



2023 PACE NSC

Edited by David Bass, Jordan Brownstein, Jaimie Carlson, Ganon Evans, Athena Kern, Joseph Krol,
Young Lee, Adam Silverman, Chandler West
Head Editor Ganon Evans

Round 11 - Tossups

1. In one story, this man wrote about an abolitionist who finds a stone idol's ear and escapes the *Marie Celeste*. This man's friend Harry Houdini mocked his belief in the Cottingley Fairies. One story by this author promises to tell the reader about "the giant rat of Sumatra, a story for which the world is not yet prepared," but never mentions it again. Professor Challenger discovers dinosaurs in South America in a novel by this man, (*) *The Lost World*. This man's most famous character realizes that a snake coming through a ventilator is "the Speckled Band." In the story "The Final Problem," that character created by this author is killed at the Reichenbach Falls by Professor Moriarty. For 10 points, name this creator of Sherlock Holmes.

ANSWER: Sir Arthur Conan Doyle

<Jaimie Carlson, Literature - British - Short Fiction> ~25797~ <Editor: Jaimie Carlson>

2. Following this case, the CMS released guidance on how emergencies could supersede state law through EMTALA. This case upheld an act written by the Alliance Defending Freedom that cited the findings of *Gonzales v. Carhart* as a basis for its regulations. This case claims that "necessary" has meanings from "essential" to "useful" and cites the unworkability of a previous case's "undue burden" standard. A concurrence to this case stated that previous cases also based on (*) substantive due process, like *Griswold*, should be evaluated. *Politico* leaked the draft opinion of this case, which, upon being issued, led to several states' "trigger laws" being activated to establish "heartbeat" bans. For 10 points, name this 2022 Supreme Court case that overturned *Roe v. Wade*.

ANSWER: Dobbs v. *Jackson Women's Health Organization* [accept Jackson *Women's Health Organization v. Dobbs*]

<Benjamin Chapman, Current Events - U.S.> ~25437~ <Editor: Ganon Evans>

3. The time derivative of a function for this quantity for s particles depends on a function for this quantity for s -plus-one particles in the BBGKY hierarchy. The ratio of this quantity for two states is their Boltzmann factor. Microstates for which the ergodic hypothesis holds have equal values of this quantity. The Born rule gives that this quantity equals the square of the amplitude of the wavefunction. Thus, wavefunctions must be (*) normalized to ensure that the integral of this quantity with respect to space equals one. The shapes of atomic orbitals represent regions where this quantity is positive for a given electron. For 10 points, name this quantity whose namesake "density" measures the chance of finding a particle at a given location.

ANSWER: probability [or likelihood; accept probability density or probability density function; prompt on density]

<Benjamin Chapman, Science - Physics> ~25915~ <Editor: David Bass>

4. After a hermit begins a prophecy calling this figure “unfortunate,” this figure kills him. One of this figure’s sons is killed by Constantine in front of an altar. Iddawg (“ee-THAUWG”) rudely delivers a peace message to this figure to incite a war. This figure was raised by a fisherman after surviving the sinking of a boat containing all babies born on May Day. This figure seizes power when a man leaves to fight the Roman emperor Lucius. This figure kills Lamorak by stabbing him in the back. This man was born as a result of his father’s (*) incest with his half-sister Morgause. This half-brother of Gawain attempted to marry Guinevere and take his father’s throne before killing and being killed by him at the Battle of Camlann. For 10 points, name this traitorous son of King Arthur.

ANSWER: Mordred [or Modred or Medrawt]

<Jaimie Carlson, RMP - World Mythology> ~26090~ <Editor: Jaimie Carlson>

5. Nine nobles of this ethnicity meet in a “Conference of Rulers” to elect their country’s “Paramount Ruler.” People of this ethnicity participate in a United Liberation Organisation aimed at independence for Patani. A political party named for this ethnicity, UMNO, spearheads the Barisan Nasional coalition. After people of this ethnicity clashed with Chinese people in the 13 May incident, policies favoring this ethnicity and other (*) bumiputera groups were implemented. The country named for this ethnicity has been led by Tunku Abdul Rahman and Mahathir Muhammad. This ethnicity’s language is spoken in an archipelago named for them, which includes all of Indonesia. For 10 points, name this ethnic group that names a country with capital Kuala Lumpur.

ANSWER: Malay [accept Malaysians; accept Malay Archipelago]

<Yingzhi Nyang, History - World - Asian> ~24822~ <Editor: Jordan Brownstein>

6. This artist adapted a song based on Piero Umiliani’s soundtrack to the film *Sweden: Heaven and Hell*. This artist and Don Sahlin created a “magic triangle” for eye focus and a namesake stitch that minimized seams. A character created by this artist for Purina Food advertisements was performed via “right-handing.” This artist directed a film in which David Bowie played Jareth the Goblin King. This frequent collaborator of Frank Oz used (*) ping-pong balls and a turquoise coat to create a character who performs “The Rainbow Connection” with a banjo. This artist created hand-rod or full-hand characters like Rowlf the Dog. This director of the films *The Labyrinth* and *The Dark Crystal* built the original cast for *Sesame Street*. For 10 points, name this puppeteer who created the Muppets.

ANSWER: Jim Henson [accept the Henson stitch] (The lead-in refers to “Mah nà mah nà.”)

<Ganon Evans, Other - Other Academic and General Knowledge> ~25147~ <Editor: Ganon Evans>

7. Opening and closing phases summarize the movement of these objects in the Wilson cycle. RRF junctions among these objects are unstable and evolve into FFR junctions, another of the ten types of triple junctions that exist at boundaries of these objects. Planes called Wadati–Benioff zones can form where these objects meet. (*) Slab suction and slab pull are the dominant forces on these objects. These objects slide past each other at transform boundaries and move apart at divergent boundaries, which can result in new crust being formed to fill the gap left by seafloor spreading. For 10 points, name these large pieces of the Earth’s lithosphere, the central objects of a namesake theory of continental drift.

ANSWER: tectonic plates [accept plate tectonics; prompt on plates; prompt on ocean basins or oceanic basins with “Oceanic basins form from the movement of what objects?”; prompt on supercontinents]

<Benjamin Chapman, Science - Earth> ~25954~ <Editor: David Bass>

8. A figure typically known by this English word is replaced by a man in a trench coat with two sticks in Kehinde Wiley's *Prelude* series. A group of artists with this English name included an artist who depicted two large shrines being carried during a religious procession. A title figure with this name may be a stand-in for Colonel Friedrich Gotthard von Brincken. A group of landscape artists with this English name included Ilya Repin. A (*) *rückenfigur* ("ROO-ken-fee-goor") known by this English word views the Zirkelstein in a painting set in the Elbe Mountains. In that painting, a figure with this name has his back to the viewer and stands with a cane atop a rocky summit. For 10 points, a Caspar David Friedrich painting depicts what kind of person "Above the Sea of Fog?"

ANSWER: wanderer [accept Wanderer *Above the Sea of Fog* or *Der Wanderer über dem Nebelmeer*; accept Peredvizhniki or Itinerants; accept traveler or wayfarer]

<Ganon Evans, Fine Arts - Painting - European 1600-1945> ~25971~ <Editor: Chandler West>

9. A syphilitic man prosecuted for this crime under the 1927 *Sullivan* precedent later transcribed the song "Madonna Mia" while in prison. It's not Watergate, but Richard Nixon's "I am not a crook" line came during investigations into whether Nixon had committed this crime. Spiro Agnew resigned the Vice Presidency after pleading no contest to committing this crime. A leader of the Chicago Outfit was sent to (*) Alcatraz for five counts of committing this crime and ordering the Saint Valentine's Day Massacre. The 2010 FATCA law cracked down on "havens" for this crime in Switzerland and the Cayman Islands. For 10 points, name this type of crime which usually involves falsely reporting earnings to the IRS.

ANSWER: tax evasion [or tax fraud; or tax avoidance; accept answers like cheating on federal income taxes; prompt on fraud or financial fraud] (The Chicago Outfit was led by Al Capone.)

<Michael Bentley, History - American - 1945+> ~25385~ <Editor: Michael Bentley>

10. These molecules, or derivatives of them like PCBM, are the electron acceptors in most organic photovoltaics. An "at" symbol indicates noble gases are hosted "at" these molecules in endohedral complexes. These antiaromatic molecules can be repeatedly cyclopropanated at their [6,6] ("six six") bonds to decorate a surface of sp²-hybridized atoms. These molecules dissolve in naphthalene to form violet solutions. These molecules were (*) accidentally discovered in 1985 from a 720-amu ("A-M-U") peak in a mass spectrum, but are synthesized today by evaporating graphite. These molecules form truncated icosahedra that have 60 vertices and pentagonal and hexagonal faces. For 10 points, name these roughly spherical allotropes of carbon that resemble geodesic domes.

ANSWER: buckminsterfullerenes [or buckyballs; prompt on fullerenes; prompt on C60; reject "carbon nanotubes" or "CNTs"]

<Adam Silverman, Science - Chemistry> ~25621~ <Editor: Adam Silverman>

11. This character wears an oval portrait of a dog around her neck at a party where she is repeatedly told not to "abandon" guests including Madam Tofana. This wife of a military engineer goes to a party in Apartment No. 50 after smashing up the apartment of the critic Latunsky. This woman is massaged with blood during a ball that takes place in the "fifth dimension." This character gains powers of flight after applying cream given to her by (*) Azazello. This title character, who becomes the main supporter of the author of a novel about Pontius Pilate, is the hostess of a party whose attendees include the cat Behemoth and the satanic Professor Woland. For 10 points, name this woman who titles a Mikhail Bulgakov novel alongside the Master.

ANSWER: Margarita Nikolaevna [prompt on the Queen or Queen Margot; prompt on *The Master and Margarita*]

<Joseph Krol, Literature - European - Long Fiction> ~25037~ <Editor: Joseph Krol>

12. It's not a quarry, but a prominent Roman one of these institutions was the Tullianum. One of these institutions in Auburn, New York placed heavy emphasis on silence, in contrast to the Pennsylvania System for them. In 1778, Parliament asked John Howard to investigate the "hulks" that served as these institutions in Britain before the widespread use of Transportation. Gustave de (*) Beaumont traveled to the US to study these institutions alongside the future author of *Democracy in America*, Alexis de Tocqueville. Michelle Alexander explored the rise in the number of Americans living in these institutions in her book *The New Jim Crow*. For 10 points, name these institutions that house criminals.

ANSWER: **prisons** [or **jails**; or **dungeons**; or **penitentiaries**; or **correction center**; accept **prison** ships]
<Michael Bentley, History - Cross, Historiography, and Miscellaneous> ~25433~ <Editor: Michael Bentley>

13. These organisms reproduce using gonidia, not spores, a process discovered by children's author Beatrix Potter when she studied their *Cladonia* genus. The trebouxoid ("TREY-boo-shoyd") type of these organisms can survive 98% desiccation and is used for simulations of Martian terraforming. Archaeologists date glacial deposits by measuring the size of these organisms' thalli ("THALL-eye"). These organisms indicate sulfur dioxide pollution because their (*) fruticose morphology is sensitive to acid rain. Chlorophyte cells in these organisms are scattered throughout the hyphae ("HIGH-fee"). Caribou mainly prey on these pioneer species. Unlike in mycorrhizae ("mih-CORE-ih-zay"), fungal cells in these organisms use cyanobacteria or algae to harvest light. For 10 points, name these symbiotes that resemble mosses.

ANSWER: **lichens** [prompt on **fungi** or **fungus**; prompt on **cyanobacteria** or **algae**]
<Adam Silverman, Science - Biology> ~25697~ <Editor: Adam Silverman>

14. Banksy added a mohawk to a photo portrait of this person in a screen print named "Turf War." A photo of this person inspecting a Tommy Gun in Hartlepool appeared in a leaflet calling him a "gangster, who you see in his element." This person gives a stern look in a photo titled *The Roaring Lion*. This person rests his hand on a chair in an iconic photo by Yousuf Karsh taken after his (*) speech to the Canadian parliament. W. G. Horton photographed this person from above as he faced an excited crowd at Whitehall while he held up his iconic two-finger hand gesture. Photos taken in Yalta show this person seated in a row with FDR and Stalin. For 10 points, name this often-photographed British prime minister during World War II.

ANSWER: Winston **Churchill** [or Sir Winston Leonard Spencer **Churchill**]
<Lalit Maharjan, Fine Arts - Photography> ~24980~ <Editor: Young Lee>

15. On the last day of Bon, objects made from this material are used during the *tōrō nagashi* festival to guide spirits to the afterlife. Shinto purification rituals use zigzag types of this material known as *shide* ("shee-dey"). Some objects made of this material depict Yánluó Wáng and are placed in chalk circles. Examples of this material adorned with metal foil are destroyed during the Qingming ("cheeng-meeng") festival to provide for (*) ancestors in the afterlife; that type of this material is called joss. Either silk or this material forms the exterior of flaming objects released into the sky during the Mid-Autumn Festival. For 10 points, in Japan, good luck comes from using what material to fold a thousand cranes?

ANSWER: **paper** [or **zhǐ**, or **kami**; accept **paper** lanterns, or joss **paper**, or origami **paper**]
<Yingzhi Nyang, RMP - East Asian Religion> ~25964~ <Editor: Athena Kern>

16. In this novel's final chapter, a group of men is led past a "little round hole in the red-earth wall" by a man who repeatedly asks "perhaps your men can help us." This novel's protagonist realizes that people "would not go to war" after he attacks a man who came to stop a town meeting. This novel ends with a character pondering whether a man might be the subject of "perhaps not a whole chapter but a reasonable (*) paragraph" in "The Pacification of the Primitive Tribes," a book being written by the District Commissioner. A character in this novel who spends seven years in exile for killing Ezeudu's ("eh-zay-OO-doo's") son eventually hangs himself in the town of Umuofia ("oo-moo-OH-fee-uh"). For 10 points, the suicide of Okonkwo ("oh-KONK-woh") concludes what novel by Chinua Achebe ("CHIN-wah ah-CHAY-bay")?

ANSWER: Things Fall Apart

<Joseph Krol, Literature - World and Miscellaneous> ~25029~ <Editor: Joseph Krol>

17. A "conservative surgery" approach to studying these things instead of a "gridiron" approach was championed by theorist Patrick Geddes. They're not fairs, but Daniel Burnham's 1893 work influenced the McMillan Plan for creating one of these things. These things cause people to distance themselves and place all of their trust in money, according to an essay partially titled for "Mental Life" by Georg Simmel ("ZIM-ull"). A reform movement named for making these things (*) "Beautiful" was called a cult in a book on the "Death and Life" of some of these places written by Jane Jacobs. Lewis Mumford decried the alienating effects of these places caused by their sprawl. For 10 points, name these locations that are the subject of urban sociology.

ANSWER: cities [or city or metropolises; accept urban areas until the end; accept *The Death and Life of Great American Cities*; prompt on neighborhoods; reject "towns" or "suburbs"]

<Ethan Ashbrook, Social Science - Sociology> ~26037~ <Editor: Athena Kern>

18. The long ascending notes "A, E, F-sharp" open a sonata for this instrument, the third of five by Beethoven, which was dedicated to Ignaz von Gleichenstein. *Schelomo* by Ernest Bloch is written for orchestra and this instrument. Friedrich Grützmacher wrote a Romantic virtuosic adaptation of (*) Luigi Boccherini's ninth out of twelve concertos for this instrument, which they both played. Tchaikovsky's *Variations on a Rococo Theme* and a B minor concerto by Dvořák ("dih-vor-JAHK") were written for orchestra and this instrument. Pablo Casals purportedly spent 13 years practicing a collection of six pieces for this instrument every day. For 10 points, J. S. Bach wrote six unaccompanied suites for what string instrument, which is smaller than a double bass but larger than a viola?

ANSWER: violoncello

<Young Lee, Fine Arts - Music - Miscellaneous> ~25904~ <Editor: Young Lee>

19. During "Black August" in the first year of this decade, the Ostankino Television tower caught on fire. In the first year in this decade, 118 sailors were killed in the Barents Sea when a nuclear submarine sank in the *Kursk* disaster. A year later, the space station *Mir* was de-orbited after funding was removed during this decade. During a staging of the *Nord-Ost* musical in this decade, 850 people were taken hostage by Chechen terrorists. A five-day war in this decade over (*) South Ossetia ended when French president Nicolas Sarkozy mediated a ceasefire with Russian Prime Minister Dmitry Medvedev. For 10 points, name this decade where Russian aggression in Georgia was not stopped by the George W. Bush administration.

ANSWER: 2000s [accept answers like the auhts or the naughties]

<Michael Bentley, History - European - 1900+> ~24263~ <Editor: Michael Bentley>

20. In one poem, this author says “You put me in *Macbeth* and *Carmen Jones*... And in everything but what’s about me!” This author claimed “I like to eat, sleep, drink, and be in love” in a poem where he asks for a pipe or “Bessie, bop, or Bach” records for Christmas. This author of “Note on Commercial Theater” is instructed to “go home and write a page tonight” in one poem. A man (*) sways “to and fro on his rickety stool” in a poem by this author in which the central figure sleeps “like a rock or a man that’s dead.” A piano-playing man with “ebony hands on each ivory key” who drones “a drowsy syncopated tune” is described in a poem by this author set “down on Lenox Avenue.” For 10 points, what Harlem Renaissance author wrote “The Weary Blues?”

ANSWER: Langston **Hughes** [or James Mercer Langston **Hughes**] (The unnamed poem is “Theme for English B.”)

<Yingzhi Nyang, Literature - American - Poetry> ~24954~ <Editor: Chandler West>

21. *Description acceptable.* In Homer’s *Hymn to Aphrodite*, the goddess warns Anchises this fate shall befall him if he reveals he fathered Aeneas with her. King Salmoneus’s hubris in driving over a bridge of brass in a chariot ultimately leads to his death in this manner. The healer Asclepius is killed in this manner, and Typhon is cast into Tartarus after being killed in this manner. To prevent him from causing more damage with his father’s out-of-control (*) chariot, Apollo’s son Phaethon is killed in this manner. The object that caused deaths in this manner was forged by the cyclopes along with Hades’s helm of invisibility and Poseidon’s trident. For 10 points, give this cause of death enacted by Zeus with his signature object.

ANSWER: **lightning** strike [accept any answer indicating getting struck by **lightning**, accept answers like getting hit by Zeus’s **lightning** bolt; accept **thunderbolt** or **bolt**; prompt on answers like killed by Zeus with “how did Zeus kill them?”; prompt on getting killed before mention; prompt on falling out of the sky with “what caused that fall?”]

<Lalit Maharjan, RMP - Greco-Roman Mythology> ~24837~ <Editor: Jaimie Carlson>

NSC 2023 - Round 11 - Bonuses

1. In 2022, conservators began an intensive process to digitally “unveil” a painting by this artist, removing blue cloth later added to cover up a nude figure. For 10 points each:

[10m] Name this painter of the *Allegory of Inclination* who likely depicted herself as *Judith Slaying Holofernes* in a scene reflecting on her rapist Agostino Tassi.

ANSWER: Artemisia **Gentileschi** [prompt on Artemisia Unveiled]

[10h] A member of this family commissioned Baldassare Franceschini to cover up Gentileschi’s painting, which itself was part of a series meant to extol the virtues of a member of this family who left the *Manchester Madonna* unfinished.

ANSWER: **Buonarroti** [accept Michelangelo **Buonarroti**; accept Leonardo **Buonarroti**; prompt on Michelangelo]

[10e] The *Allegory of Inclination* holds one of these objects. Leonardo da Vinci used these tools to draw ideal circles in the *Vitruvian Man*.

ANSWER: **compass** [or a pair of **compasses**]

<Grant Peet, Fine Arts - Painting - European to 1600> ~20479~ <Editor: Chandler West>

2. A “great dimming” of Betelgeuse (“**BEE-tuhl-jooz**”), a star in this constellation, began in October 2019, but was reverted by April 2020. For 10 points each:

[10e] Name this constellation whose stars Alnitak, Alnilam, and Mintaka form its namesake “belt.”

ANSWER: **Orion**

[10h] Betelgeuse’s “great dimming” was probably caused by the formation of this substance following a surface mass ejection. Betelgeuse will crash into a “wall” of this substance in 5,000 years.

ANSWER: cosmic **dust** particles [or extraterrestrial **dust** particles or space **dust** particles or star **dust** particles or intergalactic **dust** particles or **interplanetary** dust particles or **micrometeoroids**]

[10m] The highest-resolution photograph of Betelgeuse is from ALMA, an array of radio telescopes in this country. The Vera C. Rubin Observatory is under construction in this country that is home to the Very Large Telescope.

ANSWER: Republic of **Chile**

<Michael Bentley, Science - Astronomy> ~15303~ <Editor: David Bass>

3. Marcia Chatelain’s Pulitzer-winning history of this company and the Black community notes how its franchisees helped popularize Martin Luther King Jr. Day. For 10 points each:

[10e] Name this fast-food company that was the subject of the documentary *Super Size Me*.

ANSWER: **McDonald’s** [accept obvious variations like **McD’s**, **Mickey D’s**, etc.]

[10h] McDonald’s once sponsored a vacation contest themed around this popular 1977 production, whose characters included Chicken George.

ANSWER: **Roots**

[10m] Chatelain’s book details how Ernest Hilliard may have been murdered for trying to become one of the first Black franchisees in this city. Carl Stokes, this city’s first Black mayor, led the national press on a “pollution tour” after the Cuyahoga River caught on fire.

ANSWER: **Cleveland**

<Michael Bentley, History - American - 1945+> ~17722~ <Editor: Michael Bentley>

4. Sara Ahmed applied the notion of “orientation” to this field in a book on its “Queer” form. For 10 points each:

[10h] Name this philosophical field whose practitioners used the “bracketing” technique to investigate how the embodied mind perceives ordinary objects.

ANSWER: **phenomenology** [accept *Queer Phenomenology*]

[10e] Much of Ahmed’s book analyzes Edmund Husserl’s use of this furniture as an object of phenomenology. This piece of furniture shares its name with grid-like arrangements of data, such as ones used to display truth value combinations in logic.

ANSWER: **tables** [or **desks**; accept more specific answers like writing **tables** or truth **tables**; accept *Tisch*]

[10m] Ahmed builds on the “two ways” of looking at tables that this thinker described. This theorizer of “being-in-the-world” failed to protect his Jewish mentor Husserl in the 1930s.

ANSWER: Martin **Heidegger**

<Jordan Brownstein, RMP - Philosophy> ~20129~ <Editor: Jordan Brownstein>

5. Like clockwork, every 90 years cell biologists re-discover liquid–liquid phase separation. For 10 points each:

[10m] This phase-separated compartment of a larger membrane-bound organelle was first discovered in the 1830s. It is where cells synthesize rRNA.

ANSWER: **nucleolus** [reject “nucleus”]

[10h] In the 1920s, biologists stumbled upon phase separation to explain how plant cells concentrate starch in these liquid compartments. Platelets are chock-full of the “dense” and “alpha” type of these compartments, which also lend their name to a class of white blood cells including neutrophils.

ANSWER: **granules** [or starch **granules**; or dense **granules** or alpha **granules**; or **granulocytes**]

[10e] Biologists in the 2010s were re-infatuated when they found droplets of RNA can phase-separate from this gel that fills the space between organelles.

ANSWER: **cytoplasm** [or **cytosol**]

<Adam Silverman, Science - Biology> ~20882~ <Editor: Adam Silverman>

6. Excerpts of ghazals (“GUZZ-alls”) from one of these collections are engraved on a poet’s tomb in Shiraz. For 10 points each:

[10h] Give this term for near Eastern collections of poems by a single author, one of which contains the surviving works of the Sufi poet Hafez (“hah-FEZ”).

ANSWER: **divans** [or **diwans**]

[10e] Hafez’s *Divan* is written in this language, which was used for the *Rubaiyat* (“ROO-by-at”) and many Iranian poems.

ANSWER: **Persian** [or **Farsi**; accept New **Persian** or Early New **Persian** or Modern **Persian**]

[10m] This other Sufi poet used Persian to write the *Divan-i Shams-i Tabrizi*, which honored his teacher. Very loose translations have popularized this poet’s *Spiritual Couplets*, or *Masnavi*.

ANSWER: **Rumi** [or Jalal ad-Din Mohammad **Rumi**; or Jalal ad-Din Mohammad **Balkhi**; accept **Mevlana** or **Mowlana** or **Mevlevi** or **Mawlawi**]

<Joseph Krol, Literature - World and Miscellaneous> ~20319~ <Editor: Joseph Krol>

7. The discovery of these objects provided archaeological evidence for Sīmǎ Qiān’s (“suh-mah ch’YEN’s”) account of early Chinese history in *Records of the Grand Historian*. For 10 points each:

[10m] Give this two-word English term, or the Chinese equivalent, for objects like ox scapulae that were heated until they cracked in a form of divination from the Shāng dynasty.

ANSWER: **oracle bones** [or **jiǎgǔ**; prompt on **bones** or **gǔ**]

[10e] In another instance of archaeology confirming Sīmǎ Qiān’s writings, large amounts of mercury were found at the tomb of the first emperor of this dynasty, Shǐ Huángdì.

ANSWER: **Qin** dynasty

[10h] Sīmǎ Qiān also accurately described the tombs of this group of nomadic people. The Hàn dynasty repeatedly tried to appease this group with marriage alliances during a centuries-long frontier war.

ANSWER: **Xiōngnú** (“sh’yung-noo”) [prompt on **Huns**]

<Andrew McCowan, History - World - Asian> ~20706~ <Editor: Jordan Brownstein>

8. Answer the following about industrial designer Raymond Loewy, for 10 points each.

[10e] Loewy is responsible for adding the “gaudy” blue nose to the plane that usually has this call sign. Lyndon Johnson took the Oath of Office on the plane given this call sign.

ANSWER: **Air Force One**

[10h] One of Loewy’s signature designs is his namesake coupe for this car company. This prominent wagon manufacturer exited the auto business in the 1960s after a failed merger with Packard.

ANSWER: **Studebaker**

[10m] Loewy designed the GG-1, an electric train made from one welded steel plate for this railroad company. This company names a New York City railroad station that is the busiest transportation hub in the Western Hemisphere.

ANSWER: **Pennsylvania** Railroad Company [accept New York **Penn** Station]

<Michael Bentley, Other - Other Academic and General Knowledge> ~20520~ <Editor: Ganon Evans>

9. MagLab houses 15,000 square feet of cooling equipment for its collection of magnets, which includes one that clocks in at 45 of this unit. For 10 points each:

[10e] Name this unit of magnetic flux density named for a Serbian-American inventor.

ANSWER: **teslas** [prompt on **T**]

[10m] The “magnetic” form of this process involves radiating heat from a magnetocaloric material before removing the magnetic field such that it cools to below its original temperature. A heat pump operating in a reverse Carnot cycle performs this process ideally.

ANSWER: **refrigeration** [accept magnetic **refrigeration** or **refrigeration** cycles; prompt on answers describing moving heat energy to a heat sink; reject colloquialisms like “chilling” or “cooling”]

[10h] Extreme cooling and a strong magnetic field are required to induce this phenomenon in which a namesake value of conductance is quantized by e -squared over h .

ANSWER: **quantum Hall effect** [or integer **quantum Hall effect** or fractional **quantum Hall effect**; prompt on **Hall effect**]

<Lalit Maharjan, Science - Physics> ~21067~ <Editor: David Bass>

10. The *Intermezzo* from this opera plays behind the opening and closing credits to *Raging Bull*. For 10 points each:

[10h] Name this opera that is set entirely in the main square of a village on Easter morning. This opera depicts the relationship between Turiddu, who is returning from military service, and his fiancée Lola.

ANSWER: **Cavalleria rusticana** [or **Rustic Chivalry**]

[10m] Because they are both short Italian verismo operas, Pietro Mascagni’s *Cavalleria rusticana* and this other composer’s opera *Pagliacci* are commonly staged together as a “Cav/Pag” double bill.

ANSWER: Ruggero **Leoncavallo**

[10e] *Pagliacci* is titled for this profession of the main character Canio and his troupe. In the aria “Vesti la Giubba,” Canio puts on his makeup and costume after singing to “laugh, [this profession], at your broken love!”

ANSWER: **clowns** [prompt on actor or acting; prompt on commedia dell’arte or comedy or circus or carnival]

<Ganon Evans, Fine Arts - Opera> ~20140~ <Editor: Young Lee>

11. Answer the following about how to pray during Ramadan while menstruating, for 10 points each.

[10m] If a period starts during the day, the fast must be broken before this evening meal taken after the call for the Maghrib prayer at sunset.

ANSWER: **iftar**

[10e] While menstruating, one could instead perform *dhikr* by repeating “Allahu Akbar” 33 times with the help of one of these objects. Christians count Hail Mary’s on one of these objects called the Rosary.

ANSWER: prayer **beads** [prompt on **garland** or **necklace**]

[10h] If the period ends during Ramadan, one could perform one of these full ablution baths before *fajr* and begin their fast. Muslims have these baths after sex and they are contrasted with partial *wudu*.

ANSWER: **ghusl**

<Ganon Evans, RMP - Islam> ~21123~ <Editor: Athena Kern>

12. Supposed inconsistencies between this play and its nominal author’s other output led scholar M. L. West to attribute this play to that author’s son Euphorion. For 10 points each:

[10h] Name this tragedy, which opens with Kratos and Bia standing “here at the furthest verge of earth.”

ANSWER: **Prometheus Bound** [or **Prometheus Desmotes**]

[10e] *Prometheus Bound* is traditionally attributed to this ancient Greek tragedian, who definitely did write the *Oresteia* (“oh-res-TYE-uh”).

ANSWER: **Aeschylus** [or **Aiskhylos**]

[10m] The plot of *Prometheus Bound* is based on an episode from this poet’s *Theogony*. This poet’s *Works and Days* inspired a Greek narrative in which he beats his predecessor Homer in a poetry contest.

ANSWER: **Hesiod** (“HEE-see-od”) [or **Hesiodos**]

<Joseph Krol, Literature - European - Drama> ~20079~ <Editor: Joseph Krol>

13. In 1958, Rachid Mekhloufi secretly fled to Switzerland to join a new national soccer team affiliated with this modern-day country’s FLN. For 10 points each:

[10e] Name this country which fought a bloody war of independence against the French in the 1950s.

ANSWER: **Algeria** [or People’s Democratic Republic of **Algeria**]

[10h] Some Algerian *Harkis* who helped France were forced by the FLN to perform this task on the Morice Line. HeroRATS have helped with this dangerous task, which might be performed with a Mark I device invented by Jozef Kosacki (“yoh-SEF koh-SATS-skee”).

ANSWER: land **mine clearance** [accept anything along the lines of **removing landmines**; accept **minesweeping** even though that more commonly refers to naval mines]

[10m] *Harkis* in France were detained at Rivesaltes, which was also used as a “sojourn camp” for refugees fleeing this conflict. The International Brigades that fought in this conflict included the Lincoln Battalion.

ANSWER: **Spanish Civil War** [prompt on War in **Spain**]

<Michael Bentley, History - Cross, Historiography, and Miscellaneous> ~20468~ <Editor: Michael Bentley>

14. Scientists at Givaudan (“JEE-vuh-don”) perform this technique on headspace gases to determine which molecules make perfumes smell good. For 10 points each:

[10e] Name this technique that identifies unknown molecules based on how quickly they pass through a stationary phase. It also comes in “paper” and “thin-layer” forms.

ANSWER: **chromatography** [or **gas chromatography** or **GC**; or paper **chromatography** or thin-layer **chromatography**]

[10m] The fragrance and flavoring industries heavily rely on this class of organic compounds that form when alcohols react with carboxylic acids.

ANSWER: **esters**

[10h] Nowadays, this most common industrial flavorant is mainly synthesized rather than being extracted from its natural host, a flower. This aldehyde derivative of phenol is also used to stain TLC plates.

ANSWER: **vanillin** [or **ethylvanillin** or **methylvanillin**; prompt on **vanilla** extract]

<Ganon Evans, Science - Chemistry> ~20033~ <Editor: Adam Silverman>

15. Harlan Ellison kept a pair of Game Warden boots that this person accosted him over wearing at a San Francisco bar. For 10 points each:

[10h] Name this person described in a Gay Talese profile for *Esquire* as “Picasso without paint” when a cold threatens his ability to perform.

ANSWER: Frank **Sinatra** [or Francis Albert **Sinatra**; accept “Frank **Sinatra** Has a Cold”]

[10e] The subjective and literary descriptions in Talese’s profile helped pioneer the “New” style of this nonfiction genre, which Hunter S. Thompson published a “gonzo” style of in magazines like *Rolling Stone*.

ANSWER: **journalism** [accept New **Journalism**; accept gonzo **journalism**]

[10m] This New Journalist described the Doors and other rock stars as trying to “hang on to the innocence and turbulence and capacity for wonder” amidst drug addiction in her collection *The White Album*. She also wrote *Slouching Towards Bethlehem*.

ANSWER: Joan **Didion**

<Ganon Evans, Literature - American - Nonfiction> ~20487~ <Editor: Chandler West>

16. This composer quoted the “Agincourt Song” in the opening “Chaconne” movement of one of his concert band pieces. For 10 points each:

[10m] Name this English composer of *St. Paul’s Suite*, whose final movement is adapted from his *Second Suite in F for Military Band*. Another piece by this composer opens with a 5/4 ostinato played by *col legno* (“COL LEN-yo”) strings.

ANSWER: Gustav **Holst** [or Gustav Theodore **Holst**] (The other piece is “Mars, the Bringer of War.”)

[10e] The first movement of Holst’s *Second Suite* features a prominent solo for the euphonium, a smaller version of this lowest-pitched brass instrument.

ANSWER: **tuba**

[10h] The *Second Suite*’s third movement includes music for one of these objects, in reference to the movement’s title. The words “Vedi! Le fosche” (“VEH-dee leh FOE-sheh”) open an operatic song titled after these objects in English.

ANSWER: **anvils** [accept tuned **anvils**] (The third movement [is titled “Song of the Blacksmith,” and the operatic song is the “Anvil Chorus.”])

<Ethan Ashbrook, Fine Arts - Music - 1900 to 1970> ~20368~ <Editor: Young Lee>

17. A “Choric Song” within this poem claims “Hateful is the dark-blue sky, / Vaulted o’er the dark-blue sea./ Death is the end of life; ah, why / Should life all labour be?” For 10 points each:

[10h] Name this poem, whose title characters conclude, “O, rest ye, brother mariners, we will not wander more.” This poem’s “mild-eyed melancholy” title characters repeat “Let us alone.”

ANSWER: “The **Lotos-Eaters**”

[10m] In this poem by the author of “The Lotos-Eaters,” the speaker yearns “to follow knowledge like a sinking star” and resolves “to strive, to seek, to find, and not to yield” as he looks at a “vessel puff[ing] her sail.”

ANSWER: “**Ulysses**” [reject “Odysseus”]

[10e] “Ulysses” and “The Lotos-Eaters” was written by this poet who described some heroic horsemen in “The Charge of the Light Brigade.”

ANSWER: Alfred, Lord **Tennyson**

<Yingzhi Nyang, Literature - British - Poetry> ~20361~ <Editor: Jaimie Carlson>

18. The reason so many newspapers are called “The Post” derives from the notices that these people would post to the door of inns after performing their main job. For 10 points each:

[10h] Name this occupation, sometimes called a bellman for the objects used by people in this job. They’re not officers of the court, but these people would frequently use the word “Oyez” (“OH-yay”).

ANSWER: town **crier**

[10m] Two bellmen appear on this work, a 70-meter-long record of William the Conqueror’s triumph at the Battle of Hastings now kept at a museum in Normandy.

ANSWER: **Bayeux Tapestry** [or **Tapiserie de Bayeux**; or La **telle du conquest**; or **Tapete Baiocense**]

[10e] Another job of the town crier was to announce why these events were taking place. Gallows were often built in preparation for these gruesome events.

ANSWER: public **executions** [accept public **hangings**; do not accept “beheadings”]

<Michael Bentley, History - European - Misc> ~20767~ <Editor: Michael Bentley>

19. The monk John Cassian popularized this grouping in Europe with his text *Institutes*, which originally included “vainglory” among them. For 10 points each:

[10e] Name this grouping of vices in Christian demonology that traditionally includes sloth, envy, and wrath.

ANSWER: seven **deadly sins** [accept the seven **capital sins** or seven **cardinal sins**; accept the **seven sins**; prompt on **sins** alone; reject “venial sins”]

[10m] Demonologists such as Peter Binsfield called this demon the embodiment of envy. This Hebrew monster contrasted with Behemoth in the Book of Job was often depicted as a giant sea monster.

ANSWER: **Leviathan** [prompt on **Lotan**]

[10h] This prince of Hell, sometimes syncretized with Beelzebub, is associated with greed. In the Sermon on the Mount, Jesus says that one “cannot serve God and” this figure, whose name is the Hebrew word for money.

ANSWER: **Mammon**

<Ethan Ashbrook, RMP - World Mythology> ~20235~ <Editor: Jaimie Carlson>

20. Answer the following about the most densely populated desert in the world, the Thar, for 10 points each.
[10m] The Thar is called the Cholostan Desert in the westernmost of two provinces that share this name. Lahore and Chandigarh are the capitals of two states with this name.

ANSWER: **Punjab**

[10e] The Thar is bounded to the northwest by this river that straddles the border of India and Pakistan and empties into the Arabian Sea near Karachi.

ANSWER: **Indus** River [or **Sindhu** River]

[10h] Sandstone from the Thar was used to construct palaces like the Hawa Mahal in this city. India's "Golden Triangle" of tourism includes Delhi, Agra, and this "Pink City" home to the Amber Fort.

ANSWER: **Jaipur**

<Yingzhi Nyang, Geography - World> ~20701~ <Editor: Ganon Evans>

21. This character observes that "there was such a dead silence" when she asked her uncle about his slave trading, and is noted to be a fan of abolitionist poet William Cowper. For 10 points each:

[10h] Name this character, whose timidity is contrasted with the quick wit of Mary Crawford. This orphan disapproves of the play *Lovers' Vows*.

ANSWER: **Fanny Price** [accept either underlined]

[10m] In this novel, the "poor relation" Fanny Price is sent to live in the title estate of her uncle, Thomas Bertram, and eventually marries his son Edmund.

ANSWER: ***Mansfield Park***

[10e] *Mansfield Park* was written by this author of *Pride and Prejudice*.

ANSWER: Jane **Austen**

<Jaimie Carlson, Literature - British - Long Fiction> ~21245~ <Editor: Jaimie Carlson>