CALISTO 2

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Packet 11

- 1. In one painting, this artist used a male model to depict a muscular woman turning away from the viewer to lift up a large book. In that painting by this artist, scenes like *The Separation of Light from Darkness* and *The Drunkenness of Noah* are flanked by nude figures called *ignudi* and the prophets and sibyls who foresaw the coming of Christ. This artist depicted his own face on the flayed (*) skin of Saint Bartholomew in his version of the *Last Judgement*. In a fresco by this artist, God reaches out his fingertip to the outstretched hand of Adam. For 10 points, name this Renaissance artist who painted the ceiling of the Sistine Chapel and sculpted a marble David. ANSWER: Michelangelo [or Michelangelo di Lodovico Buonarroti Simonini]

 <Painting French> [Edited]
- 1. The B vitamin niacin and the auxin indole-3-acetic acid are derivatives of this amino acid. For 10 points each, [H] Name this amino acid coded for by the single codon UGG. The genes that code for this amino acid's production in bacteria are a common example of a repressible operon.

ANSWER: tryptophan [accept Trp]

[M] Tryptophan is a biological precursor to this pineal gland-secreted hormone responsible for controlling circadian rhythms.

ANSWER: melatonin

[E] Deficiencies in serotonin, another tryptophan derivative, have been linked to this mood disorder characterized by extended feelings of sadness and emptiness.

ANSWER: clinical <u>depression</u> [or <u>major depressive disorder</u> or <u>MDD</u>; accept <u>dysthymia</u>] <Biology — Sheffield> [Edited]

2. Fifteen unfinished apartment buildings in this country were demolished after the construction of Sunshine City II stalled. This country's Ant Group had its November 2020 IPO delayed at the last minute. In this country, mounting debts have threatened the stability of the developer (*) Evergrande. Digital payment apps in this country which allow users to send each other virtual "red envelopes" are operated by Tencent and Alibaba. The messaging app WeChat was developed in this country, which is also home to ByteDance, the developer of TikTok. For 10 points, name this country where tighter regulation of businesses has been a priority of Xi Jinping.

ANSWER: <u>China</u> [or <u>People's Republic of China</u> or <u>PRC</u> or <u>Zhongguo</u> or <u>Zhonghua Renmin Gongheguo</u>; do NOT accept or prompt on "Republic of China"]

<Current Events — Condron> [Edited]

- 2. In a poem by this author, the speaker states, "I breathed my soul back into me" after a gust of wind blows the smell of an orchard to her. For 10 points each:
- [H] Name this openly bisexual poet. She wrote, "All I could see from where I stood / Was three long mountains and a wood" to open that poem, "Renascence."

ANSWER: Edna St. Vincent Millay

[E] In "Renascence," the speaker describes sinking into a grave and lying there until she hears the sound of this substance. In a nursery rhyme, this substance is told "go away / come again some other day."

ANSWER: **rain** [prompt on water]

[M] After the rainstorm, the speaker of "Renascence" lauds this "multi-colored, multiform" concept, which another Millay poem claims "Euclid alone has looked on." John Keats wrote, "[this concept] is truth, truth [this concept]" at the end of "Ode on a Grecian Urn."

ANSWER: beauty

<Poetry — Miles> [Ed. French]

- 3. A substance used in this technique contains polyacrylamide ("poly-uh-KRILL-uh-mide") to reduce friction and hydrochloric acid to dissolve cement. In this technique, an explosive device called a perforating gun punches holes in a long steel casing that is then filled with fluid. That fluid contains a proppant ("PROP-ent"), such as sand, to hold open (*) fissures created in this technique. This technique is linked to earthquakes in seismically-inactive places like Oklahoma. This technique exploits unconventional reserves by injecting high-pressure fluid into shale beds. For 10 points, name this controversial method of oil and gas extraction.

 ANSWER: fracking [or hydraulic fracturing or hydrofracturing or hydrofracking or fracing; prompt on fracturing or oil drilling or natural gas drilling or oil extraction or natural gas extraction]

 <Earth, Ocean, and Atmospheric Sciences Delot-Vilain> [Ed. Yin]
- 3. The parents of this animal are believed to be Orthrus and the Chimera, making it the grandson of Typhon and Echidna. For 10 points each:

[M] Name this animal. The killer of this animal uses its own claws to skin it and return home with its thick fur. ANSWER: the **Nemean Lion** [prompt on <u>lion</u>]

[E] The Nemean ("NEE-me-in") Lion is slain by this man as part of the first of his twelve labors, which also include cleaning the Augean stables and killing the Hydra.

ANSWER: **Heracles** [or **Hercules**]

[H] Heracles completes the twelve labors after being commanded to do so by this cousin of his. After Hera causes Heracles to kill his family, the Oracle at Delphi tells him to serve this king of Mycenae and Tiryns.

ANSWER: **Eurystheus**

<Mythology — Venkateswaran> [Edited]

4. In the colonial era, this resource was produced at sites called *engenhos* using machines like the trapiche. Carlos Manuel de Céspedes made his living from this resource before freeing his slaves in the *Grito de Yara* and igniting the Ten Years' War. A monopoly on the production of this good was upheld in the case *U.S. v. E.C. Knight.* A boycott of this good was encouraged by a pamphlet by (*) abolitionist William Fox. The triangle trade brought slaves to the Caribbean to produce this resource in Haiti and Barbados. This resource was used to produce rum and molasses. For 10 points, name this sweet foodstuff produced from a namesake cane.

ANSWER: sugar [accept sugar cacept molasses before "molasses" is read; prompt on rum before "rum" is read by asking, "what resource is fermented to produce rum?"]

word from a namesake cane.

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- 4. Many of these features were destroyed by a 2007 mudslide in a "Valley of" them on the Kamchatka Peninsula. For 10 points each:
- [E] Name these erupting hot springs. Yellowstone National Park is home to many of these features, such as a "Steamboat" one and Old Faithful.

ANSWER: geysers

[M] The word "geyser" comes from *Geysir* ("GAY-seer"), the name of a geyser in this country. In 2010, much air travel was disrupted after the eruption of a volcano in this country.

ANSWER: **Iceland** [or **Ísland**]

[H] Many geysers are also in this country's Taupo Volcanic Zone, which is near its Bay of Plenty. In 2019, twenty-two people died in a volcanic eruption after tour groups failed to evacuate this country's White Island.

ANSWER: **New Zealand** [or **Aotearoa**]

<Geography — French> [Edited]

5. This author lamented, "they had sent my little fish into hiding" after being told to return to a gravel path. While in Regents Park, a character created by this author hallucinates his dead comrade Evans. In an essay, this author praised the sentence "Chloe liked Olivia" for presenting a relationship between women. This author wrote a novel in which (*) Peter Walsh returns from India to see the title character, and the war veteran Septimus Smith commits suicide by jumping out of a window. In an essay, this author posited that women must have "money and a room of one's own" to be successful at writing fiction. For 10 points, name this British author of *Mrs. Dalloway*.

ANSWER: Virginia **Woolf** [or Adeline Virginia **Woolf**] (The essay is "A Room of One's Own.") <Other Literature — Moon> [Ed. Orr]

5. For 10 points each, answer the following about imported German princes who were made rulers in the Balkans: [M] Otto I from the House of Wittelsbach was installed as the king of this country after it won its independence. This country's war for independence saw Edward Codrington defeat the Ottoman navy at the Battle of Navarino.

ANSWER: Kingdom of **Greece** [or **Ellas**]

[E] William of Wied, the new prince of Albania, quickly faced pressure from this empire to provide troops for World War I. The war was sparked by the assassination of this dual monarchy's Archduke Franz Ferdinand by a Serb.

ANSWER: Austria-Hungary [or Austro-Hungarian Empire; prompt on Austria or Hungary]

[H] A German prince with this name from the House of Battenberg was forced to abdicate as prince of Bulgaria just seven years after taking the throne. Troops of a different ruler with this name fought with Bulgarian volunteers against the Ottomans at the Battle of Shipka Pass.

ANSWER: <u>Alexander</u> [accept <u>Alexander</u> of Battenberg or Tsar <u>Alexander</u> II of Russia] <European History — Prabhakar> [Edited]

6. It's not film, but the realist approach to this field of study is contrasted with the formalist framework championed by Christopher Columbus Langdell. Critical race theory stems from a theory in this field of study that believes this field exists to legitimize societal biases. While it was once standard in the U.S., "reading" this field of study as part of an apprenticeship has largely been phased out. Students in this field of study use the (*) Socratic casebook method while preparing for J.D. degrees. Questions like who makes final verdicts differentiate the "civil" and "common" forms of this field. For 10 points, name this field of study central to the practice of judges and attorneys.

ANSWER: <u>law</u> [or <u>legal</u> studies]

<Other Social Science — Condron> [Edited]

- 6. The sound poem "Gadji beri bimba" was written by one member of this art movement, Hugo Ball. For 10 points each:
- [M] Name this art movement. Another member of this movement created a series of readymades that included a urinal signed "R. Mutt" that was rejected from an exhibition with a no-rejection policy.

ANSWER: **Dada**ism

[E] That urinal, *Fountain*, was created by Marcel Duchamp, who also drew a mustache and a beard on this painting in his readymade *L.H.O.O.Q.* This painting by Leonardo da Vinci depicts a woman with an enigmatic smile.

ANSWER: *Mona Lisa* [or *La Gioconda* or *La Joconde*]

[H] Duchamp was photographed cross-dressing as his alter-ego Rose Sélavy by this other Dada artist. This artist also showed Kiki de Montparnasse holding a mask while resting her head on a table in the photograph *Noire et Blanche*.

ANSWER: Man Ray [or Emmanuel Radnitzky]

<Painting — Miles> [Ed. Venkateswaran]

7. Three Catholic priests in this country were executed following the failed Cavite Mutiny against colonial rule. A secret society in this country initiated an anti-colonial rebellion with the Cry of Pugad Lawin. A founder of that society, Andrés Bonifacio, was executed during that rebellion in this country. This country's namesake league, founded by (*) José Rizal, spawned the revolutionary Katipunan which was led by Emilio Aguinaldo. Many revolutionaries in this country later fought against the United States which gained control over this Asian country following its victory in the Spanish-American War. For 10 points, name this island country whose capital is Manila.

ANSWER: The **Philippines** [or Republic of the **Philippines** or Republika ng **Pilipinas**] <World History — Condron> [Ed. Prabhakar]

7. Erdős conjectured that if the sum of the reciprocals of a set of positive integers diverges, then the set contains arbitrarily long sequences of this type. For 10 points each:

[M] Name this type of sequence in which the difference between consecutive terms is constant.

ANSWER: arithmetic sequence [accept arithmetic progression]

[E] Ben Green and Terence Tao proved that there exist arbitrarily long arithmetic sequences whose terms are all this kind of number. These numbers are only divisible by themselves and one.

ANSWER: prime numbers

[H] This mathematician proved that arithmetic sequences whose first term and common difference are coprime contain infinitely many primes. This mathematician also formulated the pigeonhole principle.

ANSWER: Gustav Lejeune **Dirichlet** [or Johann Peter Gustav Lejeune **Dirichlet**]

<Math — An> [Edited]

8. Marcion of Sinope wrote one of these texts after accusing Irenaeus of Lyons of forging the rest of them. The two-source hypothesis claims that two of these texts were based on another one of these texts and a hypothetical "Q source." The third of these texts is a letter written to Theophilus. The three (*) "synoptic" ones of these texts are contrasted with the fourth of these texts due to its inclusion of unique events such as the Wedding at Cana, where water miraculously turned into wine. For 10 points, name these texts about the "good news" of Jesus Christ, the four canonical ones of which are named after Matthew, Mark, Luke and John.

ANSWER: **gospels** [prompt on anything related to <u>books</u> in the <u>Bible</u> or <u>New Testament</u>] <Religion — Dai> [Edited]

- 8. In this novel, a boy has a nightmare in which a wind-up penguin moves around their old house despite not having been wound up. For 10 points each:
- [H] Name this novel in which a boy and his father travel towards the coast in hopes of finding civilization after an unexplained apocalypse.

ANSWER: The Road

[M] *The Road* is a novel by this American author of *Blood Meridian*, who often uses verbose, run-on sentences. This author created the bolt-gun wielding killer Anton Chigurh in his novel *No Country for Old Men*.

ANSWER: Cormac McCarthy [or Charles McCarthy Jr.]

[E] McCarthy's novels often blend post-apocalyptic themes with this genre, exemplified by roaming bands of Yuma and the violent Glanton gang in *Blood Meridian*. Books in this genre often include cowboys and shootouts.

ANSWER: Western [prompt on historical fiction]

<Long Fiction — Miles> [Ed. French]

9. Vacancies in the F-centers of these materials can be described using Kröger-Vink notation and can create diversity in the color of these materials. The strength of these materials is dependent on the degree of misorientation in boundaries between microscopic examples of them called grains. The (*) cubic system of describing these materials classifies them as primitive, body-centered, or face-centered depending on their unit cells. These materials are contrasted with amorphous materials like glass, which are not ordered. For 10 points, name these solids whose molecules are arranged in a highly ordered lattice.

ANSWER: **crystal**s [or **crystalline** materials, prompt on <u>lattice</u>s before mention]

<Chemistry — Schwartz> [Edited]

- 9. A popular Civil War marching song among Union soldiers states that this person's body "lies a-mouldering in the grave" but "his soul is marching on." For 10 points each:
- [E] Name this militant abolitionist who led anti-slavery forces in Bleeding Kansas. This person led the Pottawatomie Massacre and raided the Harper's Ferry arsenal, seeking to secure arms for a potential slave uprising.

ANSWER: John Brown [or John H. Brown]

[H] This preacher, a contemporary of Brown's, was also a militant abolitionist. John Brown used the Sharps rifles smuggled into Kansas by this preacher, which were colloquially known as this man's "Bibles."

ANSWER: Henry Ward **Beecher** [accept **Beecher**'s Bibles]

[M] Julia Ward Howe borrowed the tune of the song "John Brown's Body" to write this patriotic song, which states that "God's truth" is marching on. This song's chorus repeats the phrase "Glory, glory, hallelujah."

ANSWER: "Battle Hymn of the Republic" [or "Mine Eyes Have Seen the Glory"]

<American History — Gray> [Edited]

10. In this novel, a policeman saves the life of a woman with red, sunken eyes who threw herself into a river. A dream in this novel imagines a disease causing people to kill each other, echoing a criticism made by the detective Porfiry of an article proposing "Napoleons" who could kill without consequence. In this novel, (*) Svidrigailov commits suicide after Dunya, the narrator's sister, attempts to shoot him. The protagonist of this novel becomes feverish after using an axe to murder the pawnbroker Alyona and her sister Lizaveta. For 10 points, name this novel by Fyodor Dostoevsky in which Raskolnikov commits murder.

ANSWER: Crime and Punishment [or Prestupleniye i nakazaniye]

<Long Fiction — Tagtmeier> [Edited]

- 10. G.E.M. Anscombe's 1958 article "Modern Moral Philosophy" is credited with reviving this approach to ethics. For 10 points each:
- [H] Name this approach to ethics that primarily considers ideas like charity or kindness to tell right from wrong. This approach is contrasted with deontology and consequentialism.

ANSWER: virtue ethics

[E] One of the founders of modern virtue ethics, Philippa Foot, formulated a "problem" involving one of these vehicles. In that problem, a person can choose to let one of these vehicles kill five people, or flip a switch so that it only kills one.

ANSWER: <u>trolley</u>s [or <u>tram</u>s or <u>streetcar</u>s; accept <u>trolley</u> problem]

[M] Many contemporary virtue ethicists draw from this philosopher, who called the highest good a human can achieve "eudaimonia" in his work Nicomachean Ethics.

ANSWER: Aristotle

<Philosophy — Miles> [Edited]

11. In this film, a scene where a concussed woman vomits into a toilet is followed by a scene where another character smokes as a toilet spews sewage into a flooding room. After a camping trip is cancelled, one character in this film sets up a teepee in the backyard, where he deciphers Morse code signals from an indoor light. In this film, one character leaves her underwear in a car to get the driver (*) fired. After getting hired as a tutor for a wealthy family's daughter, a character in this film also gets the rest of his family hired as a chauffeur, housekeeper, and art therapist. For 10 points, name this 2019 film directed by Bong Joon-ho about the poor Kim and rich Park families.

ANSWER: **Parasite** [or **Gisaengchung**]

<Film — Sheffield> [Edited]

- 11. The Budapest Memorandum of 1994 got three countries to give up their stockpiles of these weapons in exchange for guaranteeing their sovereignty. For 10 points each:
- [E] Name these weapons, examples of which included the Tsar Bomba in the Soviet Union. The Soviets first developed these weapons four years after the U.S. used them against Hiroshima and Nagasaki to end World War II. ANSWER: nuclear weapons [accept nuclear bombs or nukes or atomic bombs]
- [M] One of the countries that gave up its Soviet-era nukes was this country where Alexander Lukashenko took power just five months prior to the agreement. Lukashenko has ruled this "last dictatorship in Europe" ever since. ANSWER: **Belarus** [or Republic of **Belarus**]
- [H] This other signatory to the memorandum claimed it was violated when "little green men" invaded its southernmost region in 2014. That invasion took place after the Euromaidan protests in this country.

ANSWER: Ukraine

<European History — Prabhakar> [Edited]

12. Leonardo da Vinci may have designed a double helical staircase for one of these structures at Chambord. That structure is in the Loire ("I'warr") River Valley, where many of these structures were built during the Middle Ages. Small holes or rooms called garderobes were used as toilets in these structures. Early examples of these structures partly built on flat-topped hills are called (*) "motte-and-bailey." Portcullises are vertically sliding metal gates that guard entrances to these structures. Fortified towers found in the center of these structures are called their "keep." For 10 points, name these defensive fortifications often surrounded by moats.

ANSWER: castles [or châteaux; prompt on fortress]

<European History — Delot-Vilain> [Edited]

- 12. Hugh Everett's many-worlds interpretation avoids this process, instead proposing that the universe splits into parallel universes for each possible outcome. For 10 points each:
- [H] Name this irreversible process, central to the Copenhagen interpretation, in which measurement of an observable causes the system to be non-deterministically reduced to a single eigenstate.

ANSWER: wavefunction collapse

[M] Like Everett, this earlier physicist held a position similar to the many-worlds interpretation. He names an equation that describes the evolution of the wavefunction over time.

ANSWER: Erwin Schrödinger

[E] In a critique of the Copenhagen interpretation, Schrödinger proposed a thought experiment where one of these animals would be thought of as both alive and dead, until observation caused it to collapse to just one of those states.

ANSWER: cats [accept Schrödinger's cat]

<Physics — Sheffield> [Edited]

13. This character cries, "Did ever dragon keep so fair a cave? / Beautiful tyrant! Fiend angelical!" upon learning about a man's death. While pleading that another character stay with her, this character claims that "it is not yet near day / It was the nightingale, and not the lark." In another scene, this character urges a companion to "swear not by the (*) moon, the inconstant moon." This character observes that a "rose... would smell as sweet" after lamenting, "What's in a name?" This character's father betroths her to Count Paris following the death of her cousin Tybalt. For 10 points, name this Shakespeare character who falls in love with Romeo.

ANSWER: <u>Juliet</u> Capulet <Drama — Lin> [Edited]

- 13. This kind of law was ruled constitutional in the 1926 Supreme Court Case *Euclid v. Ambler*, which upheld one of this kind of law disallowing industrial uses on some land in the town of Euclid. For 10 points each:
- [M] Name this kind of municipal ordinance which divides lands into different areas that have different allowable uses. Policies of this kind that give areas single uses, like single-family residential, are called "Euclidean."

ANSWER: **zoning** laws

- [H] This term refers to zoning allowing for combined uses, in particular several floors of residential on top of retail space. This kind of zoning has become recently trendy due to its generally better sustainability and walkability. ANSWER: **mixed-use** zoning [or vertical **mixed-use** zoning or **mixed-use** planning or **mixed-use** development]
 [E] In the five-over-one style of mixed-use buildings, the residential floors are framed with this most common framing material for US houses. "Stick" framing uses two-by-fours made of this inexpensive material.

 ANSWER: **wood** [or **lumber** or **timber** or mass **timber** or engineered **wood**; accept specific kinds of wood]

 <Other Gray> [Edited]
- 14. The Komar form of this quantity can be defined on stationary spacetimes like the Schwartzchild metric. This quantity squared times c to the fourth, plus momentum squared times c-squared, gives the square of relativistic energy. The equivalence principle states that the (*) inertial form of this quantity is equal to its gravitational form. The product of two values for this quantity are multiplied by big G in the numerator of Newton's law of gravitation. Einstein's equivalence between this quantity and energy states that energy equals this quantity times c-squared. For 10 points, name this quantity measured in kilograms.

ANSWER: mass [accept rest mass or invariant mass]

<Physics — Sheffield> [Ed. Bowman]

14. This song is supposedly the second-most-recorded song ever, topped only by the Beatles' "Yesterday." For 10 points each:

[M] Name this bossa nova song, originally written by Antonio Carlos Jobim, about someone who "just doesn't see" the singer smile.

ANSWER: "The Girl from Ipanema" [or "Garota de Ipanema"]

[H] American saxophonist Stan Getz collaborated with a guitarist of this surname on a landmark bossa nova album. That guitarist's wife, Astrud, sang the vocals for the recording of "The Girl from Ipanema" on the album.

ANSWER: Gilberto [accept Astrud Gilberto or João Gilberto]

[E] Astrud and João Gilberto were from this South-American country. Bossa nova developed from samba in the late 1950s in this country's city of Rio de Janeiro.

ANSWER: Brazil

<Jazz — Sheffield> [Edited]

15. A choir singing "Hold on / if love is the answer / you're home" appears on this group's song "Touch." Another song by this group has disco producer Giorgio Moroder talking about his career in place of lyrics. Those songs, along with "Lose Yourself to Dance," appear on this group's album (*) Random Access Memories. One song by this group states "work it, make it, do it, makes us" before listing the title four adjectives. Another song by this group states "we're up all night to the sun." For 10 points, name this electronic music duo that disbanded in 2021, known for their iconic helmets and songs like "Harder, Better, Faster, Stronger," and "Get Lucky."

ANSWER: Daft Punk

<Pop Culture — An> [Ed. Gray]

15. Alinardo complains to William that his rival outcompeted him for this position by bringing back booty from Silos. For 10 points each:

[H] Name this position, held by the monk Malachi and his assistant Bernard, both of whom are found dead with dark stains on the fingers of their right hands in the novel in which they appear.

ANSWER: librarian

[M] Adso of Melk and William of Baskerville discover that a poisoned manuscript was used to kill Malachi and Bernard in this novel by Umberto Eco, which is set at a monastery with a jealously-guarded library.

ANSWER: The Name of the Rose

[E] The poisoned manuscript was a copy of the second book of Aristotle's *Poetics*, which analyzes this genre instead of tragedy. Jorge of Burgos considers this genre blasphemous because "laughter makes man similar to monkey."

ANSWER: comedy

<Long Fiction — Sheffield> [Ed. French]

16. Vsevolod Meyerhold reacted against the naturalistic techniques for this art form with his system of biomechanics. Techniques for this art form, such as the "Magic If," were popularized in America by Lee Strasberg. Konstantin Stanislavski's system for this art form suggests that performers use their imagination to affect their behavior subconsciously. In ancient Greece, performers of this art form wore (*) masks to take part in works like *The Libation Bearers* and *Agamemnon*. For 10 points, a "method" approach to what art form has been used by practitioners like Daniel Day-Lewis and Meryl Streep?

ANSWER: acting [prompt on theater]

<Misc. Art — French> [Edited]

16. The Translation Movement in this city, which sought to translate works in Ancient Greek, was led by scholars like al-Kindi. For 10 points each:

[M] Name this city whose House of Wisdom was a center of learning in the Middle Ages. The 1258 sack of this city resulted in a nearby river running black with ink from the discarded volumes of the House of Wisdom.

ANSWER: Baghdad

[H] The *caliph* Al-Ma'mun established the first one of these facilities in the Islamic world at the House of Wisdom. Ulugh Beg later established a large one of these facilities in Samarkand.

ANSWER: **observatory** [or **observatories**; prompt on <u>sundials</u>]

[E] The House of Wisdom was destroyed as part of the 1258 sack of Baghdad by this people. This people's Ilkhanate was led by Hulagu, the grandson of Genghis Khan, the founder of this people's empire.

ANSWER: Mongols

<World History — French> [Ed. Prabhakar]

17. In one myth from this culture, two deities are tricked into becoming monkeys after trying to kill their younger brothers. In another myth from this culture, a woman is impregnated by the saliva of a head hung from a calabash. A bird demon from this culture dies of shame after losing its turquoise teeth after pretending to be the sun and moon. In a myth from this culture, the god (*) Camazotz decapitates a character in the House of Bats. In a myth from this culture, Seven Macaw is shot down by the Hero Twins, who play a ball game against the Lords of Xibalba. For 10 points, the *Popul Vuh* is from what Mesoamerican culture whose Long Count calendar ended in 2012?

ANSWER: Maya culture [or Mayan culture; accept K'iche Maya or Yucatec Maya]

<Mythology — An> [Ed. Venkateswaran]

17. Zaitsev's rule states that these bonds will form between more highly substituted carbons after an elimination. For 10 points each:

[M] Name these bonds which are present between two carbons in alkenes.

ANSWER: carbon-carbon **double** bonds [prompt on, but do not otherwise reveal, pi bonds]

[E] Double bonds consist of one sigma bond and one bond denoted by this letter. This letter also names a constant equal to roughly 3.14.

ANSWER: **pi**

[H] This hybridization is possessed by carbons with exactly 1 double bond. Every carbon atom in benzene conforms to this hybridization scheme.

ANSWER: sp2 hybridization

<Chemistry — Schwartz> [Edited]

18. The Ringle Report, which mostly refuted the basis for this policy, was intentionally suppressed to make this policy easier to implement. On the day this policy was ruled constitutional, the Supreme Court also issued a seemingly contradictory ruling in *Ex parte Endo*. The Supreme Court case *Trump v.* (*) *Hawaii* overturned an earlier ruling that upheld this policy's constitutionality. Targets of this policy were forced to live in places like Manzanar and Tule Lake. This policy's constitutionality was upheld in *Korematsu v. United States*. For 10 points, name this American policy that led to certain people of Asian descent being held in camps during World War II.

ANSWER: <u>Japanese internment</u> [accept answers describing the <u>imprisonment</u> or <u>internment</u> of <u>Japanese</u>-Americans in camps during World War II]

<American History — Amanullah [Ed. Delot-Vilain]

18. For 10 points each, answer the following about the High Priest, a position held by Zadok and Aaron:

[M] Because no one else was permitted to enter this building's Holy of Holies, the High Priest would tie a rope to his leg before entering so that he could be pulled out if necessary. The second version of this sacred building was destroyed in 70 CE.

ANSWER: <u>Temple</u> [accept the First <u>Temple</u> or the Second <u>Temple</u> or Solomon's <u>Temple</u>]

[H] The High Priest was appointed by this assembly, the highest body in the Jewish court system. This assembly had 71 members and met in the Temple in Jerusalem.

ANSWER: The **Sanhedrin** [or the Great **Sanhedrin**]

[E] This ethnic group claims descent from the Israelites who rejected Eli as High Priest and instead followed Uzzi to Mount Gerizim. In one of Jesus' parables, a traveller is helped by a "good" member of this ethnic group.

ANSWER: **Samaritan**s [accept the Good **Samaritan**]

< Religion — Dai > [Ed. French]

19. In one poem, this author wrote, "As I learn from you, / I guess you learn from me—/ although you're older... and somewhat more free." Another poem by this author is set "by the pale dull pallor of an old gas light." That poem by this author describes a musician who "slept like a rock or a man that's dead" after "droning a drowsy syncopated tune." This author of (*) "Theme for English B" wrote a poem that asks, "Does it stink like rotten meat? / Or crust and sugar over— like a syrupy sweet?" That poem begins, "What happens to a dream deferred?" For 10 points, name this African-American poet of "The Weary Blues" and "Harlem."

ANSWER: Langston **Hughes** [or James Mercer Langston **Hughes**]

<Poetry — Louis Li> [Ed. French]

19. For 10 points each, answer the following about Polish virtuosa Wanda Landowska ("VAHN-dah lan-DOHV-skah"):

[M] Landowska commissioned Manuel de Falla to write a concerto for this instrument, which she played. This plucked-string keyboard instrument preceded the modern piano.

ANSWER: **harpsichord** [accept **clavecin**]

[H] Landowska also commissioned this French composer to write his *Concert champetre* ("kon-SAIR shawm-PET"). This composer wrote the opera *Dialogue of the Carmelites* and was a member of *Les Six* alongside Arthur Honegger ("oh-neh-GAIR") and Darius Milhaud ("mee-YO").

ANSWER: Francis Poulenc

[E] Landowska made the first modern harpsichord recordings of this composer's *Goldberg Variations*. This composer's *Italian Concerto* and *Well-Tempered Clavier* were also recorded by Landowska.

ANSWER Johann Sebastian Bach

<Classical Music — Delot-Vilain> [Edited]

20. A modified form of this compound found in the skin called DHC-7 is converted to vitamin D3 by UV radiation. M2 Macrophages which have engulfed an excess of this compound are often referred to as foam cells. FRAP experiments can determine high membrane concentrations of this molecule by measuring its impact on membrane fluidity. This molecule is the main component of (*) lipid rafts in the cell membrane and serves as the precursor to steroid hormones. The lipoprotein transporters of this compound, HDL and LDL, are called its "good" and "bad" types, respectively. For 10 points, name this blood lipid whose excess can cause heart disease.

ANSWER: **cholesterol** [prompt on <u>LDL</u> or <u>HDL</u>]

<Biology — Sheffield> [Ed. Schwartz]

- 20. In a novel by this author, a teleportation-like ability called Conduction saves Hiram Walker after he falls into a river. For 10 points each:
- [H] Name this author who depicted slaves as "the Tasked" and slave owners as "the Quality" in his novel *The Water Dancer*. This author wrote the book *Between the World and Me* and the essay "The Case for Reparations."

ANSWER: Ta-Nehisi Coates ("tah nuh-HAH-see coates")

[E] In *The Water Dancer*, a character whose nickname comes from this figure tells Hiram that "memory is the chariot." That character, Harriet Tubman, parallels this biblical figure who led the Israelites out of Egypt.

ANSWER: **Moses** [or **Moshe**]

[M] In 2016, Coates took on the job of writing several books in this form, including the series "A Nation Under Our Feet." Adrian Veidt teleports a gigantic squid into New York City to avoid a nuclear war in *Watchmen*, a book in this form by Alan Moore.

ANSWER: **graphic novel**s [or **comic book**s or **comic**s]

<Other Literature — Lin> [Edited]