

17. The "collateral" activation of these proteins is the core of the SHERLOCK and HOLMES methods. The SpRY ("spry") variant of one of these proteins is significantly more promiscuous because it lacks key arginines at positions 1333 and 1335. A tool co-developed by Dana-Farber and the Broad ("brohd") for designing experiments with these proteins is called MAGeCK ("mah-GECK"). "Dead" examples of these proteins have been deactivated by mutations in both the HNH and RuvC domain. One of these proteins from *S. pyogenes* ("pye-OJ-uh-neež") has been engineered to be "near-PAMless," expanding its range but increasing the chance of off-target cleavage. One-vector systems package these proteins alongside the sgRNAs that encode their target sequences. For 10 points, name these endonucleases that are directed by guide RNAs produced from CRISPR ("crisper") sequences.

ANSWER: **Cas** nucleases [or **CRISPR associated proteins**; accept CRISPR/**Cas9** or **Cas12a** or **Cas13a**; prompt on DNA endonucleases or RNA endonucleases until "endonucleases" is read; reject "CRISPR"] (MAGeCK designs GeCKo knockout libraries.)

<Biology>

18. *Specific term required.* A "hybrid" tradition of these objects thrived in Martaban, whose *nakhodas* contracted them to *kiwis* in a commenda system regulated by Sultan Mahmud Shah's code. "Commoner's" types of these objects were contrasted with those from official bureaus, whose Muslim superintendent Pú Shòugēng ("poo sho-gung") offered them to invading Mongols. Nomads who relied on these objects were stigmatized as "egg families," or Tanka. Guǎngdōng's "Crystal Palace" exhibits one of these objects from the Southern Sòng, when they and smaller sampans were made impervious with tung oil putty for the Silk Routes between Quánzhōu ("chwen-joh") and Nánhǎi ("nahn-hye"). These objects were burned by 1525 to enforce a series of anti-wōkòu ("woh-koh") bans. 30,000 troops staffed one of the six imposing groups of them dispatched by the Yǒnglè ("yohng-luh") Emperor. For 10 points, what vessels with watertight bulkheads and battened rigs included Zhèng Hé's ("jung huh's") "treasure ships"?

ANSWER: **junks** [or **chuán**, **ch'uan**, kó-**chūn**, **jong**, **djong**, **juang**, **junco**, **junques**, **joñ**, **concho**, or other variants; accept **lorchas**, **kora-koras**, Kūnlún **bó**, K'un-lun **po**, hǎi**bó**, hai**po**, bǎo**chuán**, gǔ**chuán**, mín**chuán**, guān**chuán**, shā**chuán**, or fān**chuán**; prompt on treasure **ships**, **boats**, **vessels**, **fleets**, **navies**, **vehicles**, **watercraft**, **rigs**, **sails**, or equivalents of any] (Clues include Malacca's *Undang-undang laut*, the Maritime Trade Bureau, or Shibósī, and the Maritime Silk Road Museum, which exhibits the wreck of the *Nánhǎi One*.)

<World History>

19. An essay by this author states that it would be fun to have to return to page 47 of a book to recall “exactly what time the second gardener potted the prize-winning tea-rose begonia.” That essay by this author laments that the “master of rare knowledge” is living “in the age of the hoop skirt,” and criticizes a novel in which no one sees the artificially roughened hands of a man who claims to come from Australia. This author’s call for a hero who goes down “mean streets” titles a Martin Scorsese film. This author’s stories “Spanish Blood” and “Nevada Gas” appear in a book whose title essay picks apart logical errors in A. A. Milne’s *The Red House Mystery*. This author set forth tenets for an ideal hero in “The Simple Art of Murder.” For 10 points, name this author whose private eye Philip Marlowe appears in *The Big Sleep* and *The Long Goodbye*.

ANSWER: Raymond **Chandler** [or Raymond Thornton **Chandler**]

<American Literature>

20. *Note to moderator: Read the answerline carefully.* Women perform this activity with yucca hoops in the *ariwete* ritual. Orlando Patterson credited this activity for “paradoxical” increases in his home country’s life expectancy identified by James C. Riley. Daniel Lieberman argued that this activity’s flat cost curve outperformed the U-shape of a [emphasize] *less costly* behavior’s “inverted pendulum” mechanism. Hypotheses about mechanisms of this activity, such as *ACTN3* polymorphisms and high VO<sub>2</sub> max, fail to explain its “economy” among Kalenjin peoples like the Nandi. A Christopher McDougall book exoticized the use of *huaraches* (“wah-RAH-chays”) and ground *pinole* (“pee-NOH-lay”) during this activity by Chihuahua’s Rarámuri people. David Raichlen argued that endocannabinoids, not endorphins, mediate this activity’s so-called “high.” For 10 points, cursorial hominins may have evolved what activity for persistence hunting like pursuit predation?

ANSWER: **running** [accept **jogging**, **racing**, foot**traces**, **sprinting**, endurance **running**, **marathon** running, **dashing**, **chasing**, **chase**, or other types of running; accept **pursuit** or **pursuing** until “pursuit” is read; prompt on locomotion, movement, exercise, sports, striding, strides, or equivalents of any; prompt on hunting or tracking or equivalents by asking “via what activity?”; reject “walking” or “ambulation” or “trekking”]

<Social Science>

## BONUSES

1. In “Why Physics Needs Quantum Foundations,” Lucien Hardy and Robert Spekkens proposed editing a phrase to replace this action with “contemplate.” For 10 points each:

[10m] Quantum physicists are often told to “shut up and” do what action, rather than investigating philosophical concerns?

ANSWER: **calculate** [or word forms of **calculating**; accept “Shut up and **calculate!**”]

[10e] The phrase “shut up and calculate!” originally applied to this orthodox interpretation of quantum mechanics pioneered by Niels Bohr.

ANSWER: **Copenhagen** interpretation [or **København** interpretation]

[10h] Though he later regretted it, this physicist coined the phrase “shut up and calculate!” This proponent of the QBism (“cubism”) quantum interpretation wrote the textbook *Solid State Physics* with Neil Ashcroft, and proposed the term “boojum” for a feature of superfluids.

ANSWER: David **Mermin** [or Nathaniel David **Mermin**]

<Physics>

2. Name these terms with different meanings in Catholicism and biology, for 10 points each.

[10e] This title is given to representatives of the Benedictine Confederation and to the archbishop of a country’s most historically significant see. A mammalian order with this name includes galagos, tarsiers, and lorises.

ANSWER: **primate** [accept **Primates**; accept Abbot **Primate**]

[10m] The Apostolic Signatura judges procedures of a court with this name that acts as the Roman curia’s ordinary appellate tribunal. This prefix names a genus of wheel-shaped dsRNA viruses that cause juvenile diarrhea.

ANSWER: **rota** [accept **Rotavirus**; accept Roman **Rota**, Sacra **Rota**, **Rotae** Romanae, Apostolic Tribunal of the Roman **Rota**, or Tribunal Apostolicum **Rotae** Romanae]

[10h] Pope Francis affirmed this two-word phrase from the 1975 text *Persona humana* as a description of homosexuality. MobiDB annotates proteins described by this phrase, which have high conformational flexibility.

ANSWER: **intrinsically disordered** [or **intrinsecamente disordinati**; accept **intrinsically disordered** proteins or **intrinsically unstructured** proteins or **intrinsic** protein **disorder**; prompt on **IDPs** by asking “what does that stand for?”]

<Other Academic>

3. 2006 riots over Snyder Rini’s election destroyed a Chinatown in this country’s capital, which was again burned in 2021 after it switched relations from Taiwan to China three years before Nauru. For 10 points each:

[10m] Name this Pacific country whose security pact with China leaked in 2022. Its prime minister, Manasseh Sogavare, signed a policing pact in Beijing in 2023.

ANSWER: **Solomon** Islands [accept the **Solomons**]

[10e] A Chinese state company named for this industry will redevelop the Solomons’ Gold Ridge Mine. In Laos and Kenya, the Belt and Road Initiative built this industry’s “standard-gauge” projects.

ANSWER: **railways** [or **railroads** or **trains**; or **tiělù**; accept Boten–Vientiane **Railway**, Lao–China **Railway**, Mombasa–Nairobi Standard Gauge **Railway**, or China **Railway**; prompt on **transportation**, **shipping**, **cargo**, **freight**, **construction**, or **engineering**]

[10h] The GDPC proposed that the Solomons adopt this policy to address both “exposure” from Chinese creditors and threatened biodiversity. This policy created “blue” bonds in Seychelles (“say-SHELL”) and “green” ones in Gabon.

ANSWER: debt-for-**nature swaps** [accept debt-for-**climate swaps** or debt-for-**adaptation swaps**; prompt on green debt **swaps**; prompt on **debt relief**, **debt cancellation**, **debt forgiveness**, or equivalents] (The GDPC is the Global Development Policy Center.)

<Current Events>

4. *Original-language term required.* João VI returned from his Brazilian exile after *vintistas* from Porto convened one of these bodies with Brazilian deputies in 1820. For 10 points each:

[10m] Brazil's 1823 Constituent Assembly was subordinate to what type of Iberian parliament in Lisbon? During Spain's Triennio Liberal, Rafael Riego restored one of these assemblies that met in Cádiz in 1812.

ANSWER: **Cortes** [accept **Cortes** Generales or **Cortes** Gerais; accept **Cortes** of Cádiz or Cádiz **Cortes**; accept **Cortes** Gerais e Extraordinárias da Nação Portuguesa; reject "corte" or "courts"]

[10e] In 1822, Lisbon's Cortes created the first of these things in Portugal. During the "Ominous Decade," Ferdinand VII abolished one of these things created by the Cádiz Cortes and returned Spain to absolutism.

ANSWER: **constitutions** [accept **charters**; accept **constitutional** monarchy; accept **Constitución** de Cádiz or Political **Constitution** of the Spanish Monarchy or **Constitución** Política; accept Portuguese **Constitution** of 1822 or Political **Constitution** of the Portuguese Monarchy or **Constituição** Política; prompt on **documents** or **texts**]

[10h] Portugal's 1826 Constitution adapted monarchical "moderating power" inspired by this Swiss-born political theorist from the 1824 Brazilian Constitution. This man drafted an ephemeral French constitution in 1815.

ANSWER: Benjamin **Constant** [or Henri-Benjamin **Constant** de Rebecque]

<European History>

5. One of these places titles a memoir about the Stutthof concentration camp by the Lithuanian playwright Balys Sruoga ("buh-LEESE sroo-OH-guh"). For 10 points each:

[10h] What sort of place titles a 1922 novel about an Austro-Hungarian soldier by Liviu Rebreanu ("LEEV-yoo reb-ray-AH-noo")? Ekdal says that these places "avenge themselves" after Hedvig shoots herself in front of a fake one in *The Wild Duck*.

ANSWER: **forests** [or **woods** or **woodland**; or **skogen**; accept Vienna **Woods** or **Wienerwald**; accept *The Forest of the Hanged* or *Pădurea spânzuraților*; accept *The Forest of the Gods* or *Dievų miškas*]

[10m] This author's partly Romanian-language play *Mad Forest* examines Ceaușescu's ("chow-SHESS-koo's") fall. This British author wrote updates of Strindberg's *A Dream Play* and Seneca's *Thyestes* ("thigh-ESS-teez") and a play about a dinner attended by Pope Joan and Patient Griselda.

ANSWER: Caryl **Churchill** [or Caryl Lesley **Churchill**] (The play is *Top Girls*.)

[10e] Astrov laments forests disappearing from Russian maps in this Anton Chekhov play, a reworking of *The Wood Demon* titled for the manager of the provincial Serebryakov ("sair-uh-bree-KOFF") estate.

ANSWER: **Uncle Vanya** [or **Dyadya Vanya**; or **Uncle Vanya: Scenes from Country Life**; or **Dyadya Vanya: Stseny iz derevenskoy zhizni**; or **Uncle Vanya: Scenes from Country Life in Four Acts**; or **Dyadya Vanya: Stseny iz derevenskoy zhizni v chetyroykh deystviyakh**]

<European Literature>

6. Kaikhosru Shapurji Sorabji wrote four very long piano pieces in this genre, which each have between five and ten movements. For 10 points each:

[10h] Name this musical form that includes York Bowen's Opus 155, to be played *Allegro furioso*. Ned Rorem's First Piano Sonata ends with this kind of movement.

ANSWER: **toccata**

[10m] Robert Schumann's Opus 7 is a toccata in this key based on Czerny's ("CHAIR-nee's") toccata in this key. Other difficult piano pieces in this key include Schubert's *Wanderer Fantasy* and an unrelated *Fantasia* by Schumann.

ANSWER: **C** major [accept *Fantasia in C*; reject "C minor" or "B-sharp"]

[10e] This composer's piano toccata is in the rare key of E-flat minor. His ballet *Gayane* ("gah-yah-NEH") includes a percussive "Sabre Dance."

ANSWER: Aram **Khachaturian** [or Aram Ilyich **Khachaturian**]

<Classical Music>

7. A Thracian maid who performed this act when Thales fell in a well is celebrated in Adriana Cavarero's *In Spite of Plato*. For 10 points each:

[10e] Name this act performed by Medusa in the title of an Hélène Cixous ("ay-LEN seek-SOO") essay. Chrysippus died from this act, which provides a nickname for the cheerful atomist Democritus.

ANSWER: **laughter** [or word forms or synonyms of **laughing**; accept "The **Laugh** of the Medusa" or *Le **Rire** de la Méduse*; reject "smiling" or synonyms]

[10h] This book notes the "entirely serious" way Plato describes the Thracian maid's laughter. The author of this book used her Gifford Lectures for its parts on "Thinking" and "Willing" before dying with the first page of the third part on her typewriter in 1975.

ANSWER: *The **Life of the Mind*** (by Hannah Arendt)

[10m] Hans Blumenberg's *The Laughter of the Thracian Woman* interprets the story as this concept "interrupting" theory. Edmund Husserl introduced this term for a shared realm of social experience.

ANSWER: **lifeworld** [or **Lebenswelt**; reject "world" or "Welt"]

<Philosophy>

8. In imitation of the heroine of Madeleine de Scudéry's *Clélie* ("clay-LEE"), a woman with this name jumps into the Thames to flee from horsemen she perceives to be "ravishers," only to fall ill. For 10 points each:

[10m] Give this name of a young woman whose romantic delusions are dispelled in Charlotte Lennox's *The Female Quixote. The Rape of the Lock* was based on an incident involving a woman with this first name.

ANSWER: **Arabella** [accept **Arabella** Fermor]

[10e] Arabella Wilmot's marriage is canceled after her fiancé's father is bankrupted in this Oliver Goldsmith novel, which features the villainous Squire Thornhill.

ANSWER: *The **Vicar of Wakefield***

[10h] The protagonist of this author's 1949 novel *Arabella* pretends to be an heiress so that she can marry rich. This prolific novelist established the Regency romance genre and was known for meticulous background research.

ANSWER: Georgette **Hever**

<British Literature>

9. This ethnicity's Kwena lineage migrated to hills abandoned by the Toutswe ("TOOT-sway") tradition after the Phofu ("PO-foo") dynasty's 16th-century segmentation. For 10 points each:

[10m] What ethnic group's homesteads aggregated into "mega-sites" like Kaditshwene ("ka-deech-WAY-nay") in the Moloko period? Droughts correlate with their fissions after 1450, which culminated in their split from the Sotho ("SOO-too").

ANSWER: **Tswana** people [or ba**Tswana** or mo**Tswana**; accept Sotho-**Tswana** peoples; accept ba**Kgatla**, ba**Hurutshe**, ba**Fokeng**, ba**Rolong**, ba**Tlókwa**, ba**Ngwato**, ba**Ntšhabeleng**, ba**Tlhaping**, ba**Ngwaketse**, ba**Tlharo**, ba**Lete**, or ba**Tawana**; prompt on **Bantu** peoples; reject "Tsonga" or "Nguni"]

[10h] Thomas Huffman's "Central Cattle Pattern" models Late Iron Age Tswana state formation under paramount chiefs with this title, who answered to *kgotla* ("COAT-luh") councils. A Gaborone ("GAB-uh-roh-nee") monument honors three founders with this title.

ANSWER: **kgosi** ("CO-see") [or dik**gosi**; accept Three Dik**gosi** Monument; accept **bogosi**, **nkosi**, **hozi**, or **ishe**] (The Three Dikgosi were Khama III, Sebele I, and Bathoen I.)

[10e] The 500 Year Initiative links the Tswana migrations to Austronesian "Wakwak" raids and coastal infestations of these insects that restricted pastoralism by spreading sleeping sickness.

ANSWER: **tsetse** ("TSEE-tsee") flies [or **tik-tik** flies or **Glossina** or **Glossinidae**; prompt on **fly**, **flies**, **Diptera**, or **dipterans**]

<World History>

10. This scientist spent the 1960s in Al Cotton's lab reverse-engineering techniques to study the structure of Staphylococcal nuclease ("NUKE-lee-ace"). For 10 points each:

[10h] Name this biochemist who helped characterize superoxide dismutase as an inaugural entry in the PDB. This researcher's article "Anatomy and Taxonomy of Protein Structures" introduced ribbon diagrams.

ANSWER: Jane **Richardson** [or Jane Shelby **Richardson**]

[10m] Margaret Thatcher briefly worked in the lab of this pioneering crystallographer, who won a Nobel Prize for finding the structure of vitamin B12.

ANSWER: Dorothy **Hodgkin** [or Dorothy Mary **Crowfoot**; or Dorothy Mary Crowfoot **Hodgkin**]

[10e] Richardson and Hodgkin are successors of this pioneering crystallographer, who died of cancer shortly after *Photo 51* was taken in her lab.

ANSWER: Rosalind **Franklin** [or Rosalind Elsie **Franklin**]

<Chemistry>

11. This man's father reportedly banished him for a speech impediment, but he defended him from the tribune of the plebs. For 10 points each:

[10h] Name this general who executed his own son for disobedience at the Latin War's Battle of Vesuvius. His *agnomen* recalls the neck ring he took from a giant Gaul after single combat.

ANSWER: Titus Manlius Imperiosus **Torquatus** [or Titus Manlius **Torquatus**; accept Manlii **Torquati**; prompt on **torc** or **torque**; prompt on **Imperiosus**; prompt on Titus **Manlius**]

[10m] A descendant of Torquatus drove his son to suicide over his reported corruption as this Roman province's governor. This province was founded after Quintus Caecilius ("kai-KEEL-yus") Metellus defeated Andriscus in its fourth Roman war.

ANSWER: **Macedonia** [accept **Macedon**; accept **Macedonian** Wars or Fourth **Macedonian** War; accept Quintus Caecilius Metellus **Macedonicus**] (The father and son were Titus Manlius Torquatus and Decimus Silanus.)

[10e] This man, who died in Macedonia at Philippi, struck coins to honor an ancestor who executed his sons for conspiring to restore the Tarquin kings. This man emulated that act by leading a 44 BCE "tyrannicide" with Cassius.

ANSWER: Marcus Junius **Brutus** [or Quintus Servilius Caepio **Brutus**] (His ancestor was Lucius Junius Brutus. He and Cassius conspired to kill Julius Caesar.)

<Other History>

12. This style of music often uses a 12-beat meter with accents on beats 3, 6, 8, 10, and 12, which is equivalent to a bar of 6/8 ("six-eight") time followed by a bar of 3/4 ("three-four") time. For 10 points each:

[10m] Name this style of music and dance based on structures called *toques* ("TOH-kays") or *palos*, which most often feature a Phrygian-mode melody over a iv-III-II-I ("four three two one") chord progression.

ANSWER: **flamenco**

[10e] The iv-III-II-I progression is sometimes called a "cadence" named for this present-day autonomous community of Spain where flamenco developed.

ANSWER: **Andalusia** [or **Andalucía**]

[10h] This very fast flamenco rhythm is characterized by a 12-beat meter that begins on beat 12, unlike other *soleares* ("so-lay-ARR-ess"). Paco de Lucía used this rhythm to write pieces like "Ímpetu" and "Cepa Andaluza."

ANSWER: **bulerías**

<Other Fine Arts>

13. Since the development of accelerator mass spectrometry, these species have been the standard tool for surface exposure dating. For 10 points each:

[10h] Name these species produced in the atmosphere and in minerals on the Earth's surface by the interaction of nuclei with cosmic rays.

ANSWER: **cosmogenic radionuclides** [or **cosmogenic** radioactive **nuclides** or **cosmogenic** radio**isotopes** or **cosmogenic** radioactive **isotopes**; prompt on radionuclides, radioactive nuclides, radioisotopes, or radioactive isotopes]

[10e] This isotope, beryllium-10, aluminum-26, and chlorine-36 are the most common cosmogenic nuclides used in geological research. This isotope's half-life of about 5,730 years is used to date organic material.

ANSWER: **carbon-14** [or **14C**; prompt on radiocarbon dating]

[10m] Surface exposure dating with cosmogenic nuclides can be applied to depositional landforms such as these cone-shaped accumulations of sediment that form as water exits a narrow canyon into a basin.

ANSWER: **alluvial fans** [accept **debris-flow fans**; accept **fluvial fans** or **distributive fluvial systems**; prompt on fans]

<Other Science>

14. Massa Makan Diabaté ("dee-yah-bah-TAY") condemned colonial-era vestiges of these people and adapted his training as one in his novel about a colonial soldier, *The Lieutenant of Kouta*. For 10 points each:

[10e] Camara Laye ("cam-uh-ruh lay") based *The Guardian of the World* on recordings of what West African oral storytellers?

ANSWER: **griots** ("GREE-ohs") [or **griottes**, **djalis**, **djélis**, **gewels**, **kewels**, or **okawul**]

[10m] An author with this surname wrote *The Fortunes of Wangrin*, whose title speculator is praised by his griot ("GREE-oh") for schemes that ruin the French official Villermoz. A Senegalese author with this surname wrote an epistolary novel about the widow Ramatoulaye ("rah-mah-too-LYE").

ANSWER: **Bâ** [accept Mariama **Bâ**; accept Amadou Hampâté **Bâ**, Ahmadu Hampaate **Baa**, Hampâté **Bâ**, or Hampaate **Baa**; prompt on **Hampâté** or **Hampaate** by asking "what was his other surname?"] (The epistolary novel is *So Long a Letter*.)

[10h] This Martinican ("mar-tin-EEK-in") author's *Book of the Bush* adapted folktales he heard as an administrator in Ubangi-Shari. He romanticized Banda traditions in *Batouala* ("bah-twah-lah"), the first novel by a Black author to win the Prix Goncourt ("PREE gon-KOOR").

ANSWER: René **Maran**

<World Literature>

15. During a trip to the MoMA in 1949, Mark Rothko became obsessed with an Henri Matisse ("on-REE muh-TEESE") painting dominated by an unvarying shade of this color. For 10 points each:

[10e] Name this color that titles both John Logan's play about Rothko and that 1911 Matisse painting of his studio. Matisse's *The Dessert* is alternately titled for "harmony in" this color.

ANSWER: **red** [or **rouge**; accept shades of red such as **crimson**; accept *Harmony in Red* or *The Dessert: Harmony in Red* or *La Desserte rouge*; accept *The Red Studio* or *L'atelier rouge*]

[10h] Rothko was also inspired by the red walls and Second Style paintings of this building's Room 5, which includes a depiction of a startled woman whose upper torso is framed by the billowing robe she holds onto.

ANSWER: **Villa of the Mysteries** [or **Villa dei Misteri**; prompt on **Pompeii**]

[10m] Oddly, Rothko began his Brooklyn College course on contemporary art by discussing this much earlier artist. This artist's etchings include *The Three Crosses* and a drypoint depicting scenes from Matthew Chapter 19.

ANSWER: **Rembrandt** [or **Rembrandt** van Rijn; or Rembrandt Harmenszoon **van Rijn**]

<Painting & Sculpture>

16. This man received an *empresario* contract from the Mexican state to recruit Catholic settlers to Texas, which he did with the “Old Three Hundred.” For 10 points each:

[10e] Name this “father of Texas” who, with Haden Edwards, settled land around the present-day city of Nacogdoches (“nack-uh-DOH-chiss”), which is home to a university named for him.

ANSWER: Stephen F. **Austin** [or Stephen Fuller **Austin**; accept Stephen F. **Austin** State University]

[10m] In his request for an *empresario* contract, Austin proposed cultivating cotton and this crop. The Williams brothers cultivated this crop along the Brazos River on land that became an aptly named company town after Isaac H. Kempner bought their business.

ANSWER: **sugar** [or **sugarcane**; or **Saccharum**; accept Imperial **Sugar**; accept **Sugar** Land]

[10h] After his *empresario* status was revoked in 1826, Edwards defied Austin and allied with a local Cherokee tribe to declare this short-lived independent state.

ANSWER: Republic of **Fredonia** [or **Fredonian** Republic; accept **Fredonian** Rebellion]

<American History>

17. This book juxtaposes a human-faced sculpture of a caribou with a prose poem about a therapist who forgot about her appointment with the speaker. For 10 points each:

[10m] Name this book, a poem from which describes the “dissolving blues of metaphor” and says that “each body is a strange beach.” Claudia Rankine (“RANK-in”) explores race in this “American Lyric.”

ANSWER: **Citizen** [or **Citizen**: *An American Lyric*]

[10e] *Citizen* discusses a photo of a player in this sport stuffing her outfit with towels. An academy for this sport in Enfield appears in David Foster Wallace’s *Infinite Jest*.

ANSWER: **tennis** [accept Enfield **Tennis** Academy]

[10h] *Citizen* examines Zinedine Zidane’s (“zee-DAHNS”) headbutt of Marco Materazzi in a section titled for three words, which also appear as a stenciled watermark. Give any of those words, which describe the French national soccer team.

ANSWER: “**Black-Blanc-Beur**” [or “Black-**Blanc**-Beur”; or “Black-Blanc-**Beur**”] (The words are taken from a slogan for French ethnic diversity, with “beur” referring to French Arabs in verlan slang.)

<American Literature>

18. Melford Spiro observed that 30 percent of peasants’ income in Burma went toward gaining this concept, whose increase is the goal of a “life release” ritual linked to invasive species. For 10 points each:

[10h] Name this protective force against karma created by charitable acts. Chinese Buddhists kept “ledgers” named for this concept, which can be “transferred” to dead relatives.

ANSWER: **merit** [or **punya**; accept **bun** tham; accept **gōngguò gé**; prompt on **pattidāna** or **pāramitā** or **pariṇāmanā**; prompt on **kusala** by asking “acts that are *kusala* help accumulate what concept?”]

[10m] Giving to the *sangha* is very effective at merit-making, since the *sangha* is one of this many “jewels” offering “refuge” to Buddhists. This many “poisons” lead to the cycle of karma.

ANSWER: **three** [or **3**; accept **three** poisons or **tri**viṣa; accept **three** jewels, **triple** gem, **ti**-ratana, or **tri**-ratna]

[10e] Merit transfers can help relatives be reborn in one of these paradise-like realms in which enlightenment is easier. Amitabha rules one of these realms, which name a branch of Mahāyāna Buddhism.

ANSWER: **Pure Lands** [or **Buddha-fields**, **Buddhakshetra**, **Buddhakhetta**, **jūngtū**, or **jōdo**]

<Religion>

19. The Rescorla–Wagner model predicts that learning occurs when surprise causes associations between two of these things, a position opposed by S–R theorists like Guthrie and Thorndike. For 10 points each:

[10e] What term refers to the “conditioned” and “unconditioned” variables presented to the subject in classical conditioning?

ANSWER: **stimulus** [or **stimuli**; accept conditioned **stimulus** or unconditioned **stimulus**; accept **stimulus**–stimulus theory; prompt on S, CS, US, UCS, or S–S theory]

[10h] The Rescorla–Wagner model’s emphasis on surprise explained this effect in which a stimulus fails to cause learning in the presence of an expected conditioned stimulus. It was proposed by Leon Kamin.

ANSWER: **blocking** effect [or Kamin **blocking**]

[10m] A surprising prediction of the Rescorla–Wagner model is that conditioned inhibitors can protect from this phenomenon. The model fails to explain spontaneous recovery from this eventual decrease in an unreinforced conditioned response.

ANSWER: **extinction**

<Social Science>

20. A non-canonical route to this process involves the oligomerization of caspase-4 after it directly binds LPS, rather than the recruitment of caspase-1 by the CARD domain of ASC. For 10 points each:

[10h] Name this form of programmed cell death triggered by danger signals. This process is upregulated in individuals with familial Mediterranean fever and involves the cleavage of gasdermin D.

ANSWER: **pyroptosis** [prompt on **inflammation**]

[10m] Non-canonical splicing violates the typical assumption that this nucleobase lies on both ends of an intron. Extended sequences of this base can form planar quadruplexes due to Hoogsteen bonding.

ANSWER: **guanine** [accept **guanosine**; prompt on G or G-quadruplex]

[10e] The activation of ROCK (“rock”) by Wnt (“wint”) as part of the non-canonical cell polarity pathway triggers reorganization of actin filaments in this network, which provides structure to the cell.

ANSWER: **cytoskeleton** [or **cytoskeletal** network]

<Biology>