## 2022 ACF Regionals

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## **TOSSUPS**

1. Jay Haviser proposed that these places attracted Saladoid settlements like Pearls and the later Woodford Hill and Liamuiga sites after the Ceramic Age. The Preclassic Tlatilco culture made earthenware "ballplayer" figurines near one of these places at Tlapacoya. "Prismatic" material from these places and coral supplied the pyramids of Leluh, Kosrae and Nan Madol. In 1600, Peru's wine industry shifted from Arequipa ("ah-ray-KEE-pah") to Moquegua after events at one of these places called Huaynaputina. 75,000 years ago, humans possibly experienced a genetic bottleneck due to one of these places in Sumatra called Toba. One of these places called Tambora caused the 1816 "Year without a Summer." For 10 points, the "Little Ice Age" was possibly driven by the activity of what places that include La Soufrière and Krakatoa?

ANSWER: **volcano**es [or **volcán**es; accept **caldera**s or super**volcano**es; accept strato**volcano**es or shield **volcano**es or cinder **cone**s; prompt on <u>island</u>s or <u>atolls</u> by asking "formed by what?"] (The first line refers to the settlement of areas with fertile volcanic soil in the Caribbean; Mount Liamuiga is a volcano whose name means "fertile land" in Kalinago.)

<World History>

- 2. A novel titled for one of these places has its "finer passages" marked with one, two, or three stars to "help the reviewers." In that novel set in one of these places, a preacher shouts "there'll be no butter in hell!" and his mother claims she once saw "something nasty in the woodshed." Typically dismal books set in these places by Mary Webb and Sheila Kaye-Smith are parodied in a novel featuring Aunt Ada Doom; that Stella Gibbons novel is titled *Cold Comfort* [one of these places]. In another novel, one of these places is inherited by Bathsheba Everdene. Gabriel Oak puts out a fire in that one of these places, and loses another of them after his sheep run off a cliff. For 10 points, *Far from the Madding Crowd* is set in what rural type of place, where Tess of the D'Urbervilles works as a milkmaid? ANSWER: **farm**s [accept *Cold Comfort Farm*; accept dairy **farm** or a **dairy**]
- 3. Plasmas that notably lack this property are typically confined in cylindrically symmetric devices invented by John Malmberg and student John deGrassie. The plasma frequency can be derived by perturbing a slab with this property and treating the displaced layer as an SHO ("S-H-O"). This property does (emphasize) *not* hold in plasma sheaths. The length scale over which this property does (emphasize) *not* hold is given by the quantity "743 times the square root of electron temperature over electron density," which is the Debye ("DEH-bai") length. Plasmas have the "quasi-" form of this property, meaning the electron density is equal to the average ion charge state times the ion density. Atoms possess this property because the atomic number equals the number of electrons. For 10 points, name this property of lacking an electric charge.

ANSWER: quasineutrality [or uncharged or zero total charge, or net zero charge before "charge"; or electrically neutral; or electroneutral; prompt on single-component plasmas before "SHO" by asking "what electrical property do the single-component plasmas have?"]

<Physics>

4. It's not the Statue of Liberty, but a tall bronze sculpture shaped like one of these objects includes many portraits of historical figures between Möbius strips. Paul McCarthy's 2014 installation of a sculpture named for one of these objects in Paris's *Place* ("PLAHSS") *Vendôme* drew ire for its resemblance to a sex toy. Gilroy, California holds a "Circus" of these objects that Axel Erlandson shaped into complex weaves and a chair. Galveston, Texas contains many sculptures that were made from these objects in the aftermath of a 2008 event. The Galleria Borghese ("bor-GAY-zay") holds a marble depiction of one of these objects forming from the fingertips of a fearful woman whose stomach is grasped by a man behind her. For 10 points, name this type of object that a nymph transforms into in Bernini's *Apollo and Daphne*.

ANSWER: <u>tree</u>s [accept <u>Tree</u> of Life; accept <u>laurel</u> or laurel <u>tree</u>; prompt on <u>plants</u>; prompt on <u>sprouts</u>; prompt on <u>branches</u>] (The sculpture in the first sentence was created by Ernst Neizvestny.)
<Painting/Sculpture>

5. The Albion Action Group paints images named for these creatures that contain "memotoxins" in David Langford's short story "BLIT." In the 1550s, Vilnius University professors hunted one of these creatures with boughs of rue. These creatures allegedly caused earthquakes after the Bishop of Basel was removed. Eliezer Yudkowsky purged a *LessWrong* forums thread nicknamed for one of these creatures that proposed that an AI would punish people who didn't contribute to its creation. One of these creatures was defeated in Warsaw by a warrior wielding mirrors, and they can also be vanquished by a weasel's stench or a rooster's crow. These creatures are born from a rooster's egg incubated by a toad. For 10 points, name these serpents with deadly gazes, which are often conflated with cockatrices.

ANSWER: **basilisk** [accept Roko's **basilisk**; prompt on <u>cockatrice</u>s before read by asking "what other creature were they sometimes conflated with?"; prompt on <u>snakes</u> or <u>serpents</u>] <Mythology>

6. The Plover Cove Scheme in this city attempted to address a 1960s water shortage that caused the word "water" to become slang for wealth. Elsie Elliott was accused of inciting protests in this city against a proposed ten cent fare hike on its ferry line. This city accepted undocumented immigrants via the Touch Base policy. In this city, Alexander Grantham shelved the 1946 Young Plan. In response to 1967 left-wing riots in this city, the Public Order Ordinance was adopted by its LegCo. A voyage from this city was the final diplomatic use for the Royal Yacht *Britannia*. Governor Chris Patten's proposed democratic reforms languished after the transfer of this city to a state characterized by the "one country, two systems" model. For 10 points, name this former British colony, a special administrative region of China since 1997.

ANSWER: **Hong Kong** [accept British **Hong Kong**] (Elsie Elliott took part in protests against fare hikes on the Star Ferry line.)

<Other History>

7. When used in these devices, ethylene and propylene carbonate resist degradation due to their high LUMO ("LOO-mo"). The longevity of these devices can be improved by suppressing dendrite formation. In these devices, vinylene carbonate and fluoroethylene carbonate are additives that extend the life of a passivation layer called the solid electrolyte interface. Solid state electrolytes allow these devices to operate at higher temperatures. During the operation of these devices, cations intercalate and deintercalate from titanium disulfide crystals. These devices operate in alternating stages in which cobalt is oxidized and reduced between its 3+ and 4+ oxidation states, and often use graphite for their anode. For 10 points, name these devices that use lithium ion electrochemistry to store energy.

ANSWER: lithium ion **batteries** [or lithium ion **battery** cells; accept rechargeable **battery** cells] <Chemistry>

8. Shortly after her lover runs away, this character mourns her "beltà funesta," or "fatal beauty," after declaring herself to be "lonely, lost, and abandoned" in a closing aria. A man tells this character, "I have never seen a woman such as this," or "Donna non vidi mai," after learning that she is headed for a convent. In a different opera, this soprano character sings the seduction aria "N'est-ce plus ma main" before being arrested for cheating at gambling in the following act. This character dies in a Louisiana desert in an Italian opera based on a novel by Abbé Prévost. In the aria "Adieu notre petite table" this character laments her inability to choose between a life of luxury and the love of Des Grieux. For 10 points, name this French girl who titles operas by Giacomo Puccini ("JAH-cuh-moh poo-CHEE-nee") and Jules Massenet ("jool mah-suh-nay").

ANSWER: <u>Manon</u> Lescaut [or Manon <u>Lescaut</u>] <Other Fine Arts>

9. An essay by this author describes qualifying for a conference having only published two short stories, "The Fig Tree" and "The Return." A collection by this author ends with a chapter titled, "The Quest for Relevance," and describes colonizers inflicting a "cultural bomb" that "annihilate[s] a people's belief in their names." This author was imprisoned after an open-air performance of one of his plays at a community center in Kamirithu. In an essay, this author describes his decision to stop writing fiction in hegemonic colonial languages like English. This author created a protagonist named Mugo who betrays the Mau Mau Uprising. For 10 points, name this author of the play *I Will Marry When I Want*, the essay collection *Decolonising the Mind* and novels like *A Grain of Wheat*.

ANSWER: Ngũgĩ wa Thiong'o ("n'GOO-gee wah thee-ON-go") [accept James Ngugi, but remind players that he rejected this name as colonialist]

<World Literature>

10. The Pearl of Great Price describes how one of these places is taken into heaven along with the prophet Enoch. The Book of Revelation compares one of these places to a piece of "jasper, clear as crystal." A text defines one of these places as where men are "united by a specific bond of peace" in an opening section addressing the tribune Marcellinus. The Book of Lamentations opens by describing how one of these places has become "like a widow." In the Sermon on the Mount, Jesus compares his followers to salt, a candle, and one of these places, which "cannot be hid" when it is "on a hill." A 426 CE book of philosophy titled for one of these places objects to the notion that Christianity led to the fall of Rome. For 10 points, what sort of place, in the title of a text by Saint Augustine, is "of God"?

ANSWER: city [accept The City of God or On the city of God against the pagans or De civitate Dei contra paganos; accept city on a hill]
<Religion>

11. In the lead-up to the 1936 presidential election, a member of this family ordered switchboard operators to open with the greeting "Mr. Roosevelt is a Communist." A member of this family was aided by the enslaved man Jo Anderson to develop a technology. The WGN radio station was named by a member of this family, who was the longtime owner of the *Chicago Tribune*. A strike outside a business owned by this family led to the Haymarket Square Riot. Edwin Stanton and Abraham Lincoln defended John Henry Manny against a member of this family in a patent trial over an invention; that invention was partially responsible for making the Midwest the breadbasket of the nation. For 10 points, Cyrus, a member of what family, is usually credited with inventing the mechanical reaper? ANSWER: McCormick family [accept the McCormick reaper; accept Cyrus Hall McCormick; accept Robert Rutherford McCormick; accept Robert McCormick Jr.; prompt on Medill by asking "what was the person's last name?"]

<American History>

12. A character created by this author refutes the claim that he has fallen in love, instead claiming that he has "fallen in hate." A character created by this author turns over several white stones but fails to find a tin box of food he has hidden. About midway through a play by this author, a drum starts beating and steadily increases in speed for the rest of the play. The protagonist of a play by this author hallucinates a slave auction and convinces locals that he can only be killed by a silver bullet. In a play by this author, Mildred nearly faints upon seeing a "filthy beast" shoveling coal; that character is named Yank. Smithers advises the title character of a play by this author to flee from an island with the money he's embezzled. For 10 points, name this author who wrote *The Hairy Ape* and *The Emperor Jones*. ANSWER: Eugene **O'Neill** [or Eugene Gladstone **O'Neill**]

<American Literature>

13. Jensen's ("yen-sens") combinatorial principles and Martin's axiom were motivated by a problem concerning the uniqueness of this set formulated by Mikhail Suslin. A topological space that is similar to this set with the order topology, but is not Lindelöf, is constructed by taking omega copies of the unit interval and equipping the resulting set with the order topology. The cardinality of this set is "two to the aleph-naught," and ZFC is consistent whether or not "two to the aleph-naught" equals aleph-one. Cantor's diagonalization argument proved this set's uncountability. The existence of a cardinality between that of this set and that of the integers is the subject of the continuum hypothesis. For 10 points, the square root of 2 is an element of what set that is represented geometrically as an infinite line?

ANSWER: the <u>real</u> s [or the <u>real</u> numbers; or <u>R</u>; or the <u>real</u> line] (The second sentence refers to the long line/long ray.)

<Other Science>

14. A Czech contemporary of Beethoven with this first name wrote early examples of piano parlor music based on current events with pieces like "The Battle of Würzburg" and had the surname Wanhal. Along with librettist Christian Weisse, a composer with this first name and the surname Hiller is generally credited with inventing Singspiel ("ZING-shpeel"). A composer with this first name wrote the keyboard variations *Hexachordum Apollinis* and an organ Chaconne in F minor. A Bach family member with this first name was known as the "London Bach." A Viennese light music composer with this first name included an extended zither solo in his *Tales from the Vienna Woods*. For 10 points, give this common German first name of the *Canon in D* composer with the surname Pachelbel ("PAH-kull-bell") and a Strauss known as the "Waltz King."

ANSWER: <u>Johann</u> [accept <u>Johann</u> Strauss II; accept <u>Johann</u> Pachelbel; accept <u>Johann</u> Christian Bach; accept <u>Johann</u> Adam Hiller; accept <u>Jan</u> Křtitel Vaňhal or <u>Johann</u> Baptist Wanhal] <Classical Music>

15. A 2005 article by Michel Degraff referred to the exceptionalism of these entities as "linguists' most dangerous myth." Jeff Siegel challenged a 1984 theory about these entities that claimed to identify twelve features integral to them. The development of these entities is the subject of Derek Bickerton's language bioprogram theory. William Stewart categorized dialects of these languages using a continuum between acrolects and basilects. These languages are the subjects of a prototype theory of John McWhorter. These languages derive their vocabulary from lexifiers, which often act as their superstrates. These languages often arise when systematic grammatical rules are added to an established pidgin. For 10 points, what type of language includes the French-based majority language of Haiti? ANSWER: **creole** languages [accept post-**creole** continuum; accept specific groups such as French-based **creole**s; prompt on languages before read; prompt on pidgins before read; reject "patois" or "dialects"] <Social Science>

16. This city's town hall was built to emulate a Templar shield, but is made fun of by locals for resembling a coffin. In 2020, students at the largest Catholic university in the world in this city were banned from videoke sessions during the week and instead now frequent this city's Star City Amusement Park. Protesters in this city often congregate at the intersection of Chino Roces Bridge and Mendiola Street. In this city, the oldest Chinatown in the world contains Divisoria Market. Tourists can ride jeepneys through this city's walled Intramuros district and on a street named for a former Governor-General, Taft Avenue. This city lends its name to abacá hemp products such as a yellow binder common in office spaces. For 10 points, name this capital of the Philippines.

ANSWER: <u>Manila</u> [accept <u>Manila</u> paper or <u>Manila</u> hemp or <u>Manila</u> binders or <u>Manila</u> envelopes] <Geography>

*Note to moderator: Read the answerline carefully.* 

17. A gene cluster in *Bacteroides theta* encodes three Sus enzymes and one of these proteins called SusC that is dependent on TonB ("tone-B"). These proteins include the major facilitator superfamily that many gut bacteria encode with CAZymes ("caz-imes") and substrate binding proteins in "utilization loci." The SLC family of these proteins often has fewer alpha helices than their ABC superfamily, which contains ATP-binding cassettes. These proteins alternate between occluded, inward, and outward conformations and may operate in reverse as multidrug resistance efflux pumps. Both "sym" ("sim") and "anti" kinds of these integral membrane proteins admit two substrates and may couple a "secondary active" process to facilitated diffusion. For 10 points, what proteins bind specific solutes, unlike channels that also move sugars and ions across gradients?

ANSWER: <u>transporters</u> [or <u>transport</u> proteins; accept <u>uniporters</u> or <u>symporters</u> or <u>antiporters</u> or <u>counterporters</u> or <u>exchangers</u> or <u>translocators</u>; accept solute <u>carriers</u>; accept <u>ATPases</u> before "ATP"; accept <u>pump</u>s before read; prompt on trans<u>membrane</u> proteins before read; reject "ion channels" or "porins"] (The "utilization loci" are polysaccharide utilization loci, or PULs.)

<Biology>

18. The head of a government partially named for this noun claimed to have saved his country from a "social explosion" while on defense during the Riom Trial, which accused the government of failing to properly equip its military. That head of a government named for this noun personally intervened to allow a "cartesian skyscraper" at the Pavilion of the Modern Times and assented to a forty-hour work week in the Matignon Agreements. Holocaust-denier François Duprat cofounded a party partially named for this noun that was influenced by Pierre Poujade. Léon Blum ("lay-ON BLOOM") headed a 1930s coalition government named for this noun preceded by the word "popular." For 10 points, give this noun that was replaced with "rally" in the name of a French far-right party led by Marine Le Pen.

ANSWER: <u>Front</u> [accept <u>Front</u> Populaire or (French) Popular <u>Front</u>; accept <u>Front</u> National or National <u>Front</u>] <European History>

19. A poem from this country describes a creature as "love's arrow on earth" and asks "Can you / not see she's your sister?" A poem from this country consists entirely of the line: "I'm lit with / immensity." A poet from this country wrote "Laureate poets / seem to wander among plants no one knows" in a work describing the "moss-green trunks" of trees that "Even the poor / know." An author from this home country of the poetic movement hermeticism wrote the poems "The Eel" and "Lemon Trees" and the collection *Cuttlefish Bones*. Another author from this country wrote a poem addressed to "you who live secure / In your warm houses"; that poem by the author of *The Periodic Table* prefaces the Holocaust memoir *If This Is a Man*. For 10 points, name this home country of Giuseppe Ungaretti, Eugenio Montale, and Primo Levi.

ANSWER: <u>Italy</u> [or <u>Italia</u>] (The one-line poem is "M'illumino d'immenso.") <European Literature>

20. Marilyn Frye's *Feminist Frontiers* defined a two-word term containing this adjective as when "options are reduced to a very few and all of them expose one to penalty" in a discussion of groups targeted by oppression. A term containing this adjective is defined as seeing "[oneself] through the revelation of the other world" in the book section "Of our Spiritual Strivings." Gregory Bateson used a term containing this adjective to describe a type of existential paralysis as a result of receiving conflicting messages. A deontic ethics principle that states that it is forbidden to do harm even if it would prevent further harm in the future is known as the doctrine of this sort of "effect." For 10 points, W.E.B. DuBois ("dyoo-BOYCE") referred to the "two-ness" experienced by Black Americans as what sort of "consciousness"?

ANSWER: **double** [accept **double** consciousness; accept the doctrine of the **double** effect; accept **double**-bind] <Philosophy>

Tiebreaker. Lauffer classified the quality of a location for building these structures using stand-up time. Shotcrete provides temporary support when building these structures with the New Austrian approach. Muck created by a rotating cutter head is transferred by a screw conveyor in devices used to make these structures called TBMs. Marc Isambard Brunel invented giant rectangular iron shields for building these structures in moist conditions. Trenches are initially dug to construct these structures in the "cut-and-cover" method. Before the advent of modern machines, these structures were built with "drilling and blasting" techniques. For 10 points, name these structures commonly designed by civil engineers to safely allow cars or trains to pass under water or earth.

ANSWER: <u>tunnels</u>; [accept railway <u>tunnels</u> or subway <u>tunnels</u>; accept underwater <u>tunnels</u>; accept <u>subway</u>s; accept utility <u>tunnels</u>; accept <u>drifts</u>; prompt on <u>mines</u> by asking "what structures are built to mine resources?" "prompt on <u>spans</u> or <u>excavations</u> by asking "what structures are being built from the span/excavation?"] (TBMs are tunnel boring machines.)

<Other Science>

1. Answer the following about the nature of HTTP, for 10 points each.

[10m] *Two answers required.* HTTP devices communicate using these two message types. HTTP clients send one of these two message types, such as a POST ("post"), to HTTP servers, which then send back the other of these message types that contain status codes like "200 OK" and "404 Not Found."

ANSWER: requests AND responses

[10h] Because HTTP has this property, websites must use cookies to keep track of users. Server design is simplified because HTTP has this property of maintaining no information about clients.

ANSWER: statelessness

[10e] HTTP clients use these things to identify the objects they are requesting. Examples of these things include https://acf-quizbowl.com ("H-T-T-P-S-colon-slash-slash-A-C-F-dash-quiz-bowl-dot-com").

ANSWER: <u>URL</u>s [or <u>uniform resource locator</u>s; accept web <u>address</u>es or Internet <u>address</u>es] <0ther Science>

2. After a justice of the peace in this territory resigned in protest over the passage of women's suffrage, Esther Hobart Morris took office as the first woman in the nation to be justice of the peace. For 10 points each:

[10m] Name this territory, whose bid for statehood faced federal opposition after its passage of women's suffrage. After achieving statehood in 1890, this territory became the first state to grant women the right to vote.

ANSWER: **Wyoming** Territory [accept **WY**]

[10h] This governor of Wyoming was the first woman to serve as a governor in the United States. This politician later served as the first female Director of the United States Mint.

ANSWER: Nellie Tayloe **Ross** [or Nellie Davis Tayloe **Ross**; or Nellie Davis **Tayloe**]

[10e] Although the Wyoming Territory passed women's suffrage in 1869, it wasn't until 1920 that this amendment was ratified, granting all American women the right to vote.

ANSWER: 19th Amendment

<American History>

3. This country's labor minister José Piñera ("peen-YEH-rah") used an egg timer to shorten his speeches about privatizing its PAYGO pension system in 1980. For 10 points each:

[10e] Name this country defined as a "democratic liberal inclusive model" in Manuel Castells's *Network Society*. The study *El ladrillo* ("lah-DREE-yoh") drafted neoliberal policies brought to this country by the "Chicago Boys" under Augusto Pinochet ("ow-GOOST-oh pee-noh-CHET").

ANSWER: Chile [or Republic of Chile; or República de Chile]

[10m] Inflows of these payments from Chile, Brazil, and the US constitute over 30% of Haiti's GDP. Migration from Central America's Northern Triangle is motivated by these payments from diasporas to their homelands.

ANSWER: <u>remittance</u>s [accept inward <u>remittance</u>s or outward <u>remittance</u>s or profit <u>remittance</u>s or foreign exchange <u>remittance</u>s; prompt on electronic funds <u>transfer</u>s or E<u>FT</u>; prompt on money <u>transfer</u> organizations or <u>MT</u>Os]

[10h] Chile implemented a reduced tax on profit remittances as part of Hernán Büchi's strategy to stimulate this activity after the economic crisis of 1982. Bilateral treaties regulate this activity, which is contrasted with portfolio flows.

ANSWER: **foreign direct investment** [or **FDI**; prompt on foreign <u>investment</u> or bilateral <u>investment</u> treaties; prompt on financial <u>transactions</u> or <u>spending</u> or similar] <Social Science>

4. In a novel set during this conflict, a character drinks strong coffee with salt to stop hallucinations of his dead sergeant. For 10 points each:

[10h] Name this conflict, the setting of the books *No Man's Land* and *Novel Without a Name*. A mute woman delivers stream-of-consciousness stories about this conflict in the collection *The Sorrow of War*.

ANSWER: <u>Vietnam</u> War [or <u>Second Indochina</u> War; or Chiến tranh <u>Việt Nam</u>; prompt on <u>American</u> War] [10m] This novel's nameless spy protagonist infiltrates the filming of the American Vietnam War film *The Hamlet* and later executes the newspaper editor Sonny. This 2016 Pulitzer Prize for Fiction winner was written by Viet Thanh Nguyen ("VEE-it tahng win").

ANSWER: The Sympathizer

[10e] Vietnamese critics often compare the "true story" approach of Đặng Nhật Minh's novel *Don't Burn* with the "nonlinear plot expression" in this author's Vietnam books *The Things They Carried* and *Going after Cacciato* ("kah-CHAH-toh").

ANSWER: Tim **O'Brien** [or William Timothy **O'Brien**]

<World Literature>

5. This actress's suicide note contains the line "gossip is a fearful thing," which titles an essay denouncing the media response to her death. For 10 points each:

[10h] Name this Chinese silent film actress who starred alongside Lí Lìlì as a failing toymaker in Sūn Yú's film *Little Toys*. This actress played a struggling prostitute in the montage-heavy Liánhuá Studios silent film *The Goddess*.

ANSWER: **Ruăn** Língyù [or **Ruăn** Fènggēn; or Lily **Yuen**]

[10e] Ruăn was nicknamed for being the Chinese counterpart of Greta Garbo, who starred in films like *Grand Hotel* and *Ninotchka* for this studio. This production studio of *Singin' in the Rain* features the roaring lion Jackie in its logo.

ANSWER: Metro-Goldwyn-Mayer Studios [or MGM]

[10m] After being snubbed by MGM in favor of actors in yellowface, Anna May Wong appeared with this Paramount Pictures star in the film *Shanghai Express*. This German-American portrayed the cabaret actress Lola Lola in the film *The Blue Angel*.

ANSWER: Marlene **Dietrich** [or Marie Magdalene **Dietrich**]

<Other Fine Arts>

6. Depending on which biologist you ask about the agouti ("uh-GOO-tee"), you'll learn about very different topics. For 10 points each:

[10e] Agoutis are cute rodents from Central and South America that disperse these objects in rainforests. Granivores prey on these objects, which contain starchy endosperm to nourish the embryo within.

ANSWER: <u>seed</u>s [accept <u>seed</u> dispersal; accept <u>seed</u> lings; accept <u>seed</u> predation; prompt on <u>fruits</u> or <u>drupe</u>s or specific fruits by asking "containing what other reproductive structures?"]

[10m] The hypothalamus produces agouti-related peptide to drive this state, which is inhibited after POMC is converted to alpha-MSH. It's not wakefulness, but this state is promoted by orexin, neuropeptide Y, and ghrelin.

ANSWER: <u>hunger</u> [or <u>appetite</u> or equivalents; accept <u>feed</u>ing or <u>eat</u>ing or equivalents]

[10h] In mammals, agouti-signaling protein determines this trait in a classic example of epistasis ("eh-pih-STAY-sis"). The primary prey of some lynxes can vary this trait, which is altered by genes like Tobiano, Sabino, and Dilute.

ANSWER: <u>coat color</u> [or <u>fur pattern</u> or <u>hair color</u> or <u>fur color</u> or similar answers; prompt on <u>color</u> or <u>pigment</u>ation or <u>pattern</u> or <u>spot</u>ting or similar answers by asking "of what?"; prompt on <u>camouflage</u> or similar] (Canada lynxes prey mainly on snowshoe hares, which seasonally change their coats. The genes influence coat color in horses and dogs.)

<Biology>

7. A ruler of this name created an early example of a zoo in his planned capital according to a namesake Banquet Stele ("STEE-lee"). For 10 points each:

[10m] Give this name of an Assyrian ruler who is depicted standing in a chariot on a "lion hunt" in a palace relief.

ANSWER: <u>Ashurbanipal</u> ("aa-sher-BAA-nee-pahl") [accept <u>Ashurbanipal</u> I; accept <u>Ashurbanipal</u> II; accept Lion Hunt of <u>Ashurbanipal</u>; accept <u>Assurbanipal</u> or <u>Asenappar</u> in place of "Ashurbanipal"]

[10h] To elevate himself over his predecessors, Ashurbanipal II moved his capital to this planned city, located near the center of the "Assyrian Triangle" formed by the cities of Ashur, Nineveh, and Arbela. 19th-century archaeologists renamed this city for a biblical figure mentioned prior to a list of other ancient cities in Genesis Chapter 10.

ANSWER: Kalhu [or Caleh or Calah; accept Nimrūd]

[10e] The city of Kalhu was constructed near the confluence of the Upper Zab and this river that bisected the "Assyrian Triangle." Agriculture in Mesopotamia developed out of the floodplains of the Euphrates and this river.

ANSWER: **Tigris** River

<Other History>

8. In a novel by this author, a woman disguises herself as a prostitute, a maid, a grief-stricken widow, and a masked woman called Incognita in order to trick Beauplaisir ("bow-PLAY-seer"). For 10 points each:

[10h] Name this writer of amatory fiction such as *Fantomina*. This author created the rake D'Elmont in the 1719 novel *Love in Excess*.

ANSWER: Eliza **Haywood** [or Eliza **Fowler**]

[10m] Eliza Haywood, Delarivier Manley, and this author were known as "the fair triumvirate of wit." This author wrote about Hellena dressing as a man to woo Willmore during Carnival in her play *The Rover*.

ANSWER: Aphra Behn

[10e] In 1741, parodies of Samuel Richardson's novel *Pamela* were written by Haywood and this other early English novelist who wrote *Tom Jones*.

ANSWER: Henry <u>Fielding</u> (Haywood's parody was *The Anti-Pamela*, and Fielding's was *Shamela*.) <British Literature>

9. Abdurrahman Wahid is credited with popularizing a liberal form of Islam in this country called Islam Nusantara. For 10 points each:

[10e] Name this Southeast Asian nation that is the most populous Muslim-majority country on Earth.

ANSWER: **Indonesia** [or Republic of **Indonesia** or Republik **Indonesia**]

[10m] In the 1920s, Hajj pilgrims exposed to this form of Islam returned to Indonesia and formed the tolerant revivalist Nahdlatul Ulama movement to oppose its influence. This Sunni fundamentalist movement rejects tomb visitation and saint veneration as *shirk*.

ANSWER: <u>Wahhabism</u> [or <u>Wahhabi</u> or al-<u>Wahhābiyyah</u>; prompt on <u>Salafist</u> movement or <u>Salafist</u> movement or <u>Salafist</u>

[10h] The liberal Islam practiced in much of Indonesia differs from the strict sharia practiced in Aceh ("AH-chay"), where this action is commonly applied to adulterers and sellers of alcohol. Amnesty International has criticized the common use of this action as punishment for homosexuality in Malaysia.

ANSWER: public **caning** [accept being hit or struck with **cane**s or **stick**s or **rod**s; prompt on **whip**ping; prompt on **flog**ging; prompt on beating]

<Religion>

10. A William Sydney Mount painting depicts the *Triumph* of a person of this profession over an amazed farmer. For 10 points each:

[10h] Identify this profession depicted in a group portrait by Matthew Pratt. An 1822 painting is titled for a man with this profession who pulls back a curtain to reveal a room full of taxidermied objects.

ANSWER: artist [or painter; reject answers such as "sculptor" or "photographer"]

[10m] *The Artist in His Museum* is a painting by an early American artist with this surname. That artist fathered Raphaelle, an artist with this surname who is considered the first professional American still-life painter.

ANSWER: **Peale** [accept Charles Willson **Peale**; accept Raphaelle **Peale**]

[10e] Charles Willson Peale created many portraits of this historical figure, including one depicting him *at Princeton*. Gilbert Stuart painted this man in the *Lansdowne Portrait*.

ANSWER: George **Washington** [or **GW**; accept **Washington** at Princeton] <Painting/Sculpture>

11. Tibetan epics praise this ruler of the mythical kingdom of Ling as a champion of Buddhism and manifestation of the bodhisattvas Avalokitesvara ("uh-VAH-loh-kee-TESH-vuh-ruh"), Mañjushrī, and Vajirapāṇi. For 10 points each: [10h] Name this "Great Lion, Jewel Tamer of Enemies," a son of Qormusda Tengri reborn on earth to fight demons. This figure marries 'Brug-mo and wars with enemies like his evil uncle Krothung and the kingdom of Hor.

ANSWER: King Gesar [or King Kesar]

[10e] The *Epic of Gesar* spread from Tibet to these Central Asian people, who regarded Gesar as a protective war deity. The *Secret History* of these people recounts the genealogy of Genghis Khan.

ANSWER: **Mongol**s [or **Mongolian**s; accept **Buryat**s or **Kalmyk**s or **Oirat**s; accept *The Secret History of the* **Mongol**s]

[10m] In a potential late Buddhicization of the epic, Gesar performs this action after his mother enters Avīci. The second half of the Gospel of Nicodemus describes Jesus performing this action, which is commemorated by Orthodox Christians on Holy Saturday.

ANSWER: <u>descent</u> to the <u>underworld</u> [accept <u>katabasis</u>; accept <u>visit</u>ing or <u>travel</u>ling or equivalents in place of "descent"; accept (Buddhist) <u>hell</u> or <u>Naraka</u> in place of "underworld"; accept <u>liberating</u> souls from <u>hell</u> or equivalents; accept the <u>Harrowing</u> of <u>Hell</u>]

<Mythology>

12. Answer the following about advancements in physics during the Islamic Golden Age, for 10 points each. [10e] To measure this quantity of a gemstone, Al-Biruni designed a vessel containing fluid that drained out excess liquid when the gemstone was added. This quantity has units of mass per unit volume.

ANSWER: mass density [or specific mass; accept specific weight]

[10m] Thābit ibn Qurrah carried out many studies of equilibrium, laying the foundations for this engineering discipline. This discipline studies the stability of motionless bodies under the action of forces.

ANSWER: statics

[10h] This polymath built the first camera obscura, which he used to show that light travels in straight lines. This scientist recorded exacting details of his experiments on reflection, refraction, and dispersion in *Kitāb al-Manāzir*.

ANSWER: <u>Ibn al-Haytham</u> [or <u>Alhazen</u> or <u>Alhazen</u>; or Abū 'Alī al-Ḥasan ibn al-Ḥasan <u>ibn al-Haytham</u>; or <u>Al-Basri</u>]

<Physics>

13. Lope de Vega is rained out of a cloud onto a boat filled with poets in this author's satire *Journey to Parnassus*. For 10 points each:

[10e] Name this Spanish author who parodied his contemporary Lope de Vega as the puppeteer Ginés de Pasamonte in part two of his novel *Don Quixote*.

ANSWER: Miguel de Cervantes [or Miguel de Cervantes Saavedra]

[10h] Cervantes claims that he had disgraced this poet by "such brief praise" in *Journey to Parnassus*, and does not include him in the poets whom Venus turns into pumpkins. This man was mocked in the poems "To a Nose" and "Compass for Navigating among *Cultos*."

ANSWER: Luis de **Góngora** [or Luis de **Góngora** y Argote] (The poems were by his rival Francisco de Quevedo.) [10m] *Journey to Parnassus* also mocks Tirso de Molina, who wrote a play about Don Juan titled in part for a "trickster" from this city. A Pierre Beaumarchais play set in this city features the doctor Don Bartholo.

ANSWER: <u>Seville</u> [or <u>Sevilla</u>; accept *The Barber of <u>Seville</u>* or the Useless Precaution; or Le Barbier de <u>Séville</u> ou la Précaution inutile; accept *The Trickster of <u>Seville</u>* and the Stone Guest or El burlador de <u>Sevilla</u> y convidado de piedra]

<European Literature>

14. Solomon bar Simson chronicled a massacre of the Jewish population of the Rhineland perpetrated by a German count named Emicho ("EM-ick-oh") during this event. For 10 points each:

[10m] Name this event led by Peter the Hermit and Walter Sans Avoir. This event ended with the deaths of most of its participants at the Battle of Civetot.

ANSWER: **People's Crusade** [or **Peasants' Crusade**; prompt on First <u>Crusade</u>; prompt on popular <u>crusade</u>s] [10e] Count Emicho's crusade through the Rhineland ended in this kingdom, where his army broke apart when faced with resistance from Coloman the Book-Lover, a member of this kingdom's ruling Árpád Dynasty that first united Magyar tribes.

ANSWER: Hungary [or Magyarország; or Kingdom of Hungary or Magyar Királyság]

[10h] The exploits of Count Emicho, and much of the People's Crusade, are compiled in a *Historia Hierosolymita* by Albert, a canon of the church of this city. Odo of Metz modeled a chapel in this city on the Basilica of San Vitale in Rayenna.

ANSWER: <u>Aix</u>-la-Chapelle [or <u>Aachen</u>; accept Albert of <u>Aix</u>-la-Chapelle or Albert of <u>Aachen</u>; accept <u>Aachen</u>
Cathedral or <u>Aachener</u> Dom] (The chapel is the Palatine Chapel.)
<European History>

15. This program launched in 2003 to give poor families income, provided that their teenagers attended school, their children were immunized, and certain other requirements were met. For 10 points each:

[10m] Name this program that, like the Progresa/Oportunidades ("proh-GREH-sah op-oor-too-nee-DAH-des") program in a different country, is a single, consolidated conditional cash transfer program. Lula da Silva oversaw Fome Zero ("foh-mee zer-oo") and this program.

ANSWER: Programa **Bolsa Familia** [or PBF]

[10h] This country developed the Progresa/Oportunidades program to help poor families improve the education, health, and nutrition of their children. Actions to draw attention to this country's high femicide rate include the creation of March 9th as "Un Día Sin Nosotras" ("oon DEE-ah seen noh-SOH-trahs") and murals created by the Senderos Seguros ("sen-DEH-rohs seh-GOO-rohs") program.

ANSWER: <u>Mexico</u> [or United <u>Mexican</u> States or Estados Unidos <u>Mexicanos</u>; reject "Estados Unidos"] [10e] This institution backs many conditional cash transfer programs, including Tanzania's Productive Social Safety Net project. The IMF and this institution provide structural adjustment loans to developing countries.

ANSWER: <u>World Bank</u> [or <u>WB</u>; or <u>World Bank</u> Group; accept the <u>International Bank for Reconstruction and Development</u> or <u>IBRD</u>; accept <u>International Development Association</u> or <u>IDA</u>]

<Current Events>

16. Stanton Carlisle watches a "show" titled for this type of person in a novel by William Lindsey Gresham. For 10 points each:

[10h] Identify this type of person exemplified by the narrator's mother "Crystal" Lil in a novel by Katherine Dunn titled for their *Love*.

ANSWER: **geek** [accept **Geek** Love; accept a **geek** show]

[10m] In Gresham's *Nightmare Alley*, Stan watches the legless Joe fight a man with this quality. "The Veldt" opens a short story collection titled for an obese person with this quality who sees an image of himself strangling his wife.

ANSWER: being heavily <u>tattoo</u>ed [accept descriptive answers indicating a person who has a lot of <u>tattoo</u>s; accept *The <u>Illustrated Man</u>*; or being <u>tatted</u>; or <u>inked</u>; accept having <u>sleeves</u>]

[10e] This author of *The Illustrated Man* and *Fahrenheit 451* wrote about the arrival of a sinister carnival led by Mr. Dark in *Something Wicked This Way Comes*.

ANSWER: Ray **Bradbury** [or Ray Douglas **Bradbury**]

<American Literature>

17. Philip Kitcher questioned whether holding true examples of these things is itself valuable in a discussion of what he called Huxley's Credo, which hints at the utility of holding comforting false ones. For 10 points each:

[10e] Name these mental states studied in doxastic logic. A classical definition of knowledge considers it to be "justified true" statements of this kind.

ANSWER: **belief**s [accept truth **belief**s; accept false **belief**s; accept justified true **belief**]

[10h] This English ethicist stated that it is morally wrong to believe anything given insufficient evidence, a position he developed using a thought experiment involving a businessman who knowingly sends a poorly built ship to sea.

ANSWER: W. K. <u>Clifford</u> [or William Kingdon <u>Clifford</u>; accept <u>Clifford</u>'s ship]

[10m] This thinker responded to Clifford's paper "The Ethics of Belief" with a lecture that contended that there are four situations in which it is moral to believe on insufficient evidence. A 1902 book by this American thinker contrasts "the healthy-minded" and the "sick soul."

ANSWER: William <u>James</u> (The works are "The Will to Believe" and *Varieties of Religious Experience*.) <Philosophy>

18. A woman with this surname set twenty-two Verlaine ("vair-LEN") poems to music and wrote a D minor *Violin Sonata*. For 10 points each:

[10h] Give this surname held by the composer Régine and her father, a violin virtuoso whose Opus 17 *Légende* ("lay-ZHOND") was written to secure his marriage to Isabella Hampton. His *Polonaise Brillante* was dedicated to fellow countryman Karol Lipiński.

ANSWER: <u>Wieniawski</u> ("v'yen-YAHF-skee") [accept Henryk <u>Wieniawski</u>; accept Régine <u>Wieniawski</u> or Irène <u>Wieniawska</u>]

[10e] At the 2012 Menuhin competition, 12-year old SooBeen Lee astounded listeners with her rendition of a Wieniawski ("v'yen-YAHF-skee") piece in this form, in which a simple melodic idea is repeated multiple times with additional alterations. Beethoven wrote a piece in this form inspired by a waltz by Anton Diabelli.

ANSWER: theme and <u>variation</u>s [accept <u>variation</u>s; accept <u>Diabelli <u>Variation</u>s; accept <u>Variation</u>s on an Original Theme]</u>

[10m] At the invitation of this man, Wieniawski ("v'yen-YAHF-skee") moved to St. Petersburg to teach violin. This pianist and teacher of Tchaikovsky founded the St. Petersburg Conservatory, while his brother Nikolai founded the Moscow Conservatory.

ANSWER: <u>Anton <u>Rubinstein</u> [or <u>Anton Grigoryevich <u>Rubinstein</u>; prompt on <u>Rubinstein</u>] <Classical Music></u></u>

19. The number of these things can be calculated from the total number of electrons, minus two times the number of hydrogens, all over two. For 10 points each:

[10h] Name these things that determine the possible structures of cluster compounds according to rules developed by Wade and Mingos.

ANSWER: polyhedral **skeletal electron pair**s [or **SEP**s; accept (filled) **skeletal orbital**s; prompt on electron <u>pair</u>s] [10m] Wade's rules are often applied to cluster compounds of this element's hydrides. The dimerized hydride of this element includes "bent" 3-center-2-electron bonds.

ANSWER: **boron** [or **B**; accept **boron** hydrides]

[10e] Borane, the simplest boron hydride, is a very strong example of these compounds due to its unfilled p-orbital, making it a good electron acceptor.

ANSWER: Lewis acid [prompt on acid]

<Chemistry>

20. Hanafi scholars in this modern-day state created the Darul Uloom Deoband seminary to oppose Syed Ahmad Khan's Aligarh movement, which promoted Western education in its cities of Ghazipur and Moradabad. For 10 points each:

[10m] Name this Indian state where William Muir founded a university nicknamed the "Oxford of the East." In 2000, Uttarakhand was split from this state, which was formed from the United Provinces of Agra and Oudh.

ANSWER: <u>Uttar Pradesh</u> [or <u>UP</u>] (The "Oxford of the East" was Allahabad University.)

[10h] In this city in Uttar Pradesh, Annie Besant co-founded the Central Hindu College and a "Hindu University." The Narayan dynasty ruled this city as a princely state from the Ramnagar Fort near a structure named for Tulsidas.

ANSWER: <u>Vārāṇasī</u> [or <u>Banāras</u> or <u>Benares</u>; or <u>Kāshī</u> or <u>Kāshikā</u>; or <u>Ānandakānana</u> or <u>Avimukta</u> or <u>Rudravāsa</u>; accept <u>Benares</u> State; accept <u>Banaras</u> Hindu University or <u>Kashi</u> Hindu Vishwavidyalaya; prompt on <u>BHU</u>] (The structure is the Tulsi Ghat.)

[10e] The Princess of Wales Sārasvati Bhavana Texts were published by a state university in Vārāṇasī devoted to the study of this language. As of 2010, Uttarakhand's official languages are Hindi and this language of the Vedas.

ANSWER: <u>Sanskrit</u> [or <u>Samskrta</u>m; accept Classical <u>Sanskrit</u> or Vedic <u>Sanskrit</u>; accept Sampurnanand <u>Sanskrit</u> Vishwavidyalaya or Sampūrnānand <u>Samskrta</u> Viśvavidyālaya]

<World History>

Extra. An anthology of poems in this form compares two poems depicting autumn leaves, and declares in the commentary that one such poem "ranks thousands of leagues" above the other. For 10 points each:

[10m] Name this poetic form, examples of which are anthologized in *The Seashell Game*.

ANSWER: haiku [accept hokku]

[10e] *The Seashell Game* contains critical commentary by this Japanese author, who also wrote *The Narrow Road to the Deep North*. Western anthologies often include translations of this author's frog haiku.

ANSWER: Matsuo <u>Bashō</u> [or <u>Matsuo</u> Bashō; or Matsuo <u>Kinsaku</u>; or Matsuo Chūemon <u>Munefusa</u>]

[10h] This eighth-century anthology is the oldest extant collection of classical Japanese poetry. This anthology, which was compiled by Ōtomo no Yakamochi, contains thirteen poems by Princess Nukata.

ANSWER: <u>Man'yōshū</u> [or The Collection of <u>Ten Thousand Leaves</u>; or The Collection of <u>Myriad Leaves</u> or The Collection of <u>Myriad Ages</u>]

<World Literature>