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**TOSSUPS:**

1. **“Talking leaves” inspired an 1809 innovation by a member of this specific group that had its prototypes burned by that man’s wife after he failed to tend to their farm. A newspaper called *The Phoenix* was published by this group, whose members were said to constitute a “domestic dependent nation” in a John Marshall-led ruling that was followed up a year later by a decision involving the missionary (\*) Samuel Worcester. A farcically unauthorized group known as the “Treaty Party” feuded with a leader of this tribe, John Ross, over the signing of the Treaty of New Echota (“eh-KO-tah”). Utilizing a writing system developed by Sequoyah (“suh-KOI-uh”), for 10 points, name this Native American nation, whose members were exiled to Oklahoma on the Trail of Tears.**

ANSWER: **Cherokee** Nation [accept *Tsalagi*; accept *Aniyunwiya*; prompt on Native Americans or Indians until “tribe”]

<TH, American History>

2. **In its original language this thinker frequently used the term *aufhebung* because of its connotations of both negation and preservation. This thinker rejected Kant’s “categories of understanding” instead constructing “categories of thought” among which art approaches the Absolute aesthetically while religion does so symbolically. Ludwig (\*) Feuerbach and Max Stirner led a “left” camp of thought inspired by this thinker after his death. This thinker claimed that self-knowledge was a product of desire for recognition by other humans, a process exemplified by an idle master and a self-consciousness slave. For 10 points, name this philosopher who developed a dialectical view of history in his book *The Phenomenology of Spirit*.**

ANSWER: Georg Wilhelm Friedrich **Hegel**

<TH, Philosophy>

3. ***Omega* is a peer-reviewed journal that publishes papers on this concept from a variety of academic perspectives. Robert Kastenbaum is most well known for his work on societal systems that deal with this concept. Robert Langs has identified three types of anxieties associated with this concept, including predatory and predation types. In a 1973 book Ernest Becker argued that Americans organize their lives around (\*) denying the reality of this concept. In a book titled for this concept, Elizabeth Kubler-Ross presented a five stage theory of the emotions involved in this thing. Post-Freudian thought refers to a “drive toward” this thing as *thanatos*. For 10 points, name this life event whose occurrence may instill grief in loved ones.**

ANSWER: **death** [accept **dying** and word forms; accept **death** drive; accept **On Death and Dying**; prompt on grief until mentioned by asking “what specific type of event is the grief over?”; prompt on loss; prompt on sickness or illness]

<TH, Psychology>

4. **One significant loss for this military force was predicated by the bad omen of some sacred chickens refusing to eat their grain. While little evidence remains, it is said that this force was heavily damaged via a large claw attached to a wall during a battle near Syracuse. Innovations from the history of this force include a large grappling hook known as the (\*) *harpax*, and a hooked gangplank known as the *corvus*.** Thanks to the Gabinian Law, one statesman used this military force to destroy the Cilician pirates in under three months. Largely comprised of liburnians and quinqueremes (“KWIN-kwer-eems”) throughout its existence, this force defeated Marc Antony at the Battle of Actium. For 10 points, name this Mediterranean Sea-based military force that was used by men such as Pompey the Great.

ANSWER: **Roman navy** [accept equivalents like **naval** forces of ancient **Rome**; prompt on **Roman military**; prompt on **navy** or **military**; do NOT accept or prompt on “Roman Army”] (The “claw” clue refers to the Claw of Archimedes)

<TH, Ancient History>

5. **In the original Smash Bros. Game, pro-player Kirt used this character to pioneer the “Black Cat Set-up.” In Smash U, this character started grabbing with his hand instead of a tether, reducing range and lag. This character has shared the exact weight value with Captain Falcon in each Smash game. In Brawl, this southpaw stars in an event where he must defeat a (\*) “dark” version of himself on the Bridge of Eldin.** This character’s Final Smash was recently changed to “Ancient Arrow” and his down-B bombs more closely resemble their iteration in Breath of the Wild. For 10 points, name this character who rivals Ganondorf to save Zelda in his original games.

ANSWER: **Link** [do not accept or prompt on “Young Link” or “Toon Link”]

<BK, Pop Culture Games>

6. **In a scene from one of this director’s films, the repeated sound of firecrackers make three characters on a couch increasingly nervous about the gun wielded by a drug dealer. That film by this director opens with a three minute steadicam shot which moves from a city street to the inside of a disco club. In a different film by this director, the central couple meet after a man orders an incredible amount of (\*) breakfast food, causing the waitress to call him a “hungry boy.”** That waitress turned model later poisons the designer Reynolds Woodcock in this director’s most recent film *Phantom Thread*. For 10 points, name this contemporary American director known for long films like *Boogie Nights*, *Magnolia*, and *There Will Be Blood*.

ANSWER: Paul Thomas **Anderson** [prompt on **PTA**]

<TH, Film>

7. **The “inherent” type of this property is possessed by calixarenes because of their 3D structure. Reagents with this property include 1,2-amino alcohols and Evans’ oxa:zo:lid:i-nones; those “auxiliaries” with this property are used in asymmetric syntheses. Priority rules concerning atomic number and the first point of difference are used to designate the absolute configuration of this property’s namesake (\*) centers as either R or S in the C-I-P system.** Equal amounts of molecules with the plus and minus forms of this property are present in racemic mixtures. Enantiomers are pairs of stereoisomers with this property possessed by molecules whose mirror images are not identical. For 10 points, name this property whose name comes from the Greek from “handedness”.

ANSWER: **chirality** [accept inherent **chirality**; accept **chiral** auxiliary]

<JS, Chemistry>

8. **This composer borrowed from the Te Deum of Antonio Vivaldi for a succession of three fugues in “O fatal Consequences of Rage” from his work describing the life of Saul. An Allegro movement by this composer begins with the soprano singing long D, down to short A-B-A, then a repeat of that same motif. A work by this composer was controversial until a 1750 performance at the Foundling Hospital. This composer’s set of four (\*) anthems includes *Zadok the Priest*, which has been performed at all English coronations since that of George II. A work by this composer contains the sections “All We like Sheep” and “For Unto Us a Child is Born”. The “Hallelujah Chorus” appears in, for 10 points, what composer’s oratorio *Messiah*?**

ANSWER: George Frederick Handel

<DG, Music>

9. **In February 2019, dozens of gold miners drowned underground following the bursting of a dam near this country’s town of Battlefields. In this country, the announcement of a government mandated 130% hike in fuel taxes have sparked mass protests, during which members of the MDC-T party were detained. In 2017, Emerson (\*) Mnangagwa (“muh-nah-GAH-gwa”) won a power struggle to become the leader of this country’s ruling ZANU-PF party over a longtime leader’s wife, Grace. In the late-2000s, this country experienced hyperinflation, with the annual inflation rate topping out at 489 billion percent. For 10 points, name this African country ruled for over 30 years by Robert Mugabe.**

ANSWER: Republic of Zimbabwe

<JM, Current Events>

10. **In his description of the Suebi in his *Germania*, Tacitus conflates this Norse god with Heracles. In one myth, this god ate two whole oxen before helping a giant carry a whale back to his farm. This god threw a crystal goblet at that giant, Hymir, before taking a cauldron by rolling it away. This god struck the sleeping giant (\*) Skrymir between the eyes after spending the night with some companions inside Skrymir’s glove. While at the hall of Utgard-Loki, this god is unable to lift a cat but manages to drink so much that he causes the ocean to ebb. This god’s servant Thialfi sucks the marrow out of one of this god’s goats. For 10 points name this Norse thunder god who wields the hammer Mjolnir.**

ANSWER: Thor

<JH, Mythology>

11. **William Faulkner resided in a house on Pirate Alley in this neighborhood while writing his first book. This neighborhood is directly across the river from Algiers Point. The Audubon Butterfly Garden and Insectarium lies on Canal Street, which bounds this neighborhood to the southwest. This neighborhood is home to the Central Grocery which was the origin of the (\*) muffaletta sandwich. Jackson Square is central to this neighborhood, whose historic eateries include Antonine’s and Cafe Beignet (“ben-yay”). Nightly performances still occur in this neighborhood’s Preservation Hall, one of the birthplaces of jazz. For 10 points, name this New Orleans neighborhood home to many sleazy bars and five stars hotels on Bourbon Street.**

ANSWER: The French Quarter [accept Vieux Carre]

<TH, Geography>

12. One of these animals named Enzo documents the life of race car driver Denny Swift in the novel *The Art of Racing in the Rain*. One of these animals is delighted when a man begins calling him “Pete” instead of “Lovey,” the name given to him by a fat lady who bought him from an old woman on Broadway. A yellow one of these animals narrates that story by (\*) O. Henry, which is titled for the “memoirs” of one of these animals. One of these animals develops a rivalry with Spitz while working for the French Canadians Perrault and Francois. That one of these animals is stolen from a California ranch and is forced into work in the Yukon gold rush, where he becomes feral. For 10 points, name this type of animal exemplified by Buck in Jack London’s *Call of the Wild*.

ANSWER: **dogs** [accept yellow **dog**; accept **doggo** or **pupper**; accept other synonyms]

<DG, Mixed Lit>

13. A poem in this language begins with a priamel contrasting water and gold before noting that “days to come shall prove the surest witness.” In a 1924 collection, H.D. freely translated several poems originally written in this language, including one that begins “I envy your chance of death.” In her book *If Not Winter*, Anne Carson used parenthesis and blank space to indicate (\*) missing portions of poems originally in this language. This is the older of the two languages used in works in the Loeb Library of texts. A set of nine lyrics poets who used this language are so named because all of their poems were performed with flute and lyre accompaniment. For 10 points, name this classical language used by Pindar and Sappho.

ANSWER: Ancient **Greek**

<TH, Poetry>

14. Several weeping women and a brown and white dog look on as the body of Christ forms a diagonal line across the central panel in this artist’s *The Raising of the Cross* triptych. A group of Nereids and sea gods look up towards a woman preparing to disembark a ship in front of a caped man representing France in a painting by this artist. A peacock hides under some stairs in a version of the Visitation by this artist, which is the left panel of his (\*) *The Descent from the Cross* triptych. A large room at The Louvre features a series of 24 paintings by this artist, one of which shows an armored Henry IV staring at a portrait of his future wife held by some angels. For 10 points, name this Flemish baroque artist, whose *Marie de Medici Cycle* showcases some of his characteristic fleshy nudes.

ANSWER: Peter Paul **Rubens**

<TH, Painting>

15. During review of a document supporting this cause, false names like “Pug Nose” and “No Cheese” were discovered among 1.9 million signatures. John Frost was stripped of his position as Justice of Peace because of his advocacy for this cause. William Lovett and Feargus O'Connor were both leaders involved in this cause. Many agitating for this cause were arrested following the (\*) Newport Rising, after which some were shipped to Australia. Members of this cause demanded reforms in the House of Commons and universal male suffrage. For 10 points, name this 19th century British working class movement that sought the passage of a set of six demands published in a namesake document named for the “People.”

ANSWER: **Chartism** [accept **Chartist** movement; accept passage of the People’s **Charter**; prompt on reforms of parliament; prompt on male suffrage]

<TH, European History>

16. **Because of its high absorption cross section, pressurized helium-3 is often used to detect these particles. A “six-factor formula” used to account for these particles includes resonance absorption and leakage probability terms. Californium-252 is used as a standard source for these particles, as it releases an average of 3.7 of these particles per spontaneous (\*) fission.** Since these particles cannot ionize gases, Geiger counters cannot detect them. Water and solid graphite are commonly used as moderators of these particles. Two of these particles are bound to two protons in alpha particles. For 10 points, name this uncharged particle found in the atomic nucleus.

ANSWER: neutrons

<TH, Physics>

17. **A girl in this novel helpfully notes to her older sister that if you want to remember who discovered America, just think of cucumbers, since that word sounds like Columbus. A woman in this novel confesses to being in love with the nineteen year old flute player Germaine while eating Chinese food. In this novel, the strong-willed Sofia punches her husband's new girlfriend Squeak while in a juke joint owned by (\*) Harpo.** Partway through this epistolary novel, the protagonist begins addressing her letters to her missionary sister Nettie instead of God. The protagonist of this novel defies her unnamed husband by beginning an affair with the blues singer Shug Avery. Celie is the protagonist of, for 10 points, what novel by Alice Walker?

ANSWER: *The Color Purple*

<TH, Long Fiction>

18. **The “debt” associated with this process is higher when species are near its threshold or when there are relatively few, large patches of habitat. Islands closer to the mainland have a lower rate of this process due to the rescue effect. Metapopulations are stable when the (\*) colonization rate and the rate of this process are balanced.** The slope of the species-area relationship usually overestimates the rate of this process caused by habitat loss. A species no longer interacts with other species in its community in the “ecological” form of—for 10 points—what process in which all members of a species die off?

ANSWER: extinction [accept extinction debt; accept ecological extinction]

<JS, Biology>

19. **Under this dynasty, local officials would distribute quick-ripening Champa rice to local farmers, following its introduction to China from Vietnam. Collective responsibility within communities was emphasized through the *bǎojiǎ* system, one of the so-called “New Policies” enacted by this dynasty, which also negotiated the Chanyuan Treaty with the more-northern Liao. The influential Neo-Confucian thinker Zhu Xi (“JOO SHEE”) worked under this dynasty, as did the reforming statesman (\*) Wang Anshi (“WAHNG AHN-shur”).** Following an invasion by the Jurchen-led Jin Dynasty, this dynasty’s “Southern” period began in 1126. The first to issue paper currency and utilize gunpowder was, for 10 points, which Chinese dynasty that came to an end following the start of Kublai Khan’s Yuan (“yoo’EN”) dynasty?

ANSWER: Song Dynasty [accept Northern Song; Southern Song]

<TH, World History>

20. A Chinese type of this food called *zaotang* is used as a sacrifice to the Kitchen God. Another Chinese type of this food resembles a dragon's beard and was banned during the Cultural Revolution. A dragée (“~~draz~~-AY”) is a small variety of this food often used for decoration. A colorful variety of this food popular in Japan is called (\*) *kompeitō*. The title of Graham Greene's novel *Brighton Rock* refers to a hard variety of this food popular at British beach resorts. A variety of this food from Atlantic City is notable for being made with salt water. A type of this food originally marketed as “Fairy Floss” was ironically first created by the dentist William Morrison. For 10 points, name this type of sweet food that comes in “rock” and “cotton” varieties.

ANSWER: candy [accept confections or sweets; accept taffy; accept cotton candy; accept rock candy]

<JH, Other Academic>

21. Moisei Beregovsky is best known for gathering Eastern European examples of these works called *nigunim*. An index named for Steve Roud catalogues works of this kind. Erich Moritz von Hornbostel and Frances Densmore are best known for collecting examples of this aspect of culture. A system developed for categorizing works of this type rates 37 categories like *melisma* and *rasp* on their presence or absence. Alan Lomax traveled the United States (\*) recording examples of this aspect of culture for the Library of Congress, thus giving a wider audience to the works of Leadbelly and Muddy Waters. For 10 points, name this auditory aspect of culture whose “folk” variety may be recorded by salvage anthropologists.

ANSWER: folk music [or folk songs; accept melodies; accept Jewish songs]

<TH, Anthropology>

22. In Karger's algorithm for finding the minimum cut, the process of selecting an edge to contract has this property. Due to large batch sizes, neural nets use a gradient descent algorithm with this property. One algorithm uses tempering bit shifts and bitmasks to create outputs with this property that range from zero to a power of two minus one; that is the Mersenne twister. Calculations are done iteratively on generated inputs with this property in (\*) Monte Carlo algorithms. The initial seed determines the sequence in which outputs with the “psuedo” form of this property are generated. Variables with this property are sampled from probability distributions. For 10 points, name this property of possessed by algorithms that lack a pattern.

ANSWER: random [accept randomized; accept stochastic; accept pseudorandom]

<JS, Other Science CS>

23. A “visual lesson” from this religion features a man suspended by ropes so single-mindedly focused on the honey that is dripping in his mouth that he fails to notice the rats gnawing at the ropes. A series of fables from this religion has been translated as *The Forest of Thieves and the Magic Garden*. In a story from this religion, Princess (\*) Mairavati is forced to marry a poor leprous man after insulting her father, though her husband turns out to be a celestial king. Members of this religion venerate series of 24 leaders sometimes called “fordmakers.” This religion's two main sects disagree over allowing women to be monks and about wearing clothes. For 10 points, name this South Asian religion that practices *ahimsa*, or non-violence.

ANSWER: Jainism

<TH, Religion>

24. **This author described a man who investigates the mysterious burning of a bus nicknamed “The Incinerator” in his play *A Dance of the Forests*. This playwright created a photographer who views four girls using their bodies to form the wheels of an imaginary car performing the “Dance of the Traveller” after visiting a village on his motorcycle. This author wrote a play in which (\*) Simon Pilkings prevents the ritual suicide of Elesin Oba, which leads Olunde to kill himself. This author wrote a play in which Chief Baroka and Lakunle compete for the hand of Sidi in marriage. For 10 points, name this Nigerian playwright of *Death and the King’s Horseman* and *The Lion and the Jewel*.**

ANSWER: Wole **Soyinka**

<AS, Drama>

## BONUSES:

1. An early example of these works took the form of a woodcut that depicted a snake cut into eight segments, and was intended to demonstrate the necessity of the Albany Plan. For 10 points each:

[10] Name these works, which include one made by Benjamin Franklin entitled *JOIN, or DIE*. In general, these works consist of satirical drawings that provide caricatures of modern political issues.

ANSWER: political **cartoons** [accept editorial **cartoons**]

[10] Although the Democratic donkey didn't originate with this man, he was the first to link the Republican party with the elephant. This "Father of the American Cartoon" is known for his damaging depictions of Boss Tweed and his corrupt Tammany Hall.

ANSWER: Thomas **Nast**

[10] Thomas Nast depicted this figure in numerous contexts, such as defending a Chinese man from a mob, and requesting suffrage for a black soldier. A John Gast painting depicts this figure as a representation of the American Frontier, and this symbolic figure was largely replaced by the 20th century, thanks to an 1886 gift from France.

ANSWER: **Columbia** [prompt on descriptions of the female representation of the United States; do NOT accept or prompt on "Liberty" or "Lady Liberty"]

<JH, American History>

2. These buildings feature gates called *torana* and domes referred to as the *kumbha* or "pot." For 10 points each:

[10] Name this type of Buddhist building built to house relics. The pole and parasol-discs atop these structures represent both royalty and the Buddhist divine Bodhi tree.

ANSWER: **stupas** [accept **pagoda**]

[10] Carved reliefs on the stupa in Sanchi, India depict scenes from these tales from the Buddhist canon that tell stories from the previous lives of the Buddha.

ANSWER: **jataka** tales

[10] Early instances of *bhakti* or devotion involved Buddhists doing this to sacred bodhi trees or to stupas. During the Hajj, pilgrims perform this action seven times with regards to the Kaaba, a process called tawaf.

ANSWER: **circumambulation** [accept descriptions like **walking around** the stupa, tree or Kaaba; accept **circling**]

<TH, Religion>

3. Unlike most ancient civilizations, we have an excellent corpus of primary documentation regarding this one, thanks to the Bogazköy Archive, a collection of over 14,000 cuneiform tablets found in this people's capital, Hattusa. For 10 points each:

[10] Name this Anatolian civilization that was largely contemporaneous with Egypt's New Kingdom. This empire's king Suppiluliuma I ("SUP-ee-LOOL-ee-OOH-ma") attempted to broker a marriage alliance between his son Zannanza and Tutankhamun's widow.

ANSWER: **Hittites** [do NOT accept or prompt on "Hattians"; do NOT accept or prompt on "Hurrians"]

[10] The Battle of Kadesh, fought between Muwatalli II and Ramesses II, is renowned for its involvement of many of these vehicles. Roman examples, such as *quadrigas*, were named for the amount of horses that pulled them.

ANSWER: **chariots** [prompt on **carriage**]

[10] Within the hierarchy of Hittite government, most government branches were led by men of this title, a word that basically translates as "chief." The Hittite leader of the wine stewards and the leader of the royal bodyguards were known as [this word] *gestin* and [this word] *mesedi*, respectively.

ANSWER: **gal** [accept **gal gestin**; accept **gal mesedi**]

<JH, Ancient History>



4. Answer some questions about a chemical industrial process. For 10 points each:

[10] Name this general process that converts an unreactive gas in our atmosphere to ammonia or other products through the breaking of a triple bond.

ANSWER: **nitrogen fixation** [anti-prompt on but DO NOT REVEAL Haber-Bosch process with “what does the Haber-Bosch process do?”]

[10] Once nitrogen has been converted into ammonia, it can be used to produce nitric acid in this process. The catalyst used for this process is a platinum-rhodium gauze that is heated to about 900°C.

ANSWER: **Ostwald** process

[10] This scientist developed a process to convert nitrogen and hydrogen to ammonia with osmium catalysts. That process is now named after this scientist and Bosch, who acquired this scientist’s patents while working for B·A·S·F.

ANSWER: Fritz **Haber** [accept Haber-Bosch process]

<JS, Chemistry>

5. This performer’s first stunt was a publicity stunt at his dealership in Moses Lake, Washington, in which he attempted to jump two mountain lions and a pit of rattlesnakes, only to crash into the snakes and scatter them into the crowd. For 10 points each:

[10] Name this stuntman known for his daring motorcycle jumps over numerous motor vehicles. His popularity waned in the 1970s after his failed attempt to jump the Snake River Canyon with a steam-powered “Sky Cycle.”

ANSWER: Evel **Kniefel**

[10] An anonymous promoter offered 10 million dollars to get Evel Kniefel to fight this boxer. The documentary *When We Were Kings* documents this boxer’s 1974 fight against George Foreman in Zaire.

ANSWER: Muhammad **Ali** [accept Cassius **Clay**]

[10] In 1967 Kniefel set a record by jumping 15 cars on this long running TV show hosted by Jim McKay. This ABC show featured segments on traditional sports along with off-beat competitions like arm wrestling, rodeos, and chess.

ANSWER: ABC’s **Wide World of Sports**

<TH, Pop Culture Mixed>

6. This leader has been called anti-Semitic after his administration allowed the state television network to air the series *Horseman Without a Horse*, which portrayed the *Protocols of the Elders of Zion* as fact. For 10 points each:

[10] Name this leader who was ousted after a series of protests that took place in Tahrir Square. After serving in his country’s Air Force, he ruled an African country for three decades following the assassination of Anwar Sadat.

ANSWER: Hosni **Mubarak**

[10] Mubarak’s removal in 2011 was one portion of this event, a series of pro-democratic protests in the Middle East and North Africa. This wide-scale movement began in Tunisia after the self-immolation of Mohamed Bouazizi (“BOO-ah-ZEE-zee”).

ANSWER: **Arab Spring**

[10] Mubarak was put on blast for his government’s assistance of four members of the Palestinian Liberation Organization, who killed the handicapped man Leon Klinghoffer during an international crisis centered around one of these things, known as the *Achille Lauro* (“ah-SHEEL LAO-roh”).

ANSWER: **cruise ship** [accept descriptive answers; prompt on passenger ship, boat, watercraft, or other vague marine vehicles]

<TH, World History>

7. Name some authors who explored themes of gender and sexuality in works of science fiction, for 10 points each:

[10] This author wrote about a utopian society of asexually-reproducing women in her novel *Herland*. She also explored feminist themes in her story “The Yellow Wallpaper.”

ANSWER: Charlotte Perkins **Gilman**

[10] This later female sci-fi author wrote about a genderless society on the icy planet of Gethen in *The Left Hand of Darkness*. She also wrote the *Earthsea* fantasy series before her 2018 death.

ANSWER: Ursula K. **Le Guin**

[10] This black, queer author was influenced by Judith Butler and Michel Foucault in the writing of his novel *Trouble on Triton*, which depicts a society where gender, age and race are fluid. He also wrote *Dhalgren* and *Babel-17*.

ANSWER: Samuel R. **Delany**

<TH, Mixed Lit>

8. This conflict was initiated when a 1358 ordinance required all castles and fortresses be repaired and stocked with provisions. For 10 points each:

[10] Name this three-week long conflict in northern France, where peasant forces led by Guillaume Cale set fire to numerous manor houses and killed the noble families within. It was named for a French colloquium for a peasant.

ANSWER: the **Jacquerie**

[10] The motivations of the Jacquerie were similar to those of the English Peasants Revolt of 1381, which was led by this man. Richard II had this leader killed during peace negotiations near Smithfield.

ANSWER: Wat **Tyler**

[10] Both the Jacquerie and the English Peasants’ revolt took place during this lengthy war between France and England. Joan of Arc participated in the Siege of Orleans during this war.

ANSWER: **Hundred Years’ War**

<TH, European History>

9. Subjects are required to repeatedly push a button, pull a handle, and press down on a bar in the Kimura Box Test for damage to this lobe of the brain. For 10 points each:

[10] Name this lobe of the brain which is responsible for two point discrimination. The frontal lobe is anterior to this lobe which is named for the bones that form the sides and roof of the skull.

ANSWER: **parietal** lobe

[10] The posterior parietal cortex integrates information from this sense of the positioning of one’s own limbs into a representation of the body in space. This sense, often interchanged with kinaesthesia, is mediated by mechano-receptors and the Golgi organ.

ANSWER: **proprioception** [prompt on sixth sense; prompt on joint position sense]

[10] The thalamus relays information from sight and this other one of the five senses to the parietal lobe. The somato-sensory system processes stimuli of this sense after activation of sensory neurons in the skin.

ANSWER: **touch** [accept synonyms and word forms like **tactile**, **somatosensation**, or **mechanoreception**]

<JS, Biology>

10. A seven-part poem named for one of these places closes by noting “And blue-lung’d combers lumbered to the kill. / The Lord survives the rainbow of His will.” For 10 points each:

[10] Name this type of place described by Robert Lowell in a poem about one in Nantucket. The line “The wind is rising! ... We must try to live” appears in a Paul Valery poem about one of these places by the sea.

ANSWER: **graveyard** [accept **cemetery**; accept **cimetiere**; accept Quaker **graveyard**]

[10] This poet noted that “The posture, that we give the dead, / Points out the soul’s eternal sleep.” in his poem “The Indian Burying Ground.” This “Poet of the American Revolution” also wrote “The Wild Honeysuckle.”

ANSWER: Philip **Freneau**

[10] In Thomas Gray’s “Elegy Written in a Country Churchyard”, the speaker notes that “Some mute inglorious [*this author*] here may rest.” This author wrote about Adam and Eve’s expulsion from Eden in *Paradise Lost*.

ANSWER: John **Milton**

<TH, Poetry>

11. One of the controversies concerning the Keystone XL Pipeline was the chance of contamination of this body in the Nebraska Sand Hills. For 10 points each:

[10] Name this large aquifer located underneath several of the states in the Great Plains. It provides about 30 percent of the irrigation water used in the United States and is being depleted faster than it can be replenished by rainwater.

ANSWER: **Ogallala** Aquifer

[10] The Nubian sandstone aquifer beneath this country was tapped for the ambitious Great Man-Made River irrigation project, which provides water to cities like Sirte and Tripoli.

ANSWER: **Libya**

[10] Dry countries like Saudi Arabia and Qatar obtain most of their water not from ground or surface water but instead from this expensive process. Saudi Arabia uses about 20 percent of their energy resources in this process.

ANSWER: **desalination** of seawater [accept descriptions indicating the removal of **salt** from **water**]

<TH, Geography>

12. William Strauss and Neil Howe introduced a theory of these groups called the Fourth Turning theory, which states that in the United States they emerge every twenty years and proceed in a cyclical manner. For 10 points each:

[10] Name these groupings of people born around the same time. The media often discusses cultural difference between examples of these groups like the Baby Boomers and Millennials.

ANSWER: **generations** [accept **cohorts**]

[10] Generation Z, which consists of those born after the Millennial Generation, are often labeled using this two word term popularized by Marc Prensky. This term describes people who grew up learning how to use computers and the internet instead of learning about these technologies as adults.

ANSWER: **digital natives** [do NOT accept “digital immigrants”]

[10] Pew Research Center defines the cutoff for members of the “Post-Millennial” generation as those having little or no memory of this world event.

ANSWER: **9/11** [accept **September 11**th Terrorist Attacks]

<TH, Cultural Criticism>

13. The name for this field of mathematics originated from an Arabic word meaning “reunion of broken parts”. For 10 points each:

[10] Name this field of mathematics that studies operations between elements of structures like groups, rings, and fields.

ANSWER: abstract **algebra**

[10] The fundamental theorem of algebra states that all of these functions of degree  $n$  have  $n$  distinct roots in an algebraically closed field. These functions are sums of variables raised to integer powers multiplied by coefficients.

ANSWER: **polynomials**

[10] This Frenchman introduced his namesake theory to study the roots of polynomials. For a polynomial  $p$  over the field  $F$ , this mathematician’s group is the group of automorphisms of the splitting field of  $p$  that fixes elements of  $F$ .

ANSWER: Évariste **Galois** (“gal-wah”)

<LL, Other Science Math>

14. A 21-member UN commission on determining maritime boundaries for nationstates uses empirical claims about these things to delineate where international oceanic borders exist. For 10 points each:

[10] Name these seabed features. Under pressure from Harry Truman in the 1950s, the UN revised its definition of maritime borders to be measured from these features instead by 3 mile extension from the coastline.

ANSWER: **continental shelves** [accept **continental shelf**]

[10] Competing claims from Russia, the US, Canada, Denmark, and Norway all overlap in the seabed underneath this body of water, where enormous oil and gas reserves are located. In 2007, a Russian probe placed a flag on the seabed location of the North Pole underneath this body of water.

ANSWER: **Arctic** Ocean

[10] The seabed claims of eight countries overlap in this sea, which contains the much-contested Spratly Islands.

ANSWER: **South China** Sea [prompt on **Pacific Ocean**]

<TH, Modern World>

15. Answer these questions about the war between the gods from the Enuma Elish. For 10 points each:

[10] The primordial deities Tiamat and Apsu were the gods of two types of this thing before the war between the gods, after which Ea is made god of this thing.

ANSWER: **water** [accept salt or fresh **water**; accept the **ocean** or **sea**]

[10] Ea is made god of the water by this ambitious son of his, who slays Tiamat and her army of beasts. This king of the Babylonian pantheon creates the divisions of time and the Tigris and Euphrates rivers after the war.

ANSWER: **Marduk**

[10] In the lead up to the fight with Tiamat, Anshar employes his advisor Gaga in this role to inform Lahmu of the battle plans. In Greek myth, this was the primary role of Hermes.

ANSWER: **messenger** of the gods

<TH, Mythology>

16. Zez Confrey composed many novelty songs in this genre. For 10 points each:

[10] Name this syncopated style of American music practiced by composers like Joseph Lamb and James Scott. The Original Dixieland Jazz Band popularized a piece in this genre named for a tiger.

ANSWER: **ragtime** [accept **rags**]

[10] This African American ragtime composer wrote the *Maple Leaf Rag* and *The Entertainer*.

ANSWER: Scott **Joplin**

[10] Ragtime drew on this style of American dance popular at the turn of the 20th century. This style of music is named for a sweet prize that could be won by couples competing in dance contests.

ANSWER: **cakewalks**

<JH, Music>

17. This thinker's concept of the Metaphysics of Quality was developed in his book *Lila: An Inquiry into Morals*, but is more associated with a work which used the title vehicles as something one can experience "from the inside out." For 10 points each:

[10] Name this thinker who advocates doing philosophy directly rather than the second-order "philosophy" in his book *Zen and the Art of Motorcycle Maintenance*.

ANSWER: Robert Maynard **Pirsig**

[10] Pirsig's conception of the Metaphysics of Quality opposes the view that these entities exist in a dualistic framework with an observer. These entities are traditionally held to be observed or experienced by subjects.

ANSWER: **objects**

[10] Pirsig uses the phrase *Tat Tvam Asi*, or "thou art that" to explain his concept of Quality. *Tat Tvam Asi* is a phrase taken from this Indian language used to write the Upanishads.

ANSWER: **Sanskrit**

<TH, Philosophy>

18. Firms may be described as "seeking" this thing if they try to increase their share of wealth without creating new wealth. For 10 points each:

[10] Give this word that describes the money charged by landlords to tenants for the temporary use of housing. Governments may attempt to "control" this value by setting price ceilings for apartment fees.

ANSWER: **rent**

[10] The effectiveness of rent control may be quantified by seeing if it provides this situation to the housing market. In this situation named for an Italian economist, no party can be made better off without hurting another party.

ANSWER: **Pareto** efficiency [or **Pareto** optimality]

[10] The second theorem of a branch of economics described by this word states that any Pareto efficient outcome can be reached by performing a lump sum wealth redistribution and then allowing the market to go into effect. Arthur Pigou founded this subfield of microeconomics.

ANSWER: **welfare** economics [prompt on microeconomics]

<TH, Economic>

19. At the end of this play, an aged Tom gives a soliloquy in which he reflects "I didn't go to the moon, I went much further -- for time is the longest distance between two places." For 10 points each:

[10] Name this memory play in which Tom recalls an incident in which the possibly-engaged Jim shares a kiss with Tom's sister Laura after breaking her ceramic unicorn.

ANSWER: *The **Glass Menagerie***

[10] *The Glass Menagerie* is a play by this man, who wrote about the troubled relationship of the sisters Blanche and Stella in *A Streetcar Named Desire*.

ANSWER: Tennessee **Williams**

[10] In the closing lines of *The Glass Menagerie*, Tom tells Laura to "blow out your candles" because "nowadays the world is lit by" this specific thing. We want the specific word from the play.

ANSWER: **lightning** [do not accept or prompt on purported synonyms]

<TH, Drama>

20. Some emotions are best expressed in certain languages. For 10 points each:

[10] This German language term which literally means “harm-joy” is used to describe an experience of happiness or satisfaction arising from the misfortune of others.

ANSWER: **schadenfreude** (“sha-DEN-froy-DUH”)

[10] This three word Japanese phrase is used to describe an awareness to the impermanence and transience of things. It is a central emotional theme of Heian-era literature like *The Tale of Genji*.

ANSWER: **mono no aware**

[10] The term Iktsuarpok, meaning roughly the anticipation one feels when waiting for someone to arrive, appears in the language of this ethnic group. English loanwords from this group include igloo and kayak.

ANSWER: **Inuits** [accept **Aleut**; prompt on **Eskimo** but inform the player that this is a pejorative]

<TH, Mixed Academic>

21. This composer’s most lauded operas were collaborations with librettists Lorenzo Da Ponte and Emanuel Schikaneder. For 10 points each:

[10] Name this composer, whose early Italian-language operas include *Mitridate, re di Ponto* and *Idomeneo*.

ANSWER Wolfgang Amadeus **Mozart**

[10] In this opera by Mozart with a libretto by Da Ponte, an extremely licentious nobleman kills the Commendatore in the first scene before escaping with his servant Leporello.

ANSWER: **Don Giovanni**

[10] Another opera by Mozart and Da Ponte is titled for the “marriage” of this man, who is also the subject of Rossini’s *The Barber of Seville*.

ANSWER: **Figaro** [accept *The Marriage of **Figaro***]

<DG, Opera>

22. Answer some questions about novelist Sandor Marai. For 10 points each:

[10] In Marai’s novel *Embers*, Konrad is a relative of a composer of this surname, who in real life was a lover of George Sand. A female author that shares this surname wrote about Edna Pontellier in *The Awakening*.

ANSWER: **Chopin** [accept Frederic **Chopin** or Kate **Chopin**]

[10] Marai wrote a novel about this figure “in Bolzano.” This 18th century adventurer wrote a much-studied autobiography that played a large role in his name becoming a metonym for a womanizer.

ANSWER: Giacomo **Casanova**

[10] Sandor Marai is from this country. Another author from this country wrote the novels *War and War* and *The Melancholy of Resistance*.

ANSWER: **Hungary** (That author is László Krasznahorkai)

<TH, Long Fiction>

23. One image from a stylized Ethiopian example of one of these works in the Gunda Gunde style shows a haloed John the Evangelist beginning to write his namesake gospel. For 10 points each:

[10] Give this general term for works from the late medieval era and early renaissance in which images co-existed with sacred or informational texts. The Book of Kells is an Irish example of these works.

ANSWER: **illuminated manuscripts** [prompt on partial answer]

[10] This is the surname of a trio of Netherlandish brothers best known for the illuminated manuscript *The Very Rich Hours of the Duke of Berry*.

ANSWER: The **Limbourg** Brothers

[10] Many of the best medieval manuscript illuminators were women, such as twelfth century nun Guda, who created one of the first of these works in western art within one of her manuscripts. Much later, Elisabeth Vigee Le Brun created one of these works in which the subject shows her teeth.

ANSWER: **self-portrait** [prompt on portrait]

<TH, Painting>

24. This scientist's namesake frequency for diamond is very big. For 10 points each:

[10] Name this physicist whose namesake model of a solid is a quantum mechanical Boltzmann model in which each atom is a harmonic oscillator. His model of a solid assumes that every atom oscillates at the same frequency.

ANSWER: Albert **Einstein**

[10] The Dulong-Petit law is false for diamond because it assumes heat capacity is independent of this quantity. The average kinetic energy of a gas is directly proportional to this quantity measured on the Fahrenheit scale.

ANSWER: **temperature**

[10] In the crystal structure of diamond, the four nearest neighbors of every  $sp^3$  hybridized carbon atom form the vertices of one of these polyhedra.

ANSWER: **tetrahedra** [or **tetrahedron**; accept **tetrahedral**]

<LL, Physics>