

PACE NSC 2022 - Round 18 - Tossups

1. This book originally included a section opening "In the pale glimmer" and had a working title of either "Limbo" or "The Lesbians." The collection *Scraps* contained six sections removed from this book like "Lethe" ("LAY-thee") which its author termed "condemned." This book formed the best-known part of an author's *Collected Works* alongside *Artificial Paradises* and his translations of stories by (\*) Edgar Allan Poe. This book's first section describes a figure who "dreams of scaffolds" as he "smokes his hookah," called "Ennui" ("on-WEE"), and it declares "my twin, my brother" after addressing a "hypocrite reader." "Spleen and Ideal" is a section in, for 10 points, what influential Symbolist poetry collection by Charles Baudelaire ("BOE-duh-lair")?

ANSWER: *Les Fleurs du Mal* ("lay FLUR du MAL") [or *The Flowers of Evil*]

<Joseph Krol, Literature - European - Poetry> ~23277~

2. Giovanni Artusi's treatise about the "imperfections of modern music" lambasted this composer for violating traditional rules. This composer's innovations include rapid repetitions of a single chord, or *stile concitato*, which he first used in a piece depicting the combat between Tancred and Clorinda. One of this composer's characters sings the aria "Possente spirto" before lulling (\*) Charon to sleep. He composed nine books of madrigals, including one containing madrigals about love and war. Like his contemporary Jacopo Peri, this composer wrote a dramatic work about a musician who goes to the underworld to save his wife Eurydice. For 10 points, name this Baroque Italian composer of one of the first operas, *L'Orfeo*.

ANSWER: Claudio Monteverdi

<Jonathan Magin, Fine Arts - Music - Baroque> ~23742~

3. A man most famous for his actions during one of these events was inspired by Nord Davis Jr. to bomb an Alabama abortion clinic in 1998. Lord Killanin negotiated with presidential envoy Lloyd Cutler in order to save one of these events. Peter Ueberroth ("YOU-bur-roth") was named *Time* Man of the Year for successfully getting corporate sponsorship for one of these events. Security guard Richard (\*) Jewell was falsely accused of bombing one of these events, whose real culprit was Eric Rudolph. Avery Brundage condemned the Black Power salute given by Tommie Smith at one of these events. The Soviet invasion of Afghanistan prompted Jimmy Carter to lead a boycott against one of these events. For 10 points, Atlanta hosted what global sporting events in 1996?

ANSWER: Summer Olympic games [accept Olympics or Games of the Summer Olympiad]

<Hari Parameswaran, History - American - 1945+> ~23212~

4. A cowboy in this novel relates a story of how the woman he was escorting from Austria had the misfortune to give birth to triplets. This novel opens with the orphaned narrator reading *The Life of Jesse James* while on a long train ride from Virginia. This novel's narrator kills a giant rattlesnake while investigating a prairie-dog-town with a character who goes on to work as a hired girl for the evil moneylender (\*) Wick Cutter. This novel's title character suffers after her musician father kills himself and later marries Anton Cuzak. The early sections of this novel are set in Black Hawk, Nebraska during the childhood of Jim Burden. For 10 points, name this Willa Cather novel titled for a member of the Shimerda family.

ANSWER: My *Ántonia*

<Michael Bentley, Literature - American> ~23768~

5. A valley named for these things on the Kamchatka Peninsula was partially destroyed by a 2007 mudslide. A nonprofit that tracks these things offers rebuild stats for American examples such as Daisy and Beehive. A "cold" one of these things in Germany called the Brubbel is unusually powered by carbon dioxide. The English word for these things comes from a "Great" one in (\*) Iceland located near another one called Strokkur. One of these things known as Steamboat was dormant from 1968 to 1978 but has a higher peak than a nearby cone example that has a consistent interval of 44 minutes. For 10 points, name these natural features exemplified by Yellowstone's Old Faithful.

ANSWER: geysers [accept cold-water geyser]

<Michael Bentley, Geography - World> ~23264~

6. A benchmark named Benchy is a common means of troubleshooting these devices. STL files with flipped normals often cause problems for these devices. A raft can be specified to improve adhesion to the base of these devices. Running these devices too hot and too fast can cause stringing. Acetone vapor can smooth the output of these devices when using ABS, which is a common choice of (\*) thermoplastic filament. Software for these devices will automatically insert vertical supports for overhangs and plot an efficient route for the head. These devices are commonly used to prototype designs distributed on Thingiverse.com ("THING-a-verse dot com"). For 10 points, name these devices which create objects by additively depositing material.

ANSWER: 3D printers [accept additive manufacturing before "additively"; prompt on printers]

<Michael Bentley, Science - Engineering and Miscellaneous> ~23684~

7. The dwarf Abe Kusich witnesses Juju take part in one of these events in Homer Simpson's driveway in a scene from *The Day of the Locust*. An enslaved man named George dominates these events in Caswell County in Alex Haley's *Roots*. When these events take place "between near status equals" they attract more bets and more identification with the participants according to an anthropologist who recounted a police raid breaking one up in a text written using (\*) "thick description." "Notes" on these events are presented in a text on "deep play" by anthropologist Clifford Geertz, who witnessed them in Bali. Small metal spurs are attached to the animals that participate in these events. For 10 points, name this blood sport that may end with one bird dying.

ANSWER: cockfights [or rooster fighting; prompt on animal fighting]

<Michael Bentley, Other - Other Academic and General Knowledge> ~23049~

8. Supalla and Newport found that "hold manners" could distinguish similar noun-verb pairs in this language. The term "chereme" was coined while William Stokoe was studying this language. Two pluses represent repetition in glosses of this language, in which comparisons are made using contrastive structure. The "Black" variant of this language often uses a lower space for adverbs. The spread of this language contributed to the decline of a similar language in Chilmark, a town on (\*) Martha's Vineyard. It's not English, but this language is an official language of Washington D.C.'s Gallaudet University. For 10 points, facial expressions and fingerspelling are important features of what native language of most deaf people in the United States?

ANSWER: American Sign Language [or ASL; accept Black American Sign Language or BASL or Black Sign Variation or BSV; prompt on sign language; do not accept or prompt on "English" or "American"]

<Chauncey Lo, Social Science - Linguistics> ~21083~

**9. Outputs from this technique are used to find the isos-bestic point. Double beam instruments for this technique improve results by simultaneously measuring a blank. A diffraction grating serves as a monochromator in a Bausch & Lomb device for this technique called the Spec 20. This technique measures transitions between electronic energy levels. The negative base 10 logarithm of the (\*) transmittance is converted to the absorbance in this technique, which equals the product of concentration, path length, and the extinction coefficient according to Beer's law. Cuvettes typically contain specimens measured in, for 10 points, what technique which measures the light absorbed by a colored sample?**

ANSWER: spectrophotometry [or UV-vis spectroscopy; accept ultraviolet visible spectroscopy; prompt on colorimetry]

<Andrew Wang, Science - Chemistry> ~24136~

**10. During this event, 35 Flemish people were dragged from the Church of St. Martin Vintry and executed. Thomas Walsingham related how a valuable "jakke" ("JACK-ee") was placed on a lance and shot with arrows during an attack on Savoy Palace during this event. John Wrawe ("RAW") failed to kill the bedel of Corpus Christi College during this event. William Walworth killed a leader of this event after he supposedly (\*) pulled out a dagger. Simon Sudbury, the Archbishop of Canterbury, was executed during this event. Kentish support for this event was drummed up by preacher John Ball. One cause of this event was a new poll tax issued in the aftermath of the Black Death. For 10 points, name this 1381 revolt against King Richard II by the lower classes in England.**

ANSWER: Peasants' Revolt [or Wat Tyler's Rebellion; or Great Rising; do not accept or prompt on "Peasants' War"]

<Michael Bentley, History - European - Middle Ages> ~24009~

**11. Lina Bo Bardi carved out a shallow pool from one of these buildings to create her celebrated Sesc Pompeia center in São Paulo. One of these buildings in the Moabit district of Berlin that used very large girder frames to simplify the building's interior was planned by graphic designer Peter Behrens and stretched 122 meters long. One of these buildings in Stalingrad was designed by Albert Khan. A study on (\*) light intensity at one of these buildings gave rise to the Hawthorne Effect. A 1936 film that opens in one of these buildings has the Little Tramp pulled through giant rotating devices. The opening of *Modern Times* is set in, for 10 points, what type of building, many of which in Michigan's River Rouge ("rooj") Complex produced Ford Model A's?**

ANSWER: a factory [accept answers like turbine factory or car factory or tractor factory; accept manufacturing plant; prompt on plant or assembly line]

<Michael Bentley, Fine Arts - Architecture> ~22897~

**12. During a 1960s conflict, the leader of this country denied U. S. assistance by saying "To hell with your aid!" Political scientist Benedict Anderson was barred from being able to enter this country until 1999 due to his writing of the Cornell Paper, which detailed the events of this country's 30 September Coup. An attempt to form "The Conference of the New Emerging Forces" led Zhou (\*) Enlai and others to travel to this country to attend the Bandung Conference. In this country, the "New Order" regime displaced the "Guided Democracy" established earlier. After World War II, this country moved its capital from Yogyakarta and remodeled a colonial-era city known as Batavia. For 10 points, name this country once led by Sukarno.**

ANSWER: Indonesia [or Republic of Indonesia; or Republik Indonesia]

<Elaijay Lapy, History - World - Asian> ~21094~

**13. The presence of an inducible form of this property results in a positive D-zone test. The *ermA* ("erm-A") gene contributes to a form of this property by demethylating 23S rRNA. This property leads to no zone of inhibition in the Kirby-Bauer disc diffusion test. Mechanisms granting this property include efflux pumps and altered PBPs. Opportunistic organisms with a form of this property called MDR may cause (\*) superinfections after initial treatment; those organisms include *C diff* and MRSA (MUR-suh). Amoxicillin is given with clavulanic acid to bypass a form of this property caused by beta lactamases which have become commonplace due to penicillin overuse. "Superbugs" have an extensive form of, for 10 points, what property of not being susceptible to medications?**

ANSWER: drug resistance [or antibiotic resistance or antimicrobial resistance; prompt on resistance or resistant]

<Andrew Wang, Science - Biology> ~24101~

**14. In this poem, nine witches are rendered powerless to kill their intended target when, after the witches rob a vegetable garden, the target only responds with kindness. Another character in this poem reveals his *tana* to his wife, the protagonist's half-sister Nana, who then escapes with a court musician. At the beginning of this poem, a king heeds a prophecy by marrying a (\*) hunchbacked "buffalo woman" found by his hunters. The protagonist of this epic is unable to walk until age seven, when he lifts himself up on an iron rod. Using an arrow tipped with a rooster's claw, a king defeats Sumanguru Kante in this poem, which was passed down by generations of *griots*. For 10 points, name this West African epic about a legendary king of Mali.**

ANSWER: *Epic of Sundiata* [or *Epic of Son-Jara*; or *Epic of Sunjata*]

<Matthew Bollinger, RMP - World Mythology> ~24174~

**15. *Description acceptable.* A database maintained by University College London shows how one of these laws greatly helped Sir John Gladstone, father of Prime Minister William. A society of "friends" advocating for these laws was founded by Jacques Pierre Brissot and faced a setback under Napoleon in 1802. The inventor of jasper ware, Josiah Wedgwood, promoted a design of a pleading man advocating for these laws. Director Ava DuVernay explored the (\*) carve-out for criminals in a law of this type passed in the United States through a Constitutional amendment. An executive order of this type is celebrated on Juneteenth. For 10 points, name this legislation achieved via the Thirteenth Amendment, ending a system widely used on Southern plantations.**

ANSWER: abolition of slavery [or abolition of the slave trade; or emancipation of enslaved people; accept answers like reparations for slaveholders; prompt on reparations by asking, "for whom?"]

<Michael Bentley, History - Cross, Historiography, and Miscellaneous> ~23085~

**16. Two authors from this country collaborated on a novel about a murdered American tourist called *Roseanna*, which opens their ten-novel series *The Story of a Crime*. A character in a series from this country sometimes dates Mimi Wu and uses the pseudonym "Wasp." The fictional detective Martin Beck is from this country. In a series of noir novels from this country, an investigative journalist for a monthly magazine repeatedly encounters an asocial (\*) computer hacker who, according to one novel's title, "Kicked the Hornet's Nest." This country is home to Lisbeth Salander in *The Girl with the Dragon Tattoo*. For 10 points, name this country whose author Stieg ("steeg") Larsson was inspired by the "Pippi Longstocking" books by Astrid Lindgren.**

ANSWER: Sweden [or Kingdom of Sweden; or Sverige]

<Michael Bentley, Literature - European - Long Fiction> ~22888~

**17. An organist dressed in a contemporary black and gold outfit turns his head to stare at this figure in an allegorical painting in the Prado. A painting of this figure that Mark Twain called "filthy" likely includes the coat of arms of the Colonna family. The pose of the curling left hand of the sleeping "Dresden" version of this figure is echoed in a painting by that artist's student where a maid in a white dress digs into a (\*) chest in the background. A lapdog similar to one in a portrait of Eleonora Gonzaga sleeps at the foot of this figure's bed in a painting where she holds a posy of flowers and covers her genitals with her left hand. For 10 points, name this goddess who reclines in an erotic Titian painting named for Urbino.**

ANSWER: Venus [accept Aphrodite; accept Venus of Urbino or Sleeping Venus or Venus and Musician]

<Michael Bentley, Fine Arts - Painting - European> ~23071~

**18. This author describes how Camara Laye changed their worldview in a work that relates how, as a seven-year-old, they illustrated tales with characters who "played in the snow" and who were all "white and blue-eyed." A speech by this author, which defines the title type of person as someone who says "Yes, there's a problem with gender... and we must fix it," was sampled in (\*) Beyoncé's song "Flawless." This author of "The Danger of a Single Story" wrote a novel in which Obinze ("oh-BIN-zay") reunites with the author of the blog "Raceteenth," Ifemelu, after the latter goes to university in the U.S. The TED Talk "We Should All Be Feminists" was given by, for 10 points, what Nigerian author of *Half of a Yellow Sun* and *Americanah*?**

ANSWER: Chimamanda Ngozi Adichie [or Amanda N. Adichie]

<Michael Bentley, Literature - World and Miscellaneous> ~23227~

**19. Bailey's 1977 experiment in a CERN storage ring confirmed that this phenomenon is unaffected by acceleration. In one experiment, this phenomenon led to a "transverse" form of another effect being observed for "canal rays." Two types of this phenomenon affected the apparatus in the Hafele-Keating experiment. This phenomenon was first observed via its impact on the Doppler effect in the (\*) Ives-Stilwell experiment. The Rossi-Hall experiment showed how this phenomenon causes more muons to reach Earth due to their longer observed lifetimes. This phenomenon leads to a "paradox" in which a twin on Earth and a twin on a spacecraft age at different rates. For 10 points, name this relativistic phenomenon in which observers see moving clocks slow down.**

ANSWER: time dilation [accept kinematic time dilation or gravitational time dilation; prompt on special relativity asking "what specific phenomenon?"]

<Joseph Krol, Science - Physics> ~23030~

**20. A phrase about these objects is often used to translate the principle of *qisas* ("kee-SOSS"), which can be substituted for *diyya*. *Nazar* charms resemble these objects, which also appear on the Hand of Fatimah amulets popular in North Africa. Since Muhammad used an antimony-based substance called *ithmid* for the health of this body part, it is considered *sunnah* for men to wear *surma* or *kohl* on this body part. The (\*) Basmala can be recited to ward off a phenomenon named for this body part, in which envy causes misfortune for its target. These body parts are the only ones fully visible on people wearing the niqab. For 10 points, in a legal principle the Quran cites from the Torah, what body parts are mentioned before "a tooth for a tooth"?**

ANSWER: eyes [or *al-ayn*; accept eye for an eye, eyelids, or the evil eye]

<Jordan Brownstein, RMP - Islam> ~24144~

**21. Dr. Paul Auwaerter's ("aw-wehr-tehrs") claims that this man might have ingested microdoses of arsenic prompted a grand exhumation of his body in 2010 to clear any doubts. Mercal offers subsidized foods to one country's citizens as part of a series of welfare "missions" named after this *criollo* man, who also names a "revolutionary movement" that attempted a 1992 coup against Carlos Andrés Pérez. With his ally Francisco de (\*) Santander, this man won the Battle of Boyaca to complete his conquering of the Viceroyalty of New Granada. This figure fought alongside silver miners in Potosí for the independence of a country named after him. For 10 points, Hugo Chavez idolized what general, known as "El Libertador" for liberating South America from Spanish rule?**

ANSWER: Simón **Bolívar** [or Simón José Antonio de la Santísima Trinidad **Bolívar** y Ponte Palacios y Blanco; prompt on "El Libertador" or "The Liberator" before mentioned; prompt on Bolivia]

<Hari Parameswaran, History - World - Latin American> ~23048~

## PACE NSC 2022 - Round 18 - Bonuses

1. The surprising number of medieval court cases related to this practice was due to an 8th century Catholic ruling that prosecuted it to the seventh degree of separation. For 10 points each:

[10] Identify this crime, dispensations for which became profit centers for medieval popes. Louis VII (7) of France annulled his marriage to Eleanor of Aquitaine for this reason.

ANSWER: **incest** [accept equivalents like they were **related** to each other]

[10] The Church's rules on incest were relaxed at a 1215 council, the fourth such council held in and named for this palace.

ANSWER: **Lateran** Palace [or Palatium **Lateranense**; or Apostolic Palace of the **Lateran**; accept Fourth **Lateran** Council]

[10] Catholics also had to get a dispensation to marry people who had not undergone this rite. The Amish are a denomination that mandates this sacrament of immersion take place among adults.

ANSWER: **baptism** [accept adult **baptism** or believer's **baptism** or **credobaptism** or **christening**]

<Michael Bentley, History - European - Misc> ~17924~

2. *Men in the Sun* is a novel by an author of this ethnicity who often called its literary output "resistance literature." For 10 points each:

[10] Name this ethnicity of a poet who wrote the prose poem *Memory for Forgetfulness*. That poet of this ethnicity ended another poem with the lines "if I get hungry, / I eat the flesh of my usurper. / Beware... beware... of my hunger, / and of my anger."

ANSWER: **Palestinians** [or **Filastini** or **Palestinian** Arabs; or **Palestinian**-American prompt on **Arabs** or **American**]

[10] *Memory for Forgetfulness* is by this Palestinian poet, who repeated "Write down!" in his poem "Identity Card."

ANSWER: Mahmoud **Darwish**

[10] Though he writes in Arabic, Darwish has claimed that this language is a "language of love." Amos Oz is one of many Israeli authors who write in this language, whose ancient version was used to write the Psalms.

ANSWER: Modern **Hebrew** [or New **Hebrew**; or Israeli **Hebrew**; or **Ivrit** Hadashah]

<Joseph Krol, Literature - World and Miscellaneous> ~18816~

3. This scientist names a type of visual "acuity" concerning the ability to see whether two line segments are misaligned. For 10 points each:

[10] A "scale" named for what French scientist is used to improve the accuracy of his namesake "calipers"?

ANSWER: Pierre **Vernier** ("VAIR-nee-ay") [accept **Vernier** acuity or **vernier** scale or **Vernier** calipers]

[10] To avoid zero errors when using Vernier calipers, this process must be performed, in which a measuring instrument is checked against an instrument or standard of known accuracy.

ANSWER: **recalibration** [accept word forms]

[10] Vernier calipers can be used to give precise readings in these units, equal to a millionth of a meter. They share their name, though not their pronunciation, with a common measuring device based on a screw gauge.

ANSWER: **micrometer** [accept **micron**]

<Joseph Krol, Science - Physics> ~18538~

4. The name for these artworks derives from a finance minister for Louis XV (15) whose penny-pinching policies led his name becoming a synonym for anything cheap. For 10 points each:

[10] Name these art works used by Kara Walker to depict life on slave plantations. These artworks were often made with the aid of a device called a *physiognotrace*.

ANSWER: silhouettes

[10] The market for silhouettes dried up after the invention of this technology pioneered by Louis Daguerre, namesake of the daguerreotype.

ANSWER: photography [prompt on camera]

[10] Silhouette artist Auguste Édouart captured the likeness of this future US President. This president dismissed the cabinet of his predecessor after taking office in July 1850.

ANSWER: Millard Fillmore

<Michael Bentley, Other - Other Academic and General Knowledge> ~18020~

5. Two sons of this man fled their birth city on a black horse and a white horse and went on to found another city. For 10 points each:

[10] Identify this father of Aschius and Senius who was killed during an argument with his brother, Romulus.

ANSWER: Remus

[10] Romulus and Remus came from this Italian city, which was itself founded by Aeneas' son, Ascanius.

ANSWER: Alba Longa

[10] The settlement of Pallantium was founded by this Greek king from Arcadia, whose son Pallas fights alongside the Trojans in the *Aeneid*.

ANSWER: Evander [or Euandros]

<Michael Bentley, RMP - Greco-Roman Mythology> ~18977~

6. An IIT campus in this state was founded as part of a six-year long "movement" where students agitated for restrictions on *bahiragota*, or outsiders. For 10 points each:

[10] Name this Indian state. In the early 19th century, Robert Bruce started this state's tea growing industry.

ANSWER: Assam

[10] IIT Guwahati was established by a prime minister from this family. India was led during a repressive period known as the Emergency by another prime minister from this family.

ANSWER: Gandhi [or Nehru; accept Rajiv Gandhi or Indira Gandhi]

[10] IIT Kanpur's computer science department was kickstarted by an economist from this non-Canadian country. An agronomist from this country developed fungus-resistant wheat that was used to start the Green Revolution in India.

ANSWER: United States of America [or America] (The economist is John Kenneth Galbraith. The agronomist is Norman Borlaug.)

<Michael Bentley, History - World - Asian> ~18790~

7. One player of this instrument joined his parents in a vaudeville act under the name "Baby Traps." For 10 points each:

[10] Name this instrument whose "world's greatest player," Buddy Rich, had a hit with the "Hawaiian War Chant." Art Blakey played this instrument with the Jazz Messengers.

ANSWER: drums [or percussion or drum set]

[10] Six minutes of back and forth drum solos feature on a 1955 album titled for Buddy Rich and this other drummer who helped make drum solos cool with his solo on Benny Goodman's "Sing, Sing, Sing" in 1937.

ANSWER: Gene Krupa [or Eugene Bertram Krupa]

[10] Ron Wilson recorded a sped-up marching band part for his drum solo on "Wipe Out," a song in a rock genre named for this activity. A Beach Boys song describes doing this activity around the USA.

ANSWER: surfing [accept surf rock]

<Michael Bentley, Fine Arts - Jazz> ~18735~



8. A 1928 editorial in the *Sunday Express* declared, "I would rather give a healthy boy or a healthy girl a phial of prussic acid than" a book by this author. For 10 points each:

[10] Name this author who wrote about the upper-class Stephen Gordon in her pioneering lesbian novel *The Well of Loneliness*.

ANSWER: Radclyffe **Hall** [or Marguerite Antonia Radclyffe **Hall**]

[10] This woman was prepared to give testimony defending the artistic merit of *The Well of Loneliness* despite privately describing the book as "dull." She wrote *To the Lighthouse*.

ANSWER: Virginia **Woolf** [or Adeline Virginia **Woolf**; or Adeline Virginia **Stephen**]

[10] This Woolf novel's use of fantasy largely helped it escape censorship despite the homosexual themes within it. This novel's title character falls for Sasha during the Great Frost of 1608.

ANSWER: **Orlando**: *A Biography*

<Michael Bentley, Literature - British - Long Fiction> ~18104~

9. This element is used to produce "windows" for x-rays due to being relatively transparent towards x-rays. For 10 points each:

[10] Name this element, the heavier of two elements which fuse to form the Hoyle state.

ANSWER: **beryllium** [or **Be**]

[10] Enrico Fermi used a bulb filled with beryllium and radon as a source for these particles, which like x-rays, can be used for diffraction experiments. Unlike x-rays, these particles do not interact with electron clouds and instead interact with atomic nuclei.

ANSWER: **neutrons**

[10] Beryllium is found in this gemstone, a variety of beryl whose chromium impurities make it greener than aquamarine.

ANSWER: **emerald**

<Victor Prieto, Science - Chemistry> ~19182~

10. Answer the following about philosophical responses to the difficulty of getting out of bed, for 10 points each.

[10] This Stoic Roman emperor advised forcing yourself out of bed by saying "I have to go to work—as a human being" in his book of *Meditations*.

ANSWER: Marcus **Aurelius** [prompt on **Marcus**]

[10] Eric Weiner's pop philosophy book *The Socrates Express* introduces the "Great Bed Question" with this essay by Albert Camus, which concludes that "we must imagine" its title man "happy."

ANSWER: "The **Myth of Sisyphus**" [or *Le Mythe de Sisyphe*]

[10] You won't need to get out of bed if the sun doesn't rise tomorrow, a possibility that is the subject of this thinker's "sunrise problem." This 18th-century thinker wrote of a "demon" that knows the location of every particle in the universe.

ANSWER: Pierre-Simon **Laplace**

<Jordan Brownstein, RMP - Philosophy> ~19131~

11. During this American city's "open era", Sam Maceo set up a lucrative illegal gambling enterprise. For 10 points each:

[10] Name this city, which was sometimes called a "free state" in the early 1900s. The plethora of Army tents due to a disaster in this city led observers to call it the "White City on the Beach."

ANSWER: Galveston, Texas

[10] The deadliest natural disaster in American history occurred when one of these events struck Galveston. Puerto Rico was devastated by one of these natural disasters named Maria in 2017.

ANSWER: hurricanes [or tropical depression; or tropical storm; prompt on storms or floods]

[10] One of this woman's last jobs as president of the American Red Cross was leading relief efforts following the hurricane. She had earlier established the Office of Missing Soldiers.

ANSWER: Clara Barton [or Clarissa Harlowe Barton]

<Hari Parameswaran, History - American - 1865-1945> ~18973~

12. This author wrote "The Town is taken by its rats" in his poem about the New York Draft Riots titled "The House-top." For 10 points each:

[10] Identify this poet whose other Civil War poems include one titled "Donelson." His later epic poem *Clarel* was written following the death of numerous family members.

ANSWER: Herman Melville

[10] Melville's poem "The Portent" describes how this man's body was "hanging from the beam, / slowly swaying." A marching song titled for this man got new lyrics written by Julia Ward Howe.

ANSWER: John Brown (Howe wrote "The Battle Hymn of the Republic" from "John Brown's Body")

[10] Melville paid to publish his own poetry collection titled for John Marr and other people with this job. Ishmael signs up for this type of job at the beginning of *Moby-Dick*.

ANSWER: sailors [accept any answers about working on a ship or at sea or on a whaleboat; accept whaler]

<Michael Bentley, Literature - American> ~19194~

13. Philip Guston took up painting after seeing this artist's *The Soothsayer's Recompense*. For 10 points each:

[10] Name this co-founder of Metaphysical Painting who painted *Mystery and Melancholy of a Street*.

ANSWER: Giorgio de Chirico [or Giuseppe Maria Alberto Giorgio de Chirico]

[10] One of these drawings appears in the center of de Chirico's *Double Dream of Spring*. This term technically refers to reproductions of architectural or engineering drawings, but is colloquially used for any type of plan.

ANSWER: blueprints [or whiteprints; prompt on floor plan]

[10] This classical sculpture appears in at least five of de Chirico's paintings, including next to a gigantic glove in *The Song of Love*. Giovanni Angelo Montorsoli restored the right arm of this paradigmatic example of *contrapposto* sculpture.

ANSWER: Apollo Belvedere [or Belvedere Apollo; or Pythian Apollo; or Apollo of the Belvedere; prompt on Apollo]

<Michael Bentley, Fine Arts - Painting - European> ~19127~

14. Breaking an object in two was a common way to keep track of legal obligations in the pre-modern world. For 10 points each:

[10] The Greeks kept track of contracts with *symbolons*, made from these objects. Broken examples of these objects known as *ostraka* were used in ostracism votes.

ANSWER: broken **pottery** [accept **vases** or **ceramics** or **pots**]

[10] The broken objects were known as *fu* in this modern-day country. Other important archaeological objects from this country include oracle bones, which date from its Shang era.

ANSWER: **China** [or People's Republic of **China**; or **PRC**]

[10] In England, old tally sticks were regularly destroyed by the holder of this office. The holder of this office traditionally brings a red Despatch Box to Parliament to read a speech on a Wednesday in March.

ANSWER: Chancellor of the **Exchequer** [prompt on **chancellor**; prompt on Second Lord of the **Treasury**] (the day being referred to is Budget Day)

<Michael Bentley, History - Cross, Historiography, and Miscellaneous> ~18753~

15. An author whose time in this profession inspired his story *Peasants* claimed that this profession was his "lawful wife" while "literature was [his] mistress." For 10 points each:

[10] Name this non-literary profession of an author who included a member of this profession called Astrov in the play *Uncle Vanya*.

ANSWER: medical **doctor** [or **medicine** or **physician**]

[10] This medically-trained Russian author of *Uncle Vanya* included the physician Yevgeny Dorn in his play *The Seagull*.

ANSWER: Anton Pavlovich **Chekhov**

[10] Chekhov also mined his medical experience for this story, in which conversations with Ivan Gromov eventually lead the doctor Andrey Ragin ("RUH-ghin") into a downward mental spiral. Lenin claimed that reading this story "made him a revolutionary."

ANSWER: "**Ward No. 6**" [or "**Palata No. 6**" or "**Palata nomer shest**"]

<Joseph Krol, Literature - European - Drama> ~18271~

16. Giuseppe Verdi composed one of these pieces to honor the recently deceased author Alessandro Manzoni. For 10 points each:

[10] Name these choral pieces that set parts of the traditional Catholic liturgy, such as the *Kyrie eleison*.

Wolfgang Amadeus Mozart died before he could finish his D minor piece in this genre.

ANSWER: **requiem** mass [or **mass for the dead**; or **missa pro defunctis**; prompt on **mass**]

[10] This late Romantic French composer ended his Requiem with a setting of "In paradisum." He also composed a Pavane in F-sharp minor.

ANSWER: Gabriel **Fauré**

[10] The sixth section of Verdi's Requiem sets this Latin text to three flutes. György Ligeti's setting of this text was used as the monolith theme in *2001: A Space Odyssey*, and a Clint Mansell piece named for it was featured in the score for *Requiem for a Dream*.

ANSWER: **Lux Aeterna**

<Jonathan Magin, Fine Arts - Music - Romantic> ~18969~

17. Examples of these shapes named for Geronio and Booth are described by quartics. For 10 points each:  
[10] Name these shapes which resemble a two-petal rose curve. Bernoulli names an example of these shapes which is the limiting case of the Cassini oval.

ANSWER: **lemniscates** [accept **lemniscate** of Booth, of Bernoulli, of Geronio, or of Huygens]

[10] Camille-Christophe Geronio co-founded a math journal with Olry Terquem, who provided the name and modern definition of this shape. The circumcircle of a particular polygon has twice the radius of this shape, which intersects each side up to twice.

ANSWER: **nine-point circle** [accept **six-point circle**; prompt on Terquem's **circle**]

[10] The nine-point circle is defined relative to the sides, altitudes, and orthocenter of one of these shapes. Centers that can be defined for these shapes include the centroid and the circumcenter.

ANSWER: **triangles** [accept **triangle** centers]

<Kevin Wang, Science - Math> ~18883~

18. Dong Yong, who sold himself into servitude to pay for a funeral, is one of the 24 "exemplars" of this quality praised in a Yuan dynasty book. For 10 points each:

[10] Name this virtue of respectful treatment of one's parents and ancestors.

ANSWER: **filial piety** [or **xiào shùn**]

[10] Filial piety was advocated as an aspect of *li*, or proper conduct, by this ancient sage, whose teachings form a popular philosophical and religious tradition in China.

ANSWER: **Confucius** [or **Kongzi**; or Master **Kong**]

[10] Ancestors can be venerated by the burning of these objects, which often take the form of currency bearing the image of the Jade Emperor.

ANSWER: **hell money** [or **spirit money**, **ghost money**, **joss paper**, **jīn zhǐ**, **yīnsī zhǐ**, **zhǐqián** and **míng bì**; accept equivalents like banknotes in place of "money"]

<Michael Bentley, RMP - East Asian Religion> ~18737~

19. As of 2019, there were over 4,000 offshore examples of these things in operation in Europe, but just five in the US. For 10 points each:

[10] Identify these power generation devices that commonly have three blades.

ANSWER: offshore **wind turbines** [prompt on **turbines**; prompt on offshore **wind farms** or **wind parks** or **wind power stations**; prompt on **wind mills** because that term is sometimes colloquially used to refer to turbines]

[10] The first offshore wind turbines in the US were built off the coast of this state. A 2020 referendum dropped "Plantations" from the official name of this East Coast state, once governed by Gina Raimondo.

ANSWER: **Rhode Island** [accept State of **Rhode Island** and Providence Plantations]

[10] One reason the US has so few offshore wind turbines is that the ships constructing them must comply with this 1920 law. This protectionist law is sometimes waived following national disasters and is a major reason that Vancouver is a cruise shipping hub.

ANSWER: **Jones Act** [or **Merchant Marine Act** of 1920]

<Michael Bentley, Current Events - U.S.> ~17772~

20. This tissue is now understood to serve as an endocrine organ that releases namesake cytokines. For 10 points each:

[10] Name this tissue which, when hypertrophic, encourages release of inflammatory cytokines like TNF alpha and resistin. A form of this tissue contains UCP, which dissipates the mitochondrial proton gradient.

ANSWER: **fat** [or white **adipose** tissue; accept brown **adipose** tissue]

[10] This hormone is almost exclusively expressed in adipose tissue. It opposes ghrelin and inhibits hunger.

ANSWER: **leptin**

[10] Excessive fat intake can cause this organ to accumulate fat. Alcoholics often develop cirrhosis of this organ.

ANSWER: **liver**

<Andrew Wang, Science - Biology> ~19317~

21. This man's best-known invention increased the demand for child labor due the "boys" that were put in charge of caring for his safety lamp. For 10 points each:

[10] Name this inventor who also coined the term "laughing gas."

ANSWER: Sir Humphry **Davy**

[10] The Davy lamp was mostly used in this industry. In the US, people in this industry were helped by the Black Lung Benefits Act of 1972.

ANSWER: coal **mining**

[10] A rival safety lamp was developed by this man and presented to the Royal Society a month before Davy's. This inventor is best-known for creating a vehicle known as the *Rocket*.

ANSWER: George **Stephenson**

<Michael Bentley, History - European - 1500-1900> ~18176~