

ACF Regionals 2020

Packet A by Columbia A and Texas A

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Tossups

1. As an adjective, this place appears in the title of a poem that oddly refers to heaven as a “celestial *Salem*” that “blooms in endless spring.” The speaker of that poem titled for this place asks “how did those prospects give me soul delight / a new creation rushing on my sight?” upon seeing the addressee’s paintings. This is the [emphasize] *first* location in the title of a poem whose speaker recalls that “I redemption neither sought nor knew.” That poem is called its author’s “most reviled” in a book titled for her “trials” by Henry Louis Gates Jr. The speaker states that “’Twas mercy brought me from my *Pagan* land” in a poem titled “On Being Brought from” this place “to America.” For 10 points, name this continent where Phyllis Wheatley was born before being sold into slavery.

ANSWER: **Africa** [or **Afric**; accept “To S. M., a Young **African** Painter, on Seeing His Works”; accept “On Being Brought from **Africa** to America”]

<American Literature>

2. In August 2019, one of these two countries backed out of their landmark intelligence-sharing agreement, GSOMIA (“G-somia”). In a film, two characters recite “only child, Illinois, Chicago,” to the tune of a song about a territory disputed by these two countries. One of these two countries strengthened claims against the other by helping a fisherman and his wife become the only residents of an archipelago named for a French whaler, the Liancourt Rocks. In 2019, one of these countries ruled that its citizens could sue the other for reparations for forced wartime labor. A few months prior, that country had dissolved a 2015 agreement regarding comfort women. For 10 points, name these two countries whose relationship has deteriorated under Shinzo Abe and Moon Jae-In.

ANSWER: **South Korea** AND **Japan** [prompt on **Korea** in place of “South Korea”; accept **Republic of Korea** in place of “South Korea”]

<Current Events>

3. The mountainous coasts of this body of water were home to the Daylamites, who were often recruited as naphtha throwers. Adventurers trying to re-establish trade with “Serkland” across this body of water are thought to have supported Bagrat IV (“the fourth”) at the Battle of Sasireti after detaching from the expedition of Ingvar the Far-Traveller. It’s not a river, but the city of Little Sarai near this body of water served as the capital of the Nogai Horde, which was later forced to migrate west by the Kalmyks. The world’s first oil tanker sailed across this body of water from a port that produced half of the world’s oil in 1900. Ivan the Terrible gained a major port on this sea by capturing Astrakhan. For 10 points, name this largest lake in the world, an inland “sea” that borders Baku and receives the Volga River.

ANSWER: **Caspian** Sea (Baku produced half of the world’s oil in 1900.)

<European History>

4. A buzzard strikes this substance and flaps his wings over it in a Cherokee myth. In Ainu myth, this substance is created by a wagtail beating its tail. Satan hides this substance under his fingernails after God orders him to fetch it in a Romanian tale, which resembles Tungusic (“tun-GOO-sick”) myths of its creation by Buga or Ulgan. In Anishinaabe (“uh-NISH-in-AH-bay”) myth, the loon, mink, grebe (“greeb”), and turtle all fail to recover this substance before the muskrat succeeds. Izanami and Izanagi create this substance by stirring chaos with a jewelled spear. Tezcatlipoca makes this substance from Cipactli. Vishnu rescues this substance as the boar Varaha. In

Chinese myth, the aristocracy is created from this substance's rich loess ("LOH-iss") type. It expands on the back of a terrapin to form Turtle Island. For 10 points, name this substance personified by Gaia.

ANSWER: **earth** [accept **mud** or dry **land** or **ground**; accept **dirt** or **soil** or **silt** or **clay** or **loam**; accept **loess** until read; accept **moshiri**; accept **oeh-da**; accept **islands** until "Turtle Island" is read; accept North **America** or **Japan** or **Nippon** or **Nihon**]

<Mythology>

5. A 2013 paper by Juan Maldacena explains this problem using the analogy of a pair of gloves and expands on an idea by Leonard Susskind that could solve the AMPS firewall. Limits predicted by this proposal were violated by measurements of the correlation between the polarization of photons by Alain Aspect ("ah-LAN ah-SPEH"). This problem assumes a system that can be represented by two state vectors in a superposition and then uses induction to show that such a system must violate causality, as communication between states would require faster-than-light travel. This thought experiment was undermined by a construct regarding the impossibility of local hidden-variable theories called Bell's theorem, and was created to attack "spooky action at a distance." For 10 points, name this triply-eponymous paradox about quantum entanglement.

ANSWER: **EPR** paradox [or **Einstein-Podolski-Rosen** paradox; prompt on **quantum entanglement** or "**action at a distance**" until read]

<Physics>

6. This poet wrote about learning the "keen lessons that love deceives" in a poem that ends by listing "Your face, and the God-curst sun, and a tree / And a pond edged with grayish leaves." A poem by this author ends with a woman being told: "a raw country girl, such as you be, / Cannot quite expect that. You ain't ruined." This author invented the noun "Powerfuller" for a poem that complains "Crass Casualty obstructs the sun and rain" and wishes "some vengeful god would call to me." This author of "Neutral Tones" and "The Ruined Maid" wrote of "Some blessed hope, whereof he knew / And I was unaware" in a poem whose speaker "leant upon a coppice ("COP-iss") gate" to watch the title bird. For 10 points, "Hap" and "The Darkling Thrush" are by what author of *Tess of the d'Urbervilles*?

ANSWER: Thomas **Hardy**

<British Literature>

7. This civilization used a type of uncrystallized limestone called *sascab* for mortar and often constructed stelae ("STEE-lee") with trapezoidal cross sections by cutting with the cleavage planes of rocks. Late period temples from this civilization often included mosaic portraits supported by roof combs. This civilization built observatory complexes called E-Groups. The Nunnery Quadrangle built by this civilization contains several of its typical Puuc-style corbel vaults. This culture was the first to construct triadic pyramids like the ones located at El Mirador. Albert Kahn's Fisher Building and Frank Lloyd Wright's Ennis House exemplify this civilization's namesake art-deco "revival style." For 10 points, name this Mesoamerican civilization that built step pyramids at sites like Tikal and Chichen Itza.

ANSWER: **Mayan** civilization [accept **Mayan** Revival Style; prompt on **Mesoamerican** Civilization; accept Classical **Mayan**; accept pre-Classical **Mayan**]

<Other Arts (Architecture)>

8. A governor of this state told prosecutor John Volz to "kiss my ass" after riding a mule to the courthouse for his corruption trial. That governor of this state declared that the only way he could lose a race to David Treen was if he was "caught in bed with a dead girl or a live boy." A House majority leader from this state who dissented from the "single bullet" theory as a member of the Warren Commission died in a 1972 Alaska plane crash. Blaze Starr was the mistress of a governor who ran this state from a mental hospital. The "Dynamite Squad" opposed a governor of this state assassinated by Carl Weiss. That governor from this state allied with Charles Coughlin and promoted his

“Share our Wealth” program leading up to the 1936 election. For 10 points, name this state home to Edwin Edwards as well as Earl and Huey Long.

ANSWER: **Louisiana** (The House majority leader was Hale Boggs.)

<American History>

9. This type of program occupies ring zero of the hierarchical protection domain system. Mapping multiple threads onto a thread named for this type of program is the hallmark of a “many-to-one” model. Mach is one of the earliest “micro-” versions of these programs created at Carnegie Mellon. On most modern hard disc drives, the “user space” is separated from the memory space associated with this program. If this type of program favors speed by running all of its instructions in one location, it is referred to as “monolithic.” System calls are made to this type of program, which performs read and write operations on files. This type of program is the basis for different Linux distributions like Ubuntu and Fedora. For 10 points, what program is named for being the “core” of an operating system?

ANSWER: **kernel**s [accept micro**kernel**s or monolithic **kernel**s or **kernel** space; prompt on operating system or OS until read]

<Other Science (Computer Science)>

10. Declines in this quantity are explained by both Cleland and Wilson’s ideational theory and Caldwell’s wealth flow theory. The optimism or pessimism of workers entering the workforce affect this quantity for a population, according to the Easterlin effect. This quantity increases and then increases again a generation later in the echo effect. In neo-Malthusian models, this quantity is the second of two values to drop during the demographic transition. When this quantity is computed for a group after they reach the age of forty-four, it is called the cohort-completed form of this quantity. Family planning is encouraged by states to reach the “replacement level” of this quantity. For 10 points, give this quantity that measures the amount of live births for a population.

ANSWER: **fertility** rate [accept crude **birth rate**]

<Social Science (Sociology and Other)>

11. Sophie and Hans meet to have sex and do this action in Hans’s inn room throughout Andrés Neuman’s *The Traveler of the Century*. Dizzy plans to make a living from this activity, which he introduces to the astrologer Janina in Olga Tokarczuk’s *Drive Your Plow Over the Bones of the Dead*. The terms “tilt” and “scud” were introduced in an essay that an author wrote to accompany a product of this action, “Notes on Prosody (“PRAH-zuh-dee”).” Willa and Edwin Muir (“myoor”) frequently collaborated on this activity, as did the married scholars Pevear and Volokhonsky. Edith Grossman completed an acclaimed instance of this action in 2003. Edmund Wilson hated a work of this type by Vladimir Nabokov, who also performed it on his own Russian works. For 10 points, what action brings works like *Don Quixote* to anglophone readers?

ANSWER: **translation** [or word forms such as **translating**; accept any more specific answers involving specific forms, languages, works, or authors, such as **translating** poetry, translating **translating** into German, **translating** William Blake, or **translating** *Eugene Onegin*]

<European Literature>

12. In collaboration with Aldo Crommelynck, David Hockney framed this painting with pink-tinted sketches for a set of illustrations of a poem it inspired. Infrared and X-ray imaging of this painting’s right side uncovered a cow or bull licking the head of a calf. That study also revealed that this painting’s original subject was similar to a sketch that its artist sent to Max Jacob of a young mother and child. Like its artist’s *La Vie*, this painting was created in response to the suicide of Carles Casagemas (“KAR-luss kuh-suh-ZHEM-us”). El Greco’s style informed the elongated appearance of this painting’s title person, who sits cross-legged and leans against a wall. For 10 points, name this painting of a blind, aged street musician, a Blue Period work of Pablo Picasso.

ANSWER: *The **Old Guitarist*** (The Hockney work is titled *The Blue Guitar: Etchings By David Hockney Who Was Inspired By Wallace Stevens Who Was Inspired By Pablo Picasso*.)

<Painting/Sculpture>

13. After a cipher clerk defected to this country, Communist politician Fred Rose was arrested for leading an alleged Soviet spy ring. An associate minister of this country's national defense resigned after revelations that he had had an affair with East German prostitute Gerda Munsinger. A defector to this country always wore a white hood when appearing on television and was named Igor Gouzenko. Gridlock over whether to accept nuclear-equipped Bomarc missiles brought down one government in this country. A local defense company collapsed after this country's prime minister scrapped the Avro Arrow project as part of the NORAD agreement. For 10 points, name this country where, after his resignation, John Diefenbaker ("DEE-fin-BAY-ker") crusaded against a maple leaf flag.

ANSWER: **Canada**

<Other History>

14. Taking an ACE inhibitor or sartan combined with an NSAID ("EN-sed") and one of these drugs causes renal damage in the "triple whammy" effect. An extremely potent class of these drugs is described by the adjective "high-ceiling" and includes furosemide. They're not necessarily antihypertensive, but thiazides are a class of these drugs that contrast with inhibitors of the sodium potassium chloride cotransporter, which are the "loop" type of these drugs. Athletes who are doping can evade drug tests by using these drugs to mask the detectable concentrations of doping agents. The effect of these drugs is opposed by a hormone that is inhibited by ethanol and promotes aquaporin expression, vasopressin. For 10 points, name these drugs that promote urine production.

ANSWER: **diuretics** [accept loop **diuretics**; accept high-ceiling **diuretics**; accept potassium-sparing **diuretics**; accept thiazide **diuretics**; prompt on water pills]

<Biology>

15. This thinker noted "it is fashionable to speak of the metaphysician as a kind of misplaced poet" after contrasting the sentences "Martyrs exist" and "Martyrs suffer." This thinker was repeatedly attacked in J. L. Austin's *Sense and Sensibilia*. That work took issue with this thinker's stance of "sophisticated realism," which took sense-datum to be the object of perception. In a seminal 1963 paper, Edmund Gettier ("GETTY-er") refuted this philosopher's definition of knowledge as the "right to be sure." This emotivist called all religious statements meaningless in a 1936 book that advocated applying the verification principle to the problems of philosophy. For 10 points, name this British logical positivist who wrote *The Problem of Knowledge and Language, Truth, and Logic*.

ANSWER: A. J. **Ayer** [or Alfred Jules **Ayer**]

<Philosophy>

16. This author asserted that "caches of old papers are like graves; you shouldn't open them" to open her story "A Beneficiary." In another story by this author, Rad plants explosives in his lover Vera's luggage, resulting in an explosion on a plane. A farm boy is given a stranger's corpse instead of his brother's corpse in a story by this author of "Some Are Born to Sweet Delight." This author of "Six Feet of the Country" wrote the story collection *Beethoven Was One-Sixteenth Black*. The protagonist of a novel by this author sees a *Life* magazine photograph depicting the servant girl Lydia carrying books. A yellow truck known as a "bakkie" appears in that novel by this author that ends with Bam's wife Maureen running towards a helicopter. For 10 points, name this author of *July's People*.

ANSWER: Nadine **Gordimer**

<World/Other Literature>

17. On behalf of this dynasty, Hashimiyya Kaysanite missionaries known as the "twelve naqibs" led a secret organization to support their claim to the throne. The "Veiled One" led a rebellion of the "red-wearing ones" who believed that the spirit of God existed in a general executed by this dynasty. The mystic Mansur al-Hallaj earned the ire of a leader of this empire after uttering "I am the Truth." Rulers of this empire persecuted scholars who denied the createdness of the Qur'an in the pro-Mu'tazilite *mihna* inquisition. The Zaydi leader Ali ibn Muhammad led a

revolt of Zanj slaves against this empire in Basra. Abu Muslim carried the Black Standard into battle during this dynasty's namesake revolution, which triumphed at the Battle of the Zab. For 10 points, name this Baghdad-based caliphate that replaced the Umayyads.

ANSWER: **Abbasid** Caliphate [or **Abbasid** Empire; or **Abbasid** Dynasty]

<World History>

18. A molecule with this property replaces a hydrogen of an arene in a reaction mechanism described as "vicarious." Molecules lacking this property are used to generate an enolate from an ester in reactions such as the Claisen condensation. Lithium diisopropylamide lacks this property due to steric hindrance from a pair of isopropyl groups. The solvent must have this property for a solvolysis reaction to occur. Molecules with this property attack the electron-rich region of another molecule, replacing a leaving group, in a type of substitution reaction with unimolecular and bimolecular variants. Molecules with this property are also Lewis bases since they have the ability to donate electron pairs. For 10 points, name this property contrasted with electrophilicity.

ANSWER: **nucleophilicity** [accept word forms like **nucleophile**; prompt on Lewis **basicity**]

<Chemistry>

19. A 6/8 *andantino semplice* section of a piece in this genre opens with the following melody over soft, short D-flat major chords: A-flat descending to E-flat, then the ascending notes F, A-flat. Another piece in this genre opens with the *allegro ma non tanto* melody D [pause] F, E, D [pause] C-sharp, D, E [pause] D. The composer of that piece in this genre wrote two cadenzas for it, although the original one is more often notated as an *ossia*. A horn fanfare with the notes F, D-flat, C, B-flat opens a piece in this genre that was initially criticized by Nikolai Rubinstein. That B-flat minor piece in this genre was the first of three composed by Pyotr Tchaikovsky. Sergei Rachmaninoff composed four pieces in, for 10 points, what genre in which an orchestra accompanies a keyboard soloist?

ANSWER: **piano concertos** [prompt on partial answers]

<Classical Music>

20. Tsongkhapa analogized four of these places to "the iron net of the conception of the self," which the Dalai Lama explicated as representing the four origins of suffering: birth, aging, sickness, and death. In Japanese Buddhism, one of these places illustrates the duality of *higan* and *shigan* as a metaphor for passing from ignorance to enlightenment. Kṣitigarbha ("kshee-tee-gar-ba") saves children stuck at one of these places called Sanzu. Three of these places lie at the Triveni Sangam. Guru Nanak disappeared for three days in one of these places, which are visited during Simhashta at sites like Nashik and Ujjain. Pilgrims visit Varanasi to scatter ashes in one of these places, which Tirthankaras figuratively "ford." For 10 points, name these natural features that include the sacred Yamuna and Ganges.

ANSWER: sacred **rivers** [or **nadiyon**; or **kawa** or **kasen**; accept **tributaries** or **confluences**; accept specific rivers like **Sanzu** or **Shipra** or **Godavari** or **Ganges**; prompt on bodies of **water** or equivalents; prompt on **underworlds** or Buddhist **hells** or equivalents by asking "what type of natural geographical feature appears in that underworld?"]

<Religion>

21. In this city in 1918, about a thousand unionists protesting against Vestey's Meat Packers were led by Harold Nelson to burn an effigy of administrator John Gilruth. A kelpie dog named Gunner alerted troops stationed in this city to an attack that preceded the invasion of East Timor by a day. This city was originally named after Lord Palmerston. Most of this city was levelled in a 1942 air raid by Japanese warplanes, which was the most damage ever done to an Australian city during wartime. This city's namesake harbor was originally named by John Clements Wickham, who had previously served as first officer under Robert FitzRoy during a voyage in the early 1830s. For 10 points, name this capital of the Northern Territory, whose namesake naturalist sailed aboard the *HMS Beagle*.

ANSWER: **Darwin** [accept **Darwin** rebellion; prompt on **Palmerston**]

<Other History>

Bonuses

1. Three members of this country's parliament who spoke out against one-party rule were found with tent pins smashed into their heads, though the official explanation for their death was a "car accident." For 10 points each:
[10] Name this country where the Mwanza Four died in 1964. A leader of this country used his Young Pioneers bodyguards to terrorize the population.

ANSWER: **Malawi** [or Republic of **Malawi**]

[10] Under dictator Hastings Banda, Malawi was the only black-ruled African country to maintain diplomatic relations with South Africa, despite this South African policy of severe racial discrimination.

ANSWER: **apartheid**

[10] A strident anti-communist, Banda used the Malawi Young Pioneers as couriers and channeled South African aid to support the anti-communist RENAMO party in this country's civil war.

ANSWER: **Mozambique**

<World History>

2. In 2019, *The Guardian* reviewed this pianist's performance of his album *Seven Days Walking* at the Barbican Center and claimed that he was "as clichéd and shameless as a Simon Cowell No. 1." For 10 points each:

[10] Name this Italian composer whose piece "Nuvole Bianche" ("noo-VOH-lay BYAHN-kay") has been featured in many films and TV shows. He accompanied his playing with synthesized sounds on his album *Nightbook*.

ANSWER: Ludovico **Einaudi** ("ay-NOW-dee")

[10] Many of Einaudi's compositions are considered part of this genre of slow and repetitive music meant to evoke or accompany particular backgrounds. Brian Eno's album *Music for Airports* is partly titled for this genre.

ANSWER: **ambient** music [accept **Ambient 1: Music for Airports**]

[10] Einaudi's second album, *Stanze* ("STAHNT-seh"), was written for Cecilia Chailly ("cheh-CHEEL-ya shy-EE"), a player of this instrument. Yolanda Kondonassis plays this large instrument with 7 pedals and 47 strings.

ANSWER: **harp** [or pedal **harp**]

<Classical Music>

3. This author's relationship with Susan Sontag inspired her to begin writing plays, starting with *La Viuda* – or *The Widow* – which was never translated into English. For 10 points each:

[10] Name this Cuban-American playwright, who depicted Julio, Mark, and Fernando as three lovers of the title girl in her play *Sarita*. Her play *Fefu and Her Friends* has been hailed as a major piece of feminist theater.

ANSWER: María Irene **Fornés**

[10] Another Cuban-American playwright, Nilo Cruz, won the 2003 Pulitzer Prize for Drama for his play *Anna in the Tropics*. In that play, a lector reads to factory workers from this Russian author's novel *Anna Karenina*.

ANSWER: Leo **Tolstoy** [or Lev Nikolayevich **Tolstoy**]

[10] Although he was a notable drama critic for Havana publications, this Cuban author of *The Lost Steps* is better known for his novels, such as one in which Ti Noel recounts the Haitian Revolution.

ANSWER: Alejo **Carpentier** ("ah-LAY-ho car-pen-tee-AIR") (That novel is *The Kingdom of this World*.)

<World/Other Literature>

4. Members of this ethnic group embroider "story cloths" and "flower cloths" called *paj ntaub* ("pahn dow") that often depict symbols such as the soul doll, ram's horn, and swastika-shaped "chicken feet." For 10 points each:

[10] Name this ethnic group who examine chicken entrails in the *hu plig* ("hoo plee") or soul calling ceremony. At funerals, members of this ethnic group play a *lú shēng* ("loo shung") called the *qeej* ("kaink") after "teaching the way" to the deceased in the *Qhuab ke* ("koo-uh keh") ritual.

ANSWER: **Hmong** [or **Hmongb**; accept the related **Miao** or ab **Hmaob** or **Hmu** or **Xongb** or **A-Hmao**; accept Hmong clans such as **Xiong** or **Vang** or **Yang**]

[10] Hmong folk religion includes the concepts of *yeeb* (“yang”) and *yaj* (“yah”), which are analogous to these opposing principles from Daoism. In Traditional Chinese Medicine, the shifting balance between these two concepts guides what people eat during each season.

ANSWER: **yin** AND **yang** [or **yīn** and **yáng**; accept in either order]

[10] The Hmong have been accused of child abuse for causing bruises by rubbing these objects on oiled skin in a healing ritual. Hàn tombs in Sìchuān (“SUCH-wahn”) housed sculptures of “trees” festooned with these objects, which replaced yarrow stalks in *Yi Jing* divination.

ANSWER: **coins** [or **yìngbì**; accept hard **currency** or **money**; accept **yáoqiánshù** or **money** tree; accept **Cao Gio** or Kav; accept silver **spoons** (sometimes used instead of coins)]

<Religion>

5. The malleability of this faculty was studied by Elizabeth Loftus, who explained how it can be affected by the misinformation effect. For 10 points each:

[10] Name this cognitive faculty whose “working” form was studied by Alan Baddeley and Graham Hitch. This faculty involves storing and retrieving information.

ANSWER: **memory** [accept working **memory**; accept long-term **memory** or short-term **memory**]

[10] In an influential 1956 paper, George Armitage Miller introduced the concept behind this process, in which unwieldy packages of information are broken up to aid in memory. Splitting a 10-digit phone number into three blocks of numbers is an example of this technique.

ANSWER: **chunking**

[10] *Two answers required.* Miller’s paper that introduced chunking is named for *this number* plus-or-minus *this other number*. These two numbers represent the number of items an average person can hold in short-term memory. Give your answer as *one number* plus-or-minus *another number*, or, alternatively, the lower and upper bound.

ANSWER: **seven plus-or-minus two** [or **7 ± 2**; accept **five to nine**]

<Social Science (Psychology)>

6. When represented as graphs, these things are described by various topological indices such as the Wiener index and Hosoya index. For 10 points each:

[10] Name these things modelled by a certain subfield of graph theory. By representing one of these things as a graph and then performing a depth-first traversal, these things can be specified using SMILES notation.

ANSWER: **molecules** [or chemical **compounds**; or **chemicals**; accept **molecular** graph theory or **chemical** graph theory; accept **molecular** graphs or **chemical** graphs]

[10] Chemical graph theory is useful in “rational” approaches to the discovery of these substances, which may rely on quantitative structure–activity relationships. During the discovery of these substances, “hits” identified from high-throughput screens are converted into leads (“leeds”).

ANSWER: **drugs** [or **medicines**; or **pharmaceuticals**; or **drug** candidates; or rational **drug** discovery]

[10] For a lead (“leed”) compound to become a drug, it must lack this property of being harmful to the organisms it is administered to. The LD50 is a common metric used to quantify this property.

ANSWER: **toxicity** [prompt on **poisonous**; prompt on **lethality**; prompt on **deadly**]

<Chemistry>

7. Executives in this industry criticized unions’ “old Spanish practices” that overly privileged workers. For 10 points each:

[10] Name this industry in which union workers tried to block production centers from moving from Fleet Street to Wapping in 1986.

ANSWER: **newspaper** industry [or the **press**; or **journalism**; or **printing** industry; or **print media**; prompt on **media** industry; prompt on **publishing** industry]

[10] Rupert Murdoch's move to dismiss print workers capitalized on this prime minister's anti-union laws. This Conservative "Iron Lady" faced down Arthur Scargill and the miners' union during the 1984–85 strike.

ANSWER: Margaret **Thatcher** [or Margaret Hilda Thatcher, Baroness **Thatcher**]

[10] This press baron who owned the *Daily Express* and the *Evening Standard* used his newspapers to champion free trade and the empire against the protectionist policies of Stanley Baldwin.

ANSWER: Lord **Beaverbrook** [or Max **Aitken**; or William Maxwell **Aitken**, 1st Baron Beaverbrook]

<Other History>

8. In Dag Solstad's *Shyness and Dignity*, a schoolteacher ponders a doctor in this play who proclaims, "If you take the life-lie away from an average person, you take away his happiness as well." For 10 points each:

[10] Name this play whose motif of the "life-lie" inspired works by the psychologist Alfred Adler such as "Life-lie and Responsibility in Neurosis and Psychosis."

ANSWER: *The **Wild Duck*** [or ***Vildanden***]

[10] In *The Interpretation of Dreams*, Adler's colleague Sigmund Freud described dreaming of the word "norekdal," a combination of two character names from this author's plays *The Wild Duck* and *A Doll's House*.

ANSWER: Henrik **Ibsen**

[10] Karen Horney ("HORN-eye") frequently cited Ibsen in books like *Neurosis and Human Growth*, which discusses the self-destructive behavior of Ellert Lovborg after he loses this prized object that Hedda Gabler burns.

ANSWER: his **manuscript** [accept anything indicating his **draft papers**, or his **book** about the future]

<European Literature>

9. This song was originally performed by Gwen Verdon and was likely inspired by a mistress of King Ludwig I of Bavaria. For 10 points each:

[10] Name this song originally from a 1955 musical. Sung by the Devil's assistant in an attempt to seduce Joe, it contains the lyrics "I always get what I aim for / And your heart and soul is what I came for."

ANSWER: "**Whatever Lola Wants, Lola Gets**"

[10] "Whatever Lola Wants, Lola Gets" was written for this musical retelling of the Faust legend. This musical centers on Joe Boyd, who becomes Joe Hardy after a deal with the devil makes him a baseball star.

ANSWER: ***Damn Yankees***

[10] The choreographer of *Damn Yankees*, Bob Fosse, also choreographed and directed this Kander and Ebb musical. The aspiring performer Roxie Hart murders her lover in this musical's title city.

ANSWER: ***Chicago***

<Other Arts (Performing)>

10. Stress shielding leads to a reduction in this statistic due to a lack of repeated stimuli according to Wolff's law. For 10 points each:

[10] Name this quantity, normal values of which correspond to a T-score of negative one or higher. Dual-energy X-ray absorptiometry, or DEXA, is a technique that calculates this statistic by subtracting out soft tissue absorption and comparing readouts from the two beams.

ANSWER: **bone mineral density** [or **BMD**]

[10] Reductions in bone mineral density cause broken bones, the defining symptom of this disease. It can develop when osteoblasts overproduce RANK ligand, and it is the leading cause of fractured bones in the elderly.

ANSWER: **osteoporosis** [prompt on osteopenia]

[10] Osteoporosis is caused by an imbalance between bone formation and this process, in which osteoclasts break down bone and release stored calcium. More generally, bone remodeling consists of ossification and its counterpart process with this name.

ANSWER: bone **resorption** [prompt on absorption]

<Biology>

11. During Prohibition, this state's Franklin County was the largest center of illegal liquor production in the U.S., resulting in the Great Moonshine Conspiracy Trial of 1935. For 10 points each:

[10] Name this present-day U.S. state where bribery with liquor decided many 18th-century elections. This state's representatives organized a series of conventions after Lord Dunmore dissolved its legislature.

ANSWER: **Virginia**

[10] This man lost his first run for a seat in Virginia's House of Burgesses, but won the second time around with the help of 144 gallons of free liquor. This man didn't need alcohol to win the 1788 presidential election unanimously.

ANSWER: George **Washington**

[10] In 1768, riots erupted in Boston after British authorities impounded this ship owned by John Hancock. The authorities suspected that Hancock was smuggling Madeira wine in violation of the Townshend Acts – which he was.

ANSWER: **Liberty** [or HMS **Liberty**]

<American History>

12. On *America Unearthed*, pseudo-historical geologist Scot Wolter alleged that a “giant” skeleton from Twin Valley was one of these people, and that these people left a ship near the Salton Sea. For 10 points each:

[10] Name these people who inspired hoaxes like the Elbow Lake stone, the AVM Stone, and a heavy slab discovered in Kensington. Anne Stine Ingstad discovered a real site that they visited at L'anse aux Meadows (“LAN see meadows”).

ANSWER: **Vikings** [or **Vikingers**; accept **Norsemen** or **Northmen**; prompt on **Scandinavians** or other groups of Scandinavians]

[10] A recent study reconstructed the face of a Viking shieldmaiden from Solør (“SOO-lurr”), Norway, who was buried with one of these animals that the Vikings introduced to Iceland. Heritage breeds of these animals include the Akhal-Teke and Clydesdale.

ANSWER: **horses** [accept **ponies**; accept **equines** or **Equus**; prompt on **perissodactyls** or other nonspecific answers]

[10] After raiding this city in 844, Vikings camped in marshes that now lie in Doñana National Park. Today, tents called casetas fill this city during the April Fair and nazarenos from cofrades march in KKK-like hoods during Holy Week.

ANSWER: **Seville** [or **Sevilla**]

<Geography>

13. A short satire of this movement ends with “Dictator” Lion's wife Hope wondering if “Apple Slump” would be a better name for their failed commune of Fruitlands. For 10 points each:

[10] Name this movement satirized in a piece titled for its “Wild Oats” by Louisa May Alcott, the daughter of its proponent Bronson Alcott. Emerson and Thoreau were members of this New England-based movement.

ANSWER: **transcendentalism**

[10] Thoreau appears as “Mr. Hyde” in this Alcott novel. It begins with the orphaned fiddler Nat Blake arriving at Plumfield Academy, a school run by Jo March. This novel's title characters also appear in its sequel, *Jo's Boys*.

ANSWER: **Little Men**

[10] Poe called the Boston transcendentalists “Frogpondians” and wrote a story about a transcendentalist being killed in this manner after making a bet with the devil. Signora Zenobia meets this fate in Poe's “A Predicament.”

ANSWER: **decapitation** [or **beheading**; or equivalents of having one's **head** cut off; accept “Never Bet the Devil Your **Head**”]

<American Literature>

14. According to *Mapping Malory*, this creature highlights the fluidity of borders in the Arthurian world and ties together regions from Wales to Sarra. For 10 points each:

[10] Name this monster pursued in vain by the Saracen knight Sir Palamedes in the Post-Vulgate Cycle. This hybrid of leopard, lion, hart, and snake makes a sound like 30 hounds baying as it evades Sir Pellinore.

ANSWER: **Questing Beast** [or Beste **Glatissant**]

[10] When he's not hunting the Questing Beast, Palamedes spars with this Cornish knight in his namesake prose romance. Marie de France's lai "Chevrefoil" reworks the story of this knight drinking a love potion with the Irish princess Iseult.

ANSWER: **Tristan** [or **Tristram**; or **Tristain**; or **Trystan**; or **Drustanus**]

[10] In Gottfried von Strassburg's telling, this sister of King Mark of Cornwall is Tristan's mother. Boccaccio's *Filocolo* adapted a wildly popular medieval romance in which this captive Christian princess becomes the lover of the Saracen queen's son Floris.

ANSWER: **Blancheflour** [or **Biancifiore**; or **Blankiflúr**; or **Platziaflora**; or other reasonable variants]

<Mythology>

15. For a crystalline solid, the critical points of the Brillouin ("bree-WANN") zone are non-smooth points for this quantity known as Van Hove singularities. For 10 points each:

[10] Name this quantity, the number of particles that can occupy a system at each given energy level.

ANSWER: **density of states** [or **DOS**]

[10] The density of states for a phonon is proportional to frequency-squared in this scientist's model of heat conduction, which contains a temperature-cubed dependence of specific heat. A factor describing the attenuation of X-ray scattering due to thermal motion is co-named for this scientist and Ivar Waller.

ANSWER: Peter **Debye** ("duh-BYE") [accept **Debye**-Waller factor]

[10] Performing this operation on the product of the density of states and the distribution function with respect to energy gives the particle number.

ANSWER: **integration** [or **integral**; or word forms]

<Physics>

16. This woman once controversially attended the symphony wearing a white headband emblazoned with the phrase "Oh you Red Sox." For 10 points each:

[10] Name this socialite who stored her art collection in a building known as Fenway Court. In 1990, that museum now named for this woman was robbed of 13 artworks in a still-unsolved crime.

ANSWER: Isabella Stewart **Gardner** [accept Isabella Stewart **Gardner** Museum]

[10] Gardner's husband forbade her from publicly displaying this artist's portrait of her standing against a patterned background, possibly because of parallels with this portraitist's scandalous painting *Madame X*.

ANSWER: John Singer **Sargent**

[10] Anders Zorn's portrait of Gardner depicts her in the act of rushing inside to announce one of these events in Venice. An artist claimed to have put the "knowledge of a lifetime" into an 1874 painting of one of these events at the Cremorne Gardens in Chelsea.

ANSWER: **firework** displays [accept answers like **pyrotechnic** shows or more specific varieties of fireworks, such as **rockets** or **fire wheels**; prompt on answers like **nighttime entertainment**, **shows**, or **parties**; do not accept or prompt on "fire"] (That painting is James Whistler's *Nocturne in Black and Gold – The Falling Rocket*.)

<Painting/Sculpture>

17. Thom Yorke based the Radiohead song "Subterranean Homesick Alien" on a school assignment to imitate the style of a poetry movement named for this sort of creature. For 10 points each:

[10] Name this sort of figure, the namesake of a school of poetry led by Craig Raine that sought to defamiliarize ordinary life. These creatures invade Earth in H. G. Wells's *The War of the Worlds*.

ANSWER: **Martians** [or aliens from **Mars**; accept **Martian** poetry or **Martian** school of poetry; prompt on aliens or extraterrestrials or ETs by asking “from where?”; prompt on tripods by asking “piloted by creatures from where?”]

[10] Raine’s “A Martian Sends a Postcard Home” calls these objects “caxtons” after the man who first made them in England. Robert Herrick listed items like “blossoms, birds, and bowers (“BAO-ers”)” in an “Argument” of one of these things.

ANSWER: **books** [accept equivalents including poetry collections and printed books; or incunabula; accept “The Argument of His **Book**”]

[10] This poet of “Warming Her Pearls” is a member of the “New Generation” that succeeded the Martian school. The speaker recalls turning a “buzzing bee” to a “dull grey pebble” in this poet’s “Medusa.”

ANSWER: Carol Ann **Duffy**

<British Literature>

18. This hypothetical place is “blessed with all manner of priceless riches” and has “no owner or inhabitant.” For 10 points each:

[10] Name this location first described in the work *In Behalf of the Fool* by Gaunilo of Marmoutiers (“mar-moot-YAY”). It was theorized in response to an argument put forth in the *Proslogion*.

ANSWER: the lost **island** [accept the best of all possible islands, the perfect island, or an imaginary island; accept Gaunilo’s island]

[10] Gaunilo proposed the lost island in an attempt to refute this Archbishop of Canterbury’s ontological argument.

ANSWER: St. **Anselm** of Canterbury [accept **Anselm** of Aosta or **Anselm** of Bec]

[10] This University of Notre Dame philosopher and Christian apologist built on the work of Charles Hartshorne and Norman Malcolm. He developed a “victorious” modal version of the ontological argument in his book *The Nature of Necessity*.

ANSWER: Alvin **Plantinga**

<Philosophy>

19. This epoch ended with an extinction event called the Grande Coupure, or “Great Break.” For 10 points each:

[10] Name this epoch whose early period is a prototypical case study for the effects of global warming, since it [emphasize] *began* with a “thermal maximum” in which sea surface temperatures abruptly increased by about 6 degrees Celsius.

ANSWER: **Eocene** epoch [prompt on Paleocene–Eocene thermal maximum; prompt on PETM]

[10] In addition to carbon dioxide forcing, scientists hypothesize that the thermal maximum may have been caused by a positive feedback loop involving the release of methane from these deposits. BSR seismic reflections are key to revealing the “stability zone” of these deposits in the ocean.

ANSWER: methane **clathrate** hydrates [or methane hydrates; or gas hydrates; accept clathrate gun hypothesis]

[10] Today, the “clathrate gun” feedback hypothesis primarily manifests itself in the release of methane from the Arctic, which is caused by the thawing of this type of soil layer that remains frozen year round.

ANSWER: Arctic **permafrost**

<Other Science (Earth Science)>

20. The Museum of Fine Arts of Seville houses art taken from these institutions. For 10 points each:

[10] Name these institutions that were turned into national assets by a liberal government operating under the Constitution of Cádiz. Henry VIII (“the eighth”) similarly dissolved these religious institutions and confiscated their wealth.

ANSWER: **monasteries**

[10] This Spanish king and his *consulta* commanded religious orders to leave the country and seized their property. This monarch abolished the Spanish Inquisition, but it was restored after his deposition.

ANSWER: **Joseph** Bonaparte [or **Giuseppe di Buonaparte**; accept **Joseph** I or **José** I]

[10] This pro-Catholic traditionalist faction that resisted the rule of Isabella II also opposed the confiscation of Church property.

ANSWER: **Carlists** [or **Carlistas**; accept **Carlism**]

<European History>

21. In October 2019, Hong Kong's chief executive Carrie Lam used an emergency ordinance dating back to 1922 to ban the use of these objects. For 10 points each:

[10] Name these items frequently used by protesters in Hong Kong, often drawing from pop culture. The ban on these items was initially struck down, but was temporarily reinstated by the court ahead of the November elections.

ANSWER: **masks** [accept face **masks** or gas **masks** or descriptive answers about **facial coverings**]

[10] Many protesters wore masks inspired by the Joker, who was falsely believed to have inspired a 2012 mass shooting in one of these places in Aurora, Colorado.

ANSWER: **movie theater** [or **cinema**; or the **movies**; accept **Century 16** theater; prompt on **theater**]

[10] A 2019 open letter by the families of Aurora victims asked Warner Brothers to stop donations to candidates who accept money from the NRA, which has recently faced challenges under this NRA president. After this man tried to oust CEO Wayne LaPierre, he was himself ousted.

ANSWER: Oliver **North** (He was also involved in the Iran–Contra scandal.)

<Current Events>