



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 15 - Tossups

1. In 2011, a former ruling dynasty of this modern-day country hired Cambridge historian Christopher Clark to write a report justifying the family's claims to reside in historical palaces. One school of historiography argues that this country went from monarchy to democracy on a "special path." The so-called "2.0" version of the "Historian's Dispute" in this country centers on whether it applied lessons from the (*) Herero genocide to Europe. This country's "November criminals" were denounced in its "stab-in-the-back" myth. Barbara Tuchman's *The Guns of August* describes how this country failed to execute the Schlieffen Plan after being defeated at the Battle of the Marne in 1914. For 10 points, name this country once ruled by Adolf Hitler.

ANSWER: Germany [or Federal Republic of Germany or Deutschland; reject "Prussia"]

<Michael Bentley, History - Cross, Historiography, and Miscellaneous> ~25727~ <Editor: Michael Bentley>

2. In one story by this author, people who do not believe that the title figure is omnipotent are threatened with "Homelessness." COVID-19 lockdowns popularized a story by this author about Vashti and Kuno, who video-call from isolated chambers. A story by this author ends with the body of the snob Mr. Septimus Bons being found "hurled from a considerable height" after a boy takes him to meet Achilles on the title (*) carriage. This author of "The Machine Stops" and "The Celestial Omnibus" wrote a novel in which a woman kisses a man in a field of violets and rejects Cecil Vyse. A novel by this author ends with George Emerson eloping with Lucy Honeychurch after a trip to Florence. For 10 points, name this author of *A Room with a View* and *Howards End*.

ANSWER: E. M. Forster [or Edward Morgan Forster]

<Jaimie Carlson, Literature - British - Short Fiction> ~25791~ <Editor: Jaimie Carlson>

3. ibn-Umar established one form of this practice called *fitrana* that is based on a *sa'* ("SAW-ah") of dates or barley. In addition to their namesake action, the Apostates refused to perform this activity after the death of Muhammad, resulting in the Ridda Wars. It is disputed whether this practice is directed at jihad within the umbrella term of *fi sabilillah* ("fee sah-beel il-LAW"). The *ushr* ("oo-sheer") and this practice are administered by government councils in Pakistan instead of an imam. The (*) *nisab* ("ni-SAWB") determines eligibility for a form of this practice contrasted with voluntary *sadaqah* ("SAW-dah-qah"). This practice is the subject of the Third Pillar of Islam and benefits recent converts and orphans. For 10 points, *zakat* advises Muslims to perform what action with 2.5% of their income for the poor?

ANSWER: almsgiving [accept charity; accept donating; accept word forms such as making a donation; accept sadaqah until read; accept zakat or Zakat al-Fitr until read; prompt on paying taxes]

<Ganon Evans, RMP - Islam> ~25445~ <Editor: Athena Kern>

4. *Note to moderator: read answerline carefully.* Alex Steinweiss innovated the widespread usage of these artworks in the 1940s. One of these artworks is designed as a mock newspaper claiming to contain the work of the genius Gerald Bostock and partly titled the *Linwell Advertiser*. One of these artworks by Roger Dean depicts a wooden spaceship flying around a splitting planet Earth. A collage featuring cardboard cut-outs of Marlon Brando and Marilyn Monroe is included in one of these works designed by Peter Blake. One of these works contains the instruction (*) “Peel Slowly and See” written in small text above a prominent screen-printed banana. Andy Warhol created one of these artworks for a collaboration with The Velvet Underground & Nico. For 10 points, what kind of artwork depicts The Beatles at a crosswalk and accompanies *Abbey Road*?

ANSWER: album covers [or record covers; or CD covers; accept album art or cover art; accept album packaging or album package or recording package; accept vinyl cover art or vinyl covers or vinyl record covers; accept sleeves or dust sleeves or record sleeves; accept liners or album liners or record liners; prompt on album or record or CD or cover or packaging or box set; reject “liner notes”; reject “vinyl art”] (The second sentence refers to Jethro Tull’s *Thick as a Brick*. The third sentence refers to Yes’s *Fragile*. The fourth sentence refers to The Beatles’s *Sgt. Pepper’s Lonely Hearts Club Band*.)

<Michael Bentley, Fine Arts - Miscellaneous> ~25881~ <Editor: Young Lee>

5. A canonical example of an integrating factor is the calculation of an exact differential of this quantity using the reciprocal of temperature. This quantity is the thermodynamic potential of the microcanonical ensemble. The ratio between changes in specific forms of this quantity and volume gives the slope of coexistence curves in the (*) Clapeyron equation. The Clausius theorem gives that an integral of a change in this quantity expressed as “negative delta Q over T ” must be greater than or equal to zero. A law of this quantity implies that Carnot engines cannot be perfectly efficient and establishes an “arrow of time.” For 10 points, the second law of thermodynamics holds that what quantity always increases in the universe?

ANSWER: entropy [prompt on delta S or dS]

<Adam Silverman, Science - Physics> ~26013~ <Editor: David Bass>

6. So-called “funeral runners” traveled around this state hoping to feast on a raisin-filled funeral pie baked during a “redd up.” The protagonist of *Maniac Magee* enjoys the Butterscotch Krimpets made by Tastykake in this state. William Woys Weaver’s book on the “Foodlore and Fakelore” of this state is titled for the Shoofly pie. In this state, cross-street rivals Pat’s and (*) Geno’s sell a product that is often sold “whiz wit,” meaning it has Cheez Whiz added. Candy-shaped lamps light a town in this state founded by milk chocolate entrepreneur Milton Hershey. Fresh meat from local Amish farms is on offer in the Lancaster Central Market in this state. For 10 points, name this state whose most populous city is home to the cheesesteak.

ANSWER: Pennsylvania [or PA; or the Commonwealth of Pennsylvania]

<Michael Bentley, Geography - United States> ~25443~ <Editor: Ganon Evans>

7. Adrian Schoolcraft revealed that this organization manipulated data from a program that originated as Jack Maple’s Charts of the Future. A whistleblower within this organization who testified to the Knapp Commission was named Frank Serpico. This organization was the first to use the computer program COMPSTAT. In the 1990s, this organization faced protests over its treatment of Guinean immigrant (*) Amadou Diallo. A Civilian Complaint Review Board was established by mayor David Dinkins to oversee this organization. In 1994, Bill Bratton prioritized a “broken windows” strategy for this organization under mayor Rudy Giuliani. For 10 points, name this city law enforcement organization that responded to the World Trade Center bombing.

ANSWER: New York Police Department [or NYPD; or New York City Police Department; prompt on partial answers]

<Lalit Maharjan, History - American - 1945+> ~25201~ <Editor: Michael Bentley>

8. In the net formula of the CETCH (“ketch”) cycle, two moles of this molecule react *in vitro* to form a mole of glyoxylate. This molecule is stored at extremely high concentrations inside *Chlamydomonas* (“kluh-MID-oh-moh-nuss”) pyrenoids and cyanobacterial microcompartments. This molecule slowly adds to the five-carbon acid RuBP and splits it into two molecules of 3-phosphoglycerate. This molecule reacts with PEP (“P-E-P”) to form oxaloacetate in mesophyll cells, then is released from (*) C4 acids inside bundle sheath cells. In genus *Crassulaceae* (“crass-uh-LAY-shuh”), stomata uptake this molecule at night until enough ATP accumulates to use it in the stroma during the day. RuBisCo fixes this molecule in the Calvin cycle. For 10 points, chloroplasts consume water and what gas to make sugars during photosynthesis?

ANSWER: **carbon dioxide** [or **CO₂**; accept **bicarbonate** ion; reject “carbon”]

<Michael Bentley, Science - Biology> ~23131~ <Editor: Adam Silverman>

9. This poet suggested waiting for nine years before publishing one’s work in a poem that notes that “a word once sent abroad can never return.” This poet complained about “weighty openings” that have “purple patches” tacked on in a poem written in hexameters that notes that “as painting, so is poetry.” The first of four books of a collection by this poet notes “now is the time for drinking!” A dedication to his patron (*) Maecenas (“my-SEE-nass”) opens a collection by this poet that introduced such phrases as “it is sweet and right to die for one’s country,” or “dulce (“DULL-chay”) et decorum est,” as well as a phrase that means “seize the day.” For 10 points, name this Roman author of *Ars Poetica*, who coined the phrase “carpe diem” in one of his *Odes*.

ANSWER: **Horace** [or Quintus **Horatius** Flaccus]

<Joseph Krol, Literature - European - Poetry> ~25030~ <Editor: Joseph Krol>

10. Sutherland and Toutziari’s biography reveals how the subject of this painting crossed the Atlantic 11 times and regularly made lunches for visitors to a Chelsea studio. A 1934 holiday stamp version of this painting added a vase of flowers but removed a print of the Thames from the wall. This painting shares most of its formal title with a later portrait of Thomas Carlyle. In the Musee d’Orsay, this painting hangs to the left of *Luncheon on the Grass* as a highlight of its American collection. The white (*) lace trim on the otherwise all-black dress of the frail 67-year-old subject of this painting indicates that she has long been a widow. For 10 points, name this painting of an elderly relative of the British-American artist of *Nocturne in Black and Gold*.

ANSWER: ***Whistler’s Mother*** [or *Portrait of Artist’s Mother*; accept ***Arrangement in Grey and Black*** No. 1]

<Michael Bentley, Fine Arts - Painting - Misc> ~25974~ <Editor: Chandler West>

11. In one story, this figure’s son Lityerses (“lit-EER-sees”) made travelers reap corn, then beheaded them with a scythe. This figure’s father Gordias was made king after bringing this figure into town on a wagon. After disagreeing with Tmolus, this figure started wearing a turban, only for a barber to whisper about it into a field of reeds, which repeated it when the wind blew. After this figure rated (*) Pan over Apollo in a music contest, Apollo gave him ass’s ears. The river Pactolus was used to wash away a gift given to this figure, which he received for treating the drunken Silenus hospitably and returning him to Dionysus. That gift made this Phrygian man unable to touch his daughter or eat. For 10 points, name this king who turned everything he touched into gold.

ANSWER: King **Midas**

<Jaimie Carlson, RMP - Greco-Roman Mythology> ~25801~ <Editor: Jaimie Carlson>

12. These structures are built by a machine steered by gripper shoes attached to thrust cylinders; that machine is the Gripper TBM. Peter W. Barlow patented a shield used in conjunction with compressed air to protect new portions of these structures, which must be reinforced within their stand-up times. A method for venting noxious gases from these structures was developed by Clifford (*) Milburn Holland, who oversaw the construction of many of them in New York City. The cut-and-cover method for building these structures begins with digging trenches. Modular construction of these structures can be performed with immersed tubes. The Boring Company produces, for 10 points, what cylindrical underground passageways that can house subway systems?

ANSWER: **tunnels** [accept subway **tunnels** or vehicular **tunnels**; prompt on subways or subway systems before “subway” is read]

<Michael Bentley, Science - Engineering and Miscellaneous> ~25928~ <Editor: David Bass>

13. A character in this novel resents his mother for only caring about her cat and frames the protagonist for killing it. This novel’s protagonist is beaten by her mother for dropping a blueberry cobbler on the floor. In this novel, the prostitutes Maginot Line, China, and Poland live above the protagonist’s apartment. The protagonist of this novel envies the actress (*) Shirley Temple and is assaulted by her alcoholic father Cholly. In this novel, the death of the protagonist’s unborn child is foreshadowed when marigold seeds purchased by Claudia and Frieda fail to blossom. For 10 points, Pecola Breedlove desires the title feature, which symbolizes white beauty, in which novel by Toni Morrison?

ANSWER: *The **Bluest Eye***

<Edward Liu, Literature - American - Long Fiction> ~25585~ <Editor: Chandler West>

14. In 1494, Giovanni Pico della Mirandola wrote a polemic against this discipline’s “judicial” branch. Abu Ma’shar collected thousands of charts in this discipline he called “Flowers” and paired with medicinal herbs. A 1930 *Sunday Express* article about Princess Margaret was the first of many popular newspaper articles on this discipline criticized for leveraging the Barnum effect. The dragon’s head and the dragon’s tail are two (*) lunar nodes important in this discipline. One common practice in this discipline is creating a natal chart that considers “aspects,” a term for the planets’ angles to each other. For 10 points, name this pseudoscientific discipline concerned with horoscopes and zodiac signs.

ANSWER: **astrology** [or Western **astrology**; accept **zodiac** before mentioned; prompt on divination; prompt on fortune telling; prompt on the occult or magic; reject “astronomy”]

<Michael Bentley, Other - Other Academic and General Knowledge> ~23279~ <Editor: Ganon Evans>

15. These words’ property of clusivity allows many Asian languages to distinguish between inclusive and exclusive types of them. A 2020 book by Dennis Baron titled for these words describes how a now-common usage of them was frequently employed by Shakespeare. A “reform” named for one of these words in 1960s Sweden replaced a system that primarily depended on using the word *ni*. An epicene one of these words was chosen in 2019 as (*) Merriam-Webster’s word of the year. Stressed forms of these words used in isolation are called “disjunctive.” These words are used in different contexts depending on formality according to the T-V distinction, such as how French uses “vous” (“vo**o”) and “tu.” For 10 points, name these words whose English third-person forms include “he,” “she,” and “they.”**

ANSWER: **pronouns** [accept first-person (personal) **pronouns** or third-person (personal) **pronouns** or disjunctive **pronouns**; prompt on nouns] (The second line refers to how Shakespeare used the singular *they*. The Swedish reform is the *du-reformen*.)

<Benjamin Chapman, Social Science - Linguistics> ~26026~ <Editor: Benjamin Chapman>

16. Star and trident motifs are often found in the “pillar crypts” of this civilization, whose other cult furniture include “horns of consecration.” Luigi Pernier discovered an object on which these people stamped hieroglyphics in a spiral pattern. The “Marine style” was used for some of these people’s Kamares ware. This civilization’s Tombs of Odigitria is an early example of a beehive tomb. This civilization produced the (*) Phaistos Disc and may have declined after a tsunami from a volcanic eruption at Thera. These people used the Linear A script and produced numerous frescoes of people leaping over bulls. Arthur Evans excavated one of this civilization’s palaces at Knossos. For 10 points, name this Bronze Age civilization based in Crete.

ANSWER: **Minoan** civilization [prompt on proto-Greek civilization; prompt on Cretan civilization before “Crete” is read]

<Yingzhi Nyang, History - European - Classical> ~24786~ <Editor: Michael Bentley>

17. Clay with a high concentration of this mineral is more susceptible to dunting when firing a kiln because it changes from its alpha to its beta form at 573 degrees Celsius. To save cost, PZT is sometimes used to replace this mineral in a system developed by George W. Pierce. This mineral is the most resistant to weathering on the (*) Goldich dissolution series. Because of its low crystallization temperature, this mineral appears at the bottom of Bowen’s reaction series. Microcrystalline forms of this mineral make up different types of chert, like agate and onyx. This mineral’s piezoelectric properties enable its use in digital watches. For 10 points, a value of seven on the Mohs hardness scale corresponds to what mineral made up of silica?

ANSWER: **quartz** [prompt on silica or silicon dioxide or SiO₂ until “silica” is read]

<Benjamin Chapman, Science - Earth> ~26000~ <Editor: David Bass>

18. A music genre featuring this many players was established by 24 pieces written by Anton Reicha. Mozart’s *Eine Kleine Nachtmusik* was originally written for an ensemble of this many instruments. A piece for this many instruments invokes a group of blind beggars by instructing players to strum their instruments like guitars. Luigi Boccherini’s (*) *Night Music of the Streets of Madrid* is for this many musicians. A piano concerto of this number that opens with tutti E-flat, A-flat, and B-flat chords each followed by short cadenzas from the soloist was written by Beethoven and is nicknamed *Emperor*. For 10 points, name this number of performers in Schubert’s instrumental piece “The Trout,” a piano quintet.

ANSWER: **five** (Anton Reicha popularized the woodwind quintet.)

<Ethan Ashbrook, Fine Arts - Music - Classical> ~25788~ <Editor: Young Lee>

19. This poet punned on the word “saltmother” in a poem that describes a creature as “daughter of fire, spirit of fire.” A claim to have “slept the dreams of” the title object “that never dreams” and the brief line “Madrid, 1937” appear in a poem by this author of “Salamander.” This poet’s translator Eliot Weinberger worked with him on a book of translations of the poem “Deer Park,” titled (*) *Nineteen Ways of Looking at Wang Wei*. This poet used the period of Venus as the basis for a poem that repeats the line “willow of crystal, a poplar of water.” This poet reflected on his country’s culture in the essay “The Sons of La Malinche (“mah-LIN-chay”)” and in the Aztec-inspired poem “Sunstone.” For 10 points, name this Mexican author of *The Labyrinth of Solitude*.

ANSWER: Octavio **Paz** [or Octavio **Paz** Lozano]

<Joseph Krol, Literature - World and Miscellaneous> ~25098~ <Editor: Joseph Krol>

20. In 1632, a man in this city known as “Hezarfen” attempted to fly two miles from the top of a watchtower with makeshift wings. Serbian exiles forced to resettle in this city inspired the name of the nearby Belgrad Forest. Mary Wortley Montagu wrote letters detailing smallpox inoculation while traveling to this city. Genoa established the trading colony of Galata in this city. (*) Cannons designed by the Hungarian engineer Orban were used to breach this city’s Theodosian Walls. A religious building in this city named for its iconic Iznik tiling was designed by students of Mimar Sinan. The phrase “Sublime Porte” was synonymous with a government led from this city’s Topkapi Palace. For 10 points, name this city that contains the Hagia Sophia.

ANSWER: **Istanbul** [accept **Constantinople** or **Konstantiniyye**]

<Hari Parameswaran, History - World - Middle Eastern> ~25930~ <Editor: Jordan Brownstein>

21. Queen Elizabeth I is compared to one of these objects in her epitaph by Anne Bradstreet which begins “this is the royal bed.” A poem addressed to one of these objects claims that, had it lived “in deserts, where no men abide,” it “must have uncommended died”; that Edmund Waller poem begins “go, lovely” [this object]. Robert Herrick's carpe diem poem “To the Virgins, to Make Much of Time” begins “gather (*) [these objects] while ye may.” William Blake wrote a poem addressed to a sick example of this flower, which is “newly sprung in June” in a love poem by Robert Burns. A line in *Romeo and Juliet* claims that this flower “By any other name would smell as sweet.” For 10 points, name this flower traditionally used to symbolize love because of its red color.

ANSWER: **rose** [or **rosebud**; accept “Go, Lovely **Rose**”; accept “The Sick **Rose**”; prompt on flower by asking “What type of flower?”]

<Jonathan Magin, Literature - British - Poetry> ~26114~ <Editor: Jaimie Carlson>

NSC 2023 - Round 15 - Bonuses

1. This organization provided \$1,200 for a woman to travel to Shanghai and meet her mother's long lost children. For 10 points each:

[10m] Name this fictional organization headed by George Hsu that was founded in San Francisco in 1949. During a meeting of this organization, Jing-Mei took her deceased mother's place at a mahjong table.

ANSWER: the **Joy Luck** Club

[10h] While telling parables about recognizing evil, a grandmother believes a laughing baby is a reincarnation of this goddess. The last section of *The Joy Luck Club* is named for this goddess.

ANSWER: **Queen Mother** of the West [accept **Divine Mother** or **Nanny**; accept **Queen Mother** of the Western Skies; accept **Xiwángmǔ** or **Seiobo** or **Seowangmo** or **Tây Vương Mẫu**; accept **Wusheng Liamu** or **Wujimu**]

[10e] This Chinese-American author of *The Kitchen God's Wife* also wrote *The Joy Luck Club*.

ANSWER: Amy **Tan** [or Amy Ruth **Tan**]

<Steven Yuan, Literature - American - Long Fiction> ~20269~ <Editor: Ganon Evans>

2. In 2022, newly elected Kenyan president William Ruto overturned a decade-long ban on these products and called for importing 10 million bags of them. For 10 points each:

[10h] Name these products. In March 2023, the Mexican government banned import of the "Bt" form of one of these products widely used in the US.

ANSWER: **GMOs** [or **Genetically Modified Organisms**; accept anything involving **genetically modified crops** or **genetically modified corn**; prompt on **seeds** or **crops** or **corn** or other products that don't mention being genetically modified]

[10m] Kenyan opposition leader Raila Odinga has accused Ruto of being a "puppet" of this man for ending the GMO ban. This philanthropist wrote the books *How to Avoid a Climate Disaster* and *How to Prevent the Next Pandemic*.

ANSWER: Bill **Gates** [or William Henry **Gates III**]

[10e] This country's ban on GMOs as part of a disastrous campaign of organic farming ultimately led to a 2022 uprising where protestors stormed the house of President Gotabaya Rajapaksa in its capital of Colombo.

ANSWER: **Sri Lanka** [or Democratic Socialist Republic of **Sri Lanka**]

<Michael Bentley, Current Events - World> ~21120~ <Editor: Ganon Evans>

3. According to gate control theory, this structure's dorsal horn screens out slow-moving painful stimuli when faster non-painful stimuli are also present. For 10 points each:

[10e] Name this tube of nervous tissue that links to the brain in the central nervous system.

ANSWER: **spinal cord** [prompt on **spine**]

[10m] Gate theory proposes that the noxious stimuli are screened out by inhibitory signals passed through these neurons, which link sensory neurons to motor neurons in reflex arcs in the CNS.

ANSWER: **interneurons** [or **relay** neurons; or **intermediate** neurons; or **connector** neurons; or local **interneurons** or relay **interneurons**]

[10h] Gate theory was invigorated by the discovery of peripheral pain receptors like TRPV1, which are induced in the lab using this chemical. This natural product from a plant is used in topical creams to treat peripheral neuropathy.

ANSWER: **capsaicin** [or **8-methyl-N-vanillyl-6-nonenamide**]

<Sudheer Potru, Science - Biology> ~20728~ <Editor: Adam Silverman>

4. *Description acceptable.* A god's huge appetite and fierce eyes while performing this action are explained away as the result of eagerness for a wedding. For 10 points each:

[10m] Name this action achieved with the help of the Brising necklace, which Thor takes to get his hammer back from a giant who seeks Freya's hand in marriage.

ANSWER: **dressing as a woman** [or **cross-dressing**; or **dressing as a bride**; or **drag**; or **dressing as Freya**; accept answers which replace "dressing" with equivalents like **disguising**; prompt on **dressing up** or **disguising**]

[10h] This frost giant ransoms Mjöllnir ("myoll-NEER") in exchange for Freya's hand in marriage. This giant is killed by Thor immediately after he gets his hammer back.

ANSWER: **Thrym** [or **Thrymr**]

[10e] This Norse god of mischief convinces Thor to dress as a woman to get Mjöllnir back.

ANSWER: **Loki**

<Jaimie Carlson, RMP - World Mythology> ~20945~ <Editor: Jaimie Carlson>

5. The *magua*, a men's jacket used in this activity, became a standard dress worn during the Qīng dynasty. For 10 points each:

[10h] Name this activity that was unusually taught to Manchu noblewomen. In the Sòng dynasty, a road to Tibet to trade tea for supplies necessary for this activity was established.

ANSWER: **horse riding** [or **horsemanship**; accept anything involving **horses** or **ponies**; or *qímǎ*]

[10e] Unlike Hàn women, the Manchus did not subject women to this painful practice. Because they did not undergo this practice, Manchu women could wear wooden-soled boots while horse riding.

ANSWER: **foot binding** [or *chánzú*; or *ch'an-tsu*; accept golden **lotus feet**]

[10m] This woman popularized the use of *liǎngbǎtóu* ("liang-ba-TOE") headpieces to distinguish Manchu women from Hàn Chinese. This mother of the Tóngzhì Emperor was the main power behind the throne during the late Qīng dynasty.

ANSWER: Empress Dowager **Cíxǐ** [or Empress Dowager **T'zu-his**; or **Cíxǐ** tàihòu; or **Xitaihou**; or **Xiaoqin Xianhuanghou**; prompt on **Dowager Empress** or **Empress Dowager**]

<Michael Bentley, History - World - Asian> ~20598~ <Editor: Jordan Brownstein>

6. According to Alfred Wolff, this woman exhibited alongside "five or six lunatics" at the First Impressionist Exhibition. For 10 points each:

[10h] Name this Impressionist who rests her arm on a railing in Edouard Manet's painting *The Balcony*. This artist also painted *The Cradle* and *On the Terrace*.

ANSWER: Berthe **Morisot** ("mor-EE-soh") [or Berthe Marie Pauline **Morisot**]

[10e] This American Impressionist painted scenes of motherhood similar to Morisot's, including in her painting *The Child's Bath*.

ANSWER: Mary **Cassatt** [or Mary Stevenson **Cassatt**]

[10m] Impressionists including Morisot and Cassatt were greatly influenced by the art of this country, which led to a phenomenon known by a French term ending with the suffix *-isme* ("EEZ-muh"). Paintings from this country feature in the background of van Gogh's painting *Portrait of Père Tanguy*.

ANSWER: **Japan** [or **Nippon**; or **Nihon**; accept *Japonisme*; accept *Japonesque*]

<Michael Bentley, Fine Arts - Painting - European 1600-1945> ~19874~ <Editor: Chandler West>

7. One of these people called Mamoudou Kouyate (“MAH-mah-doo koo-YAH-tay”) was the source of the standard version of a poem which depicts one of these people called Balla Fasséké (“fah-SAY-KAY”). For 10 points each:

[10m] Name these West African bards who preserve poems such as the *Epic of Sundiata*.

ANSWER: **griots** (“gree-OHZ”) [or **djeli**]

[10e] The way griots recite poems in order to pass stories down the generations exemplifies this type of tradition contrasted with written tradition.

ANSWER: **oral** tradition [accept **song** tradition or **spoken** tradition or word forms]

[10h] Oral traditions likely informed the version of this Ethiopian national epic written in Ge’ez (“gay-ezz”) in the 13th century. This epic describes the provenance of the Ark of the Covenant.

ANSWER: ***Kebra Nagast*** [or ***Kebra Negast*** or ***The Glory of the Kings***]

<Joseph Krol, Literature - World and Miscellaneous> ~20317~ <Editor: Joseph Krol>

8. Answer the following about the year 536 CE, which may possibly be the worst year in human history, for 10 points each.

[10e] A likely cause of the year’s incredibly long winter was one of these events. Another one of these events originating from Tambora in Indonesia caused the “Year Without a Summer.”

ANSWER: volcanic **eruptions** [or explosive **eruptions**; or super **eruptions**]

[10h] One candidate for the volcano that caused the winter is this modern-day country’s Ilopango volcano. Archbishop Óscar Romero was murdered in this country in 1980.

ANSWER: **El Salvador** [or Republic of **El Salvador**]

[10m] The winter likely contributed to the collapse of this empire, which had been repeatedly invaded by the White Huns. This Indian empire oversaw a golden age of Sanskrit literature.

ANSWER: **Gupta** Empire

<Hari Parameswaran, History - Cross, Historiography, and Miscellaneous> ~18989~ <Editor: Michael Bentley>

9. In a story by this author, Philippa tells the title character “Ah, how you will enchant the angels!” after she prepares a meal. For 10 points each:

[10m] Name this author of “Babette’s Feast,” who also wrote about her time on a Kenyan farm in a 1937 memoir.

ANSWER: Isak **Dinesen** [or Karen **Blixen**; or Baroness Karen von **Blixen-Finecke**] (The memoir is *Out of Africa*.)

[10h] In “Babette’s Feast,” Philippa and her sister are surprised that Babette intends to continue living with her despite this event a few weeks earlier, which only occurs thanks to an annual action of Babette’s old Parisian friend.

ANSWER: winning the **lottery** [prompt on winning **money** or receiving a **windfall** with “She receives money due to what event?”]

[10e] Dinesen’s other short fiction includes a set of seven “Tales” titled in English for this genre, which is characterized by spooky old castles, supernatural figures, and horror-laden deaths.

ANSWER: **Gothic** fiction [accept *Seven Gothic Tales*; accept *Syv Fantastiske Fortællinger*]

<Joseph Krol, Literature - European - Short Fiction> ~20166~ <Editor: Joseph Krol>

10. This film movement arguably came to an end after a censorship law was passed by Giulio Andreotti, who felt that these films were “dirty laundry that shouldn’t be washed and hung to dry in the open.” For 10 points each:

[10m] Name this Italian film movement that includes Vittorio De Sica’s *Umberto D.* and *Bicycle Thieves*.

ANSWER: Italian **Neorealism** [or **Neorealismo**; or **Neorealist**; prompt on Golden Age; prompt on realism; prompt on Italian New Wave]

[10e] Neorealist classic *Rome, Open City* won the Palme d’Or at the 1946 iteration of this French film festival.

ANSWER: **Cannes** Film Festival [or Festival de **Cannes**; prompt on International Film Festival]

[10h] Italian Neorealism influenced this future Indian director of the Ravi Shankar-scored *Apu Trilogy*, which includes *Pather Panchali* and *Aparajito*.

ANSWER: Satyajit **Ray**

<Michael Bentley, Fine Arts - Film> ~20441~ <Editor: Young Lee>

11. A holiday celebrating these things is supported by Leviticus 19:23 (“chapter 19, verse 23”), which specifies a three-year wait period before taking from these things. For 10 points each:

[10h] Name these things, which are celebrated during the holiday of Tu BiShvat. In Islam, one of these things called Ṭūbā (“**TOO-bah**”) is located in Jannah.

ANSWER: **trees** [or fruit **trees**; prompt on plants]

[10m] In this tradition, 10 or 11 nodes appear on the Etz Chaim, a diagram that translates as “Tree of Life” and connects *sephirot*. Ein Sof is studied in this branch of Jewish mysticism.

ANSWER: **Kabbalah**

[10e] This animal tempts Eve to eat fruit from the tree of the knowledge of good and evil. God subsequently curses this animal to crawl on his belly.

ANSWER: **serpent** [or **snake**; or **Nāhāš**]

<Andrew McCowan, RMP - Hebrew Bible> ~20704~ <Editor: Athena Kern>

12. Nick Holonyak’s 1962 invention of the “laser” type of these devices preceded the invention of their “light-emitting” type. For 10 points each:

[10e] Name these electrical components that conduct in only one direction.

ANSWER: **diode** [accept laser **diodes** or light-emitting **diodes** or **LEDs**]

[10h] Another early diode was the Fleming valve, which allows the current to flow only via this phenomenon upon heating of the cathode, which is separated from the anode by a vacuum. This phenomenon was rediscovered by Thomas Edison as a reason for uneven blackening of light bulbs.

ANSWER: **thermionic emission** [or **thermal electron emission**; prompt on Edison effect]

[10m] Fleming valves were commonly used as this type of device that converts alternating current into direct current. These devices have the opposite function of inverters.

ANSWER: **rectifiers**

<Sudheer Potru, Science - Physics> ~20005~ <Editor: David Bass>

13. An “Ecstatic Lecture” begins by noting that whether or not you perform this action, you’ll regret it. For 10 points each:

[10h] Name this action whose “aesthetic validity” Judge Vilhelm defends in a book by Danish philosopher Søren Kierkegaard. Many of Kierkegaard’s books address his sudden decision to not engage in this practice in 1841.

ANSWER: **marriage** [accept synonyms of getting **married** or **wedding**]

[10m] Judge Vilhelm defends marriage in this first Kierkegaard book, whose title refers to the choice between the “aesthetic” and “ethical” realms.

ANSWER: **Either/Or** [or **Enten - Eller**]

[10e] In *Fear and Trembling*, Kierkegaard elliptically compares his decision to not marry Regine Olsen to a “leap” of this concept. Atheists sometimes define this concept as “belief without evidence.”

ANSWER: **faith** [or **troens**; or **fides**]

<Jordan Brownstein, RMP - Philosophy> ~20132~ <Editor: Jordan Brownstein>

14. In colloid physics, this term refers to the repulsion between particles to prevent agglomeration. For 10 points each:

[10e] The attractive van der Waals forces between nonpolar molecules are usually named for Fritz London and what physical process?

ANSWER: **dispersion** [or London **dispersion** forces; prompt on **LDFs** or **London** forces]

[10m] Just as electrostatics prevent colloids from glooping together, this principle opposes molecular dispersion forces. In other words, this principle explains why fermionic matter does not just collapse into a condensate.

ANSWER: **Pauli** exclusion principle [or the **exclusion** principle]

[10h] Whereas the colloidal dispersion force scales with the average particle radius, the London dispersion force scales with the average of this molecular property. When expressed in electron-volts, the Rydberg constant equals this quantity for a hydrogen atom.

ANSWER: first **ionization energy** [or **ionization potential**; prompt on **I**; prompt on **work function**; prompt on **energy**]

<Adam Silverman, Science - Chemistry> ~20849~ <Editor: Adam Silverman>

15. Anthemius of Tralles reportedly pranked his neighbor Zeno by shooting this substance through leather tubes in his parlor to create mini-earthquakes. For 10 point each:

[10e] Name this substance that powered Hero’s engine, also called the aeolipile (“ee-ah-low-pile”), much like the engines developed a millennia later to launch the industrial revolution.

ANSWER: **steam** [accept **steam** engine; prompt on **water** or **gas**]

[10h] This Roman engineer described the aeolipile in a treatise where he also lists *utilitas*, *firmitas*, and *venustas* as important attributes of the title discipline.

ANSWER: **Vitruvius** [or Marcus **Vitruvius** Pollio] (The treatise is *De architectura*.)

[10m] Vitruvius also described these siege weapons which used two thick cords to provide the tension needed to shoot a javelin. “Repeating” examples of these weapons were called polybolos.

ANSWER: **ballista** [or **ballistae**; prompt on **bolt thrower**]

<Lalit Maharjan, History - European - Classical> ~20295~ <Editor: Michael Bentley>

16. Earl Young pioneered this pattern, which appears in songs like “Another One Bites the Dust.” For 10 points each:

[10h] Name this rhythmic pattern commonly used in electronic dance music. In this pattern, the bass drum is hit on every beat in 4/4 time.

ANSWER: **four-on-the-floor** [or **four-to-the-floor**]

[10e] This genre of dance music popularized the four-on-the-floor pattern in songs like the Bee Gees’ “Stayin’ Alive.” This genre, which was targeted in a 1979 “Demolition Night,” was portrayed in the movie *Saturday Night Fever*.

ANSWER: **disco** music [accept **Disco** Demolition Night]

[10m] This genre of dance music, which evolved from disco at a namesake underground club in Chicago, uses electronic drum machines to play a four-on-the-floor pattern. This genre broke into the mainstream through Madonna’s single “Vogue.”

ANSWER: **house** music [accept the Ware**house**]

<Jonathan Magin, Fine Arts - Music - Recent> ~18979~ <Editor: Wonyoung Jang>

17. The first Feigenbaum constant is the limiting ratio of bifurcation intervals between events in which this quantity doubles. For 10 points each:

[10h] Name this quantity that is doubled by chaos-inducing events that are marked by the splitting of paths on a bifurcation diagram as the bifurcation parameter increases.

ANSWER: **period** [accept **period**-doubling bifurcations or **period**-doublings]

[10m] A system that reaches chaos via period-doubling is described by this “map” that sets x -sub-quantity n plus one equal to the product of r , x -sub- n , and one minus x -sub- n . This map shares its name with a function whose graph is the canonical example of a sigmoid curve.

ANSWER: **logistic** map [accept **logistic** function; reject “log” or “logit” or “logarithm”]

[10e] The logistic map is quadratic, and thus lacks this property possessed by functions of the form “ y equals m x .”

ANSWER: **linear** [accept word forms like **linearity**]

<Benjamin Chapman, Science - Math> ~21153~ <Editor: David Bass>

18. Answer the following about staged dinner parties, for 10 points each.

[10e] This man’s dinner party is ruined by the ghost of Banquo. This man and his wife host that dinner party to begin his reign after they murder Duncan.

ANSWER: **Macbeth**

[10h] This author wrote about Marlene hosting a dinner party for famous historical women like Pope Joan, Isabella Bird, and Lady Nijo, in the play *Top Girls*. The second act of this author’s play *Cloud 9* flashes forward from Colonial Africa to 1979 London.

ANSWER: Caryl **Churchill** [or Caryl Lesley **Churchill**]

[10m] The Condomines host a dinner party which ends with the medium Madame Arcati summoning the ghost of Elvira in *Blithe Spirit*, a play by this author. This author also wrote *Hay Fever* and *Private Lives*.

ANSWER: Noël **Coward** [or Sir Noël Pierce **Coward**]

<Jaimie Carlson, Literature - British - Drama> ~21139~ <Editor: Jaimie Carlson>

19. The 2021 book *Send a Runner* documents Edison Eskeet’s attempt to commemorate the route of this event over just 16 days. For 10 points each:

[10h] Give this name for a series of forced relocations of the Navajo from present-day Arizona to an internment camp along the Pecos River in New Mexico.

ANSWER: **Long Walk** of the Navajo [or **Long Walk** to Bosque Redondo; or **Hwéeldi**]

[10e] 15,000 people died during this earlier forced relocation of Native Americans following the 1830 Indian Removal Act.

ANSWER: **Trail of Tears**

[10m] It’s not Alaska, but the Nome Cult Trail in this modern-day state was used during the 1863 Konkow Trail of Tears. This state’s so-called Apostle, Junipero Serra, adopted harsh policies towards natives.

ANSWER: **California** [or **CA**]

<Michael Bentley, History - American - Pre-1865> ~20809~ <Editor: Michael Bentley>

20. Clance and Imes’s paper outlining this phenomenon stemmed from a discussion with several Oberlin students. For 10 points each:

[10m] Name this phenomenon characterized by “an internal experience of intellectual phoniness” which originally was observed in “high achieving women.”

ANSWER: **imposter** syndrome [or **imposter** phenomenon; accept **impostorism**]

[10e] While imposter syndrome is not a recognized mental illness, it shares some common aspects with this group of disorders that includes a “social” variety in which individuals fear interacting with others.

ANSWER: **anxiety** disorders [or social **anxiety** disorder]

[10h] Ruchika Tulshyan and Jodi-Ann Burey have argued that pathologizing “imposter syndrome” connects it to this catch-all diagnosis from the 19th century. Some scholars held that this condition was caused by a “wandering womb.”

ANSWER: female **hysteria** [or **hysterical** suffocation]

<Michael Bentley, Social Science - Psychology> ~20845~ <Editor: Athena Kern>

21. During a holiday to this goddess, women sing songs and wear red or green, while male members of their family often prepare them food or give them gifts. For 10 points each:

[10h] Name this Hindu goddess at the center of a three-day long celebration of sisterhood called Teej.

ANSWER: **Parvati** [accept **Uma** or **Aparna** or **Shakti** or **Gauri**]

[10m] Nepalis celebrate Gai Tihar (“guy ti-hah”) by laying out Rangoli for this goddess, and *diyas* (“DEE-yahs”) are used to celebrate her in another festival. This goddess is often depicted seated upon or holding lotuses.

ANSWER: **Lakshmi** (Diyas are the lamps lit during Diwali.)

[10e] Women often perform this religious practice during Teej, Navratri, or a Karva Chauth *vrat*. In Hinduism, Tuesday and Thursday are common days to participate in this practice where people sometimes abstain from even drinking water.

ANSWER: **fasting** [accept word forms such as engaging in a **fast**; accept **not eating** or **starving**]

<Veer Bhatt, RMP - East Asian Religion> ~21021~ <Editor: Athena Kern>