

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 1 Tossups

1. **As Colonial Secretary, one politician with this surname advocated the “Imperial Preference” policy and presided over the first Khaki Election. Another politician with this last name gave party leadership to Bonar Law and won the Nobel Peace Prize for the Locarno Pact. That politician’s half-brother with the same last name relinquished power after the Narvik Debate, in which his handling of the Phoney (*) War was criticized. That Prime Minister had previously declared that he had made “peace for our time” by resolving the Sudetenland crisis in the Munich Conference. For 10 points, give this family name of Joseph, Austen, and Neville, the last of whom tried to appease Hitler.**

ANSWER: Chamberlain [accept Joseph Chamberlain or Austen Chamberlain or Neville Chamberlain] (VS)

2. **In one depiction of this scene, a dog crouches under a table behind a cat peering into a basket. The only two light sources in that version of this scene are a single lantern hanging from a coffered ceiling and a figure in red and blue robes with a bright aureole. Translucent angels float across the upper portion of that (*) diagonally-oriented painting by Tintoretto. Another painting of this scene features an effeminate-looking St. John leaning towards Judas, who holds a bag of silver; that painting is located in the refectory of the Santa Maria delle Grazie. Christ dines with his twelve apostles in, for 10 points, what Biblical scene painted for the Duke of Milan by Leonardo da Vinci?**

ANSWER: Last Supper [accept Il Cenacolo or L'Ultima Cena] (SL)

3. **The first chapter of this thinker’s major book on ethics disputes Dostoevsky’s claim that “If God is dead, everything is permitted.” This thinker identified “mystery” as a myth used to explain the inexplicable about certain kinds of people. Sections on “Lived Experience” and “Facts and Myths” of the title group comprise this thinker’s most famous work. This author of *The Ethics of Ambiguity* reworked Hegel’s master-slave dialectic as a (*) Subject-Other dichotomy in a work that argues against the myth of the “eternal feminine.” This author seems to distinguish “sex” and “gender” in saying “One is not born, but rather becomes, a woman.” For 10 points, name this French existentialist author of *The Second Sex*.**

ANSWER: Simone de Beauvoir [or Simone Lucie Ernestine Marie Bertrand de Beauvoir] (HK)

4. **When this force is present in experiments involving soft elastomers, dislocations propagate via Schallamach [“SHALL-uh-makh”] waves. A quantity describing a result of this force in fluids appears in the denominator of the Reynolds number. The mixed–hydrodynamic transition on the Stribeck curve gives a minimum for this force, whose reduction is studied in (*) tribology. This force is independent of contact area and velocity, according to Amontons’ and Coulomb’s laws of its dry form. The strength of this force equals the normal force times a namesake coefficient denoted by the letter mu. For 10 points, name this force that resists the sliding of objects past one another.**

ANSWER: friction [or frictional force; prompt on viscosity before “Stribeck” is read] (MG)

5. This thing is described as “labyrinths” in which “Love... [detains] his slaves” in a poem in which a character burns three garters, a glove, and “tender billets-doux” to win this thing. The pawnbroker Jabez Wilson gets a job copying the *Encyclopedia Britannica* in one story due to the color of this thing. This thing becomes a constellation after being stolen during a game of (*) Ombre in a mock-epic. The narrator exclaims, “And yet God has not said a word!” after strangling his lover with this possession of hers in the poem “Porphyria’s Lover.” For 10 points, the sylph Ariel fails to stop the Baron from cutting what item off Belinda’s head in Alexander Pope’s *The Rape of the Lock*?

ANSWER: hair [accept locks or *The Rape of the Lock* until read; prompt on heads or “The Red-Headed League”] (DS)

6. The results of this phenomenon in Amazonia were incorporated into *terra preta*. Baba Gurgur, named for this phenomenon, was surpassed in one metric by Ghawar in the 1940s. This phenomenon names “mountains” found at Yanar Dag and the Ateshgah of Baku and occurs due to certain nearby “fields.” This process has occurred since 1971 at the “Gate of (*) Hell” in Turkmenistan. Swidden relies on inducing this phenomenon in “slashed” matter. Small instances of this phenomenon preserve old-growth and prevent larger instances of it by removing kindling. For 10 points, Smokey Bear publicized the dangers of what phenomenon in forests?

ANSWER: fire [accept descriptions of things burning and clear equivalents] (DM)

7. A collection of this figure’s sermons and utterances is called *The Peak of Eloquence*. A popular talismanic inscription reads that there is no man like this man and no sword like his bifurcated sword Zulfiqar. This man defeated a force led by his mother-in-law at Basra during the First Fitna. People may self-flagellate on the 10th of Muharram in remembrance of the martyrdom of this man’s son (*) Husayn at the Battle of Karbala. This person is held to be the first male convert to Islam, and he succeeded Uthman as the fourth and last Rightly Guided Caliph. For 10 points, name this husband of Muhammad’s daughter, Fatima, who Shias revere as the first Imam.

ANSWER: Ali [or Ali ibn Abi Talib] (HK)

8. This show’s protagonist gets in trouble while skipping a screening of *The Robe*, a movie featuring Caligula. The thirteen year old Giorgi is confused when this show’s protagonist repeatedly walks away from him. After spending time with her old pen pal Manuel, an alcoholic character in this series dies of hepatitis on a trip to (*) Mexico City. Townes returns to cover the events of this show’s last episode, set in Moscow, for the *Lexington Herald*. This show’s tranquilizer-addicted protagonist never repays the janitor Mr. Shaibel for a five dollar tournament entry fee. World champion Borgov is Beth Harmon’s final opponent in, for 10 points, what chess-themed Netflix series?

ANSWER: *The Queen’s Gambit* (DS)

9. A common mathematical model of this process is the equation “A = RKLSCP”, which is known as the USLE and includes topographic and cropping management factors. One form of this process can be divided into four severity categories, including “sheet” and “rill.” Terracing can prevent both (*) surface runoff and this process, since this process occurs much faster on steep slopes. Modern farming practices such as surface irrigation and excessive tilling accelerate the rate of this process from rainfall. The primary cause of land degradation is, for 10 points, what process by which soil is broken down and moved by wind or water?

ANSWER: soil erosion [accept specific types such as wind erosion; prompt on answers indicating soil movement or sediment transport; do **NOT** accept or prompt on “landslides” or “mudslides”] (DR)

10. In one novel written in this language, a man heartbroken with the West kills his fourth wife after the first three commit suicide. One poem in this language of *Season of Migration to the North* warns readers to “beware of my hunger / and of my anger,” and repeats the phrase “Write down!” Strongmen controlling an alley are overthrown in a novel in this language which allegorizes the three (*) Abrahamic religions as the children of Gebelawi. The novels *Palace Walk*, *Palace of Desire*, and *Sugar Street*, which follow the al-Jawad family, were written in this language. The Cairo Trilogy was written in, for 10 points, what language of Mahmoud Darwish and Naguib Mahfouz?

ANSWER: **Arabic** [or **‘arabi**; or al-**arabiyya**] (HK)

11. The Mi’kmaq people built a type of this item with significant tumble-home and a strongly hogged sheer. A type of this item used by Algonquin people was known as a *rabaska* and was later adapted into the “du Maître” [“MET-ruh”] and “du Nord” varieties. The Maliseet used a “war” variety of these items that was adopted by French settlers. The Haida used (*) cedar to build examples of these items that could weigh over a ton and hold 40 people. To reduce their weight for portage, these items were often made from a light wooden frame covered in birch bark. For 10 points, name these boats that, unlike kayaks, are open-topped and propelled with a single-bladed paddle.

ANSWER: **canoes** [prompt on **boats** or **ships** before “boats” is read; do **NOT** accept or prompt on “kayaks”] (DR)

12. This note is the tonic of Scarlatti’s *Cat Fugue*. A “Little” *Fugue* in this note’s minor is among Bach’s more famous organ pieces. Remo Giuzotto composed an Adagio in this key, purportedly based on an Albinoni fragment. A 12/8 [“twelve-eight”] pastorale ad libitum in this note’s major key closes Corelli’s *Christmas Concerto*, which, like Vivaldi’s (*) *Summer*, is written in this note’s minor. A transcription of the Air from Bach’s *Orchestral Suite No. 3* is named for the string of this note. Christian Pezoldt actually wrote Bach’s popular Minuets in this note’s major and minor. For 10 points, name this note whose minor has two flats and whose major has one sharp, a fifth up from C.

ANSWER: **G** [accept **G** major or **G** minor] (DM)

13. One of these groups moves from the SH2 domain to the catalytic domain to activate the protein SRC [“SARC”]. Toxic nerve agents like sarin contain “organo” versions of these ions. One DNA sequencing paradigm detects the release of two of these ions bonded together, a group prefixed “pyro-.” (*) Endergonic biological reactions are often coupled to the hydrolytic release of one of these groups. These groups are attached to serine, threonine, or tyrosine residues by kinases, and they make up the backbone of DNA. For 10 points, ATP contains three of what polyatomic ion with formula PO_4^{3-} [“P-O-four-three-minus”]?

ANSWER: **phosphate** ion [or **PO₄³⁻** before mention; accept organo**phosphates**] (HK)

14. The Doliones accidentally attack this group, leading to the death of Cyzicus. This group bangs shields together to drive off a number of birds before encountering the sons of Chalcioppe. One figure abandons this group in a frenzy after nymphs at Pegae abduct his companion. Hypsipyle welcomes this group to (*) Lemnos. This group follows a dove safely through the Symplegades, or Clashing Rocks, as counseled by a blind prophetic king. Members of this group drive away the harpies plaguing Phineus. The leader of this group receives magical protection from, but later abandons, Medea. For 10 points, name this group of heroes led by Jason on a quest for the Golden Fleece.

ANSWER: **Argonauts** (AY)

15. Ivo van Hove directed a 2020 revival of this musical that projects videos of the cast on an enormous screen in the backdrop. The name of a woman from this musical is sung in a three note melody beginning with a rising tritone. A rising minor seventh features in the lines “there’s a place for us” from this musical’s song (*) “Somewhere.” Swaggering men snap their fingers in an opening sequence choreographed by Jerome Robbins for this musical. In retaliation for Bernardo’s death, Tony is shot and dies in Maria’s arms in this musical. The Sharks and Jets clash in, for 10 points, what adaptation of *Romeo and Juliet* by Stephen Sondheim and Leonard Bernstein?

ANSWER: West Side Story (AY)

16. This family resisted Turkish incursion into its monopoly on producing alum, which it mined in Tolfa for use in the textile industry. A member of this family sponsored Francesco Sforza’s seizure of the Duchy of Milan, forming a counterbalance against *La Serenissima*. That man’s grandson, also from this family, offered himself as hostage to the King of Naples after (*) Sixtus IV targeted him in collusion with the Pazzi conspiracy. Two women from this family, who married Kings of France and each served as regent, were named Catherine and Marie. For 10 points, name this Italian banking family that produced four popes and ruled Florence in the 15th century.

ANSWER: Medici family [or House of Medici; or Casa de’ Medici; accept Cosimo de’ Medici or Lorenzo de’ Medici or Catherine de’ Medici or Marie de’ Medici] (LL)

17. In this play’s third act, one character compares a man whose “lusts have brought him to his bitter end” to Julius Caesar and a Hebrew king, remarking “how fortunate the man with none.” That performer of the “Solomon Song” shares her name with the persona of another character in this play who sings of “the Black Freighter’s” crew killing townspeople on her order in (*) “Pirate Jenny.” The protagonist marries Polly Peachum and is made a nobleman despite being introduced as a notorious criminal in this play’s opening song, “Mack the Knife.” For 10 points, name this adaptation of *The Beggar’s Opera* with music by Kurt Weill and lyrics by Bertolt Brecht.

ANSWER: *The Threepenny Opera* [or *Die Dreigroschenoper*; do NOT accept or prompt on “*The Beggar’s Opera*”] (MG)

18. These people inhabited a city simply called “Winter Quarters.” The U.S. Army, acting under the command of Albert Sidney Johnston, replaced a leader of these people with Alfred Cumming. A leader of these people shut down the short-lived *Expositor* newspaper for printing criticism of him. These people led an unprovoked attack on the Baker-Fancher wagon train. These people, who formed the state of (*) Deseret, perpetrated the Mountain Meadows Massacre. These people migrated westward from Nauvoo, Illinois to modern-day Utah. For 10 points, name this religious group once led by Brigham Young and Joseph Smith.

ANSWER: Mormons [accept the Church of Jesus Christ of Latter-Day Saints; accept LDS] (MP)

19. The Born equation describes how the change in this quantity due to solvation is proportional to ionic charge squared divided by effective radius. The differential form of this extensive quantity is given by “ $V dP$ minus $S dT$,” since its natural variables are temperature and pressure. The partial derivative of this quantity with respect to particle number is the (*) chemical potential. The standard change in this quantity is equal to negative RT times the natural log of the equilibrium constant. Enthalpy minus the product of temperature and entropy equals, for 10 points, what quantity whose change is negative for a spontaneous chemical reaction?

ANSWER: Gibbs free energy [prompt on partial answer; prompt on G] (MP)

20. In one poem, this poet is “exiled to no good” and tells a man who defies “questions” and “godhood” that “this thick air is murderous. / I would breathe water.” This poet “fancied you’d return the way you said” in a poem punctuated by the parenthetical “(I think I made you up inside my head).” This poet asks if her “eye pits” and “full set of teeth” are terrifying in another poem, where she performs the “art” of (*) dying “exceptionally well.” This author of “Mad Girl’s Love Song” concludes, “you bastard, I’m through,” in a poem about a man with “a stake in [his] fat black heart.” For 10 points, name this Confessional poet who wrote “Lady Lazarus” and “Daddy.”

ANSWER: Sylvia **Plath** (HK)

Tiebreaker

A work titled for one of these people is divided into twelve sections emulating Virgil and introduces Colin Clout. A reproach to one of these people claims that “A honey tongue, a heart of gall / Is fancy’s spring, but sorrow’s fall.” A woman in one poem claims that “the belt of straw and (*) Ivy buds / With coral clasps and amber studs” promised to her by this kind of person cannot move her. Walter Raleigh wrote a scathing “Nymph’s Reply” to one of these people, who begged a woman to “Come live with me and be my love” in another poem. For 10 points, Christopher Marlowe wrote of a “passionate” member of what pastoral profession’s entreaty to his love?

ANSWER: **shepherds** [accept “The Passionate **Shepherd** To His Love”; accept “The Nymph’s Reply to the **Shepherd**”; accept *The **Shepherdess** Calendar*] (HK)

Packet 1 Bonuses

1. The Q cycle describes the series of reactions that occur in complex III in this set of complexes. For 10 points each:

[10] Name this series of complexes in the inner mitochondrial membrane that generates the proton gradient necessary to power oxidative phosphorylation.

ANSWER: **electron transport chain** [or **ETC**; accept **transfer** for “transport” or **system** for “chain”; or **ETS**]

[10] In a process similar to the Q cycle, this electron acceptor in photosystem II accepts two electrons and then transfers them to the cytochrome complex, which then transfers them to plastocyanin.

ANSWER: **plastoquinone** [or **PQ**]

[10] The thylakoid membranes of these chlorophyll-containing organelles require electron transport chains. Like mitochondria, they are thought to have developed from bacterial endosymbiosis.

ANSWER: **chloroplasts** (HK)

2. This test is based on Carl Jung’s *Psychological Types*. For 10 points each:

[10] Name this psychometric test developed by a mother-daughter pair which evaluates four dichotomies, providing results in the form of one of sixteen possible four-letter acronyms.

ANSWER: **Myers–Briggs** Type Indicator [or **MBTI**]

[10] The Myers–Briggs test is one test for this set of traits that make up an individual. The acronym OCEAN can be used to remember the “Big Five” behavioral traits that comprise this entity in another model.

ANSWER: **personality**

[10] Another personality test is a Multiphasic Personality Inventory that was developed by psychologists at this school, which names it. This school is also notable for a series of ongoing twin studies.

ANSWER: University of **Minnesota** [accept **Minnesota Multiphasic Personality Inventory**; prompt on **MMPI**] (HK)

3. Answer the following about the Central Asian region of Khwarazm, a center of Persian culture whose burgeoning empire was destroyed in a 1220 invasion set off by the murder of two ambassadors. For 10 points each:

[10] The last Khwarazm-shah died on an island in the Caspian after a long pursuit by Jebe and Subutai, generals of this ruler. He was simultaneously fighting against the Khwarezmid in the west and the Jin Dynasty in the east.

ANSWER: **Genghis** Khan [or **Chinggis** Khan; accept **Temujin**; do **NOT** accept or prompt on “Khan”]

[10] Al-Khwarizmi, the most famous Khwarazmian scholar, developed this discipline in a book titled for “completion” and “balancing.” The English name for this discipline derives from the Arabic for “balancing.”

ANSWER: **algebra** (algorithms are named for al-Khwarizmi)

[10] Another famous Khwarazmian scholar was al-Biruni, who compiled an encyclopedia on the culture and polytheistic religion of this country. The Delhi Sultanate ruled from this country as its first Muslim rulers.

ANSWER: **India** (DM)

4. A “drinkard” of this substance sets off for Deads’ Town to resurrect the tapster who makes it for him in Amos Tutuola’s most famous novel. For 10 points each:

[10] Name this beverage. In one novel, consuming this substance frequently follows ritual breaking of the kola nut.

ANSWER: **palm wine** [prompt on **wine** or **alcohol**]

[10] This character who is famous for throwing Amalinze the Cat drinks palm wine from his “first human head” at funerals. This man hated his father, the lazy musician Unoka, for spending all his money on gourds of palm wine.

ANSWER: **Okonkwo**

[10] Okonkwo is the protagonist of this 1958 novel by Chinua Achebe, published six years after Tutuola’s more controversially-received *The Palm-Wine Drinkard*.

ANSWER: **Things Fall Apart** (DS)

5. This is the world's third-most-expensive spice behind vanilla and saffron. For 10 points each:

[10] Name this spice, which names a mountain range in southwest Cambodia and eastern Thailand. These intensely aromatic green or black seed pods come from plants native to the Indian Subcontinent and Indonesia.

ANSWER: **cardamom** [prompt on *Elettaria* or *Amomum*]

[10] Besides cardamom, Indonesia's Maluku Islands had nutmeg, cloves, and mace that also attracted attention from this colonial power, which annexed Malacca in 1511. This country fought a Spice War against the Dutch.

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

[10] Another once-coveted spice is this one, whose "true" variety originates in Sri Lanka but whose cassia variety comes from China and Vietnam. Today, this "spicy" bark flavors foods ranging from *horchata* to apple pie.

ANSWER: **cinnamon** (HK)

6. The last thing the narrator sees before leaving this place forever is a mural of a man and a woman walking among roses in this location. For 10 points each:

[10] Name this location which is left empty when its namesake occupant is guillotined for murdering the bar owner Guillaume. The narrator only leaves this location when his fiancée, Hella, returns to Paris from Spain.

ANSWER: **Giovanni's room** [accept descriptive equivalents of **Giovanni's place of residence**; prompt on partial answer]

[10] *Giovanni's Room* was written by this African-American author. This author depicted John Grimes' antagonistic relationship with his stepfather Gabriel in his first novel, *Go Tell it on the Mountain*.

ANSWER: James (Arthur) **Baldwin**

[10] Both Gabriel and Baldwin's own stepfather shared this profession, which Baldwin considered pursuing in his youth. Jim Casy, a former member of this profession, travels with the Joad family in *The Grapes of Wrath*.

ANSWER: **preacher** [or **pastor**, **deacon**, **minister**, **reverend** or equivalents] (MGS)

7. Tsar Nikolai II gifted one of these artworks, which used pearls to simulate lilies-of-the-valley, to Tsarina Alexandra in 1898. For 10 points each:

[10] Name these artworks, which contained "surprises" like automata. Of 52 "Imperial" versions, only 46 survive, including ones themed for the Imperial Coronation and the Romanov Tercentenary.

ANSWER: **Fabergé eggs** [prompt on partial answer; prompt on **Easter eggs**]

[10] Fabergé's only female workmaster, Alma Pihl, designed an egg named for this season whose glass shell is studded with platinum and 1,660 white diamonds. The Tsars' official residence was a Palace named for this season.

ANSWER: **winter** [accept **Winter Egg**; accept **Winter Palace**; accept **Zimniy** dvorets]

[10] The Lilies-of-the-Valley Egg featured a surprise of three of these artworks. Ottoman artists illustrated illuminated manuscripts with paintings known as this type of work.

ANSWER: portrait **miniatures** [accept **miniature** paintings; prompt on **portraits**] (HK)

8. Answer the following about the motif of the number seven in the Bible, for 10 points each.

[10] In the Book of Genesis, God takes six days to create the world; on the seventh day, God does this, forming the basis for the Sabbath day.

ANSWER: God **rests** [accept equivalent descriptions; do **NOT** accept or prompt on "sleeping" or equivalents]

[10] In the Gospel of John, Jesus performs seven miracles and makes seven statements beginning with *this* two-word phrase. Either the English or the Greek is acceptable.

ANSWER: **I am** [or **ego eimi**]

[10] Revelation claims seven angels will sound seven trumpets to herald the apocalypse, possibly alluding to the destruction of this city after it was encircled for seven days straight.

ANSWER: **Jericho** (DS)

9. “Ah, brooklet, do you know what love can do?” In Romantic music, it can cause terrible pain and sadness! For 10 points each:

[10] That quote is from this song cycle’s lied “The Miller and the Brook,” in which the miller commits suicide over his unattainable love. This song cycle’s composer set the same poet’s poems in it and in *Winterreise*

[“VIN-tair-RAI-suh”].

ANSWER: **Die Schöne Müllerin** [accept *The Fair Maid of the Mill* or similar translations; accept D. 795; accept but do NOT otherwise reveal **Schubert** Opus 25]

[10] Gretchen sings “when he’s not with me, life’s like the grave” while at her spinning wheel in one of many lieder written by this composer of *Die Schöne Müllerin*.

ANSWER: Franz (Peter) **Schubert**

[10] The *Liebestod* is widely used in tragic romantic scenes and ends an opera about these lovers as one of them cries over the other’s body. Their namesake opera begins with a highly dissonant “F, B, D# [“D-sharp”], and G# [“G-sharp”]” chord.

ANSWER: **Tristan und Isolde** [accept *Tristan and Isolde*] (DM)

10. The Italian Wars were very complicated. For 10 points each:

[10] This doublecrossing condottiero took the Romagna with the aid of his father Alexander VI and also aided Louis XII in taking Milan and Naples. Machiavelli says he is the ideal prince.

ANSWER: **Cesare** Borgia [prompt on **Borgia**]

[10] Not only did the Italian Wars have military complications, but they likely also had public health complications. This king captured Naples in 1494-5, while his forces suffered the first known syphilis outbreak.

ANSWER: **Charles VIII** [or **Charles the Affable**; prompt on **Charles**]

[10] Ironically, the Italian Wars, lasting 65 years, occurred *after* the Treaty of Lodi, intended to stop future conflict. That treaty was signed between Milan, Naples, and this trade-centered city with many canals.

ANSWER: **Venice** [or **Venezia**] (DM)

11. Answer the following about Mary Anning, one of the world’s first female paleontologists, for 10 points each.

[10] Anning worked on a coast in Dorset named for this second geologic period of the Mesozoic Era. Named for a western subrange of the Alps, it came after the Triassic and before the Cretaceous.

ANSWER: **Jurassic**

[10] Anning made some of the first discoveries of “bezoar stones,” which turned out to be fossilized pieces of this substance. Now called coprolites, fossils of this substance often contain fragments of bones or scales.

ANSWER: **feces** [or **excrement**; accept informal terms like **poop**]

[10] Anning’s discoveries provided evidence for George Cuvier’s theories of extinction, which he held as part of this broader hypothesis that Earth is shaped by short, violent events. It is contrasted with uniformitarianism.

ANSWER: **catastrophism** (SE)

12. Answer the following about puzzle games, for 10 points each.

[10] This kind of puzzle, commonly found in newspapers, requires you to fill in a nine-by-nine grid. The columns, rows, and three-by-three sub-grids must each contain the numbers one to nine only once.

ANSWER: **sudoku**

[10] Players must create words by moving diagonally, horizontally, or vertically in this game played on a four-by-four grid of letter dice. Words of 8 letters or more are worth eleven points, the highest possible value.

ANSWER: **Boggle**

[10] This genre of games requires the player to push boxes to goals while avoiding constraints. The Japanese company Thinking Rabbit published the first version of this kind of game, another example of which is *Rush Hour*.

ANSWER: **sokoban** [accept **warehouse** or **sliding block** puzzles] (MGS)

13. A poem about a “Lost Tram” in this city recalls “rocking across three bridges” and concludes, “I could never have known / of such a love, of such a grief.” For 10 points each:

[10] Name this city. Another poem titled after this city’s old name addresses it, saying “I am simply not ready to die: / You possess my phone number – just give it a try.”

ANSWER: St. **Petersburg** [or Sankt-**Peterburg**; accept **Leningrad**] (The poems are “Lost Tram” by Nikolai Gumilev and “Leningrad” by Osip Mandelstam.)

[10] The protagonist of this “Petersburg Tale,” Yevgeniy, is chased around the streets of St. Petersburg by the title object which he had cursed. In this poem, Yevgeniy goes mad after Parasha drowns in the Neva River.

ANSWER: “The **Bronze Horseman**: A Petersburg Tale” [or “The **Copper Horseman**”; or “**Mednyi Vsadnik**”]

[10] This Russian poet wrote “The Bronze Horseman.” In a more famous text by this author, Eugene Onegin kills Lensky in a duel.

ANSWER: Alexander (Sergeyevich) **Pushkin** (VS)

14. No sound is produced during these theoretical events, since the sound waves would carry away energy. For 10 points each:

[10] Name these events in which two objects come into contact and separate while conserving total kinetic energy.

ANSWER: **elastic collisions** [prompt on **collisions**; do **NOT** accept or prompt on “inelastic collisions”]

[10] In addition to conserving kinetic energy, elastic collisions also conserve this vector quantity, as do all collisions. This quantity symbolized p is the product of mass and velocity.

ANSWER: linear **momentum** [or translational **momentum**]

[10] Suppose that a mass m_1 with velocity v collides elastically and head-on with a smaller stationary mass m_2 . In the “ m_2 equals zero” limit, what is the final lab-frame velocity of m_2 ? You have 15 seconds, and it may help to shift to the reference frame of m_1 .

ANSWER: **$2v$** [accept any answer indicating **two times v** or **twice v**] (DM)

15. This writer’s most notable independent work was *The Condition of the Working Class in England*. For 10 points each:

[10] Name this writer who also edited and compiled a friend’s draft of *Theories of Surplus Value* into the fourth and final volume of a massive economics text. A later acclaimed work of his was *The Origin of the Family*.

ANSWER: Friedrich **Engels** [accept Frederick **Engels**]

[10] Engels researched *The Condition of the Working Class in England* in this British city, the center of the global cotton industry. A protest for popular representation in this city was broken by cavalry in the Peterloo Massacre.

ANSWER: **Manchester**

[10] Engels’s work on the English Industrial Revolution occurred during this monarch’s reign. This monarch’s 64-year reign included the passing of the Reform Act of 1867, expanding the electorate to many low-wage earners.

ANSWER: Queen **Victoria** (DM)

16. All the women of Thebes once became members of this group. For 10 points each:

[10] Name these “raving ones” who tore apart cattle with their bare hands. Led by Agave, this *daimon*-maddened group dismembered Agave’s son, Pentheus, after he tried to ban worship of their god.

ANSWER: the **Maenads** [accept but do **NOT** otherwise reveal the **Bacchae** or the **Bacchantes**; accept the **Bassarids**]

[10] The Maenads were the followers of this foreigner god of wine and madness.

ANSWER: **Dionysus** [or **Bacchus**; or **Zagreus**]

[10] Agave was the sister of this mother of Dionysus. However, that didn’t stop her from slandering this woman after her death upon being exposed to Zeus’ glory.

ANSWER: **Semele** (HK)

17. One of these items, created for the Roman senator Junius Bassus, depicts ten Biblical scenes separated by two registers of columns on its front panel. For 10 points each:

[10] Identify these funerary objects, which were often carved from stone. Another of these objects *of the Spouses* was created from terracotta and portrays a smiling couple reclining at a banquet.

ANSWER: **sarcophagi** [or **sarcophagus**; prompt on “coffin”]

[10] This civilization created the *Sarcophagus of the Spouses*. This pre-Roman civilization included Charon and the demon Vanth on the *Sarcophagus of Lars Pulena*, and painted a terracotta statue of Apollo at Veii.

ANSWER: **Etruscan**

[10] A sarcophagus named for Cardinal Ludovisi features one of these events carved in *horror vacui*, so that there is no space left for any background. Pollaiuolo created an engraving of ten nude men engaged in one of these events.

ANSWER: **battle** [prompt on **fight** or synonyms] (SL)

18. This novel was written partly in response to the metafiction of John Fowles’ *The French Lieutenant’s Woman*. For 10 points each:

[10] Name this A.S. Byatt novel split between past and present, in which a pair of modern academics investigate a secret romance between two fictional Victorian poets.

ANSWER: ***Possession: A Romance***

[10] This Tom Stoppard play similarly takes place in both past and present and features two scholars researching the 19th century inhabitants of Sidley Park, including Lord Byron, Septimus Hodge, and Thomasina Coverley.

ANSWER: ***Arcadia***

[10] Future historians at the “Twelfth Symposium on Gileadean Studies” use the title document to study a collapsed American theocracy in the epilogue to this author’s *The Handmaid’s Tale*.

ANSWER: Margaret (Eleanor) **Atwood** (DS)

19. This president’s veto of the Bland-Allison Act, which restored the silver dollar to circulation, was overridden by a congressional supermajority. For 10 points each:

[10] Name this president. Immediately after his inauguration, this president removed federal troops from Louisiana and South Carolina, effectively handing over the states to the “Redeemer” faction of the Democratic party.

ANSWER: Rutherford Birchard **Hayes**

[10] Hayes’ removal of troops from the South, agreed in the Compromise of 1877, marked the end of this historical period, in which both the North and the South grappled with the effects of the Civil War.

ANSWER: **Reconstruction**

[10] Historians have given this two-word nickname to Hayes’ wife because of her ardent support for the temperance movement and role in banning alcohol from the White House.

ANSWER: “**Lemonade Lucy**” (Her full name was Lucy Ware Hayes, née Webb.) (MP)

20. Answer the following about the group 13 elements, for 10 points each.

[10] Group 13 is often named for this second-period element, its lightest member. This metalloid element forms stable compounds that have only six valence electrons.

ANSWER: **boron** [accept **B**]

[10] Boron is a poor electrical conductor, but this light, strong metal immediately below it is a very good one. This metal is used in cars, cans, and a thin foil sometimes misleadingly named for tin.

ANSWER: **aluminum** [accept **Al**; accept **aluminum** foil]

[10] Group 13 elements like gallium form semiconductors with elements in this other group. Toxic elements in this group include one that forms a tetrahedral white allotrope and one that is detected by the Marsh test.

ANSWER: group **15** [or **pnictogens**; or **nitrogen** group; accept group **V** [“five”] or group **VA** [“five-A”] or group **VB** [“five-B”]] (MP)

Tiebreaker

The valet Jean tells this character about a dream in which he wants to climb a tall tree to plunder the bird’s nest on top. For 10 points each:

[10] Name this character created by August Strindberg. At the end of the play named for her, Jean kills this character’s pet finch with a razor before urging her to do the same to herself.

ANSWER: Miss **Julie** [or Fröken **Julie**]

[10] The poor siblings Tytyl and Mytyl seek the title *Blue Bird* symbolizing happiness in a children’s play by this Belgian symbolist.

ANSWER: Maurice **Maeterlinck** [or Maurice Polydore Marie Bernard **Maeterlinck**]

[10] In a play by Anton Chekhov, Treplev shoots this title bird on the lake to give to Nina. Seeing this dead bird, Trigorin imagines destroying Nina “out of idleness,” as this bird had been destroyed.

ANSWER: seagull [accept *The Seagull* or **Cháyka**] (DS)