Bulldog High School Academic Tournament 2021 (XXX): "I feel like ACF Regionals 2021 is a confusing subtitle for a set that's not ACF Regionals 2021."
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Packet 6 Tossups
1. **During this dynasty, the scholar Zhu Xi canonized the Four Books and made them the basis of all subsequent civil service examinations. Bi Sheng invented movable type during this dynasty. This dynasty's New Policies, which furthered the Qingli reforms, were opposed by conservative historian Sima Guang and advocated by Wang (*)** Anshi. The breakdown of the Alliance Conducted at Sea with the Jurchen Jin forced this dynasty to abandon its capital at Kaifeng and begin its "Southern" phase, centered at Hangzhou. The first to print national paper money, for 10 points, name this dynasty of China that ruled between the Tang and Yuan dynasties.
ANSWER: **Song** Dynasty (LL)

2. **After losing a contest of this activity, Féng Méng bludgeons his teacher to death. One hero performs this activity to save the world when all ten inhabitants of a mulberry tree come out at the same time. A pill that grants immortality is Hòu Yì's reward for performing this activity. Kama owns an object used for this activity made of sugarcane and bees. Odysseus kills (*)** Penelope's suitors after passing a trial of this activity involving twelve axe heads. Philoctetes receives objects for this activity that are coated in venom from the Lernean Hydra. Artemis and Apollo wield weapons used in this activity. For 10 points, give this activity, which can be performed with the Bow of Heracles.
ANSWER: **archery** [accept answers indicating the use of either **bow** or **arrow**s before "Bow" is read; accept **shoot**ing down the sun(s); prompt on **hunt**ing by asking "with what kind of weapon?"] (AY)

3. **In a story from this country, the elderly "boss" is distracted from his son's death in World War I as he kills a fly by dropping inkblots on it. Prospector Walter Moody encounters a zodiac-themed council in *The Luminaries*, a novel by this country's Eleanor Catton. Another writer from this country describes a "lovely pear tree" after Bertha Young sees her husband embracing Miss Fulton in the story (*)** "Bliss." That author from this country also wrote a story in which Laura asks "isn't life–" upon seeing Mr. Scott's corpse while bringing his family a basket of leftovers from the title event. For 10 points, "The Garden Party" takes place in what country once home to author Katherine Mansfield?
ANSWER: **New Zealand** [or **Aotearoa**] (The first story is "The Fly" by Katherine Mansfield.) (DS)

4. **Due to previous backlash from the church, Cherubini's D-minor work in this genre does not include any female singers. Harp arpeggios and a rising violin melody accompany vocalists in the heavenly third section of a work in this genre. An organ accompanies a solo soprano in the following section of that seven movement example of these works. Fauré unusually closed a piece in this genre with a section meant for burials, (*)** "In Paradisum," and replaced another section with the "Pie Jesu." Offstage trumpets sound in a loud "Tuba Mirum" from one of these pieces composed by Verdi. The "Dies Irae" typically features in, for 10 points, what Masses for the dead?
ANSWER: **Requiem** Mass [prompt on Mass or Mass for the dead before "Masses" is read] (AY)

5. **This character's confession that he had faked his own death is mistakenly interpreted as a confession that he was bald. February 15th is "Annoy [this character] Day." This character helps fulfill a friend's bucket list after that friend eats some "homemade" pies that were actually made "in a factory—a bomb factory." In one episode, this character's pet, (*)** Snellie, loses in a race to a rock. In the episode "Band Geeks," this character leads a marching band to compete with his rival, Squilliam Fancyson. He plays the clarinet and is the head cashier at the Krusty Krab. For 10 points, name this octopus who lives in a moai and is neighbors with Spongebob Squarepants.
ANSWER: **Squidward** **Tentacles** [accept either underlined name] (MP)

6. **The Jewish prefect of Egypt, Tiberius Julius Alexander, supported this emperor while his army was winning the Second Battle of Bedriacum. Prior to his accession, this emperor led the Legio II Augusta during the conquest of Britain. Upon being criticized for his tax on public urinals, this emperor asked whether a gold coin smelled. This emperor patronized the (*)** historian Josephus after besieging Masada and suppressing the Great Jewish Revolt. This emperor's son Titus finished his work on the Colosseum, often named for his family. For 10 points, name this founder of the Flavian dynasty who prevailed in the Year of the Four Emperors in 69 AD.
ANSWER: **Vespasian** [or Titus Flavius **Vespasian**us] (LL)

7. **Paneth cells sit adjacent to and maintain these other cells' namesake "niche" in the bottom of small intestinal crypts. The procedure once known as bone marrow transplant is now referred to as the transplant of these cells, specifically of their hematopoietic** ["he-MAH-toh-POH-et-ic"] **variety. Transfecting somatic cells with Klf4, Oct4, SOX2, and c-Myc, the so-called (*)** "Yamanaka factors," can reprogram them into "induced" cells of this type. A controversial procedure harvests these cells from the inner cell mass of the blastocyst. For 10 points, name these kinds of undifferentiated cells which come in adult and embryonic types.
ANSWER: **stem cell**s [accept intestinal **stem cell**s or **ISC**s; accept hematopoietic **stem cell**s or **HSC**s; accept induced pluripotent **stem cell**s or **IPSC**s; accept embryonic or adult **stem cell**s; accept **stem cell** transplant] (HK)

8. **Gibbsite is an aluminum mineral containing this an·ion. It's heated with other bauxite minerals in a solution of this an·ion and sodium in the Bayer process. This an·ion is the most common nucleophile in saponification reactions, and its magnesium salt is a common antacid. "1 times 10 to the minus (*)** 14" is the product of the concentration of this an·ion and the concentration of protons for the auto·ionization of water. Water reacts with the conjugate base of a weak acid to yield that weak acid and this ion. Arrhenius defined bases as substances that dissociate in water to form this an·ion. For 10 points, name this an·ion present in all strong bases, which has formula OH⁻ ["O-H-minus"].
ANSWER: **hydroxide** [accept **OH**⁻ before mention] (MP)

9. **The speaker of one poem in this language is suddenly transported to "Asia's gates" looking for the title island of Jesus's beloved disciple, "Patmos." The speaker of another poem in this language is saddened by a "fable of old" in which a sailor has "no eye for the jagged cliff" because he is "enraptured with a wild ache." That poem in this language describes the (*)** song of a lovely maiden who "combs her golden hair." This is the language of a poem that praises the title concept as the "daughter of Elysium" and "spark of the gods." "The Lorelei" and "Ode to Joy" were written in, for 10 points, what language of Heinrich Heine and Friedrich Schiller?
ANSWER: **German** [or **Deutsch**] ("Patmos" is by Friedrich Hölderlin.) (MG)

10. **One form of this practice takes its name from the contraction of the words** *bhava*, *raga*, **and** *tala* **and makes frequent use of the** *aramandi* **position. Black** *khirqah* **are removed before one instance of this action, leaving practitioners in felt** *sikke* **hats and white** *tenure* **gowns. Performing this action facilitates** *dhikr* **in** *sama* **ceremonies of the (*)** Mevlevi order. A flaming halo encircles depictions of the *tandav* variety of this action performed by Shiva as Nataraj in order to destroy the universe. Some Muslims consider this physical action performed by namesake Sufi dervishes to be *haram*. For 10 points, name this rhythmic action often performed accompanied by music.
ANSWER: **danc**ing [accept ***Bharatanatyam*** or ***natyam***; accept **whirl**ing] (HK)

11. **In this building, a bronze sculpture of Death holding an hourglass emerges from a door partially covered by drapery of Sicilian jasper. A dove appears at the center of a glass oval window divided into twelve sections, which is found in this building above a wood and ivory chair. That throne in this building is flanked by four gilded bronze statues of the "Doctors" Athanasius, John Chrysostom, Ambrose, and (*)** Augustine. Another sculpture in this building adorned with bees features Solomoic, or twisting, columns holding up a bronze canopy. For 10 points, Bernini sculpted the Tomb of Alexander VII, the *Baldacchino*, and a cover for the throne of the first pope for what church in Vatican City?
ANSWER: **St. Peter's** Basilica [or the Papal Basilica of **Saint Peter** in the Vatican; or Basilica Papale di **San Pietro** in Vaticano; accept **tomb of Alexander VII** before "window" is read] (AY)

12. **During this event, one woman told another that "I just hope I get to be a mom," after changing out her heels for sneakers. One video of this event depicted a woman carrying a towel wrapped around an onion. A quarter was allegedly left as payment for stolen mail during this event. The first confirmed casualty of this event was the (*)** Airforce veteran Ashli Babbitt. Eugene Goodman successfully diverted participants away from one location during this event, which also saw the murder of Brian Sicknick. For 10 points, name this January 6, 2021 event, which occurred as supporters of former President Donald Trump violently contested the results of the 2020 U.S. election.
ANSWER: the **storming** of the United States **Capitol** [accept equivalents; accept the **January 6** attack or equivalents; accept **invasion**, **coup** attempt, (attempted) **insurrection**, **protest**, **riot**, **attack** or equivalents in the place of "storming"] (MP)

13. **Jan** ["yan"] **Tinbergen proposed a distance-dependent model of this process that analogizes it to gravity. Wassily Leontief formulated his namesake paradox while trying to empirically test a model of this process. Hypotheses such as a "preference for diversity" were part of Paul Krugman's Nobel-winning "New" theory of this process, which is also explained by the (*)** Heckscher–Ohlin model. David Ricardo argued that lower opportunity costs of production drive this process, using Portuguese wine and English cloth to illustrate the idea of comparative advantage. For 10 points, name this process in which countries exchange goods and services with one another.
ANSWER: international **trade** (BY)

14. **After this battle, the leader of one side refused to bargain for the release of his POW son, remarking "I will not trade a marshal for a lieutenant." Erich von Manstein's** *Panzers* **failed to open a corridor in this battle in a relief effort dubbed Operation Winter Storm. Hermann Göring** ["GUR-ing"] **tried to supply forces in this battle via an (*)** air bridge and discouraged Hitler from ordering a breakout. Field marshal Friedrich Paulus surrendered in this battle after being cut off by the massive Soviet Operation Uranus, which enveloped and destroyed his Sixth Army. For 10 points, name this World War II battle fought over a southern Russian city that is today known as Volgograd.
ANSWER: Battle of **Stalingrad** (ZA)

15. **A jar of pickled limes gains fleeting popularity for one of these characters until a teacher throws them out. Family members periodically ask one of these characters if genius burns when she locks herself away to work on her novel, wearing her "scribbling suit." These members of a "Busy Bee Society" discuss their respective (*)** "castles in the air" with a friend whose marriage proposal one of them later rejects. These characters prepare a Christmas breakfast for the Hummels, and one of them, "dear and nothing else" named Beth, contracts scarlet fever and eventually dies. For 10 points, name this group of four siblings who title a Louisa May Alcott novel.
ANSWER: the **March sisters** [or the **Little Women**; or **Meg**, **Jo**, **Beth**, and **Amy** March in any order, and accept **Margaret** for "Meg," **Elizabeth** for "Beth," or **Josephine** for "Jo"; or the **March children**; prompt on the March family; do NOT accept or prompt on answers that include "Marmee" or "Mrs. March" or "Mr. March"] (HK)

16. **A ballet titled for these objects features the folksong "Yablochko" in its "Russian Sailor's Dance"; that ballet was written by Reinhold Glière. A character in another ballet performs a pique arabesque to greet her four suitors in an adagio named for these objects. In another ballet by the same composer, the Dewdrop Fairy performs a series of fouettés during a dance (*)** titled after these objects, which precedes a pas de deux between the Sugarplum Fairy and Cavalier. In an Adolphe Adam ballet, Giselle plays a children's game with one of these objects to see if Albrecht loves her or loves her not. For 10 points, identify these objects, which name a waltz in Tchaikovsky's *Nutcracker*.
ANSWER: **flower**s [accept **poppy** or **poppies**, **rose**s, or **daisy** or **daisies**] (the first clue refers to Glière's *The Red Poppy*.) (SL)

17. **A theoretical physicist from this country proposed a method to extract energy from a black hole and won a share of the 2020 Nobel Prize in Physics. While traveling *to* this country to earn a Ph.D., a physicist derived an upper limit of 1.4 solar masses for the mass of a white dwarf. A physicist from this country introduced the bra-ket notation for quantum states and names a function with unit integral that is (*)** zero everywhere except at the origin. The electron and the neutron were discovered in this country at the Cavendish Laboratory. For 10 points, James Chadwick, Lord Rayleigh, and J. J. Thomson all studied physics at which country's University of Cambridge?
ANSWER: **United Kingdom** [or **U.K.**; or **United Kingdom** of Great Britain and Northern Ireland; accept Great **Britain**; accept **England**] (The first three sentences refer, respectively, to Roger Penrose, Subrahmanyan Chandrasekhar, and Paul Dirac.) (SE)

18. **Nearly all species in this genus form branches in "pseudo-whorls," producing an integer number of such whorls per year. These organisms and those in the related genus *Abies* ["AY-beez"] secrete oleoresins that are used in turpentine production. The *strobus* species of this genus is the tallest tree in eastern North America. The world's oldest non-clonal tree is one of these trees in California named (*)** Methuselah. A highly symmetrical tree named for resembling these trees is from Norfolk Island, while western North America is home to their ponderosa type. For 10 points, name these evergreens, whose namesake type of cone is also produced by firs, spruces, and cedars.
ANSWER: **pine** trees [or *Pinus*; accept *Pinus strobus* or white **pine** or Norfolk Island **pine** or ponderosa **pine**; prompt on trees or evergreens or conifers] (DR)

19. **This author created the servant Santosh, whose employer warns him that "Washington is not Bombay" and has him sleep in a cupboard. The protagonist of a novel by this author of "One out of Many" becomes a reporter at the _Sentinel_. Father Huismans collects African masks in a novel by this author in which Salim's shop is forced to distribute the (*)** "Big Man's" book of maxims. This author created a title character with polydactyly who is hired to paint signs at Hanuman House for the Tulsis, his domineering future in-laws. For 10 points, name this Trinidadian author of _A Bend in the River_ and _A House for Mr. Biswas_.
ANSWER: V. S. **Naipaul** [or Vidiadhar Surajprasad **Naipaul**] (DS)

20. **This politician was accused of taking bribes from the Holland Land Company by John Barker Church. This man, who presided over the first impeachment of a Supreme Court Justice, was the first high-profile politician to emerge from the Tammany Society. This man served one term in the Senate after defeating (*)** Philip Schuyler in an election. This man and James Wilkinson were accused of treason for trying to establish an independent country in the Texas Territory. After this man placed second in the election of 1800, he became vice president under Thomas Jefferson. For 10 points, name this founding father who dueled and killed Alexander Hamilton.
ANSWER: Aaron **Burr** Jr. (MP)

Tiebreaker
This is the _second_ word in the name of a phenomenon that can be polarized into E-modes due to Thomson scattering or B-modes due to gravitational radiation. Phenomena named for this word have energy immediately _below_ the technologically-underserved "terahertz gap." This word names the highest-energy waves that transmit energy to polar molecules via dielectric (*) heating. Arno Penzias and Robert Wilson discovered a type of cosmic background radiation that peaks in and is named for this region of the electromagnetic spectrum. For 10 points, name this spectral region between radio and infrared waves, which is used in home appliances to cook food.
ANSWER: **microwave**s [accept cosmic **microwave** background radiation or **microwave** radiation or **microwave** ovens; prompt on CMBR; prompt on radio or radio waves before "cosmic" is read] (SE)

Packet 6 Bonuses

1. This musical was recently adapted into a Netflix film starring Meryl Streep, Nicole Kidman and Kerry Washington. For 10 points each:
[10] Name this musical in which a group of former Hollywood stars try to regain their relevance by going to Indiana to help a pair of lesbian high-schoolers attend the title event.
ANSWER: The **Prom**
[10] This TV personality hosted the 2019 Tonies at which *The Prom* was nominated seven times, and played the role of Barry in the movie adaptation. This British talk show host does Carpool Karaoke on his "Late Late Show."
ANSWER: James (Kimberley) **Corden**
[10] In *The Prom*, Angie was an understudy for the lead role of Roxie Hart in this Broadway musical. Angie talks about working with Bob Fosse, the choreographer of this musical.
ANSWER: **Chicago** (JD)

2. Answer the following about the LBA collapse, for 10 points each.
[10] LBA stands for Late [this age], which came after the Stone Age and before the Iron Age.
ANSWER: **Bronze** Age
[10] The Late Bronze Age collapse was partially caused by a group of people collectively given this name. They included the Shardana and Peleset (or Philistines) and were depicted by Ramses III in inscriptions at Medinet Habu.
ANSWER: **Sea People**s
[10] Ugarit, a major trading port with a namesake alphabet and otherwise unknown Semitic language, was sacked by the Sea Peoples during the LBA Collapse. It was re-discovered in 1928 in this modern country.
ANSWER: **Syria** [or **Syrian** Arab Republic; or al-Jumhūrīyah al-ʿArabīyah as-**Sūrīyah**] (DM)

3. In this man's possibly-apocryphal "barrel" experiment, he caused a barrel to burst by pouring water into it from a great height using a thin tube. For 10 points each:
[10] Identify this French mathematician, philosopher, and physicist, who names an SI unit equal to one newton per square meter, one millionth of a bar, or one over 101,325 atmospheres.
ANSWER: Blaise **Pascal**
[10] The pascal is the SI unit of this quantity, which is transmitted uniformly throughout an incompressible fluid according to Pascal's principle. In air, it is measured with a barometer.
ANSWER: **pressure** [accept hydrostatic **pressure** or air **pressure**; prompt on P]
[10] Since weighty fluids exert hydrostatic pressure, the pressure at the top and bottom of a container are different. If a fluid of density d fills a vessel of height h, what is the *difference* in pressure between the vessel's top and bottom?
ANSWER: **d times g times h** [or **$d\,g\,h$**; or **density** times **gravitational acceleration** times **height**; accept terms in any order as long as they are multiplied; accept **little g** for "g"] (DM)

4. Aristotle's treatises on this subject were grouped under the title *Organon* by ancient commentators. For 10 points each:
[10] Aristotle's *Prior Analytics* introduced the syllogism to what discipline? This field of philosophy and mathematics is concerned with the validity of deductive and inductive arguments.
ANSWER: **logic**
[10] This other text by Aristotle is the earliest surviving work of literary theory. This work examines whether it is better to tell or act out stories and argues that theatrical tragedies should evoke "pity and fear" in their viewers.
ANSWER: **Poetics** [accept **De Poetica** or **peri poietikês**]
[10] The *Poetics* discusses this phenomenon, in which the climax of a tragedy flushes out strong emotions from its audience. This Greek term can be translated as "purification" or "purgation."
ANSWER: **catharsis** (VS)

5. A band organized after this musician's death called itself the "[This man] Dynasty" after one of his albums. For 10 points each:
[10] Name this "Angry Man of Jazz," who wrote the jazz waltz "Gunslinging Bird" addressing Charlie Parker's legacy. This musician behind *Pithecanthropus Erectus* also wrote "Goodbye Pork Pie Hat."
ANSWER: Charles **Mingus** Jr.
[10] Mingus' *The Black Saint and the Sinner Lady* divides songs into "Tracks" and these things. George Russell wrote a textbook titled for a *Chromatic Concept of Tonal Organization* based on one of these scale systems.
ANSWER: musical **mode**s [accept **modal**; anti-prompt (ask "can you be less specific?") on **Lydian**] (the Russell textbook is *Lydian Chromatic Concept of Tonal Organization*.)
[10] Like Paul Chambers and Dave Holland, Mingus played this lowest string instrument.
ANSWER: double **bass** [or upright **bass** or string **bass**] (NM)

6. Takiji Kobayashi wrote *The Crab Cannery Ship* for a Japanese League of these kinds of people. For 10 points each:
[10] Name this class that, in Marxism, does not own the means of production. The uneducated majority of Oceania's population is known by a shortened form of this group's name in *1984*.
ANSWER: the **proletariat** [accept **prole**s, **working-class**, **lower-class**, or **worker**s]
[10] Proletarian novels were penned by writers like this author of *Mother*. His other works include one where the landlord Kostilyoff is killed by the inhabitants of his boarding house.
ANSWER: Maxim **Gorky** [or Alexei Maximovich **Peshkov**] (The second work is *The Lower Depths*.)
[10] The anonymous B. Traven, another proletarian author, lived in and wrote about this country in works like *The Treasure of the Sierra Madre*. Ambrose Bierce likely died in this country.
ANSWER: **Mexico** [or United **Mexican** States; or Estados Unidos **Mexicanos**] (MGS)

7. Answer the following about the Municipality of Tianjin, for 10 points each.
[10] Tianjin is mostly surrounded by Hebei Province, which is named for its position north of this geographic feature. This natural feature takes its name from a material it receives from the Loess Plateau.
ANSWER: **Yellow** River [accept **Huang** He]
[10] Tianjin is at the westernmost extension of the shallow Bohai Sea, which is separated from the rest of the Yellow Sea by the Cape of Penglai and this other peninsula. This peninsula ends at Lüshunkou District in Dalian.
ANSWER: **Liaodong** Peninsula
[10] One of these events that occurred at Tangshan in 1976 destroyed 80% of its buildings in Tianjin and was one of the three deadliest ever. That event was a XI ["eleven"] on the Mercalli scale and 7.6 on the Richter scale.
ANSWER: **earthquake**s (DM)

8. The 14th through 19th of May, 1643 was a momentous six days. For 10 points each:
[10] The final phase of the Thirty Years' War was marked by France defeating this country at Rocroi on May 19th. Rocroi marked the beginning of the end for this country's military strength, as it showed the tercios' weaknesses.
ANSWER: Kingdom of **Spain** [or Reino de **España**]
[10] The King of France during the Battle of Rocroi was this "Sun King," who had acceded to the throne on the 14th. His mother, Anne of Austria, was his regent, and he reigned for 72 years total.
ANSWER: **Louis XIV** [prompt on **Louis**]
[10] On the 18th, Anne of Austria became regent and appointed this cardinal her Chief Minister. He remained Chief Minister of France for her, and later for Louis XIV, until his death in 1661.
ANSWER: Cardinal Jules **Mazarin** [accept Giulio Raimondo **Mazzarino** or **Mazarini**] (DM)

9. One of these structures was built by the edge of Dal Lake for the Mughal Empress Nur Jahan. For 10 points each:
[10] Name these places, whose Mughal versions often contain elaborate fountains and canals. The Shalimar one of these in Kashmir contains tulips that bloom in the spring and chinar trees famous for their brilliant fall color.
ANSWER: **garden**s [or ***bagh***; accept Shalimar **Garden** or Shalimar **Bagh**]
[10] Persian-style Charbagh gardens like the Shalimar are laid out as a quadrilateral with axial paths that intersect at a central pond to emulate this place. Masaccio painted a sword-bearing figure in red driving a pair of wailing figures from this location.
ANSWER: **Paradise** [or **Jannah**; or **heaven**; or any other equivalents; accept the **Garden of Eden**]
[10] This Iranian city renowned for its gardens contains a Chahar Bagh Boulevard that ends in another garden, the Chehel Sotoun. Abbas I moved the Safavid capital to this city, which names a cultivar of fragrant pink Damask rose.
ANSWER: **Isfahan** [or **Esfahan**; accept **Ispahan** rose] (HK)

10. Newton's method finds these values by starting at an initial guess and repeatedly subtracting the ratio between a function and its derivative. For 10 points each:
[10] Identify these points, sometimes called *x*-intercepts, at which a function vanishes. The quadratic equation provides the location of these points for a second-order polynomial.
ANSWER: **root**s [or **zero**s; prompt on solutions]
[10] As a consequence of this theorem, a continuous function that has both positive and negative values on an interval also has at least one root on that interval, since the function must cross from positive to negative.
ANSWER: **intermediate value** theorem [or **Bolzano**'s theorem; do NOT accept or prompt on "mean value theorem"]
[10] The intermediate value theorem is often used to prove this other basic theorem of a certain branch of math, which states that a non-constant polynomial of degree *n* with complex coefficients has exactly *n* roots.
ANSWER: **fundamental** theorem of **algebra** [prompt on fundamental theorem] (DR)

11. Answer the following about star-crossed lovers, for 10 points each.
[10] *Description acceptable.* In a Persian romance, Majnun earns a reputation for madness by engaging in this activity due to his passionate love for Layla. In Norse mythology, the husband of Idunn presides over this activity.
ANSWER: reciting or composing **poetry** [accept **skaldship** or being a **skald**; prompt on speech by asking "of what form?"]
[10] In a Chinese folktale about a different pair of star-crossed lovers, a cowherd and a weaver are banished to either side of the Milky Way, though they are able to reunite once a year by crossing a bridge made of these animals.
ANSWER: **bird**s [accept **magpie**s]
[10] A Nahua legend about the lovers Po·po·ca·té·pet·l and Iz·tac·cí·huat·l holds that the gods transformed their bodies into two of these geological features. Pele is a Hawaiian goddess of these features, which include Mauna Loa.
ANSWER: **volcano**es [prompt on mountains] (HK)

12. This character dismisses the actor Montfleury before throwing a bag of coins into the crowd at the Hotel Burgundy. For 10 points each:
[10] Name this swashbuckling swordsman who titles an 1897 play by Edmond Rostand. He writes letters to his love Roxanne posing as his friend Christian while leading the Gascon Cadets in battle.
ANSWER: **Cyrano** de Bergerac [or Cyrano **de Bergerac**]
[10] Cyrano is sensitive about his abnormally large one of these body parts. In a Nikolai Gogol short story, one of these body parts receives the rank of State Councillor.
ANSWER: a **nose**
[10] Claiming he has lost everything but his *panache*, Cyrano dies after being injured in this manner on his way to visit Roxanne in a convent.
ANSWER: a piece of **wood** is dropped on his head [or he is hit by a piece of **wood**; accept reasonable equivalents; accept a **log** for wood; prompt on descriptions of being hit by asking "hit by what?"] (JD)

13. This protein's RING-domain-containing E3 ligases bind it to proteins to tag them for degradation by the proteasome. For 10 points each:
[10] Name this 76-residue protein which is named for its omnipresence in cells.
ANSWER: **ubiquitin**
[10] E3 ligases bind ubiquitin to these residues of the target protein. Ubiquitin can bind itself because it contains 6 of them, and histones also contain many of these residues, especially at their N-termini.
ANSWER: **lysine** [or **Lys**; prompt on K]
[10] Histone N-termini are highly positively charged due to their abundant lysine and arginine. Like histidine, those amino acids' side chains share this property of tending to produce a pH greater than 7.
ANSWER: **basic** [accept word forms like **base**] (HK)

14. The Orthodox schism that began in 2018 was spurred by the plan to grant this status to the Ukrainian church. For 10 points each:
[10] Name this status of Orthodox churches such as the Polish and Russian. This status of being independent of external patriarchal authority has a name that derives from the Greek for "self-headed."
ANSWER: **autocephaly** [accept word forms like **autocephalous**; prompt on autonomy or word forms]
[10] Autocephaly was granted to the Ukrainian church by the current archbishop of Constantinople, who has this name. The member of the twelve apostles with this name is often depicted in art holding his own flayed skin.
ANSWER: **Bartholomew** [or **Bartholomeos**]
[10] Constantinople, Alexandria, Antioch, and this city are the site of the four "Ancient Patriarchates" of Orthodoxy. This holy city of the Abrahamic religions was the site of King Solomon's Temple.
ANSWER: **Jerusalem** (MG)

15. This artist created a series of frescoes likely commissioned by a banker to atone for usury. For 10 points each:
[10] Name this artist, who depicted angels flying in an ultramarin sky above Christ and his mourners in a Lamentation scene found at the Scrovegni Chapel.
ANSWER: **Giotto** di Bondone
[10] Giotto's haloes in the Arena Chapel contain a leaf of this material, which was also used to gild illuminated manuscripts.
ANSWER: **gold** leaf
[10] Gold leaf features prominently in the background of this artist's Santa Trinita Maestà, which depicts the Virgin Mary enthroned. According to Vasari, this artist became Giotto's mentor after seeing him draw a single sheep.
ANSWER: **Cimabue** [or **Cenni** di Pepi or **Cenno** di Pepi] (SL)

16. Answer the following about the wildly unpopular acts passed by Parliament in the lead-up to the American Revolution, for 10 points each.
[10] This act, passed in 1765, ordered that most written material be printed on paper that featured a special duty mark. That fall, a namesake Congress formed in New York to protest this act.
ANSWER: **Stamp** Act of 1765 [accept **Stamp** Act Congress]
[10] Enforcement of the Stamp Act largely fell to the governor of the province of Massachusetts Bay, who had this last name. An ancestor of his with the same last name led supporters to establish the town of Portsmouth.
ANSWER: **Hutchinson** [accept Thomas **Hutchinson** or Anne **Hutchinson**]
[10] This law, passed in 1774 among the "intolerable acts," expanded its namesake region into the modern-day Midwest and controversially allowed Catholicism to be practiced there.
ANSWER: **Quebec** Act (MP)

17. "Sights of woe, / Regions of sorrow, [and] doleful shades" surround this location. For 10 points each:
[10] Name this palace of "No light, but rather darkness visible." This palace's architect, Mulciber, had previously designed a "towered structure…Where sceptred Angels held their residence" before falling from Heaven.
ANSWER: **Pandemonium** [prompt on Satan's palace; prompt on Hell or the underworld]
[10] In another poem about darkness, John Milton, the creator of *Paradise Lost*'s Pandemonium, wrote about this medical condition of his. That poem is called "When I Consider How My Light is Spent."
ANSWER: **blindness** [accept reasonable descriptions of being **unable to see**]
[10] The last line of "When I Consider How My Light is Spent" declares "They also [do this action] who only stand and wait." In *Paradise Lost,* Satan maintains it is "Better to reign in Hell, than [do this action] in Heaven."
ANSWER: **serve** (MGS)

18. Two examples of these systems are called TAE and TAPS. For 10 points each:
[10] Name these systems. One of these systems relies on carbonic acid and bicarbonate to respond to changes caused by hyperventilation.
ANSWER: **buffer**s [or **buffer**ing solution]
[10] Buffer systems resist changes in this quantity. In a lab, one might adjust this quantity to a desired value by adding either hydrochloric acid or sodium hydroxide to a solution.
ANSWER: **pH**
[10] Another buffer relevant to laboratory applications is HEPES ["heaps"] , a sulfonic acid with this property. Since physiological pH is below the pKa of an amine but above the pKa of a carboxyl, amino acids take this form.
ANSWER: **zwitterion**ic [accept word forms like **zwitterion**s] (HK)

19. The indigenous peoples of Canada have a complicated history with the government. For 10 points each:
[10] *Description acceptable.* Name this system of institutions that sought to indoctrinate and assimilate indigenous children, forcibly removing them from their homes and forbidding their native languages and customs. An analogous institution in the US was set up at Carlisle.
ANSWER: **Residential School** [accept **Indian School** or **boarding school**; prompt on partial answers by asking "what type of school?"]
[10] The Indian Act, which created the residential school system, also banned this ceremonial activity practiced by Northwest Coast Indians. In this activity, rich tribal leaders give away or destroy wealth at community gatherings.
ANSWER: **potlatch** [do NOT accept or prompt on "potluck"]
[10] The Canadian government describes all aboriginal groups besides the Inuit and Métis by this official term.
ANSWER: **First Nation**s (LL)

20. This author wrote that her husband "seems to believe that plagiarism begins at home" in a review for one of his novels. For 10 points each:
[10] Name this author. Her husband used some of the same autobiographical material underpinning her only novel, *Save Me the Waltz*, in a novel of his own which featured an actress in the film *Daddy's Girl*.
ANSWER: **Z**elda **Fitzgerald** [or Zelda **Sayre**; prompt on Fitzgerald]
[10] F. Scott Fitzgerald used Zelda's wish that her daughter be born a "beautiful little fool" as dialogue for this character of his. This character's voice is described as a "deathless song" and later as "full of money."
ANSWER: **Daisy** Buchanan [or **Daisy** Fay; prompt on Buchanan]
[10] F. Scott Fitzgerald recalled that his first meeting with Zelda at a country club dance inspired the scene in which this title character of his magnum opus meets Daisy Buchanan at a train station.
ANSWER: **Jay Gatsby** [accept either underlined name; or James **Gatz**; accept *The Great **Gatsby***] (MGS)

Tiebreaker
Historian Dana Goodman writes that these intellectual spaces were largely unequal in terms of class and sex despite the prominent role of women in their growth. For 10 points each:
[10] Name these social gatherings of intellectuals that flourished in pre-Revolutionary France.
ANSWER: **salon**s
[10] This woman hosted her own salon in 1920s Paris. The author of works such as *Three Lives*, this woman and her brother Leo were at the time better known for promoting the art of painters like Matisse and Picasso.
ANSWER: Gertrude **Stein**
[10] Stein coined this term to describe the American expatriates that frequented her salon who were disillusioned with World War I and its aftermath. Ernest Hemingway popularized this term in the epigraph for *The Sun Also Rises*.
ANSWER: **Lost Generation** (The complete quotation is "You are all a lost generation.") (MGS)