

Boilermaker Spring Novice

Written by: David Bass, Sarah Benner, Veer Bhatt, Daniel Cronin, Ben Dahl, Jim Fan, Ashwin Ganesh, Seth Honnigford, Drew Jensen, Kevin Jiang, Lalit Maharjan, Stan Melkumian, Quynh Phung, Alex Pijanowski, Patrick Quion, Ryan Rosenberg, Matt Schiavone, Payton Schubel, and Vishnu Srinivas

Packet 7: I hear the train a-comin', it's rollin' 'round the bend

TOSSUPS

1. **During this dynasty, Le Loi pushed out Chinese rule in Vietnam in the Lam Son Uprising. Emperor Yingzong of this dynasty was captured by Esen Taishi in the Tumu Crisis. The peasant Li Zicheng led a rebellion against this dynasty, which ended after its last ruler died in Jingshan Park. This dynasty was founded by the Hongwu Emperor, a leader of the (*) Red Turbans. This dynasty built the Forbidden City under the Yongle (“young-luh”) Emperor and sponsored the voyages of Zheng He. An influx of silver from the New World traded for porcelain from this dynasty crippled its economy. For 10 points, name this Chinese dynasty preceded by the Yuan and succeeded by the Qing.**

ANSWER: Ming Dynasty

<QP, History - World History> [Ed. LM]

2. **This pope described holiness as “an impulse to evangelize and to leave a mark in this world” in the encyclical *Gaudete et exsultate*. (“gao-day-tay et ex-sul-tah-tay”). Prior to becoming pope, this person was accused of allowing the kidnappings of the priests Orlando Yorio and Franz Jalics. (“ya-leech”). This pope established the World Day of the Poor and chose to live in the Domus Sanctae Marthae. This pope canonized his predecessors (*) John XXII and John Paul II. This man became pope after his predecessor became the first pope to resign from the position in nearly 600 years. This Argentinian Jesuit said “who am I to judge?” about homosexuality and wrote the encyclical *Fratelli tutti* to address the global response to the COVID-19 pandemic. For 10 points, who is the current pope?**

ANSWER: Pope Francis [or Jorge Mario Bergoglio]

<QP, Beliefs - Practices> [Ed. QP]

3. **Zeta function regularization can be applied to define a quantity relevant to certain mathematical objects with this property. An operator that shares its name with this property equals the trace of the Jacobian matrix of a given vector field. Replacing certain terms with their successors and then combining them to achieve a contradiction is used in a proof that the (*) harmonic series has this property. A geometric series has this property if its common ratio has magnitude greater than or equal to one. The sequence of partial sums of a series with this property does not have a finite limit. For 10 points, name this property of a series that does not converge.**

ANSWER: divergence [accept diverges, prompt on div, prompt on answers describing the opposite of convergence, prompt on answers describing a series whose limit is either infinite or undefined]

<LM, Science - Math> [Ed. DB]

4. Kinsey Millhone investigates the death of a man with this job named Laurence Fife in the first novel in Sue Grafton's "Alphabet" series. A man with this job in Clanton, Mississippi has his house burned down by the KKK; that man is Jake Brigance. ("brig-ents"). A character with this job owns a pamphlet called "The Black Plague" and disagrees with the ruling of *Brown vs. Board of Education* in the (*) first draft of a novel where that man accuses Mayella Ewell of soliciting Tom Robinson. The daughter of a man with this job is attacked while walking home dressed as a ham, but is saved by Boo Radley. The main characters of books by John Grisham tend to have, for 10 points, what profession of Atticus Finch in *To Kill a Mockingbird*?

ANSWER: lawyers [or attorneys-at-law; accept divorce lawyer or divorce attorney; do not accept or prompt on "judge" or "jury"]

<SB, Literature - Other> [Ed. SB]

5. Francis Crick co-proposed that a form of "reverse learning" occurs during this action. This action's "slow-wave" stage is characterized by periods of 20 to 50 percent and over 50 percent delta wave activity. A. Roger Ekrich suggested a **biphasic** ("bi-phase-ic") form of this action was prevalent before the Industrial Revolution where it was interrupted with a one hour break. (*) Polysomnography monitors factors such as heart rhythm and eye movement during this activity. The onset of this action can be disrupted when light sensors in the eye are exposed to blue light from screens. The practice of *siesta* in warmer climates is characterized by taking this action midday. For 10 points, name this action during which humans may dream.

ANSWER: sleep [accept equivalents like napping, prompt on answers like dreaming with "during what action does one dream?"]

<LM, Social Science - Other> [Ed. SB]

6. This piece opens with four cellos and two violins playing the hymn "O Lord, Save Thy People." A brass fanfare alternating with chaotically struck tubular bells gives way to descending strings that lead into the final section of this piece. This piece debuted in 1882 at the Cathedral of Christ the Savior, a building dedicated to the event this piece commemorates. The Battle of (*) Borodino is represented in this piece by the increasing prominence of "La Marseillaise." ("mar-say-yez"). The melody of "God Save the Tsar!" appears in the grand finale of this piece, which calls for several live cannon shots. For 10 points, identify this overture by Tchaikovsky, named for the year Napoleon retreated from Russia.

ANSWER: 1812 Overture [or The Year 1812 Solemn Overture, Op. 49]

<LM, Fine Arts - Classical Music> [Ed. QP + AP]

7. In one film, this actor plays a former catcher who ruptured a nerve in their elbow and could no longer throw. After this actor lost 60 pounds for a movie role, his character in a sitcom attributed the weight loss to giving up beer. This actor played a former Green Beret who is brought to the year 2048 to fight alien White Spikes in the film *The (*) Tomorrow War*. Illumination Studios was criticized for casting this actor instead of Charles Martinet to star in the upcoming *Mario* movie. A superhero played by this actor leads a group of interstellar outlaws, including his love interest, Gamora. For 10 points, name this actor who stars in the *Jurassic World* and *Guardians of the Galaxy* film series.

ANSWER: Chris Pratt [or Christopher Michael Pratt]

<PQ, Pop Culture - Film> [Ed. SB]

8. After this state's governor coached a high school girl's basketball game in February 2020, he drew criticism for calling the opposing team "a bunch of thugs." Lawyer Robert Bilott represented over 70,000 plaintiffs in this state in a suit against DuPont over the presence of PFAS in the water. In late 2021, protestors from this state traveled to Washington, DC to kayak around their Senator's yacht. (*) Don Blankenship was convicted of violating safety standards after the 2010 Upper Big Branch explosion in this state. Along with Kyrsten Sinema of Arizona, a Senator from this state has been the Democrats' major internal roadblock to passing Biden's Build Back Better Plan. For 10 points, name this Appalachian coal-mining state, home to Joe Manchin.

ANSWER: West Virginia

<PQ, The World - Current Events> [ed. KJ]

9. A sustainability-minded firm based in this city with the motto "never demolish" was awarded the 2021 Pritzker Prize. One newspaper declared "[this city] has its own monster" in response to the construction of a new cultural center in this city; that building was described by its architects as "bowellist" for its color-coded utilities, exposed structure, and external tubular (*) stairways. A controversial structure built in this city for its 1889 World's Fair was derided as a "gigantic black smokestack" by a committee of three hundred artists; that structure contains an apartment at the top intended for use by its namesake engineer. The Center Pompidou is in, for 10 points, what city whose modernist architecture also includes the Eiffel Tower?

ANSWER: Paris

<PQ, Fine Arts - Other Visual> [ed. DC]

10. An analogue of graphene but with this element instead of carbon has a tunable band gap based on its thickness. Dissolving this element in molten lead and then crystallizing it out slowly forms a violet type of this element named for Hittorf. Exposure to the vapor of one form of this element can cause jaw necrosis. One form of this element is commonly used in smoke grenades because it forms a (*) pentoxide when set on fire. That form, existing as a tetrahedral arrangement of atoms, is banned in international warfare because it spontaneously ignites in air and is toxic. For 10 points, identify this element whose aforementioned white allotrope contrasts with its red allotrope found in matches and which has atomic symbol P.

ANSWER: phosphorus [accept P before mention]

<MS, Science - Chemistry> [Ed. JF]

11. This poet accused the title organization of attracting "the dictatorship of the flies" in their poem "The United Fruit Company." This poet called for their ancestors to "speak through my words and my blood" in a poem written upon seeing an ancient city. A poem at the end of a collection by this author reminisces that "love is so short, forgetting is so long" before giving way to a poem that repeats the phrases "it is the (*) hour of departure, oh abandoned one" and "in you everything sank!" In the 20th of a collection of 21 poems, this author wrote that "tonight, I can write the saddest lines." For 10 points, name this Chilean poet of *The Heights of Macchu Picchu* and *Twenty Love Poems and a Song of Despair*.

ANSWER: Pablo Neruda [accept Ricardo Eliécer Neftalí Reyes Basoalto]

<SB, Literature - Poetry> [Ed. SB]

12. The "500 days" campaign was enacted by this leader to push economic reform in their country. While this leader was on vacation, the State Committee on the State of Emergency attempted to overthrow them in the August coup. Over two million people protesting this leader's rule over their countries formed a human chain from Vilnius to Riga to Tallin. At a summit in Reykjavik, this non-American leader signed the Intermediate-Range (*) Nuclear Forces Treaty. This leader withdrew their country from a decade-long war in Afghanistan and enacted the policies of *glasnost* and *perestroika*. The fall of the Berlin Wall occurred under, for 10 points, what last president of the Soviet Union?

ANSWER: Mikhail Sergeyevich Gorbachev

<LM, History - European History> [Ed. LM]

HALFTIME

13. The centaur Nessus gave **Deianira** (“*day-uh-neer-uh*”) a tunic containing his blood and a substance from this creature as a gift to her husband, which kills him when he wears it. Hera turns the crab Cancer into a constellation after it is killed during a battle with this creature. Chiron gave up his immortality after he accidentally pierces himself with an arrow dipped in (*) this creature’s highly poisonous blood. Iolaus helped his uncle Heracles slay this creature which resided in the poisonous swamp near Lake Lerna. During that battle with this creature, Heracles repeatedly decapitated it while Iolaus used a firebrand to cauterize the stumps. For 10 points, name this monster that, whenever one of its heads was cut off, would sprout two more.

ANSWER: Lernean **Hydra**

<PQ, Beliefs - Stories> [Ed. LM]

14. A “Citizens’ Commission to Investigate” this organization stole documents from them in 1971, with the perpetrators later confessing in 2014. An assistant director of this organization provided key information to Bob Woodward and Carl Bernstein under a suggestive pseudonym. This organization’s **COINTELPRO** (“*co-intel-pro*”) program spied on numerous (*) civil rights organizations like the Black Panthers. John Douglass pioneered the practice of criminal profiling while at this organization. The ATF and this federal agency conducted a disastrous raid in Waco, Texas that served as motivation for the Oklahoma City Bombing. J. Edgar Hoover was the first and longtime director of, for 10 points, what federal law enforcement agency?

ANSWER: **Federal Bureau of Investigation** [or **FBI**]

<VS, History - American History> [Ed. LM]

15. In one book titled for this status, Abhijit Banerjee and Esther Duflo cite amplified effects of adverse selection and moral hazard as reasons why people with this status lack access to reliable insurance. Although it was criticized for introducing artificial and intensive agricultural practices, the Millenium Villages Project sought to aid people with this status in countries including (*) Kenya and Uganda. In an essay subtitled for “entitlement and deprivation,” Amartya Sen argues that this status intensifies famines. The World Bank uses household consumption and access to education and utilities as indicators for whether people are affected by this status. For 10 points, name this status whose “line” in the US is defined as three times the subsistence food budget.

ANSWER: **poverty** [or being **poor**]

<PQ, Social Sciences - Economics> [Ed. KJ]

16. A boiled form of this dish is the Acadian Poutine Rápée, which is eaten with fruit, sugar, or maple syrup. A steamed version of this food popular in Tibet and Nepal is called momo. Hyacinth of Poland is the patron saint of one type of this food, which is produced in America by the brand Mrs. T’s. One type of this food filled with gelatinous soup comes from Shanghai and is called (*) **xiaolongbao** (“*shyao-long-baow*”). It’s not pasta, but **gnocchi** (“*nyo-kee*”) is a type of this dish. **Jiaozi** (“*jow-zee*”) differs from a form of this food often served in soups, wontons, by the shape of the wrapper used. For 10 points, pierogies and potstickers are versions of what food made of a filling wrapped by a starchy dough?

ANSWER: **dumplings** [accept **momo**, accept **pierogi**, accept **baozi** before “xiaolongbao,” accept **jiaozi**, **gyoza**, or **potstickers** before each is mentioned]

<VS, The World - Geography> [Ed. QP]

17. **The trapezoid body precedes the superior olivary nucleus in a pathway found in this structure. Linear areas of bleeding in this structure characterize Duret hemorrhages. Climbing fibers *originate* in this structure and innervate Purkinje cells in another structure. Parkinson’s disease is characterized by the loss of dopaminergic neurons in this structure’s (*) substantia nigra. One part of this structure controls heart rate and breathing. Cerebellar peduncles connect the cerebellum to this structure which connects with ten cranial nerves and is a conveyor of important pathways such as that controlling motor function. For 10 points, name this structure comprised of the medulla, pons, and midbrain, which connects the cerebrum to the spinal cord.**

ANSWER: human brain stem [prompt on brain; anti-prompt on medulla oblongata, pons, or midbrain before mentioned with “What larger structure contains the [answer given]?”]

<DB, Science - Biology> [Ed. JF]

18. **In this novel, a mother tells a story about a parrot tricking a greedy tortoise into jumping out of the sky and breaking his shell. Villagers in this novel are astounded when a church built in the Evil Forest is not destroyed after 28 days. As this novel’s protagonist honors a funeral, their gun explodes, killing the dead man’s 16-year-old son and forcing the protagonist into 7 years of (*) exile. Because of a fear of appearing weak, this novel’s protagonist kills his adopted son, Ikemefuna. (“ee-kay-may-foo-na”). This novel’s protagonist hangs himself upon realizing that the village of Umuofia (“oo-mwo-fya”) refuses to go to war against Christian missionaries. For 10 points, name this novel by Chinua Achebe (“chin-wa a-chay-bay”) about the Nigerian wrestler Okonkwo.**

ANSWER: Things Fall Apart

<SB, Literature - Novels> [Ed. SB]

19. **After part of this building collapsed, Hendrik van den Broeck and Matteo da Lecce replaced Ghirlandaio’s *Resurrection of Christ*. Gold and silver fictive tapestries in this building were replaced with ones displaying the Raphael Cartoons. Frank Lynn Meshberger speculated that a billowing red cloth in a work in this building actually depicts the human brain. The most famous painting in this building replaced a pattern of (*) stars on a blue background. This building houses a massive fresco depicting a sky where the clouds are crowded with people, called *The Last Judgment*. In a painting in this building, God and Adam reach out towards each other, their fingers nearly touching. For 10 points, name this building whose ceiling was painted by Michelangelo.**

ANSWER: the Sistine Chapel [accept Cappella Sistina]

<SB, Fine Arts - Painting and Sculpture> [Ed. SB]

20. **In a play by this author, the maid who milks the family mammoth cannot get the inventor of the wheel to accept her two weeks’ notice. In that play by this author, George Antrobus tries to keep a fire going in face of an impending ice age. The song “Blessed Be the Tie that Binds” is directed by the drunken choirmaster Simon Stimson in a play by this author. At the beginning of each act in a play by this author, the friendly milkman (*) Howie Newsome appears. The Stage Manager allows a character to relive her twelfth birthday before saying goodbye to Grover’s Corner in a play by this author. For 10 points, name this playwright of *The Skin of Our Teeth* who created George Gibbs and Emily Webb in *Our Town*.**

ANSWER: Thornton Wilder [or Thornton Niven Wilder]

<PQ, Literature - Drama> [Ed. PS]

21. Members of this school of thought included **Hipparchia** (“hip-ar-kee-ah”) of Maroneia and her husband **Crates** (“kray-tees”) of Thebes. A central idea in this school of thought is parrhesia, or shameless speech. A philosopher in this school of thought was known as the “faithful hound” of Antisthenes, who was the forerunner of this school of thought. That member of this school of thought plucked a (*) chicken to show an example of a non-human “featherless biped,” asked Alexander the Great to stop blocking the sun, wandered the streets of Athens with a lantern looking for an honest man, and lived in a jar. For 10 points, name this school of thought whose name comes from the Greek for “dog-like,” which was practiced by Diogenes and now refers to a general distrust or lack of faith in others.

ANSWER: cynicism [accept word forms like cynics or cynical]

<QP, Social Sciences - Philosophy> [Ed. QP]

22. A series of ads for this company depict a tense friendship between characters played by John Hodgman and Justin Long. Anya Major was cast in an ad for this company directed by Ridley Scott after demonstrating her ability to throw a sledgehammer reliably. In an ad for this company, black-and-white footage of figures like Mahatma Gandhi and Jim Henson accompanies a voiceover that begins “here’s to the crazy ones.” This company’s (*) “1984” ad was only broadcast once. A series of ads for this company featured dancing silhouettes with bright-white headphones in their ears. “Think different” was an old slogan of, for 10 points, what technology company whose ads contrasted Macs with PCs?

ANSWER: Apple Inc. [accept Apple Computer Company or Apple Computer, Inc.]

<VS, Pop Culture - Other> [Ed. PQ]

23. Full-wave bridge rectifiers convert AC to DC using four of these devices arranged in a diamond shape. On a circuit diagram, these devices are symbolized by a triangle whose apex touches a line parallel to the base. The **Zener** (“zee-ner”) type of these devices features a very low breakdown voltage, allowing current to flow backwards. A simple type of these devices consists of a single p-n junction, while a special type of these devices uses (*) organic compounds as electroluminescent layers to produce better-quality displays compared to liquid crystals. These devices ideally have zero resistance in one direction, and infinite resistance in the other. For 10 points, name these devices that include a common light-emitting variety.

ANSWER: diodes [accept light-emitting diode or LED, accept organic light-emitting diode or OLED, accept Zener diode]

<QP, Science - Physics> [Ed. LM]

24. During this war, the Alaska Highway was constructed through the Yukon territory to protect against a potential invasion. An invasion of Winnipeg was staged for “If Day” during this war to promote the purchase of Victory Bonds. Canada’s longest serving prime minister retired shortly after this war. Canadian soldiers made up the bulk of the Dieppe Raid in this war, during which Ian (*) Fleming may have overseen a secret mission to retrieve a famous cypher machine. British Columbia was home to internment camps Japanese-Canadians were sent to during this war. For 10 points, name this war where Canada supported the Allied powers against the Axis powers.

ANSWER: World War 2 [accept answers clearly referring to the Second World War]

<LM, History - Other History> [ed. LM]

BONUSES

1. For 10 points each, answer some questions about grabs in fighting games:

[10e] In the *Super Smash Bros.* series, this tie-wearing ape can carry grabbed opponents around on his shoulder.

ANSWER: Donkey Kong [or **DK**; do not accept or prompt on “Diddy Kong”]

[10m] Many fighting games feature a “grappler” archetype, whose moveset contains at least one of these special grabs. These grabs usually require full-circle inputs and deal heavy damage.

ANSWER: command grabs

[10h] The original grappler is this enormous *Street Fighter* character, whose moveset includes the Siberian Express and the Borscht Dynamite. This Russian wrestler calls himself the Red Cyclone.

ANSWER: Zangief

<AG, Pop Culture - Games> [Ed. SB]

2. For 10 points each, answer the following about the growing genre of cli-fi, or climate fiction:

[10e] Critics have pointed to this Frank Herbert novel as a key inspiration for the genre. This sci-fi novel describes the ecology of the planet Arrakis, where Fremmen live alongside giant sandworms.

ANSWER: Dune

[10m] Richard Powers won a Pulitzer Prize for *The Overstory*, whose characters are brought together by their unique experiences with these things. A novel by Betty Smith is titled for one of these things “in Brooklyn.”

ANSWER: trees (accept *A Tree Grows In Brooklyn*)

[10h] The Terasem Movement is a real-life “geo-ethics” organization based on the Earthseed religion from this author’s unfinished *Parable* series. This sci-fi author also wrote *Kindred* and the *Patternist* series.

ANSWER: Octavia Butler [or Octavia Estelle **Butler**]

<PQ, Literature - Novels> [Ed. SB]

3. In 2021, this artist posted a video to Instagram publicizing their *Great British Spraycation* series. For 10 points each:

[10e] Name this pseudonymous English graffiti artist. In one of their works, a girl releases a heart-shaped balloon.

ANSWER: Banksy

[10m] After selling at a 2018 auction, a framed version of Banksy’s *Girl with Balloon* painting immediately underwent this process, after which it was renamed *Love is in the Bin*. A description is acceptable.

ANSWER: shredding itself [or being **shredded**; accept more general words like being **destroyed** or **ruined**]

[10h] Banksy sliced up someone else’s artwork by cutting out one of these title figures from a Jean-François Millet painting and depicting her sitting on the frame, smoking a cigarette. In that painting named for these figures, three women scavenge for leftover grain.

ANSWER: gleaners

<SB, Fine Arts - Painting and Sculpture> [ed. DC]

4. Florence Bayard Hiles, the chairman of the Delaware Branch of the National Woman's Party, was arrested in front of this building and sentenced to time in the Occoquan Workhouse. For 10 points each:

[10h] Name this building the Silent Sentinels of the National Woman's Party picketed daily from 1917 to 1919 with posters asking questions like "how long must women wait for liberty?"

ANSWER: White House

[10e] The National Woman's Party was founded to aggressively push for this right for women, which was granted by the 19th amendment in 1920.

ANSWER: suffrage [accept any answers describing the right to **vote**]

[10m] The National Woman's Party also began the campaign for this proposed constitutional amendment to grant general equality between the sexes under law, which failed to be ratified in the 1970s.

ANSWER: Equal Rights Amendment [or **ERA]**

<LM, History - American History> [Ed. LM]

5. Genetics is complicated, so scientists often use simpler organisms as models to study. For 10 points each:

[10m] This model organism was the first multicellular organism to have its genome completely sequenced. This tiny transparent nematode is considered one of the simplest multicellular organisms.

ANSWER: Caenorhabditis elegans

[10e] Studies on *Drosophila*, another model organism, found that a mutation that turned their eyes white was linked to this trait. In humans, this reproductive trait is linked to X and Y chromosomes.

ANSWER: sex [reject "gender"]

[10h] Studies of the model organism *Arabidopsis* inspired this model of flower development, where the overlap between three different genes creates four whorls that determine which organs of a flower are present.

ANSWER: ABC model of flower development

<BD, Science - Biology> [Ed. SB]

6. Binaural recording is characteristic of videos that trigger this response, which is largely similar to frisson. For 10 Points Each:

[10e] Name this often-acronymed, somewhat mysterious biological response that is often stimulated by whispered talking.

ANSWER: Autonomous Sensory Meridian Response

[10h] In the first brain scan study on ASMR, researchers could not support the theory that ASMR activates this system of neurons needed for observational learning. These specialized neurons fire when mimicking actions like grooming.

ANSWER: mirror neuron (system)

[10m] Other researchers theorize that ASMR may be related to this condition since it creates touch sensations from visio-auditory stimuli. This condition is most prominent in its grapheme-color type.

ANSWER: synesthesia

<PQ, Social Sciences- Psychology> [ed. RR]

7. The conservation of this quantity is demonstrated when a figure skater spins faster upon pulling in their arms and legs. For 10 points each:

[10e] Name this value equal to moment of inertia times angular velocity. It is the rotational analogue of a linear quantity symbolized with a lowercase p .

ANSWER: angular momentum [or **rotational momentum**; accept **moment of momentum**; reject “momentum” or “linear momentum”]

[10m] The conservation of angular momentum explains the second of this set of three laws. That one of these laws describes a line sweeping out equal area in equal time.

ANSWER: Kepler's laws of planetary motion

[10h] The conservation of angular momentum results from the rotational invariance of the Lagrangian according to this physicist's namesake theorem, which relates conservation laws to symmetries of an action.

ANSWER: (Amalie) Emmy Noether

<LM, Science - Physics> [Ed. SB]

8. For 10 points each, answer some questions about magical objects in Arthurian legend.

[10m] King Arthur owned a mantle that granted him this ability. In Greek mythology, Hades owns a cap that grants him this ability.

ANSWER: invisibility [accept any answer clearly referring to **being unseen**]

[10e] Mordred killed King Arthur using one of these objects named Clarent. Another one of these objects lodged in a stone was only able to be pulled free by the rightful king of Britain.

ANSWER: sword [prompt on blade, reject answers like “knife” or “dagger”]

[10h] Rhongomyniad, an object of this type, was given to King Arthur by his father Uther Pendragon. In Japanese mythology, Izanagi and Izanami use one of these objects to churn the ocean and create the islands of Japan.

ANSWER: spear [accept naginata]

<SH, Beliefs - Stories> [Ed. LM + MS]

9. A certain thinker's namesake “guillotine” described their position on this problem, which was introduced in *A Treatise of Human Nature*. For 10 points each:

[10h] Name this problem that arises when trying to derive statements about how things should be from statements about how things are.

ANSWER: is-ought problem [or **ought-is** problem, accept descriptions of “**how to derive ‘ought’ from ‘is’**”, accept **but do not otherwise reveal Hume's law** or **Hume's guillotine**, prompt on fact-value distinction]

[10m] The is-ought problem was described by this Scottish empiricist who wrote *An Enquiry Concerning Human Understanding*.

ANSWER: David Hume

[10e] Hume also argued that ideas can arise independent of experience using an example of a “missing shade” of this color. Nelson Goodman combined this color with green to come up with grue and bleen.

ANSWER: blue

<QP, Social Sciences - Philosophy> [Ed. QP]

10. Activists protested Alex Oates' 2019 play *All in a Row* for depicting an autistic child using this type of performance. For 10 points each:

[10h] Name this type of performance. The original adaptation of Chikamatsu Monzaemon's play *The Love Suicides at Sonezaki* is this type of performance, which is central to Japanese *bunraku* theatre.

ANSWER: puppetry [or **puppets**; accept **marionettes**, **dolls**, or specific kinds of **puppets**]

[10m] It's not *Noh*, but Chikamatsu focused on *bunraku* after giving up on writing this 17th century style of Japanese theater known for its distinct white makeup with red patterns on the face known as *kumadori*.

ANSWER: kabuki theater

[10e] *Wayang* shadow puppetry, where puppets are lit from behind a translucent screen, is a different form of puppet theater originating from this country's island of Java.

ANSWER: Indonesia

<SB, Literature - Drama> [Ed. PS]

11. For 10 points each, answer the following about recipients of the Grass Crown, the highest and rarest military honor in ancient Rome.

[10e] Marcus Flamma and Scipio Amelianus were both given the Grass Crown for their service in the first and third of these conflicts respectively. Amelianus' father, Scipio Africanus, defeated Hannibal in the second of these conflicts.

ANSWER: Punic wars

[10m] This man received the Grass Crown following a battle at Nola during the Social War. He was a bitter rival of Gaius Marius.

ANSWER: Lucius Cornelius Sulla Felix

[10h] Quintus Sertorius was awarded the Grass Crown for putting down a rebellion in this region, where he would later launch his own rebellion. Emperor Theodosius the Great was born in this region.

ANSWER: Hispania [accept **Spain**, **Portugal**, or anything referring to the **Iberian** peninsula]

<LM, History - Other History> [Ed. LM]

12. This is the common name of a group of oil companies that once controlled 85% of the world's petroleum reserves, a group of historically influential Canadian law firms, and a sub-district of Tottenham. For 10 points each:

[10m] Give this two-word name that also refers to a group of historically women's liberal arts colleges in the Northeastern US, including Vassar and Bryn Mawr. This name is often chosen as a reference to the Pleiades.

ANSWER: Seven Sisters

[10e] The Seven Sisters are also a group of seven Stalinist-style skyscrapers located in this capital of Russia.

ANSWER: Moscow [or **Москва**, or **Moskva**]

[10h] The Seven Sisters are also a group of seven states in Northeastern India, including this one. This state's chief export is a namesake type of black tea.

ANSWER: Assam [accept **Assam** tea]

<QP, The World - Geography> [Ed. QP]

13. Today, this organization is the second largest grouping of countries worldwide behind the United Nations. For 10 points each:

[10m] Name this movement, founded on principles drawn from the 1955 Bandung Conference. Its name refers to the status of its constituent countries during the Cold War as neither pro-American nor pro-Soviet.

ANSWER: Non-Aligned Movement [or NAM]

[10e] The Non-Aligned Movement was founded by a group of this many leaders. The US Department of Defense is headquartered in a building with this many sides.

ANSWER: five

[10h] One of the founding members of the Non-Aligned Movement was this first postcolonial prime minister and president of Ghana.

ANSWER: Kwame Nkrumah

<QP, History - World History> [Ed. LM]

14. This work's section "Lord Melbourne" has sections in free time and measures in "five-eight" and "three-eight" time. For 10 points each:

[10h] Name this concert band staple based on six folk songs from the title place. The third section of this work, "Rufford Park Poachers," was cut from its premiere due to being too difficult for the Milwaukee Symphonic Band.

ANSWER: Lincolnshire Posy

[10m] *Lincolnshire Posy* was written by this Australian avant-garde composer, who wrote his scores entirely in English. His many folk song adaptations include "Country Gardens."

ANSWER: Percy (Aldridge) Grainger [or George (Percy) Grainger]

[10e] Percy Grainger also wrote an adaptation of "Londonderry Air," a folk song from this island that was adapted into the song "Danny Boy." Other folk songs from this island include "Molly Malone" and "Whiskey in the Jar."

ANSWER: Ireland [or Éire, or Airlann, accept Republic of Ireland (Poblacht na hÉireann) or Northern Ireland (Tuaisceart Éireann or Norlin Airlann) because they are both polities on the island]

<SB, Fine Arts - Classical Music> [Ed. QP]

15. A senior designer at this company apologized in June 2020 after expressing anti-Palestinian sentiments in an argument over Instagram direct message. For 10 points each:

[10h] Name this Spanish apparel founded by Amancio Ortega. This company notably gives its designers market signal demand inputs to influence their design choices.

ANSWER: Zara

[10e] Zara's rise is attributed to being a leader of this alliterative business model also used by H&M and UNIQLO. Polyester products are emblematic of this model that relies on shortened life cycles and creating micro-trends.

ANSWER: fast fashion

[10m] The intentionally shortened lifespan of fashion goods is an application of this business practice. This two word term describes the practice of artificially reducing a product's useful life.

ANSWER: planned obsolescence (accept premature obsolescence)

<PQ, The World - Current Events> [ed. KJ]

16. This radio station's hosts read poetry about heaven between songs, including the original poem "Phantom Regret by Jim." For 10 points each:

[10h] Name this radio station hosted by Jim Carrey on frequency 103.5. In a 2022 concept album, this radio station plays music for wandering souls in the space between death and the afterlife.

ANSWER: Dawn FM

[10e] This pop singer included the songs "Take My Breath" and "Sacrifice" on the album *Dawn FM*.

ANSWER: the Weeknd [or Abel Makkonen Tesfaye]

[10m] This European electronic music trio helped write and produce *Dawn FM*, and also featured the Weeknd in their 2021 single "Moth to a Flame." John Martin sang the lyrics for this band's song "Don't You Worry Child."

ANSWER: Swedish House Mafia

<SB, Pop Culture - Music> [Ed. SB]

17. The author of this story hints at an alternative interpretation of this story in which the main character is hallucinating in his hospital bed. For 10 points each:

[10h] Name this story from the collection *Ficciones* in which Juan Dahlmann travels to the title location in order to die an honorable death in a knife fight.

ANSWER: "The South" [or "El Sur"]

[10m] This author of "The South" considered it their best story. This blind Argentinian also wrote "The Garden of Forking Paths."

ANSWER: Jorge Luis Borges [or Jorge Francisco Isidoro Luis Borges Acevedo] ("bore-hess")

[10e] Both Juan Dahlmann and Borges himself worked in one of these locations. In another Borges story, Purifiers burn through one of these places "of Babel" seeking the Crimson Hexagon.

ANSWER: library [accept "The Library of Babel" or "La biblioteca de Babel"]

<BD, Literature - Short Stories/Other> [Ed. SB]

18. One way to measure relatively small values of this quantity is by parallax, which involves observing an object in the night sky six months apart and measuring its shift relative to the cosmic background. For 10 points each:

[10e] Name this quantity, which is measured in parsecs and light-years on an astronomical scale.

ANSWER: distance [or length]

[10m] One way of measuring longer distances is by knowing that the type Ia ("one-A") category of these events always has a consistent peak luminosity.

ANSWER: supernovae [or supernovas; reject "hypernovas"]

[10h] Type Ia supernovae are one type of these objects, whose known luminosity allows their distance to be measured. Another type of these objects, Cepheid variable stars, was first measured by Henrietta Swan Leavitt.

ANSWER: standard candles

<QP, Science - Other Science (Astronomy)> [Ed. MS]

19. For 10 points each, answer the following about the legacy of the late anthropologist Marshall Sahlins.

[10h] Sahlins taught this UChicago anthropologist and author of *Debt: The First 5000 Years*. This man also compiled accounts from people who think their job is meaningless, and coined the term "bullshit jobs".

ANSWER: David Graeber

[10e] Sahlins argued that the "original affluent society" was this type of early human society. Sahlins argued that this primal social order produced bountiful leisure time in between its two namesake methods of acquiring food.

ANSWER: hunter-gatherer [accept word-forms of either]

[10m] Sahlins's book *Islands of History* sparked a wide debate about how native Hawaiians reacted to the death of this person. Hawaiians possibly revered this person as a deity called Lono.

ANSWER: Captain James Cook

<PQ, Social Sciences- Other> [ed. RR]

20. John Coltrane described this jazz composition as “My favorite out of all those that I have recorded.” For 10 points each:

[10h] Name this Coltrane piece, a 14-minute-long jazz interpretation of a Broadway showtune.

ANSWER: “My Favorite Things”

[10e] Coltrane plays the soprano version of this reed instrument on *My Favorite Things*, although he is better known for playing the tenor version of this instrument.

ANSWER: saxophone

[10m] Coltrane was gifted his soprano saxophone by this frequent collaborator. Coltrane played tenor sax in this jazz trumpeter’s band on his album *Kind of Blue*.

ANSWER: Miles Davis [or Miles Dewey Davis III]

<VS, Fine Arts - Other Auditory> [Ed. PQ + QP]

21. This king erected the larger of the two Jelling stones partly in memory of his father King Grom the Old. For 10 points each:

[10h] Name this viking king whose unification of his kingdom led to his name and runestone initials being used for the name and logo of a communication technology.

ANSWER: Harald “Bluetooth” Gormsson [accept either underlined]

[10m] In addition to territory in Norway, Bluetooth united the tribes of what is now this modern-day country into a single kingdom. Alfred the Great defeated a warlord from this country named Guthrum, starting this country’s namesake “law” in Britain.

ANSWER: Denmark [accept Danelaw]

[10e] Bluetooth later converted to this religion and promoted it throughout his kingdom, even commemorating it on his Jelling stone. The Viking age largely ended as much of Scandinavia converted to this major world religion.

ANSWER: Christianity

<LM, History - European History> [Ed. LM]

22. When one of these characters suggests suicide, the other responds saying that “dust I am, and shall to dust return.” For 10 points each:

[10h] Give these two characters who, at the end of a poem, see that “The World was all before them,” and take their “solitary way” out of their home.

ANSWER: Adam and Eve

[10e] Adam and Eve are expelled from Eden at the end of this poet’s magnum opus, *Paradise Lost*. This English poet wrote *Paradise Lost* by dictating it to their daughter after going blind.

ANSWER: John Milton

[10m] *Paradise Lost* is filled with these sections, which hide messages in plain sight. For instance, a famous one of these spells the name SATAN as the serpent convinces Eve to eat the forbidden fruit.

ANSWER: acrostics

<PQ, Literature - Poetry> [Ed. PS + SB]

23. The hexadehydro variant of this reaction can be used to form substituted benzene derivatives. For 10 points each:

[10h] Name this reaction, whose products usually follow the endo rule. A diene and a dienophile react in this [4+2] (“four plus two”) cycloaddition reaction.

ANSWER: Diels–Alder reaction

[10e] The dienophile in the Diels-Alder reaction is usually one of these compounds. These compounds contain a carbon-carbon double bond.

ANSWER: alkenes [reject “alkanes” or “alkynes”]

[10m] The Diels-Alder reaction can be catalyzed by these compounds. Boron trifluoride is an example of this most broad category of certain compounds, which is defined as accepting electron pairs to form a bond.

ANSWER: Lewis acids [prompt on acids]

<MS, Science - Chemistry> [Ed. MS]

24. The Upanishads state that one “who utters [this syllable] with the intention ‘I shall attain Brahman’ does verily attain Brahman.” For 10 points each:

[10e] Give this sound, a sacred syllable used by Hindus, Buddhists, Jains, and Sikhs as a mantra for meditation.

ANSWER: om [or aum, accept onkara, accept omkara, accept pranava]

[10m] The meaning of om is meditated on in the Pranava subfield of this Indian discipline. The Hatha subfield of this discipline involves performing *pranayama* breathing exercises and *asana* positions.

ANSWER: yoga

[10h] Meditation can also be focused through the use of these geometric images similar to yantras. To represent the transitory nature of life, some Buddhists create these complex images with multicolored sand, then destroy them.

ANSWER: mandalas

<QP, Beliefs - Practices> [ed. DC]