

Bulldog High School Academic Tournament 2018 (XXVII): After such knowledge, what forgiveness?

Written by Yale Student Academic Competitions (Stephen Eltinge, Adam Fine, Isaac Kirk-Davidoff, Hasna Karim, Michael Kearney, Moses Kitakule, Jacob Reed, James Wedgwood, Sid White, and Bo You), Clare Keenan, and Eddie Kim
Edited by Jacob Reed, with Stephen Eltinge and Eddie Kim

Tossups

1. **One of this author’s novels predicted the heavy bombings of World War II and centers on a “Dictatorship of the Air” that eradicates all religions and makes English the world’s official language. This author of *The Shape of Things to Come* wrote a wildly popular *Outline of History*. In a novel by this author, Thomas Marvel and Dr. Kemp discover the (*) physicist Griffin’s plans to use his new-found ability to terrorize people. Weena, an Eloi, is killed in another novel by this author, in which the protagonist visits the year 802,701 A.D. For 10 points, name this English author of science-fiction novels like *The Invisible Man* and *The Time Machine*.**

ANSWER: H.G. Wells [or Herbert George Wells] <MK>

2. **Dale’s principle states that these cells behave identically in all of their interactions. They’re not egg cells, but Barr bodies were first discovered in these cells in a cat. A process occurring in these cells involves increased AMPA receptor activity in the “expression” phase. Santiago Ramón y Cajal formulated a “doctrine” stating that these cells are discrete after using Camillo Golgi’s stain to study them. (*) Long-term potentiation is an example of these cells’ “plasticity.” A kind of “saltation” refers to the “jumping” of action potentials in these cells between myelin sheaths. For 10 points, name these cells consisting of axons and dendrites, which are found in the brain.**

ANSWER: neurons [accept nerve cells but do not accept or prompt on just “nerves”] <AF>

3. **This president defeated a primary opponent from Illinois who advocated a 50-cent gas tax and a 50% cut in social security taxes. In the general election, this president defeated an independent run by that former primary opponent, John B. Anderson. During a debate, he responded to an accusation that he wanted to get rid of Medicare by quipping “There you (*) go again.” He first gained prominence supporting Barry Goldwater with the 1964 speech “A Time for Choosing.” This president was the first to have his supply-side policies dubbed “voodoo economics.” For 10 points, name this Republican president who defeated Jimmy Carter in 1980.**

ANSWER: Ronald (Wilson) Reagan <MK>

4. **The number of these elements differentiates “quadripartite” and “sexpartite” structures. These are the simpler of two kinds of structures made of voussoirs [voo-SWARs]. The “ogee” form of these structures was used in the Perpendicular or Flamboyant style. Three tiers of these structures in different sizes comprise the (*) Pont du Gard. A number of these structures in a row forms a barrel vault. A flying buttress is basically half of one of these structures. They’re semicircular in Romanesque architecture and pointy in Gothic architecture. For 10 points, name these curved structures .**

ANSWER: arches [accept ribs] <JR>

5. **A novel in this language analyzes itself using the musical notion of a “motif” and illustrates the notion that “What happens but once, might as well not have happened at all.” In that novel in this language, a professor dies in Cambodia trying to join the “Grand March of History,” and a painter shows her originality by wearing a (*) bowler hat. This language was used for a play in which Helena fights for the rights of Dr. Gall’s title automatons. A novel in this language depicts the lives of Tereza and Tomas during a 1968 revolution. For 10 points name this Eastern European language used by Karel Čapek in *R.U.R.* and Milan Kundera in *The Unbearable Lightness of Being*.**

ANSWER: Czech [or Četina] <CK>

6. *Description acceptable.* In the lead-up to this process, protesters changed their slogan from “We want out!” to “We are staying here!” This process, which is also known as “The Turn,” was partly brought about by the “Monday Demonstrations.” The “Two Plus Four Agreement” finished this process, which is celebrated on October 3rd. This process led to the arrest of (*) Egon Krenz. François Mitterand and Margaret Thatcher opposed it, fearing the end of their hegemony in Europe. The Warsaw Pact ended between this event and the fall of the Soviet Union. With Mikhail Gorbachev’s approval, it was completed under Helmut Kohl. For 10 points, name this process that began with the fall of the Berlin Wall.

ANSWER: **Germany Reunification** [accept Deutsche **Wiedervereinigung**; accept anything that mentions **West and East Germany becoming one country**; prompt on answers like German Unification or descriptions of Germany becoming one country; do not accept answers about the “Berlin Wall”] <SPQR>

7. These objects title a song that switches to “6-8” over the drums’ “4-4” at the words “When I hold you in my arms.” That song also switches time signatures at the words “I need a fix ‘cause I’m going down” and “Mother Superior.” A record punningly titled for one type of these things includes the first Indian-style pop track, “Love You To,” and uses tape loops on album closer “Tomorrow Never Knows.” On the *White Album*, John Lennon sings that (*) “Happiness is a Warm” one of these objects. The songs “Eleanor Rigby” and “Yellow Submarine” were first released on an album titled for this kind of object. The Beatles’ *Revolver* is named for—for 10 points—what kind of weapon?

ANSWER: **guns** [accept **revolvers**; accept “**Happiness is a Warm Gun**”] <JR>

8. In the *Poetic Edda*, one of these animals is the mount of the völva Hyndla. Four warriors are unable to control one of these animals ridden by a giantess at the funeral of Balder. A tool intended for one of these animals is created using thought-to-be-nonexistent items such as a woman’s beard and the sound of a cat’s footsteps. Due to the actions of one of these animals, the god (*) Tyr [“tier”] is missing his right hand. During Ragnarök, a great boot made by Vidarr is used to kill one of these animals named Fenrir. For 10 points, name this animal into which a ly-can-thrope transforms during the full moon.

ANSWER: **wolf** [or *Canis lupus* or *C. lupus*; accept **werewolf**; do not accept “dog”] <SPQR>

9. One of the first of these people was a musician named Tereza Lee, whose name was frequently mentioned by Dick Durbin. A *Splinter* article about why “you should stop using *this term*” mentions that this term is “rooted in exceptionalism” and separates “deserving” from “undeserving.” In September 2017, a group of protesters described by this term chanted “we are not a (*) bargaining chip” at a town hall held by Nancy Pelosi. This term refers to people who presented their GED or high school diploma and paid a \$495 fee to obtain temporary legal status. For 10 points, give this term often used to refer to young undocumented immigrants under the DACA program.

ANSWER: **DREAMers** [accept **DACAmented**; prompt on undocumented immigrants or illegal immigrants or illegal aliens] <IKD>

10. Drugs that induce a process with this name include phenylephrine and tropicamide. This process occurs through release of EDHF and prostacyclin stimulated by bradykinin. A process with this name occurs through stimulation of the radial muscle and is known as mydriasis. The contribution of a process with this name to the Doppler shift was measured in the (*) Ives–Stilwell experiment. The endothelium signals for this process in the vasculature using nitric oxide. A process with this name occurs with length contraction in moving frames in special relativity. For 10 points, give the name for when veins and the pupil swell.

ANSWER: **dilation** [accept vaso**dilation**; accept pupillary **dilation**; accept time **dilation**] <AF>

11. This artist's last work, found in the Philadelphia Museum, is divided into the numbered parts "The Waterfall" and "The Illuminating Gas," and consists of a battered wooden door with two peepholes, through which you can see a landscape with a spreadeagle nude woman. This artist of *Étant donnés*, who supposedly gave up art for (*) chess around 1923, disparaged "retinal" art, instead creating the prototypes of conceptual art. This creator of *In Advance of the Broken Arm* penciled a mustache and goatee on a postcard of the *Mona Lisa*. For 10 points, name this French artist who made "readymades" by signing his name to a snow shovel and a urinal.

ANSWER: (Henri-Robert-)Marcel **Duchamp** [accept **Rrose Sélavy** ("Eros, c'est la vie")] <JR>

12. External factors impacting this concept were studied by J. McVicker Hunt. Aspects of this concept were grouped into seven "clusters" by L.L. Thurstone. The "triarchic" theory of it proposed by Robert Sternberg simplifies Howard Gardner's theory that there is no one "g-factor," but rather (*) "multiple" versions of this concept. A popular way of measuring this concept is named for David Wechsler. Measures of this concept gradually rise in the Flynn effect. Social success is based on the "emotional" form of this concept. The Stanford-Binet test measures—for 10 points—what capacity's namesake "quotient"?

ANSWER: **intelligence** [accept **emotional intelligence** or **intelligence quotient**; prompt on IQ] <HK>

13. After leaving this place, a protagonist holds a funeral for his nurse, Caieta. A poetic protagonist is told how to get to this place by a woman whose mythologically-decorated temple doors don't depict the death of Icarus because they were designed by Daedalus. A "hesitant" or "lingering" plant that contradicts a Sibylline prophecy possibly signifies that a (*) hero is not quite ready to go to this place. This place is left through a gate of "false dreams" made of ivory in the *katabasis* of Book 6 of the *Aeneid*. Two doves help Aeneas find the golden bough he uses to enter this place. For 10 points, name this place where Aeneas sees the ghost of Dido.

ANSWER: the **underworld** [accept **Elysium**, **Hell**, **Hades**, **Dis**, **Pluto**, **Orcus**, or **Avernus**] <SPQR>

14. This man supposedly died listening to a reading of Psalm 142. This man's original eleven followers, including Bernardo di Quintavalle, lived with him in an abandoned leper colony. A text by this man praises God through "Brother Wind" and "Sister Moon." A prayer often named for this man asks "Make me an instrument of [God's] (*) peace." To experience poverty, this founder of the Friars Minor joined the beggars at St. Peter's Basilica. This author of the *Canticle of the Sun* inspired the Order of Poor Clares. This man supposedly received the stigmata and preached to the birds. For 10 points, name this saint from Assisi.

ANSWER: Saint **Francis** of Assisi [or San **Francesco** d'Assisi] <MK>

15. This value is plotted against free energy on Frost diagrams. This value changes at two carbons in ozonolysis. An increase in this value increases a bond's covalent character. This value is unusually high for the central atom of permanganate. When calculating this value, electrons are assigned to the more electronegative atom, unlike in (*) formal charge computations. This value decreases for an atom undergoing a reduction. This value, which determines the suffixes "-ous" and "-ic," is written with Roman numerals in parentheses. For 10 points, name this value, the number of electrons an atom has gained or lost.

ANSWER: **oxidation states** [or **oxidation numbers**; prompt on **charge**] <HK>

16. The introduction to a work in this genre opens with an octave C, followed by a slow, suspension-filled movement that avoids cadences for about two minutes. That work in this genre includes a blazing C major chord depicting the word "Light" after the opening "Representation of Chaos." A work in this genre includes the lengthy "He was (*) despised" and the soprano solo "I know that my Redeemer liveth," and repeats phrases like "King of kings, and Lord of lords" in a chorus during which the audience traditionally stands. For 10 points, name this opera-like genre of pieces like Haydn's *Creation* and Handel's *Messiah*.

ANSWER: **oratorios** <JR>

17. **One of this man's characters thinks that her son must be alive because November 25th was his "favorable day." In that play by this man, children play the game "jail" in a front yard where Frank Lubey tries to use horoscopes to find a missing soldier. In a play by this man, Ann Deever gets engaged to Chris Keller, whose reading of his brother Larry's suicide note forces their father to admit to having sold faulty (*) airplane parts that killed 21 pilots. Another of his plays ends with the title man's funeral after he crashes his car for the life insurance money. Happy and Biff are the sons of Willy Loman in that play by this author of *All My Sons*.** For 10 points, who wrote *Death of a Salesman*?

ANSWER: Arthur (Asher) Miller <CK>

18. *Description acceptable.* **This historical state was represented by a "star" within a yellow floral badge with the text "Heaven's light our guide." Richard Temple led the relief effort for an 1870s famine in this state. A state of emergency was enacted in this state by the Rowlatt Acts. In this state, hundreds were killed by troops under Reginald Dyer in 1919. This state, which perpetrated the (*) Amritsar massacre, was asked to "Quit" by a leader who underwent several hunger strikes and practiced a form of civil disobedience called *satyagraha*.** For 10 points, name this state in which the Salt March took place, a government presided over by a viceroy and protested by Mahatma Gandhi.

ANSWER: British India [or the British Raj; accept anything that mentions British rule of India; accept Crown rule of India or direct rule of India; prompt on just India, Indian Empire, Raj, British Empire, or Quit India; do not accept or prompt on answers involving the "British East India Company"] <JW>

19. **On Feynman diagrams, lines denoting particles of this substance bear leftward- or downward-pointing arrows. While baryons typically contain none, all mesons have exactly one particle of this substance. The Sakharov conditions explain the asymmetry that leads to the universe's deficiency of this substance. In the most common type of pair production, the (*) positive particle is this type of substance. This substance was initially understood as negative energy "holes" in the Dirac sea, since particles of it have the same mass but opposite charge to their counterparts. Positrons are an example of—for 10 points—what stuff that annihilates normal matter when they come into contact?**

ANSWER: antimatter [or antiparticles; accept antiquarks until "positive"] <SE>

20. **This people were raided by people from "Ahhiyawa," which is possibly a transliteration of "Achaean." This people called their language Neshili, meaning "the language of Nesha." This people ruled over the Hurrians, whose Mitanni Empire they conquered under the king (*) Suppiluliuma I. They signed the earliest surviving peace treaty after their king Hattusili II led several thousand chariots against Ramses II at the Battle of Kadesh. They seem to have been the first people to produce iron tools. Hattusa was the capital of—for 10 points—what people that ruled Anatolia throughout the second millennium B.C.?**

ANSWER: Hittites <SPQR>

Tiebreaker

21. **This man wrote that "Ambition must be made to counteract ambition" in an essay claiming that "if men were angels, no government would be necessary." In an earlier essay, this man compared getting rid of liberty to getting rid of air, when cautioning about efforts to abolish factions. This was the alphabetically-last man to write under the name (*) "Publius," writing essays numbers 51 and 10. Along with Edmund Randolph, he devised the main alternative to the New Jersey Plan. Along with John Jay and Alexander Hamilton, he wrote the Federalist Papers. For 10 points, name this main drafter of the Constitution and Bill of Rights, who succeeded Thomas Jefferson as President.**

ANSWER: James Madison Jr. <JR>

Bonuses

1. This term, which designates much of the Levant, was coined in the early 1900s by archaeologist James Henry Breasted. For 10 points each:

[10] Give this two-word English name for the “cradle of civilization” that spanned the lower Nile and Mesopotamia.

ANSWER: **Fertile Crescent**

[10] The eastern “wing” of the Fertile Crescent is this part of Mesopotamia south of Assyria. It’s the namesake of two major Mesopotamian Empires, one of which was home to some Hanging Gardens in its capital.

ANSWER: **Babylon** [or **Babylonian Empire**; accept **Hanging Gardens of Babylon**]

[10] The Babylonian Code of Hammurabi is preserved on one of *these* stone slabs. The Axumites of modern Ethiopia erected a number of these pillar-like objects.

ANSWER: **steles** <SPQR>

2. In a system with spatial translational symmetry, this quantity will be conserved as a consequence of Noether’s theorem. For 10 points each:

[10] Name this quantity that, for a moving object, equals its mass times its velocity.

ANSWER: linear **momentum** [do not accept or prompt on “angular momentum”]

[10] In a system of many particles in which total momentum is conserved, *this* point moves at constant velocity. This point can be located by adding up mass times position for all particles, and dividing by total mass.

ANSWER: **center of mass** [or **barycenter**]

[10] In the gravitational two-body problem of masses at positions R_1 and R_2 , one often transforms to a coordinate system with the center of mass as one coordinate. What is the expression for the other coordinate?

ANSWER: **R_2 minus R_1** [or **R_1 minus R_2**] <SE>

3. This country underwent a “White Revolution” from 1963 to 1978. For 10 points each:

[10] Name this country, which suffered crippling inflation following the 1973 oil crisis when its economy was flooded with foreign currency. Its Islamist 1979 Revolution began with demonstrations against the Shah.

ANSWER: Islamic Republic of **Iran** [accept **Persia**]

[10] This man became Supreme Leader of Iran after that 1979 Revolution.

ANSWER: Ayatollah **Khomeini** [or Sayyid Ruhollah Mūsavi **Khomeini**; prompt on **Ayatollah**]

[10] Soon after the Revolution, Iran fought a war with Iraq over *this* oil-rich western province, which is the closest to Kuwait.

ANSWER: **Khuzestan** <SPQR>

4. For 10 points each—answer the following about a family of poets:

[10] First, name this Confessional poet who won the National Book Award for the book *Life Studies*, which includes the poems “Waking in the Blue” and “Skunk Hour.”

ANSWER: Robert (Traill Spence) **Lowell** (IV)

[10] James Russell Lowell is counted with *this* man as one of the Fireside Poets. At the age of 19, this man wrote a poem about joining “the innumerable caravan” of death, which begins “To him who in the love of Nature holds”.

ANSWER: William Cullen **Bryant** (The poem is “Thanatopsis.”)

[10] Amy Lowell’s collection *Fir-Flower Poets* consists of translations from this East Asian Language. Poets in this language included Du Fu and Bai Juyi.

ANSWER: Classical **Chinese** [or **Zhongwen**; accept **Mandarin** or **Hanyu**] <MK>

5. Despite its common name, Bach's *Mass in B Minor* is mostly in this key. For 10 points each:

[10] Name this key popular for festive trumpets-and-drums pieces like the "Hallelujah Chorus" and the last movement of Beethoven's ninth.

ANSWER: **D** Major

[10] Baroque trumpets could only play in a few keys because they lacked *this* technical feature, which allows them to play notes off the harmonic series by elongating the resonating tube.

ANSWER: piston **valves**

[10] Similarly, it was difficult to tune timpani before they were given *this* feature. Most pianos have three of these devices, which are manipulated by the feet.

ANSWER: **pedals** <JR>

6. In these substances, the beyond-leading-order coefficients of the virial expansion are nonzero. For 10 points each:

[10] Give this term for substances with a compressibility factor that deviates from 1.

ANSWER: **real gases** [prompt on **gases**; prompt on, but **do not otherwise reveal non-ideal gases**; do **not** accept or prompt on "ideal gases"]

[10] Equations describing real gases attempt to account for the presence of intermolecular forces, unlike this simpler equation, which states that "*PV* equals *nRT*."

ANSWER: **ideal gas** law

[10] By observing that the number of moles equals a gas's mass divided by its molar mass, one can rearrange the ideal gas law to find that *this* quantity is given by pressure times molar mass over *RT*.

ANSWER: **density** [or mass **density**] <SE>

7. This man's brother Charles wrote hymns like "Hark! The Herald Angels Sing." For 10 points each:

[10] Name this English theologian, who is best known for founding Methodism.

ANSWER: John **Wesley**

[10] Methodists were among the first Christians to permit *these* people to preach. Elizabeth Ann Seton was the first American one of these people to be made a saint.

ANSWER: **women** [accept obvious equivalents]

[10] John Wesley subscribed to this particular belief system, which shares similarities with Calvinism. It was condemned by the Synod of Dort.

ANSWER: **Arminianism** <MK>

8. For 10 points each—answer the following about the structure of Greek tragedy:

[10] Greek tragedies featured *this* crowd of actors, who collectively comment on the action and often goad the protagonist to action.

ANSWER: Greek **chorus**

[10] Many critics have attacked Euripides for his overuse of *this* plot device, whereby a mythical figure like Heracles steps in at the last moment to save the protagonist.

ANSWER: **deus ex machina** [or **apo mekhanes theos**; accept **God from the machine**]

[10] Aristotle thought that the action of tragedy should be describable by *this* Greek term, meaning it "represents" the world. This word titles a history of representation in Western Literature by Erich Auerbach.

ANSWER: **mimesis** <JR>

9. For 10 points each—answer the following about Classical Arabic thought:

[10] The Persian thinker al-Khwarizmi was the first to detail the techniques of subtracting and adding from both sides of an equation, thus inventing *this* kind of mathematics, which involves abstract symbols like “x.”

ANSWER: **algebra**

[10] The Persian philosopher Avicenna used the “flying man” thought experiment to argue for the existence of *this* thing. The word “psychology” once mean the study of this thing, which is examined in Aristotle’s *De Anima*.

ANSWER: **souls**

[10] This North African historian proposed a cycle in which empires gradually lose *Asabiyyah* or social cohesion in his historiographical work *Muqaddimah*.

ANSWER: **Ibn Khaldun** [or Abu Zayd ‘Abd ar-Rahman ibn Muhammad **ibn Khaldun** al-Hadrami] <JR>

10. For 10 points each—answer the following about American painter Helen Frankenthaler:

[10] Frankenthaler’s soak stain paintings have often been compared to paintings of this kind, in which the pigment is added to the namesake common liquid.

ANSWER: **watercolors**

[10] Frankenthaler often produced her paintings with the canvas in *this* unusual position, which is how Jackson Pollock made his drip paintings. A description is fine.

ANSWER: **on the floor** [accept any answer that indicates painting on the **ground**; prompt on flat, horizontal, or unstretched by asking “Where?”]

[10] Frankenthaler later sharply changed tacks, producing paintings with heavy use of *this* technique, in which the paint is visibly layered up, producing an almost 3D effect.

ANSWER: **impasto** <JR>

11. This term refers to the process of re-integrating two branches in Git. For 10 points each:

[10] Give this term that also names a sorting algorithm developed by von Neumann. That algorithm has a big-*O* runtime of “ $n \log n$ ” and recursively divides an array, using this namesake operation to recombine the subarrays.

ANSWER: **merging** [accept **mergesort**]

[10] That process of recursively breaking down a problem into parts and then combining the solutions to the subproblems is described by *this* common three-word English phrase.

ANSWER: **divide and conquer**

[10] Despite quicksort being generally faster, mergesort is useful because it has *this* sorting property. Sorting algorithms with this property maintain the order of equal values within the input list.

ANSWER: **stability** [accept word forms like **stable**] <BY/AF>

12. This process started after the “surprise” result of a 2016 referendum called by David Cameron. For 10 points each:

[10] Name this process that’s currently being negotiated by Theresa May.

ANSWER: **Brexit** [accept any answer involving the **U.K.** leaving the **E**uropean **U**nion]

[10] In January 2017, this man said he’d “happily” negotiate a British return to the E.U. This current president of the European Commission was Prime Minister of Luxembourg for 20 years until 2013.

ANSWER: Jean-Claude **Juncker** [YOON-kuh]

[10] After calling a snap election in 2017, Theresa May’s Conservatives were forced to form a coalition government with *this* region’s far-right Democratic Unionist Party.

ANSWER: **Northern Ireland** [do **not** accept or prompt on partial answer] <JR>

13. For 10 points each—answer the following about the properties of teeth... in mythology:

[10] This Norse god with golden teeth wields a magic hunting horn called Gjallar-horn [G'YAHL-err-"HORN"] and lives near the rainbow bridge Bifröst ["BEE"-"frost"].

ANSWER: **Heimdall** [or **Heimdallr**] (The Old Norse pronunciation of Gjallar-horn, or "yell horn", is closer to Gjallar-horn [K'YAHT-luhrr-HOH-ruhn] or Gjallar-horn /cat.lar.horn/.)

[10] This Polynesian trickster's attempt to make humans immortal is foiled when he is crushed to death by the *vagina dentata*, or toothed vagina, of the death goddess Hine.

ANSWER: **Maui**

[10] In Hinduism, this god demonstrates his son Karna's generosity by convincing him to break and donate the gold in his teeth. This god's chariot is pulled by seven horses led by the charioteer Aruna.

ANSWER: **Surya** <AF>

14. For 10 points each—answer the following about video games with "rain" in their title:

[10] *Risk of Rain* was a 2014 game in the Metroidvania subgenre of these games, in which you have to jump between the namesake parts of the environment. The original *Super Mario* was a side-scrolling game of this type.

ANSWER: **platformers**

[10] The 2010 videogame *Heavy Rain* was produced by a studio named for a "Quantic" kind of these phenomena. The PS2, GameCube, and Xbox competed with a Sega console named "this phenomenon-cast."

ANSWER: **dreams** [accept **Quantic Dream**; accept **Dreamcast**]

[10] The protagonist of *Rain World*, a 2017 survival platformer, is half-cat and half-*this* type of animal. In *Faster Than Light*, these animals are a telepathic, immune-to-mind control race that mostly live in nebulae.

ANSWER: **slugs** <AF>

15. This country's native son Bartolomeu Dias was the first European to sail around the southern tip of Africa. For 10 points each:

[10] Name this Iberian kingdom home to Pedro de Cabral, who "discovered" Brazil.

ANSWER: Kingdom of **Portugal** [or Reino de **Portugal**]

[10] This son of John I helped kick off Portugal's Age of Discovery, himself exploring Madeira and the Azores.

ANSWER: Prince **Henry the Navigator** [accept **Henry**, Duke of **Viseu**; prompt on partial answer]

[10] One of Henry's first achievements was capturing this port. Along with Melilla, it is one of two Moroccan cities currently controlled by Spain.

ANSWER: **Ceuta** <MK>

16. This novel includes the story "Before the Law," in which a gatekeeper repeatedly tells a man "not just yet." For 10 points each:

[10] Name this novel that opens "Someone must have been telling lies about Josef K."

ANSWER: *The **Trial*** [or *Der **Prozess***]

[10] *The Trial* was written by this German-language author of *The Metamorphosis*.

ANSWER: Franz **Kafka**

[10] Most of Kafka's stories survive because this friend of his published them instead of burning them as Kafka had asked. This man's partial German translation was key to the success of Jaroslav Hašek's *The Good Soldier Švejk*.

ANSWER: Max **Brod** <MK>

17. For 10 points each—answer the following about mosque architecture.

[10] Mosques usually include structures of this kind called minarets. One of these structures built for Pisa Cathedral has been stabilized at a tilt of around 4 degrees.

ANSWER: **towers** [accept more specific answers like **bell towers**; accept **campanile**; accept Leaning **Tower of Pisa**]

[10] One of the oldest surviving mosques is this Jerusalem landmark, which is usually named for its gold-covered crowning feature.

ANSWER: **Dome of the Rock** [or **Oubbat al-Sakhrah**; or **Kippat haSela**]

[10] The Great Mosque of Djenné and other monuments of the Sahelian style are characterized by their construction in mud bricks with *these* exterior features perpendicular to the walls. A rough description is fine.

ANSWER: support **beams** jutting out [accept any answer indicating that wooden **logs** or **sticks** stick out from the walls] <JR>

18. In the lead-up to this conflict, William Randolph Hearst allegedly quipped “you furnish the pictures and I’ll furnish the war.” For 10 points each:

[10] Name this war prompted by the explosion of the USS *Maine*, in which the U.S. defeated a fading colonial power and acquired Cuba, the Philippines, and other territories.

ANSWER: **Spanish–American War**

[10] A joint resolution passed by Congress in 1898 contained this pledge not to annex Cuba after the war’s end. It was walked back slightly by a similar document three years later.

ANSWER: **Teller Amendment** (The similar document is the Platt Amendment.)

[10] Following the war, the U.S. also acquired this territory, which was granted limited self-governance by the Foraker Act. Separatists from this place tried to assassinate Harry Truman in 1950.

ANSWER: **Puerto Rico** <SE>

19. In extreme environments like deep sea vents, this process is performed by chemotrophs. For 10 points each:

[10] Name this process of producing new organic material from nonliving sources. It’s performed by autotrophs.

ANSWER: **primary production**

[10] Primary productivity is measured by the amount of *this* stuff that’s produced. This is the term for the total amount of living matter in a given ecosystem.

ANSWER: **biomass**

[10] Earth’s primary productivity fluctuates in a yearly cycle due to the enormous amounts of biomass produced by forests in *this* kind of climate. Forests in this kind of climate are known as taiga.

ANSWER: **boreal** [accept **subarctic**, **subpolar**, or **subalpine**] <JR>

20. This man planned for his long poem *The Prelude* to actually be a prelude to a gargantuan poem called *The Recluse*. For 10 points each:

[10] Name this English Romantic poet, whose “We Are Seven” and “Tintern Abbey” are included in *Lyrical Ballads*, which he wrote with Samuel Taylor Coleridge.

ANSWER: William **Wordsworth**

[10] Wordsworth’s poem “I Wandered Lonely as a Cloud” describes “a host” of *these* things.

ANSWER: **daffodils** [prompt on **flowers**]

[10] Wordsworth’s “Lucy” poems may have partly been about this sister of his, who wrote the classic *Grasmere Journal*. Her account of daffodils “dancing” is suspiciously close to William’s, which was written two years later.

ANSWER: **Dorothy** (Mae Ann) Wordsworth <MK>

Tiebreaker

21. This empire was one of the first to convert most of its subjects to Shia Islam. For 10 points each:

[10] Name this empire ruled by Abbas the Great and Ismail I. It fought the Ottomans at the Battle of Chaldiran.

ANSWER: **Safavid** dynasty

[10] The Safavids, Ottomans, and Mughals were empires nicknamed for their use of *this* military technology. Roger Bacon developed this chemical that's made from charcoal, sulfur, and saltpeter, and which is used to power firearms.

ANSWER: **gunpowder**

[10] The most famous portrait of Shah Ismail I was made by an artist from this city. The Ottoman Sultan Mehmed II had his portrait painted by another artist from this city.

ANSWER: Most Serene Republic of **Venice** [or la Serenissima Repubblica di **Venezia**] (The first artist is unknown; the second is Gentile Bellini.) <JR>