Packet 13

Tossups:

1. **A war of this many princes broke out over the successor to a disabled ruler of the Jin Dynasty. A group of hard-liners called the "gang" of this many people carried out the failed August Putsch against Gorbachev. Florence fought against Pope Gregory XI in a war named for this many saints that helped to end the Avignon Papacy. An "affable" French king named Charles of this number invaded (*)** Italy in 1494. Another French king named Louis of this number fought in the First Barons' War and earned the nickname the "Lion." The Treaty of Tunis ended the crusade with this number, which also saw the death of Louis IX, and the Qing Dynasty used military divisions named for this many banners. For 10 points, give this number of English kings with the name Henry.
ANSWER: **eight** [or **8**; or **eighth**]
<GP World History>

2. **A man replies to questions about this item with the exclamation "I believe in Matthew Harrison Brady!" in a play that ends with Henry Drummond taking this item. In *Huck Finn*, Harney hides a love note for Sophia in this item, feuling a feud between the Grangerfords and Shepherdsons. In a short story, a character opens a hollowed-out one of these objects to reveal whiskey and playing cards before taking Joy's artificial leg. Besides those items in (*)** *Inherit the Wind* and Flannery O'Connor's "Good Country People," Montag threatens Faber by tearing pages out of this item in *Fahrenheit 451* and later memorizes a portion of this book. The Dead family uses this book to name daughters like Reba, Magdalene, and First Corinthians in Toni Morrison's *Song of Solomon*. For 10 points, name this religious text.
ANSWER: **Bible**s [or synonyms; anti-prompt on more specific books or sections]
<OL American Literature>

3. **In the ring of integers of a number field, the group of elements with this property has a rank determined by the number of real and complex embeddings of the field, by a theorem of Dirichlet. In a commutative ring, an element has this property precisely if it is not part of any maximal ideal. In a ring, an element with this property is called a unit. Matrices with this property make up the (*)** general linear group. A commutative ring where every non-zero element has this property is called a field. A square matrix has this property if and only if it does not have zero as an eigenvalue, and it has this property if and only if its determinant is non-zero. For 10 points, a square matrix has what property if it can be multiplied with another matrix to give the identity?
ANSWER: **invertible** [accept word forms; accept **unit** until mentioned; accept **nonsingular**]
<AW Math>

4. **The slow first movement from a collection by this composer opens with the piano playing the following descending eighth-note figure over pulsating D minor eighth-note chords: upbeat F, E, D, A. This composer reused music from his opera *Fierrabras* for a work that closes with "The Brook's Lullaby." One string quartet by this composer was partially based on music this man wrote based a poem that opens "Vorüber! Ach, vorüber!"; that poem is by (*)** Matthias Claudius. The song "Gute Nacht" opens a set of pieces by this composer, who also wrote a set of pieces about a wandering miller who sings to a brook about his love for a maiden. This composer wrote both a vocal piece and a string quartet based on "Death and the Maiden." This composer wrote a song based on a Goethe poem titled "Der Erlkönig" ["AIRL-ker-nig"]. For 10 points, name this composer of many lieder, some of which are in the song cycle *Winterreise* ["VIN-tuh-RIZE-uh"].
ANSWER: Franz **Schubert**
<YFL Music and Opera>

5. **In "Video killed the radio star," Erik Hurst argues that video games have caused a decrease in this quantity, which increased in the second half of the 20th century due to the mechanization of household tasks like laundry. An increase in the rate of return on capital or an increase in wealth leads to a decrease in this quantity due to the income effect, and though it's not aggregate demand, this quantity notably has a (*)** backward-bending or inverted S-shaped curve. It's not technology or productivity, but in the IS-LM model, an increase in this quantity increases the long-run equilibrium GDP by shifting the FE line. This quantity is usually denoted with a capital N, and it increases with immigration. For 10 points, name this term for the amount that people are willing to work in an economy.
ANSWER: **labor** supply [or **labor** force participation rate; accept **N** before mention]
<JK Economics>

6. **Georges Maillard criticized a painting of one of these places, saying "these flakes, these mists… are so thick they sometimes hide everything else." Claude Monet's twelve-painting series of one of these buildings was poorly received at the time for its focus on industry and modernity, and Edouard Manet's *last* painting of is sometimes named for one of these buildings. Degas's *L'Absinthe* and Millet's *The Gleaners* are (*)** housed in a former one of these buildings, the Musee d'Orsay. One of these buildings is the setting of Manet's painting of a woman with a young girl who watches billowing smoke behind a fence; that one of them is depicted in Monet's *Gare Saint-Lazare* series. For 10 points, name this type of building depicted in Manet's *The Railway*.
ANSWER: **train station** [or **rail**way **station**; prompt on station; accept **Gare** Saint-Lazare or **Paris-Saint-Lazare** until "housed in" is read]
<JK Painting and Sculpture>

7. **An admiral with this surname was the only full admiral in the Confederate Navy, and he lost the Battle of Mobile Bay. Another man with this surname served as the second Governor of Liberia, whose third largest city is named in his honor. A man with this surname gave a speech that Molly Ivins joked "probably sounded better in the original German"; that speech described a conflict "for the soul of America" dubbed the (*)** "culture war." John Breckenridge served as vice president to the most famous man with this surname, during whose term the Crittenden Compromise failed to prevent South Carolina from seceding from the Union. For 10 points, give this last name of the conservative political pundit Pat and of James, the 15th President of the United States.
ANSWER: **Buchanan** [accept Franklin **Buchanan**, Thomas **Buchanan**, Pat **Buchanan**, or James **Buchanan**]
<GP American History>

8. **This organ's artery and vein are attached to a long fissure called the hilum. In Chaudhrey's disease, this organ is replaced by multiple small accessory versions of it. A sharp pain in the [emphasize]** *left* **shoulder indicates injury to this organ, and is called Kehr's sign, and though it's not the liver, mononucleosis enlarges this organ and can lead to its (*)** "rupture." People may experience infarctions of this organ due to sickle-cell disease, while spherocytosis leads it to destroy otherwise healthy cells. This organ's PALS, or periarteriolar lymphoid sheath, contain T lymphocytes. Misshapen erythrocytes are unable to pass through the cords of Billroth in this organ, which contains red and white pulp. For 10 points, name this lymphatic organ that filters out old red blood cells.
ANSWER: **spleen**
<JK Biology>

9. **A musician who played this instrument frequently collaborated with his brothers Monk and Buddy and is known for his composition "Four on Six." Joe Zawinul recruited a musician who played this instrument to play on the album** *In a Silent Way***, leading to him playing on a namesake song on** *Bitches Brew***. "Minor Swing" and "Nuages" are (*)** gypsy jazz compositions by a musician who played this instrument despite being disabled in his left ring and pinky fingers. That musician who played this instrument formed the Quintette du Hot Club de France with violinist Stéphane Grappelli. A jazz rhythm section typically includes bass, drums, piano and one of these instruments. For 10 points, name this instrument played by Wes Montgomery, Django Reinhardt, and John McLaughlin that usually has six strings.
ANSWER: jazz **guitar** [accept electric **guitar**]
<YFL Other Arts (Jazz)>

10. **In a novel from this movement, Susan Brown's Aston Martin-loving husband leaves her for Alice Aisgill. That novel from this movement chronicles Joe Lampton's move to Warley. In a work from this movement, the protagonist meets the "pop-eyed potbellied governor" after the discovery of money in a drainpipe leads to him being sent to a Borstal. In a play from this movement, a man says "What the hell is that?" when his wife jumps up and down in imitation of a (*)** squirrel. In that play, Alison's miscarriage forces her to return to her husband Jimmy Porter. John Braine's *Room at the Top* and Alan Sillitoe's *The Loneliness of the Long Distance Runner* are works of this movement. For 10 points, John Osborne's play *Look Back in Anger* exemplifies what 1950s movement of disgruntled British writers?
ANSWER: **Angry Young Men** [or **kitchen sink** realism]
<OL British Literature>

11. **In quantum field theory, the S-matrix formalism is used when this operator is decomposed into "free" and "interaction" components. The Rayleigh–Ritz modification of the variational principle relies on setting the determinant of a matrix of this operator minus energy times the overlap integral to zero. A quantity corresponding to time-independent operator** *Q* **is a (*)** constant of motion if *Q* commutes with this operator. This quantity can be obtained by the Legendre transform of the Lagrangian. For a particle moving in one dimension, this operator equals *h*-bar squared over two-*m* times the second derivative with respect to position, plus a potential energy term. For 10 points, name this operator that gives the total energy of a system.
ANSWER: **Hamiltonian** [accept H; prompt on total energy until read]
<EM Physics>

12. **One of this modern nation's monarchs from the House of Wettin battled a rebellion which ended after a "Silent" meeting adjudicated by foreign troops. The Henrician Articles governed the rights of this nation's monarch. Magnates from this country were the primary opponents of the Khmelnytsky Rebellion, which occurred shortly before this nation suffered a (*)** "deluge" caused by foreign invasion. This nation's Queen Hedwig married Grand Duke Jogaila, creating a connection that was formalized by the Union of Lublin; that connection lasted until this country was divided by three partitions. For 10 points, name this country whose Commonwealth with Lithuania had capitals at various points at Krakow and Warsaw.
ANSWER: Crown of the Kingdom of **Poland**
<CH European History>

13. **A 1989 book argues that modern interpretations of this concept are flawed because they presuppose the institution of the family. This is the *first* concept in the title of that book by Susan Moller Okin. Elizabeth Anderson argued that this concept should not be understood as "luck egalitarianism" in "What is the Point of Equality?" Another thinker argued that distribution D2 *did* demonstrate this thing because people willingly gave 25 cents to see (*)** Wilt Chamberlain. A work titled for this concept argues that inequalities should benefit the worst-off group and designs the "original position," in which people are unaware of their specific circumstances due to the "veil of ignorance." For 10 points each, name this concept that John Rawls defined "as fairness."
ANSWER: **just**ice [prompt on fairness; prompt on equality]
<JK Philosophy>

14. **To avoid problems caused by the cytotoxicity of this element, Carolyn Bertozzi developed highly-strained reagents for bio-orthogonal chemistry. The cofactor TPQ, which is formed by post-translational tyrosine oxidation, allows the two-electron reduction of oxygen by an atom of this element in amine oxidases. Two histidines and a cysteine coordinate an atom of this element in a family of proteins which includes (*)** plastocyanin and azurin. In humans, this element is mainly transported in blood by ceruloplasmin. A protein which binds oxygen between two atoms of this element is hemocyanin, which gives spiders' blood its blue colour. This element builds up in the liver and the brain in Wilson's disease. For 10 points, name this element which alloys with zinc to make brass and has symbol Cu.
ANSWER: **copper** [accept **Cu** until read]
<AR Biology>

15. **This woman is exiled by her husband after an angry washerman slanders her while fighting with his wife. She's not Helen, but in some stories this woman is replaced by a "shadow" or "illusionary" duplicate created by a god to preserve this woman's purity. She's not Penelope, but this woman marries her husband after he strings and then breaks a bow unliftable by mortals. She is distracted by a golden (*)** deer created by Maricha while under the protection of her brother-in-law. This woman proved her chastity to her husband by jumping through a fire unharmed after the monkey-king Hanuman helps rescue her from the ten-headed Rakshasa king Ravana. For 10 points, name this consort of Lord Rama who is kidnapped in the *Ramayana*.
ANSWER: **Sita**
<JK Mythology>

16. **In a novel centered around this event, the narrator remembers seeing his ex-wife with a "stubborn blue-eyed boy" and explains to Dr. Oblath why he does not want to have children. A poem about this event is narrated by "we" drinking the "Black milk of dawn" at different times of the day. Paul Celan's Death Fugue is set during this event, as is a book in which Madame Schachter hysterically cries that she can see flames. Theodor (*)** Adorno once claimed that "to write poetry after" this event was "barbaric." The narrator imagines himself as the accuser with "God the accused" in one work set during this event, where he imagines God "hanging here on the gallows." For 10 points, name this event central to Imre Kertész's ["EEM-ray KAIR-tace's"] *Kaddish for an Unborn Child* and *Night* by Elie Wiesel ["ELL-ee vee-ZELL"].
ANSWER: the **Holocaust** [or the **Shoah**; accept specific concentration camps like **Auschwitz**; prompt on World War II or answers like the Nazi occupation of Hungary; prompt on genocide]
<JK European Literature>

17. **A senator from this state warned against the "new normal" and the lure of populist politics in a speech that announced he would not seek re-election. It's not Maine or North Dakota, but a senator from this state sponsored a "No Fly, No Buy" bill that would keep people on the no-fly list from purchasing guns. That senator from this state criticized (*)** Trump's "Fake News awards" as repeating "words infamously spoken by Joseph Stalin." *Will and Grace* was attacked by conservatives for suggesting that Lindsey Graham had "sexual tension" with the senior senator from this state, who voted against the Graham-Cassidy healthcare bill after returning from surgery for brain cancer. For 10 points, name this state of senators Jeff Flake and John McCain.
ANSWER: **Arizona** [or **AZ**]
<JK Current Events>

18. **At the time of his death, a king of this name was planning to start a war with Denmark to add to his holdings as Duke of Holstein-Gottorp. The final wife of a ruler of this name, a scullery maid who had been captured at the siege of Marienburg, dyed her hair to avoid looking like his one-time mistress Anna Mons. The accession of a ruler with this name was responsible for the Miracle of the House of Brandenburg, since he withdrew his country's troops from (*)** Berlin out of love for Frederick the Great. That monarch of this name was deposed as part of a conspiracy led by his wife, Catherine the Great. The most famous ruler with this name established the Table of Ranks and defeated the armies of Charles XII at Poltava. For 10 points, give this name of three Russian czars, the first of whom is known as "the great."
ANSWER: **Peter** [accept **Peter** I, **Peter** the Great, **Peter** II, or **Peter** III]
<GP European History>

19. **This author's most recent novel is about an intersex woman who finds refuge in a Muslim cemetery and joins a community of hijra. In another novel by this author, a character protests having to leave a showing of *The Sound of Music* early, not knowing that her brother is traumatized after being molested by a drink vendor. *The Ministry of Utmost Happiness* is by this author, who included the Rhodes Scholar (*)** Chacko in a novel about a pair of twins whose family owns Paradise Pickles. In that Booker-winning novel by this author, Sophie Mol's accidental drowning is blamed on the Untouchable Velutha, who loves Ammu. For 10 points, name this Indian author who wrote about the incestuous relationship between Rahel and Estha in *The God of Small Things*.
ANSWER: Arundhati **Roy**
<JK World Literature>

[NOTE: Read the answerline before reading the tossup]

20. **This doctrine was created by Bible scholar John Nelson Darby, and was spread through footnotes in the Scofield Reference Bible. Doug Weaver argues that focus on this doctrine increases during political or economic despair, or as a response to real or perceived persecution. A series by Tim LaHaye and Jerry Jenkins familiarized this event for children, while Janet Heimlich's** *Breaking Their Will* **argues that fundamentalist children are often manipulated via (*)** fear around this event. Biblical support for this event includes Thessalonians 4:17, which states that the living shall be "caught up together." Hysteria over this event ramped up leading up to the year 2000, which many millenarians believed would bring an event depicted in the *Left Behind* series. For 10 points, name this end time event when all elect Christians will ascend to heaven.

ANSWER: the **Rapture** [or **dispensationalism**; prompt on the end of the world or the apocalypse or the end times or the Second Coming; prompt on any doctrine containing millennialism or millenarianism until read; prompt on judgment day or the apocalypse]

<JK Religion>

21. **The benchmarks HPCG and LINPACK test supercomputer performance by performing operations on these things. Iterative methods like the Jacobi method and Gauss-Seidel method converge if the spectral radius of one of these things is less than 1. The skyline storage and compressed row storage formats are ways of representing (*)** sparse versions of these things. Graphs can be represented with an "adjacency" type of these objects. Linear least squares problems can be solved using the QR decomposition of these things, and LU decomposition splits these things into their upper triangular and lower triangular types. Cofactor expansion is a simple method for calculating the determinant of one of these objects. For 10 points, name these rectangular arrays of numbers.

ANSWER: **matrix** or **matrices**

<DM Math/CS>

Bonuses:

1. This island was seized from Isaac Komnenos in 1191. For 10 points each:
[10] Name this island that at one point was controlled by the Knights Templar, and was the site of the Siege of Famagusta before the Battle of Lepanto.
ANSWER: **Cyprus**
[10] This man conquered Cyprus from Komnenos in retribution for the capture of his sister Joan and fianceé Berengaria. This man fought Saladin during the Third Crusade and was succeeded by his brother John as King of England.
ANSWER: **Richard** the **Lionheart** [**Richard I**; prompt on Richard]
[10] The House of Lusignan sold Cyprus to this city, which would lose it to the Ottoman Empire. This city also lost the Cretan and Morean Wars to the Ottomans, and its territories were called the Stato da Mar.
ANSWER: Republic of **Venice**
<GP European History>

2. Antonie van Leeuwenhoek and Robert Hooke developed early apparatus for this technique. For 10 points each:
[10] Name this technique where lenses are used to focus light so that small specimens can be observed.
ANSWER: optical **microscopy** [accept word forms; accept **light microscopy**]
[10] One problem with light microscopy is the diffraction limit, where features appear blurred if they are smaller than the wavelength of light divided by two times this quantity. This dimensionless quantity can be raised to around 1.5 by using immersion oil as an external medium.
ANSWER: **numerical aperture** [or **NA**]
[10] This name is given to the fuzzy rings around point objects observed due to diffraction during light microscopy. The Rayleigh criterion gives the distance at which the first order maximum of one of them overlaps with the first order minimum of an adjacent one.
ANSWER: **Airy disk** [or **Airy** pattern]
<EM Physics>

3. Metaphorical meaning in poems from this country is concealed through *Säm əna Wärq* ["sem uh-nah werk"]. For 10 points each:
[10] Name this home of Qəne ["ken-AY"] poetry. Paul Laurence Dunbar told those taken from this country that "thy name is writ on Glory's scroll / in characters of fire" in one of the many American poems that uses this country's name to refer to the entire African continent.
ANSWER: **Ethiopia**
[10] Some critics argue that this Ancient Greek writer was originally from Ethiopia. His fables include "The Fox and the Grapes," "The Ant and the Grasshopper," and "The Tortoise and the Hare."
ANSWER: **Aesop**
[10] In Dinaw Mengistu's novel *All Our Names*, an Ethiopian foreign exchange student with this name meets the social worker Helen. Reverend Brown gives Nwoye this name in Chinua Achebe's *Things Fall Apart*.
ANSWER: **Isaac**
<OL World Literature>

4. This artist said that one's signature or "gesture" must appear out of necessity, not habit. For 10 points each:
[10] Name this abstract expressionist known for her "soak stain" technique. Her painting *Mountains and Sea* was created after a trip to Nova Scotia, and she painted *Eden* around the two 100s painted in the center.
ANSWER: Helen **Frankenthaler**
[10] Frankenthaler described first seeing this artist's work as like going to a foreign country but knowing she "*had* to live there, and master the language." Like Frankenthaler, this husband of Lee Krasner laid his canvases on the floor, where he would drip paint over them.
ANSWER: Jackson **Pollock**
[10] Pollock and Krasner were known for this style of painting that emphasized the physical act of painting via splashes or smears. This term was coined by critic Harold Rosenberg, who called the canvas an "arena."
ANSWER: **action painting** [prompt on partial answer; accept **gestural abstraction**; prompt on drip painting]
<JK Painting and Sculpture>

5. This poet tells his "luve" that his affection is like a "red, red rose." For 10 points each:
[10] Name this Scottish poet of "To a Mouse" and "Tam O'Shanter." He might be best known for his New Year's hymn "Auld Lang Syne."
ANSWER: Robert **Burns**
[10] A Robert Herrick poem addressed to these people tells them to "gather ye rosebuds while ye may," since "this same flower that smiles today / tomorrow will be dying."
ANSWER: **virgin**s
[10] In the opening speech of *Richard III*, which takes place during the War of the Roses, Gloucester ["GLOSS-ter"] notes that "the winter of our discontent" has been made "glorious summer" by this figure, whose name includes a homophone.
ANSWER: this **sun of York** [prompt on Edward IV]
<OL British Literature>

6. One civilization had two gods of this foodstuff, one tonsured and the other leafy. For 10 points each:
[10] Name this domain of the "first father," who Linda Schele argues was associated with creation through his raising of the world tree. In some myths, that god of this domain is resurrected from the floating carapace of a turtle.
ANSWER: **maize** [or **corn**]
[10] Maize was important in the mythology of these Mesoamerican people, whose creation narrative is recounted in the *Popol Vuh* ["vookh"] along with the story of the Hero Twins. These people include the K'iche' ["KEE-chay"] and the Chuh.
ANSWER: **Maya** [or **Maya**ns]
[10] The *Popol Vuh* recounts how maize dough was used to successfully accomplish this task after several failed attempts. In Aztec myth, Quetzalcoatl and Huitzilopochtli did this by sacrificing a god, whose blood fell on a mass of ground-up bones and produced Oxomoco and Cipactonal.
ANSWER: **creating humans** [or equivalents of **creating man** or **creating people**; prompt on creation]
<JK Mythology>

7. This scientist earned his PhD under Robert Bunsen, the namesake of the Bunsen burner. For 10 points each:
[10] Name this German chemist who invented a namesake process for producing hydroxylamine. He names a type of ceramic or metal ring that is used to form a packed bed to increase the efficiency of distillations.
ANSWER: Friedrich August **Raschig**
[10] The Raschig–Hooker process facilitates industrial production of this molecule from benzene. This aromatic alcohol has the formula C6H5OH.
ANSWER: **phenol** [or **phenol**ic acid]
[10] Adding a methyl group to phenol produces cresol. Depending on the position of the methyl group, the cresol can have this word as a prefix when the methyl group adds directly on the opposite side of the hydroxyl group.
ANSWER: **para**-cresol [or **p**-cresol]
<AR Chemistry>

8. The lenient sentencing of this man's murderer sparked the White Night Riots. For 10 points each:
[10] Name this openly gay member of the San Francisco Board of Supervisors who was killed by Dan White.
ANSWER: Harvey (Bernard) **Milk**
[10] Before shooting Milk, White killed this mayor of San Francisco. This man refused to investigate Jim Jones and the People's Temple, and he was succeeded by Diane Feinstein.
ANSWER: George (Richard) **Moscone**
[10] During the trial, Dan White's lawyer's citing of his junk food eating habits as a sign of his depression was misleadingly dubbed a "defense" named for this sugary snack food.
ANSWER: **Twinkie** [prompt on Hostess cakes]
<AN American History>

9. David Skarbek's *The Social Order of the Underworld* examines the complex structure of prison organizations of this type. For 10 points each:
[10] Name this type of group often discussed in the sociology of deviance, examples of which include the Crips and Bloods in Los Angeles.
ANSWER: **gang**s
[10] The gang member J. T.'s beating of C-Note is recounted in this book by Sudhir Venkatesh, which is subtitled "A Rogue Sociologist Takes to the Streets" and recounts his participant-observation study of crime in Chicago.
ANSWER: *Gang Leader for a Day*
[10] The choice of young people to join gangs is often explained with Robert Merton's strain theory, which articulates how people adapt to this condition. This state of societal normlessness was first described in Émile Durkheim's *Suicide*.
ANSWER: **anomie**
<JB Social Science>

10. This territory also includes the islands of Henderson, Ducie, and Oeno. For 10 points each:
[10] Name this island territory in the South Pacific with a population of 50, whose inhabitants are descended from mutineers on the *HMS Bounty*. Its capital is Adamstown.
ANSWER: **Pitcairn** Islands
[10] This other British island territory in the South Atlantic has its capital at Stanley. It was the subject of a war between the United Kingdom and Argentina in 1982.
ANSWER: **Falkland** Islands [accept **Falklands** and **Las Islas Malvinas**]
[10] This British island territory is currently claimed by Mauritius, and its largest island is Diego Garcia. Its native people, the Chagossians, were expelled to allow for the creation of a military base in this territory.
ANSWER: **British Indian Ocean Territory**
<GP Geography>

11. These people fought against the Spanish Empire in the Arauco War. For 10 points each:
[10] Name this indigenous group that live south of the Bio-Bio River in Chile. They resisted expansion from both the Inca and Spanish and killed the conquistador Pedro de Valdivia.
ANSWER: **Mapuche**
[10] The Mapuches of this region were subjugated by Argentina during its Conquest of The Desert. Large numbers of Welsh immigrants settled in the Chubut Valley of this region.
ANSWER: **Patagonia**
[10] Mapuche men known as malónes stole this commodity in Patagonia to exchange for alcohol and weapons in Chile. The alleged stealing of this commodity led to the Johnson County War in Wyoming.
ANSWER: **cattle** [or **cow**s]
<GP World/Other History>

12. Some objects hung in these locations have genitalia inscribed on them for fertility prayers. For 10 points each:
[10] Name these locations where small wooden plaques called ema ["eh-mah"] are hung and ritually burned at certain events to release wishes from their writer. Those objects replaced the practice of donating horses for good favor to these places.
ANSWER: **Shinto shrines** [accept **kami shrines**; prompt on just shrine without mention of Shinto; accept **jinja**; accept **jingu**; accept **honden**; accept **haiden**; accept **shinsha**]
[10] Shinto shrines are found in this country where Shinto originates from. The Ise Grand Shrine in this country is dedicated to Amaterasu and destroyed and rebuilt every 20 years.
ANSWER: **Japan** [or **Nippon**; or **Nihon**]
[10] Kagura literally means "god-entertainment" and is the Shinto tradition of this activity which derives from the practice of *kami-gakari* and was originally performed by shrine maidens called *miko*.
ANSWER: **dancing** [or **dance**]
<YFL Religion>

13. This composer wrote an opera about the life of painter Matthias Grünewald ["mah-TEE-ahss GRUE-nuh-valt"]. For 10 points each:
[10] Name this composer of *Mathis der Maler*. This composer used a march to end his *Symphonic Metamorphosis of Themes by Carl Maria von Weber*.
ANSWER: Paul **Hindemith** ["HIN-duh-mit"]
[10] Hindemith was also a musician who played this instrument and wrote the concerto *Der Schwanendreher* for this instrument. This instrument is the second highest pitched string instrument.
ANSWER: **viola** [do not accept or prompt on viol or viola de gamba]
[10] When King George V died on Hindemith's travels to London, he wrote this piece for viola and orchestra on request and performed it with the BBC orchestra on live broadcast the same day.
ANSWER: ***Trauermusik***
<YFL Music and Opera>

14. This philosopher's book *Wittgenstein on Rules and Private Language* was his original reading of *Philosophical Investigations*. For 10 points each:
[10] Name this philosopher who introduced the notion of the rigid designator in his book *Naming and Necessity*.
ANSWER: Saul **Kripke**
[10] Kripke is also known for his developments in this branch of philosophy, such as a system of semantics based around possible worlds. Syllogisms and mathematical analysis of propositions are part of this field.
ANSWER: **logic**
[10] Kripke's semantics are used in this specific branch of logic that uses operators expressing statement qualifiers, such as possibility or necessity. Operators in this branch of logic include deontic operators for obligation.
ANSWER: **modal** logic
<YFL Philosophy>

15. While serving as this author's personal secretary in the last years of his life, Johann Peter Eckermann authored some "Conversations" with him. For 10 points each:
[10] Name this author of the vaguely scientific treatises *Metamorphosis of Plants* and *Theory of Colours*, who also pioneered the bildungsroman in his *Wilhelm Meister's Apprenticeship*.
ANSWER: Johann Wolfgang von **Goethe**
[10] Eckermann's *Conversations with Goethe* belongs to a genre of remarks by famous people in informal settings, which is named for this piece of furniture. Erasmus was one of the first writers to lay out a type of "manners" named for this piece of furniture.
ANSWER: **table**s [or **table** talk; or **table** manners]
[10] The women of Jena call Goethe "His Ancient and Divine Majesty" in Penelope Fitzgerald's novel *The Blue Flower*, which is about this author. This author wrote about Heinrich's quest for a blue flower in an incomplete novel.
ANSWER: **Novalis** [or Georg Philipp Friedrich "Fritz" Freiherr von **Hardenberg**]
<JB European Lit>

16. Mammals are diphyodont, meaning that they develop two "sets" of these structures. For 10 points each:
[10] Name these structures whose "baby" or "milk" sets are eventually replaced by adult ones.
ANSWER: **teeth**
[10] This tissue found in teeth is the most highly mineralized substance of the body. It primarily consists of hydroxyapatite, and unlike dentin and bone, it does not contain collagen.
ANSWER: tooth **enamel**
[10] This calcified substance attaches to the enamel at the CEJ, also called the cervical line, and meets the dentin at the DCJ. Gingival recession can lead to the erosion of this substance.
ANSWER: **cementum** [or **cementocyte**s or **cementoblast**s]
<JK Biology>

17. At the end of the play in which she appears, this character sobs while repeating "We're free." For 10 points each:
[10] Name this mother of Biff and Happy. She never discovers her husband's affair with "the Woman," despite his hallucinations of her and his uncle Ben.
ANSWER: **Linda** Loman [prompt on Loman]
[10] The Loman family appears in this play by Arthur Miller. Willy Loman describes the title event happening to Dave Singleman, who "drummed merchandise in thirty-one states" before passing away in his green velvet slippers.
ANSWER: *__Death of a Salesman__*
[10] *Death of a Salesman* is written in two acts and this section. Linda shares that she had paid off her family's mortgage shortly before attending Willy's funeral in this section of the play.
ANSWER: "**Requiem**" [prompt on epilogue]
<OL American Literature>

18. This film is named for a scene where Shmuel Frenkel "dances" wildly with a machine gun on a Beirut street. For 10 points each:
[10] Name this animated documentary by Ari Folman, a former soldier for the IDF who suffers from PTSD. Folman eventually realizes that he helped the Lebanese Christian Phalange militia massacre a Palestinian refugee camp.
ANSWER: *__Waltz with Bashir__* [or *__Vals Im Bashir__*]
[10] This other animated film depicts Marjane Satrapi's life growing up in a theocracy and her rebellion against fundamentalist Islam. It lost an Academy Award to *Ratatouille*, a film about a rat's rebellion against the idea that rodents should not cook.
ANSWER: *__Persepolis__*
[10] *Persepolis* is primarily set in this home country of directors Asghar Farhadi, whose most recent film is *The Salesman*. Farhadi's *A Separation* is set in this country's capital of Tehran.
ANSWER: **Iran** [or **Persia**]
<JK Visual FA>

19. Sarah Pomeroy's book titled for these people discusses ones such as the Olympic champion Cynisca and the philosopher Chilonis. For 10 points each:
[10] Name these people. A section from Plutarch's *Moralia* presenting the "sayings" of these people describes one of them who gave a man departing for war his shield and told him "Either this or upon this."
ANSWER: **Spartan women** [or **Spartan mother**s; or **Spartan wive**s; accept equivalents; prompt on Spartans; prompt on Greek women; prompt by asking "from where?" on answers such as women, mothers, wives, etc.]
[10] "The Sayings of Spartan Women" also presents several aphorisms of this Spartan queen, including one in which she urges her father King Cleomenes to rebuff Aristagoras's attempts to involve him in the Ionian Revolt.
ANSWER: **Gorgo**
[10] Cynisca won an Olympic laurel through her skill at driving the *quadriga*, a type of these vehicles pulled by four horses. The Romans held races for these wheeled vehicles at the Circus Maximus.
ANSWER: **chariot**s
<JB Euro History>

20. Hydrothermal vents are commonly found in regions where this process is occurring. For 10 points each:
[10] Name this process that occurs at mid-ocean ridges where new oceanic crust is formed as tectonic plates move apart from each other.
ANSWER: **seafloor spreading**
[10] Patterns of magnetic striping near mid-ocean ridges provide evidence for these events. The lengths of time between these events are called "chrons" ["krons"].
ANSWER: **geomagnetic** field **reversal**s [prompt on descriptive answers like the Earth's magnetic field flipping]
[10] The Vine–Matthews–Morley hypothesis was an early test of plate tectonics theory which posited that the patterns of magnetic striping around a mid-ocean ridge should have this property.
ANSWER: **symmetric**
<EM Earth Science>

21. One of this group's leading members wrote a work which criticized the "animal-like" way men and women were allowed to mix in the United States. For 10 points each:
[10] Name this group whose members included the author of "The America that I Have Seen," Sayyid Qutb. This group was founded by Hassan al-Banna.
ANSWER: **Muslim Brotherhood** [or Society of the **Muslim Brothers**, or Jamāʿat **al-Ikhwān al-Muslimīn**]
[10] Sayyid Qutb was assassinated by the Egyptian secret police after plotting to kill this Egyptian president. The Free Officers Movement propelled this man and his predecessor Mohammed Naguib to power in Egypt.
ANSWER: Gamal Abdel **Nasser** Hussein
[10] The Muslim Brotherhood was founded by al-Banna with the help of six people who worked on this transportation route. Nasser's nationalization of this route connecting the Mediterranean and Red Seas led to a joint British-French invasion of Egypt.
ANSWER: **Suez Canal**
<CH World History>