

## VAULT (Virginia and Upper Illinois Tournament)

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### Packet 1

"You can't just expect someone to learn from a packet yo"

#### Questions

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1. In the opening stanza of one work, this poet bitterly states "Jehovah gave the world to Coca-Cola Inc." A poem by this author celebrates how an onion can "make us cry without hurting us." This poet described moving "from air to air, as through an empty net" in a collection that chronicles the history of the Western Hemisphere. This poet claimed the title entity "abolished free will" in his poem (\*) "United Fruit Company." A poem by this author of the *Canto General* begins by stating "Tonight I can write the saddest lines" and laments "In you everything sank!" For 10 points, name this Chilean poet of *Twenty Love Poems and a Song of Despair*.

ANSWER: Pablo Neruda [or Ricardo Eliécer Neftalí Reyes Basoalto; accept either underlined portion]

<World Literature - Poetry, Pan>

1. This device's namesake expanded on an invention used for soil testing by Samuel Hunter Christie. For 10 points each:

[10h] Name these diamond shaped difference measurement devices. These circuits use three known resistors and an unknown one.

ANSWER: Wheatstone bridge

[10m] Calculating the unknown strength with Wheatstone bridges requires the use of two inequalities named for this German physicist. This man also names a law that states that the sum of the voltage differences around a closed loop is zero.

ANSWER: Gustav Kirchhoff ("KEER-koff")

[10e] James Maxwell extended Wheatstone bridges to use the "alternating" type of this phenomenon. This quantity measured in amperes ("AM-peerz") represents the rate of flow of charged particles.

ANSWER: current [accept alternating current; prompt on I]

<Physics - mixed/other, Narasimhan>

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2. A folk song written during this event tells of many evictions in the town of Skibbereen. During this event, Lionel Rothschild founded a "relief organization" to provide aid. While making a deal unrelated to this event, Daniel O'Connell empowered the laissez-faire ("LAY-zay FAIR") policies of Charles Trevelyan ("truh-VEH-lee-an"). People attempting to escape this event embarked on (\*) "coffin-ships" to Canada or the United States. Robert Peel's government fell after he used this crisis as an excuse to repeal the Corn Laws. The fungus *phytophthora infestans* ("phi-op-teh-ra in-fes-tans") caused, for 10 points, what event that occurred after yields of a certain crop were decimated on a European island?

ANSWER: Irish Potato Famine [accept Great Irish Famine, Irish Potato Blight, An Gorta Mor; prompt on Great Hunger, Great Famine]

<European History, Narasimhan>

2. Answer the following about American high-speed rail, For 10 points each:

[10m] This American high-speed rail service operates on the northeast corridor between Boston and Washington, DC.

ANSWER: Acela [do not accept or prompt on "Northeast Regional"]

[10h] In 2012, this company began proposing a plan to bring High-Speed intercity routes in states without Amtrak. In 2023, this company began operating a high-speed rail service in Florida, connecting Miami and Orlando.

ANSWER: Brightline

[10e] The first state-funded high speed rail project in the U.S. was authorized by 2008's Proposition 1A in this state, though it has yet to be constructed. The line seeks to connect this state's cities of San Francisco and Los Angeles.

ANSWER: California

<Modern World - Geography, Patki>

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3. This writer gained fame after winning an essay competition with a work that argued that civilization becomes decadent as a result of cultural progress. Along with writing a letter to D'Alembert ("dah-lum-BEAR") opposing a theater in Geneva, this thinker wrote several Letters on the Elements of Botany that exemplify the pedagogical method he advocated for in his treatise (\*) Emile. This man claimed that "the first man to fence in land" was the "real founder of civil society" in his *Discourse on Inequality*. The phrase "man is born free but everywhere he is in chains" was written by, for 10 points, what philosopher who wrote *The Social Contract*.

ANSWER: Jean-Jacques Rousseau

<Philosophy - Enlightenment, Narasimhan>

3. The practitioners of this religion search for a life purpose called a wampeter and embrace a circle of "cosmically-minded" people known as a karass. For 10 points each:

[10h] Name this fictional religion persecuted by San Lorenzo's dictator "Papa" Monzano, who threatens all practitioners of this religion with impalement on a large hook, despite practicing this religion in secret.

ANSWER: Bokononism

[10m] Bokononism appears in this novel in which the polymorph ice-nine initiates the end of the world.

ANSWER: Cat's Cradle

[10e] *Cat's Cradle* was written by this American author known for his satire and dark humor. This author wrote about Billy Pilgrim's time-traveling exploits in his novel *Slaughterhouse-Five*.

ANSWER: Kurt Vonnegut Jr.

<American Literature, Ananthakrishnan + Pan>

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4. In a fetus, the health of these organs are inferred from the lecithin to sphingomyelin ratio in amniotic fluid. Angiotensin-converting enzyme is largely produced in these organs, which form the R·A·A·S system with the liver and kidneys. These organs' type II cells produce D·P·P·C and other phospholipid constituents of a (\*) surfactant that lowers surface tension within it. These organs are surrounded by the visceral pleura. Emphysema is caused by damage to the alveoli in these organs. The bronchi bring gas to these organs from the trachea. For 10 points, name these large respiratory organs where oxygen is supplied to blood.

ANSWER: lungs

<Biology - Anatomy/Physiology/Medicine, Zhang>

4. According to the wise words of Monty Python's *Spamalot*, "You can't succeed on Broadway if you don't have any Jews." For 10 points each:

[10e] Name this musical whose songs include "If I Were a Rich Man," "Matchmaker," and "Anatevka." This musical set in Russia follows Tevye the Dairyman's attempts to get his daughters married to nice Jewish boys.

ANSWER: Fiddler on the Roof

[10h] In this musical, the Jewish immigrant Tateh takes on the persona "Baron Ashkenazi" after becoming a successful filmmaker. Historical figures like Emma Goldman and Harry Houdini feature in this musical named for a style of music.

ANSWER: Ragtime

[10m] Emma Goldman also appears in *Assassins*, a musical by this prolific Jewish composer and lyricist. Other works by this man include *Sunday in the Park with George* and *Company*.

ANSWER: Stephen Sondheim [or Stephen Joshua Sondheim]

<Auditory Fine Arts - Opera/Musicals, Zatzenbloom>

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5. An artist from this movement depicted women as literal “love machines” in his “mechanomorphs” *Voila Elle* and *Machine Turn Quickly*. It’s not Symbolism, but following a falling out, Francis Picabia replaced a member of this movement with Ezra Pound for magazine 391. The Cabaret Voltaire was frequented by founding members of this movement such as Tristan (\*) Tzara and the chess-loving creator of *Prelude to a Broken Arm*. That work and a urinal labeled “R. Mutt” are examples of this movement’s “readymades.” For 10 points, name this anti-art art movement that was developed during and after World War I by former-Cubists like Marcel Duchamp.

ANSWER: Dadaism [prompt on anti-philosophy before “mechanomorphs” by asking for an art movement instead]

<Visual Fine Arts - Painting, Do + Kelly>

5. Innocent III declared a crusade against these people after suspecting that Raymond VI, Count of Toulouse orchestrated the murder of Pierre de Castelnau. For 10 points each:

[10h] Name these putative quasi-dualist Christians in Southern France who were persecuted in a namesake crusade.

ANSWER: Cathars [accept Albigensians, Albigensian Crusade, Good Christians, Cathari, Catharism]

[10m] After Innocent III saw this man holding up the Basilica of St. John Lateran in a dream, he decided to endorse his teachings. This saint’s eyes were cauterized after he received a stigmata.

ANSWER: Saint Francis of Assisi [accept Franciscans, San Francesco d’Assisi]

[10e] Innocent III also attempted to annul this 1215 document signed by King John I.

ANSWER: Magna Carta [accept Magna Carta Libertatum, Great Charter of Liberties]

<European History, Narasimhan>

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6. This scientist found that Thorium was twice as active as the pure version of its main component. This scientist created a hollow needle used for sterilizing wounds with Radon gas. This chemist’s study of “Becquerel waves” helped discover elements like thorium. This chemist used differential crystallisation to isolate (\*) pitchblende. A paper written by this chemist and her spouse found that, when exposed to radium, cancer cells were destroyed faster than healthy cells. This chemist’s death likely came from radioactive exposure to radium and polonium. For 10 points, name this French-Polish chemist who was the first woman to receive a Nobel Prize.

ANSWER: Marie Curie [or Madame Curie; or Marie Skłodowska; prompt on Curie]

<Chemistry - Any/Other, Narasimhan>

6. This man hypothesized that unfulfilled gratification during the Oral stage of development could lead to fixations that manifested into behaviors such as smoking and sucking one's thumb. For 10 points each:

[10e] Name this Austrian psychoanalyst who developed five stages of psychosexual development. He is also known for developing the Oedipus complex.

ANSWER: Sigmund **Freud**

[10m] Freud's five stages of development were expanded into eight by this psychologist in his work *Childhood and Society*, where he examined conflicting forces like "initiative vs. guilt" and "trust vs. mistrust."

ANSWER: Erik **Erikson**

[10h] Erikson was a patient and student of this daughter of Sigmund Freud, who developed the theory of defense mechanisms in their works *The Ego and the Mechanisms of Defense*.

ANSWER: Anna Freud [prompt on Freud]

<Social Science - Psychology, Pan>

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7. A character in this novel claims "fear can't hurt you any more than a dream." In this novel, a boy claims he should be chief because he can sing in C-sharp. At the end of this novel, a character weeps for "the end of innocence" and "the darkness of man's heart." One group leaves a smoke signal due to the sight of (\*) "the beast" in this novel. A kid in this novel with a mulberry-colored birthmark is killed by a fire which razes half the island. Ralph continuously says "sucks to your assmar" to Piggy in this novel, in which a pseudo-government oriented around a conch shell is formed. For 10 points, a group of stranded boys descend into madness in what William Golding novel?

ANSWER: ***Lord of the Flies***

<British Literature - Long Fiction, Ananthakrishnan>

7. The first recorded ancestor of this dynasty, who legendarily managed the Great Flood, was born after a woman swallowed a black bird's egg and gave birth to him. For 10 points each:

[10h] Name this Chinese dynasty whose King Zhou ("joh") forced prisoners to hug red hot copper tubes for his concubine's entertainment. This dynasty ended after their defeat at the Battle of Mùyě ("moo-yeh").

ANSWER: **Shang** Dynasty [accept Yin dynasty, **Shāng** cháo; or Yin dài]

[10m] Archaeological evidence for the Shang Dynasty's existence largely comes from their use of these items in divination. Ox scapulae and turtle shells were heated until they cracked to create these things described by a two word English term.

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

[10e] The Shang dynasty was chronicled in a set of scripts written on this material and buried with King Xiang ("sh'YAHNG") of Wei. Shang dynasty artworks depict this material consumed by Pandas.

ANSWER: **bamboo** [accept Bamboo Annals; accept **Zhúzǐ** or **Zhúshū** JìnIán]

<Ancient History - Asia, Narasimhan>

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8. In a 2024 film, a character played by this actress spontaneously dances in a parking lot to celebrate R.M.F.'s resurrection. This actress looks up out of a window and smiles in the final shot of the 2014 film *Birdman*. A character played by this actress rivals with Sarah Churchill for a monarch's affection in her first collaboration with Yorgos Lanthimos, who also directed a film where she plays a woman with a (\*) child's brain. In a 2016 film, this actress and Ryan Gosling dance to the song "City of Stars" in the Griffith Observatory planetarium. For 10 points, name this two-time Oscar winner who starred in *Poor Things* and *La La Land*.

ANSWER: Emma Stone [or Emily Jean Stone] (unnamed films are *Kinds of Kindness* and *The Favourite*)

<Other Fine Arts – Film, Burchett>

8. Answer the follow about game theory, for 10 points each:

[10e] In this seminal game theory scenario, two parties are given the option to either betray their partner to reduce their sentence, or both stay silent to share a lesser sentence.

ANSWER: Prisoner's Dilemma

[10m] In games with finite players and finite strategies, like the prisoners' dilemma, one of these conditions where neither player can improve by changing strategy will always exist.

ANSWER: Nash equilibria [accept Nash equilibria]

[10h] Nash equilibria can be identified in the Prisoner's dilemma by using one of these constructs. These constructs often used to model oligopolies depict the gains and losses to a player based on the decisions both parties make.

ANSWER: Payoff matrix

<Math, Ma>

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9. Practitioners of this faith recite the Namokar Mantra while meditating. This religion's motto declares that the function of all "jivas," or souls, is to help one another. Five vows taken by members of this religion include one emphasizing non-possessiveness, or Aparigraha ("Apari-graha"). Two sects of this faith disagree about whether (\*) Mallinatha ("muuh-lee-NAH-tuh") was a man or a woman. Debates between sects of this religion concern whether its canonical Agamas are lost or not. This religion venerates the succession of twenty-four Tirthankaras ("teer-TUNK-kuh-ruhs"). The non-violent doctrine of Ahimsa is practiced in, for 10 points, what Indian religion?

ANSWER: Jainism [or Jain Dharma]

<Religion - Asian Non-Hindu, Narasimhan>

9. This organophosphate compound can act as a nerve agent due to its phosphorus-sulfur bond. For 10 points each:

[10h] Name this extremely toxic chemical used to kill Kim Jong Nam in 2017.

ANSWER: VX

[10m] VX functions by inhibiting the enzyme that breaks down this neurotransmitter. Motor neurons release this neurotransmitter that controls muscle contraction.

ANSWER: acetylcholine [or ACh]

[10e] VX has a value of 140 micrograms for the medium lethal dose, a quantity representing the dose quantity that would kill this percent of the population. This percent of an original sample is left over after one half-life.

ANSWER: fifty percent [or LD-50]

<Chemistry - Any/Other, Ma>

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10. Northeast of this city, sandstone formations depict "The River of a Thousand Lingas" at Kbal Spean ("kuh-val SPEEN"). A period named for being post-[this city] centered on Chaktomuk and Longvek following its fall. Visiting Yuan dynasty diplomat Zhōu Dáguān ("joh da-GWEN") described this city's Bayon temple. A religious transformation undertaken by (\*) Jayavarman VII ("JAH-yah-VAR-mahn the seventh") is evidenced by many bas-reliefs ("bah reliefs") enclosed in this city. An inscription at a complex in this city describes how its constructor, Suryavarman II ("soor-yuh-VAR-mun the second"), lept on his great-uncle's elephant and killed him. For 10 points, name this Cambodian city home to a namesake "wat" temple constructed by the Khmer Empire.

ANSWER: Angkor [accept Angkor Wat]

<World History, Narasimhan>

10. Answer the following about destruction by fire in plays by Henrik Ibsen. For 10 points each:

[10m] In this play, Pastor Manders's supposed careless disposal of a candle leads to the burning down of an orphanage. At the end of this play, Helen has to decide whether to euthanize her syphilitic son Oswald.

ANSWER: Ghosts [or Gengangere]

[10h] In this other Ibsen play, a house fire that destroyed "nine lovely dolls" caused the wife of its protagonist to produce fevered milk that killed their infant sons. Hilda Wangel coaxes the title acrophobic character into climbing a church steeple in this play.

ANSWER: The Master Builder [accept Bygmester Solness]

[10e] After burning his manuscript, this title character of another Ibsen play drives Eilert Lövborg to suicide. This wife of George Tesman kills herself shortly after.

ANSWER: Hedda Gabler [accept either underlined portion; prompt on Mrs. Tesman]

<European Literature - Drama, Pan>

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11. This substance's namesake conductivity is symbolized by capital K and determined in slug tests. Capillary fringes occur where this substance moves upward. A "cone of depression" forms around sites where this substance is extracted. High (\*) porosity and permeability characterizes materials effective at storing this substance, like sandstone and gravel. This substance can naturally move upward in artesian systems. High rates of infiltration in the area above this substance's namesake underground "table" can cause it to undergo surface runoff. For 10 points, name this substance stored underground in aquifers.

ANSWER: water [or H<sub>2</sub>O; accept groundwater; accept water table or water wells; accept hydraulic conductivity]

<Other Science - Earth, Kher>

11. The film *Rabbit-Proof Fence* depicts A.O. Neville's role in the genocide of these people. For 10 points each:

[10e] Name these people who received a national apology from Kevin Rudd. These indigenous Australians are recognized on "National Sorry Day."

ANSWER: Aboriginal Australians [or Australian Aborigines or Aborigines; accept Torres Strait Islanders]

[10h] Aboriginal rights were often restricted under this broader policy. This largely immigration-focused policy's "dictation test" was used to deny entry to many prospective immigrants.

ANSWER: White Australia [prompt on descriptions of racial discrimination]

[10m] The White Australia policy was primarily aimed at blocking the entry of immigrants from this country. Conspiracy theories allege that Australian Prime Minister Harold Holt was "picked up" by a submarine from this country after he disappeared while swimming.

ANSWER: China

<World History, Narasimhan>

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12. Nathaniel Gordon was executed for operating one of these things in the only use of an 1819 law championed by Daniel D. Tompkins. Zora Neale Hurston interviewed Cudjoe Lewis in Mobile Bay while investigating the "last" of these things, the *Clotilda*. After Joseph Cinque ("seenk") and 34 others captured one of these things, John Quincy Adams defended them in the (\*) *Amistad* case. Olaudah Equiano ("uh-LAO-duh eh-quee-AH-no") wrote a narrative describing awful conditions in these vessels. Article 1 of the Constitution prevented the banning of these things for 20 years. For 10 points, what vessels frequently crossed the "Middle Passage" carrying humans?

ANSWER: slave ships [accept any descriptions of ships carrying slaves or of ships carrying escaped slaves prompt on ships with "what were they carrying"? ]

<American History, Narasimhan>

12. The 1964 Nobel Prize in Chemistry was given to Dorothy Hodgkin after she discovered the structure of this compound through X-ray crystallography. For 10 points each:

[10h] Name this compound whose absorption in the stomach requires an intrinsic factor.

ANSWER: Vitamin B12 [or cobalamin]

[10e] A derivative of Vitamin B12 can be administered intravenously to treat exposure to this ion with formula CN- ("C N minus"). This deadly ion is found in bitter almonds and apple seeds.

ANSWER: cyanide ion

[10m] Reduced absorption of Vitamin B12 in the gut may result in the pernicious type of this general condition characterized by low hematocrit or reduced ability of red blood cells to carry oxygen.

ANSWER: anemia [accept pernicious anemia]

<Biology - Cell/Molecular, Zhang>

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13. The publication of a photo of this man caused Nordstrom to run out of Merino crewneck sweaters. This figure underwent a 2023 spinal surgery to correct back spondylolisthesis ("spaan-duh-low-luhs-THEE-suhs"). A document possibly created by this man begins "To the Feds, I'll keep this short." The words (\*) "deny, defend, depose" were allegedly written by this man on several bullet casings. Despite being under indictment himself, Eric Adams participated in a perp walk with this man after his arrest at a McDonalds in Altoona, Pennsylvania. For 10 points, name this man who is currently charged with shooting Brian Thompson, the CEO of UnitedHealthcare.

ANSWER: Luigi Mangione [accept either or both underlined parts]

<Modern World - Current Events, Narasimhan>

13. Albert Bierstadt, a member of this movement, painted a Native American on horseback hunting a buffalo in his *The Last of the Buffalo*. For 10 points each:

[10e] Name this group whose members Edwin Church and Thomas Cole emphasized depictions of immense, captivating natural settings.

ANSWER: Hudson River School

[10h] Edwin Church's panoramic painting of the Niagara Falls and Thomas Cole's four-part series *The Voyage of Life* are held by an American art museum with this name. A London museum with this name currently holds Hans Holbein's *The Ambassadors*.

ANSWER: National Gallery of Art [do not accept or prompt on "National Portrait Gallery"]

[10m] Like the one in D.C., London's National Gallery has no shortage of great landscape paintings, being home to this quintessential "six-footer." A horse-drawn wood wain crosses a stream next to Willy Lot's Cottage in this British classic.

ANSWER: *The Hay Wain* [accept Landscape: Noon]

<Visual Fine Arts - Painting, R. Zhang + Kelly>

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14. A character in this novel angrily recites Latin after learning that his political rival Stremov has received the government post he was pining after. The ramblings of the sleeping clairvoyant Jules Landau convince that character to refuse a divorce. This novel opens with Dolly uncovering her husband Stiva's affair with a governess. Dolly's sister, (\*) Kitty, is variously pursued in this novel by Konstantin Levin. This novel opens by stating "happy families are alike; every unhappy family is unhappy in its own way." The titular noblewoman commits suicide by jumping in front of a freight train in, for 10 points, what 1878 novel by Leo Tolstoy?

ANSWER: Anna Karenina

<European Literature - Long Fiction, Ananthakrishnan>

14. Many churches engaging in this practice describe themselves as "with signs following." For 10 points each:

[10h] Name or describe this practice performed in certain Christian churches in rural Appalachia, drawing on an interpretation of a passage in the book of Mark to claim God's protection while doing so.

ANSWER: snake handling [accept serpent for snakes, or reasonable descriptions]

[10m] Most churches that engage in snake handling are part of the "Holiness" movement in this branch of Protestantism, who are named for an event 50 days after Easter in which the Holy Spirit visited the Apostles with spiritual gifts.

ANSWER: Pentecostalism

[10e] Another Bible passage used to support snake handling is a scene in the Book of Acts recounting this Apostle being bitten by a serpent on the island of Melita. This author of several epistles converted to Christianity after being blinded on the way to Damascus.

ANSWER: Saint Paul [or Saul of Tarsus]

<Religion, Burchett>

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15. Gauss's Lemma states that these objects constructed over a unique factorization domain retain a certain property under multiplication. The Weierstrass factorization theorem extends a result on these objects to the entire function. Evariste Galois ("gal-WAH") characterized these objects on whether they are solvable by radicals, which generalizes the (\*) Abel-Ruffini theorem on the unsolvability of the quintic type of these objects. Conjugate pairs always accompany complex roots when these expressions only have rational coefficients. Summing monomials creates, for 10 points, what functions exemplified by cubics and quadratics?

ANSWER: polynomials [Anti-prompt on specific instances such as binomials]

<Math, Ma>

15. This author depicted the morning before his marriage to Elizabeth Boyle in his poem "Epithalamion." For 10 points each:

[10m] Name this poet. In an epic by this poet, the evil wizard Archimago convinces one character that his betrothed Una is unchaste.

ANSWER: Edmund Spenser (The unnamed character is the Redcrosse Knight)

[10h]. Spenser published "Epithalamion" and this sonnet sequence together as a wedding gift for his wife. In the first poem of this sonnet sequence, the speaker asks for "Leaves, lines, and rhymes, seek her to please alone, / whom if ye please, I care for other none."

ANSWER: Amoretti

[10e] After not receiving payment from this person, Spenser apocryphally composed a quatrain stating "From that time unto this season, I receiv'd nor rhyme nor reason." This English monarch was depicted as Gloriana in Spenser's epic *The Faerie Queene*.

ANSWER: Queen Elizabeth I Tudor [prompt on Elizabeth]

<British Literature - Poetry, Pan>

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16. The name of a deity associated with this object, Elpis, is sometimes interpreted as both the "expectation of bad" and the "expectation of good." A misconception around this object's nature likely originates from Erasmus's translation of Hesiod's *Works and Days*. This object, which is described as a "plague to men who eat bread," was gifted to its owner's husband Epimetheus to punish the world for (\*) Prometheus's theft of fire. By the end of the myth in which it appears, the only thing left inside this object is hope. For 10 points, name this object owned by the first woman in Greek myth, which when opened released evil into the world.

ANSWER: Pandora's box [or Pandora's jar, or pithos]

<Mythology - Greco-Roman, Burchett>

16. During a 2017 lecture at Harvard, this designer advocated for a "Readymade" principle that something only needs to be changed by 3% to create innovation. For 10 points each:

[10h] Name this designer, who served as Louis Vuitton's first black creative director of menswear until his 2021 death from heart cancer.

ANSWER: Virgil Abloh [accept either underlined part]

[10m] Abloh chose this Italian city to headquartered his brand PYREX VISION, now known as Off-White. Fashion houses like Dolce & Gabbana and Prada are also based in this city.

ANSWER: Milano

[10e] In 2019, Abloh designed the "Markerad" range for this Swedish furniture retailer, which also sells a stuffed shark known as a Blåhaj ("BLOW-high").

ANSWER: IKEA

<Other Fine Arts – Miscellaneous, Burchett>

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17. During one of these events, Gustavo Díaz Ordaz ordered the arrest of students in the National Strike Council. Richard Jewell discovered a pipe bomb placed by Eric Rudolph during one of these events. Leni Riefenstahl ("REE-fen-shtall") produced a film subtitled "Festival of Beauty" for one of these events. Protests against one of these events led to the (\*) Tlatelolco ("tlah-tay-LAWL coh") massacre in Mexico City. The Black September attacks during one of these events led Golda Meir to launch Operation Wrath of God. Adolf Hitler refused to shake hands with Jesse Owens during one of these events. For 10 points, name these major sporting events that occur every four years.

ANSWER: Summer Olympic Games [accept the Olympics; reject "Winter Olympics"]  
<Other History - Cross/Mixed, Narasimhan>

17. Some of this man's limited works include a cycle of admirable sonnets for the Baroness de Bacourt and an article on enriching chess by eliminating one of the rooks' pawns. For 10 points each:

[10h] Name this fictional Symbolist author, who authors a "re-creation" of *Don Quixote* in a 1939 story.

ANSWER: Pierre Menard [or Pierre Menard, Author of the Quixote; prompt on Pierre] [10m] "Pierre Menard, Author of the Quixote" features in the original 1941 publication of this short story collection which preceded its author's later 1962 collection *Labyrinths*.

ANSWER: Ficciones [or Fictions]

[10e] This Argentinian author also included his stories "The Garden of Forking Paths" and "The Library of Babel" in both *Ficciones* and *Labyrinths*, the latter of which was published after he went blind.

ANSWER: Jorge Luis Borges [or Jorge Francisco Isidoro Luis Borges Acevedo]  
<World Literature - Short Fiction, Pan>

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18. A quantity named for this physicist multiplies "8 pi frequency squared over c cubed" in a law they discovered. A value named for this physicist equals the von Klitzing constant times the elementary charge squared. The assumptions of the Rayleigh-Jeans law were corrected by this physicist's law for the radiance of a (\*) blackbody, which instead assumes that energy is quantized. A value named for this physicist is written with a bar to represent dividing it by 2 pi. Einstein solved the photoelectric effect using the fact that the energy of a photon equals its frequency times this physicist's namesake constant. For 10 points, what German quantum physicist names the constant h?

ANSWER: Max Planck [or Max Karl Ernest Ludwig Planck; accept Planck's constant or Planck's law]

<Physics - Quantum/Particle/Relativity, Sivachidhambaram>

18. This man was commissioned by the Jade Emperor to wrangle his ten sons and stop them from scorching the earth. For 10 points each:

[10h] Name this divine Chinese archer who, after shooting down nine of the ten sons, was stripped of his immortality by the Jade Emperor.

ANSWER: Houyi ("hoe-YEE") [or Hou-i or Yi; or Shenyi]

[10m] In another myth, the now-mortal Houyi is given an elixir of immortality. In some versions of the myth, a robber tries to steal the elixir, however this goddess, Houyi's wife, drinks it and becomes the goddess of the moon.

ANSWER: Chang'e ("chong-UH") [or Chang-O or Heng'e]

[10e] A Jade one of these creatures pounds the ingredients of the elixir of immortality for Chang'e. This Chinese Zodiac animal finished fourth, after he slipped into the river hopping from rock to rock.

ANSWER: rabbits [accept hares; accept Jade Rabbit]

<Mythology, Pan>

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19. A piece by this composer opens with the soloist playing [READ SLOWLY] the 8th notes E down to A, then down to a 16th-32nd note slur on E, followed by the ascending 32nd-note arpeggio A, C, E in its Andante malinconico section. Scordatura is employed to tune the violin's E string down to E-flat in a Halloween-themed symphonic poem by this composer. This composer dedicated his third violin concerto to (\*) Pablo de Sarasate ("sa-ra-SAH-tay"), who was also the dedicatee of his *Introduction and Rondo Capriccioso*. This composer utilized the glass harmonica and xylophone in the "Aquarium" and "Fossils" movements of another work. For 10 points, name this composer of *The Carnival of the Animals*.

ANSWER: Camille Saint-Saëns [or Charles-Camille Saint-Saëns]

<Auditory Fine Arts - Classical, J. Xu>

19. For 10 points each, answer the following about famous Scientific prizes.

[10e] In 2024, this Nobel Prize was controversially given to John Hopfield and Geoffrey Hinton for their "foundational work" in the development of neural networks for use in AI. Prior winners of this Nobel, like Roger Penrose, investigated astronomy and subatomic particles.

ANSWER: The Nobel Prize in Physics [Prompt on Nobel Prize]

[10m] Hinton received this other prize in 2018. This so-called "Nobel Prize of computing" was given to Avi Wigderson for his work on zero-knowledge proofs.

ANSWER: ACM A. M. Turing Award

[10h] Widgerson shared this prestigious mathematical prize with Lazlo Lovasz in 2021. This prize's namesake created group theory independently of Évariste Galois ("gal-WAH").

ANSWER: Abel Prize

<Other Science - Misc, Ma>

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20. The speaker of a poem by this author asks if the reader wants to see the speaker "broken" with a "bowed head and lowered eyes." That poem asks "Does my haughtiness offend you?" and compares its speaker to dust. Another poem by this author demands the reader not to "hide [their] face." That poem, which begins by describing (\*) "A Rock, A River, A Tree,' was recited by this author at Bill Clinton's first inauguration. This author took the title for one of their works from Paul Laurence Dunbar's poem "Sympathy." For 10 points, name this author of "Still I Rise," who gained critical acclaim for her autobiography *I Know Why the Caged Bird Sings*.  
ANSWER: Maya Angelou [accept Marguerite Annie Johnson]  
<American Literature - Poetry, Pan>

20. For 10 points each, answer the following about the TIME Magazine issue for August 1st, 1969.

[10e] The issue ran an article asking about this event and "Middle America." The previous week's cover page invoked this event by showing Neil Armstrong holding an American flag.  
ANSWER: the moon landing [accept Apollo 11, accept descriptive answers]

[10h] TIME's August 1st cover page shows Senator Ted Kennedy wearing a neck brace after this incident, during which he crashed a car with Mary Jo Kopechne trapped inside.

ANSWER: Chappaquiddick incident ("cha-puh-KWI-dick")

[10m] Under a new "Environment" section in the issue, many learned of mayor Carl Stokes' efforts to clean up pollution after this city's Cuyahoga River caught on fire.

ANSWER: Cleveland

<American History, Narasimhan>

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21. A façade of 4,500 colored LEDs covers a phallic 38-story Jean Nouvel-designed skyscraper in this city. Nikken Sekkai ("NICK-in SEH-key") is currently redeveloping an arena in this city which, when completed, will be the largest soccer stadium in Europe. Broken ceramic tiles decorate a building in this city known as the "House of Bones." A (\*) serpent-shaped bench was designed for a landmark in this city whose entrance features a salamander mosaic. This city's Park Guell ("gwail") was designed by an architect whose incomplete cathedral in this city is set to be finished in 2026. For 10 points, Antoni Gaudi designed buildings like the Sagrada Familia in which Spanish city?

ANSWER: Barcelona

<Other Fine Arts, Architecture – Burchett>