

## Berus-Lie Academic Spring Tournament (BLAST)

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### Packet 13: I lost the game

#### Tossups

1. **A copy of this painting made by Giampietrino includes a now-lost detail of the central figure's feet. A figure on the left side of this painting holds his hands up above a twisted arm holding a knife. The vanishing point of this painting is a green landscape visible through three windows. Because its artist decided to use *secco* on a stone wall of the (\*) Santa Maria delle Grazie, this painting has suffered extreme damage due to humidity. John the Baptist is often misidentified as a woman in a blue dress in this painting, who forms a trio with Peter and Judas. For 10 points, name this painting by Leonardo da Vinci which depicts Jesus eating with the Apostles for the final time.**

ANSWER: **The Last Supper** [accept **Il Cenacolo** or **L'Ultima Cena**] <HP, Visual Fine Arts>

2. **Letters written by Hasdai ibn Shaprut to an empire practicing this religion are compiled in that empire's namesake "correspondences." After a local misidentified an image of Jesus with that of Jacob, Matteo Ricci discovered an extant community of practitioners of this religion in Kaifeng. The Khazars of Central Asia practiced this religion. While living in Egypt, a thinker known as (\*) "Rambam" compiled fourteen books of this religion's law into the Mishneh version of one of its central texts. That man was Moses ben Maimonides. For 10 points, name this religion whose practitioners were displaced by Arabs from their homeland in Israel.**

ANSWER: **Judaism** [accept **Jews**] <HP, World History>

3. **This quantity is the derivative of the action with respect to position, and its canonical form is equal to the partial derivative of the Lagrangian with respect to a generalized velocity. The total value of this quantity for a system is equal to zero in the center-of-mass frame. Because the Fourier transform of position is this quantity, it is the conjugate variable of (\*) position. The square of this quantity over two times the mass is equal to kinetic energy. The time derivative of this quantity is equal to force. Impulse is defined as the change in this quantity that is conserved in inelastic collisions. For 10 points, name this quantity which is equal to mass times velocity.**

ANSWER: linear **momentum** <SL, Physics>

4. **This character calls his use of the word "bloody" "mere alliteration... natural to a poet." This man drunkenly writes a letter recommending a dustman to speak at Ezra Wannafeller's Moral Reform World League. This man's lab on Wimpole Street is cleaned by the housekeeper Mrs. Pearce. This character, who is first introduced as "The Note Taker," replicates another character's scream of (\*) "Ah - ow - oo" outside Covent Garden, and he makes a bet with a colonel who had served in India to transform a flower girl's "kerbstone English" within six months. For 10 points, name this friend of Pickering, a professor of phonetics who teaches Eliza Doolittle to speak properly in George Bernard Shaw's *Pygmalion*.**

ANSWER: **Henry Higgins** [accept either underlined part] <WZ, Drama>

5. The first European to sight this location was Garcia Lopez de Cardenas. It's not in Scotland, but this location is home to a region called the "Great Unconformity," which is between the Tonto Group and the Vishnu Complex. A skywalk in the west of this location is owned by the Hualapai tribe, and this location was mapped by John Wesley (\*) Powell. This location is bordered to the north by the Kaibab Plateau, and its location's ecology was heavily impacted by the construction of the Glen Canyon Dam. For 10 points, name this geologic feature carved by the Colorado River, located in its namesake national park in Arizona.

ANSWER: Grand Canyon <GP, Geography>

6. Even though he claimed that he had gotten permission from this emperor, Marcus Primus was tried for illegally declaring war on the Odrysae. This ruler exiled his daughter, Julia, to Pandateria to demonstrate harsh punishments for citizens who did not follow his strict marriage laws. This ruler's culture minister, Maecenas, patronized Virgil and Horace. A famous statue of this emperor (\*) pointing his finger was found at his villa at Prima Porta. Historians attribute the beginning of the *Pax Romana* to this ruler's defeat of Mark Antony at the Battle of Actium. For 10 points, name this great-nephew of Julius Caesar, who was the first Roman emperor.

ANSWER: Gaius Octavius Thurinus [accept Octavian or Caesar Augustus] <HP, Ancient/Other History>

7. Diarmuid ["de-AR-mud"] of the Love Spot dies in one of these events near Benn Gullbain after Finn MacCool spitefully lets healing water run through his fingers. On behalf of Culhwch ["KULL-hook"], King Arthur retrieves a comb and scissors to cut Ysbaddaden's ["iss-bah-dah-den's"] hair during one of these events against Twrch Trwyth ["TOORK TROOYTH"]. Hercules ends one of these events by driving its target into a heavy (\*) snow bank. Another one of these events was caused by King Oeneus's ["ee-NEE-us's"] failure to honor Artemis, and that event was ended when Meleager and Atalanta slew the target animal. For 10 points, name this type of event that targeted a certain creature in Erymanthos and Calydon.

ANSWER: boar hunt [accept kill a boar, accept capturing a boar, accept pig or hog for boar, accept obvious equivalents, prompt on hunt, do not accept or prompt on any answers involving the hunt of another animal] <SZ, Mythology>

8. In one novel, this character quotes Terence while explaining how it is possible he has rheumatism. After this character and his sidekicks enter a theater where the Guilli family of acrobats perform, the Variety Theater, money starts falling from the ceiling, though it turns out to be paper money. This character's prediction is proven correct to a writer nicknamed "Homeless" when the head of (\*) MASSOLIT, Berlioz, is decapitated by a tram. This character frees Pontius Pilate at the end of a novel in which he is personified as Professor Woland; that is Mikhail Bulgakov's *The Master and Margarita*. For 10 points, name this evil character, a common trope in literature due to his contrast with God.

ANSWER: the Devil [accept Satan or Lucifer, accept Professor Woland before mentioned] <AN, Long Fiction>

9. Chapters such as "Vagueness in Logic" and "The Case of Definition" appear in a work this man co-wrote with Arthur Bentley, titled *Knowing and the Known*. This philosopher wrote an essay titled "Creative Democracy" as a follow-up to a work which argued that a democratic society is superior to a technocratic one. That work, written as a refutation to journalist Walter Lipmann, was titled (\*) *The Public and its Problems*. In another work, this philosopher argued in favor of hands-on learning, an idea which he incorporated into the Chicago Laboratory Schools. For 10 points, name this philosopher who wrote *Democracy and Education*, a prominent Pragmatist.

ANSWER: John Dewey <AN, Philosophy>

10. **Compounds with this functional group can be synthesized asymmetrically using titanium tetraisopropoxide [“tetra-iso-pro-poxide”] and DET. The anti-dihydroxylation of alkenes begins with the formation of one of these groups, which is facilitated by the oxidant mCPBA. Sequestration and dissolution of alkali metal salts in nonpolar solvents can be done using cyclic compounds with several of these groups, and a method of preparing compounds with this group is named for (\*) Williamson. Epoxides contain this functional group, which have a “crown” variety and are exemplified by the chemical formula R-O-R’ [“R-O-R-prime”].** For 10 points, name this functional group whose diethyl variety was used in anesthetics.

ANSWER: ether [accept epoxide or oxirane until mention] <CT, Chemistry>

11. **In this religion, two triangular concept maps show the relation between Affinity, Reality, and Communication as well as Knowledge, Responsibility, and Control. Followers of this religion often attempt to purge bad memories known as engrams. Adherents of this religion may transition from Pre-Clear to (\*) Clear states through a process, which uses E-meters, known as auditing. This religion believes that the body is controlled by an entity known as a thetan. According to a myth from this religion, millions of people were killed on the planet Teegeack after hydrogen bombs were detonated by the alien dictator Xenu. For 10 points, name this religion founded by L. Ron Hubbard and followed by actors John Travolta and Tom Cruise.**

ANSWER: Church of Scientology <ARB, Religion>

12. **A poem by this author describes a stone that “[glitens] like a wild beast’s fur” beneath “the translucent cascade of the shoulders.” That poem describes an object “suffused with brilliance from inside, like a lamp,” and notes “there is no place that does not see you.” A poem by this author describes the “night, when the wind is full of space” and asks “have you remembered (\*) Gaspara Stampa sufficiently yet?” This author likens “ripening fruit” to the eyes of a “legendary head” in a poem that ends by declaring “you must change your life.” This author stated “every Angel is terror” and asked “who, if I cried out, would hear me among the Angelic Orders?” in a poem that opens a collection titled after a German castle. For 10 points, name this German poet of “Archaic Torso of Apollo” and the *Duino Elegies*.**

ANSWER: Rainer Maria Rilke <KL, Non-Epic Poetry>

13. **The extreme sensitivity of these values to input parameters is demonstrated by a construction named after James Wilkinson. The problem of finding these values exactly led to the development of Galois [“gal-WAH”] theory. These values cannot generally be represented in radicals according to the (\*) Abel-Ruffini theorem. A theorem used to find these values states that rational ones are the quotients of factors of the constant and leading coefficients. The number of these values counted with multiplicity is equal to the degree of the polynomial according to the fundamental theorem of algebra. For 10 points, name these values where a polynomial is equal to zero.**

ANSWER: polynomial roots [accept polynomial zeros before mention] <SL, Math>

14. **In this country, a highway ramp runs through the 5th through 7th floors of the Gate Tower Building. An architect from this country designed an arts complex topped by a helix tower of steel triangles and won the 2019 Pritzker Prize. Another church by an architect from this country is New Zealand’s Cardboard Cathedral. One of this country’s airports is built on an (\*) artificial island designed by Renzo Piano. Frank Lloyd Wright designed an Imperial Hotel in this country’s capital that withstood a 1923 earthquake. For 10 points, name this home country of Arata Isozaki, Tadao Ando, and Shigeru Ban, some of whose buildings can be found in Osaka.**

ANSWER: Japan [The second line refers to the Art Tower Mito.] <WZ, Other Visual Arts>

15. Philip Berrigan and the “Plowshares Eight” committed arson at a General Electric plant to protest these things. As part of Project Candor, President Eisenhower sought to enlighten the public about the pros and cons of these things. John Foster Dulles argued for the development of these things to deter aggression as part of his New Look policy. Lieutenant General (\*) Leslie Groves was picked to oversee the creation of one of these things, which had earlier been tested on Bikini Atoll and Las Cruces. For 10 points, name these things, the creation of which was the goal of the Manhattan Project.

ANSWER: nuclear weapons [prompt on partial answer] <HP, American History>

16. A 21-chapter book named for this object includes a description of the author’s ancestors and his own experience at locations such as Fossoli di Carpi. Tom Lehrer wrote a song used to remember the members that make up this object based on the Major General’s Song from *The Pirates of Penzance*. This object, which names a Primo Levi short-story collection, had a predecessor created by (\*) Johann Dobereiner. One edition of this object included labels such as *eka-*, *dvi-*, and *tri-*, predicting the existence of germanium. For 10 points, name this object designed by Dmitri Mendeleev, which sorts elements by chemical properties and atomic number.

ANSWER: periodic table [accept *The Periodic Table*] <AN, Other Academic>

17. One condition which affects this organ can be treated with latanoprost, which is a prostaglandin F receptor agonist. Cross-linking of alpha-crystallins occurs in another major condition which affects this organ. A condition of this organ can be classified as “open-angle” or “closed-angle” depending on the obstruction of drainage pathways. Using a tonometer to measure pressure is a common way of determining whether excess (\*) aqueous humor is present in this organ. Blood vessels in the choroid supply oxygen to the fovea in this organ. This organ can be affected by glaucoma and cataracts. For 10 points, macular degeneration affects the retina of what visual organ?

ANSWER: the human eye [accept optic nerve or lens, accept retina or macula before mention] <ARB, Biology>

18. With the Christian Democrats, a political party of this name reached a “historic compromise” under Enrico Berlinguer’s [**“buhr-lin-gayr”**] plan to peacefully attain power. Student protests forced a party of this name to cede power to the Civic Forum, ending Gustav Husák’s term as president of his country. A party of this name was urged to engage in mutinous action to secure treaty ratification in a letter forged in the writing of (\*) Grigory Zinoviev. A party with this name adopted the reform doctrines of *glasnost* and *perestroika* under the leadership of its final General Secretary, Mikhail Gorbachev. For 10 points, give the term that named the ruling party of the Soviet Union.

ANSWER: Communist party [accept word forms; accept Italian Communist Party, PCI, Communist Party of Great Britain, CPGB, Communist Party of Czechoslovakia, KSČ, Communist Party of the Soviet Union, CPSU; do NOT prompt or accept on Socialist party] <CS, European History>

19. *Description Acceptable*. After seeing the body of this event’s perpetrator in the bushes, the narrator claims that “the holocaust is complete.” The father of the victim of this event says that he would have been a “great man... like James J. Hill” had it not happened. Leaves trace out “a thin red circle in the water” following this event, whose victim was floating on a mattress in his pool. The narrator is surprised that a man with (\*) owl-eyed glasses attends a funeral after this event, because its victim’s friends refused to come. This crime is perpetrated after Myrtle is hit by a yellow car that Daisy Buchanan is driving, enraging George Wilson. For 10 points, name this event in which the protagonist of a novel by F. Scott Fitzgerald is killed.

ANSWER: Jay Gatsby’s death [accept equivalents; accept answers indicating that George Wilson murders Jay Gatsby; accept James Gatz in place of “Jay Gatsby”] <SL, Long Fiction>

20. *Composer and type of piece required.* **A piece of this type by this composer begins with octave D-sharps alternating between the hands. That piece was one of six pieces of this type based on themes by Paganini. The composer collected three of these works into a set intended for concerts; the third of those works is in D-flat major, made almost entirely of arpeggios, and named "Un sospiro."** (\*) "*La campanella*" is one of these works, while another of these works depicts a cossack tied to a horse, "Mazeppa." Twelve extremely difficult works of this type by this composer are called "Transcendental." For 10 points, name these study works for piano by the composer of the Hungarian Rhapsodies.

ANSWER: piano étude by Franz Liszt [accept pianoforte in place of piano; prompt on partial answer] <ML, Auditory Fine Arts>

## Bonuses

1. These objects require a condensation nucleus to form. For 10 points each:

[10] Name these objects that can be noctilucent [“NOK-ti-lucent”] or nacreous [“NAY-cree-us”]. A method of seeding them commonly uses silver iodide.

ANSWER: **clouds** [accept specific types]

[10] Clouds are the source of this phenomenon, which includes snow, hail, and rain.

ANSWER: **precipitation**

[10] This process is one method of ice crystal growth to form precipitation. It can occur through a fast adiabatic updraft and supersaturated conditions for ice.

ANSWER: Wegener–**Bergeron**–Findeisen process [or **cold-rain** process] <KL, Earth Science>

2. The protagonist of this story whistles the song “The Teddy Boy’s Picnic” before he steals from a baker with his friend Mike. For 10 points each:

[10] Name this Alan Sillitoe short story in which Smith intentionally does not win a race to spite the prison Borstal administration.

ANSWER: “The **Loneliness of the Long Distance Runner**”

[10] Sillitoe was part of a realist literary movement named for “Young Men” experiencing this emotion. John Osborne wrote a play with the title *Look Back in this emotion*.

ANSWER: **anger** [or *Look Back in Anger*; or **Angry** Young Men]

[10] Kingsley Amis, another member of the Angry Young Men, wrote the novel *Colonel Sun* in which this character has to rescue the kidnapped MI6 chief. M. Amis’s novel was a continuation of the original novels written about this spy by Ian Fleming.

ANSWER: the name’s **Bond** [, **James Bond**; accept either name; accept Agent **007**] <AMB, Short Fiction/Other Literature>

3. This collection’s last piece is a Passepied [“pass-pee-AY”] in F-sharp minor. For 10 points each:

[10] Name this piano suite, whose name comes from a Paul Verlaine poem. That Paul Verlaine poem also names a D-flat major piece in this collection which is set in the unusual time signature of 9/8.

ANSWER: *Suite* **bergamasque**

[10] An F major piece of this type begins *Suite bergamasque*. The fifteenth piece of this type by Chopin gets its nickname from the repeated A-flats played by the left hand.

ANSWER: **prelude** [accept Raindrop **Prelude**]

[10] *Suite bergamasque* was written by this composer. Georges Barrère [“buh-rare”] premiered the flute solo in this composer’s *Prelude to the Afternoon of a Faun*.

ANSWER: Claude **Debussy** <HP, Auditory Fine Arts>

4. Name these features of Siberia. For 10 points each:

[10] Most of Russia’s population lives in these administration division west of Siberia. Examples of these Russian “provinces” in Siberia include ones named after Irkutsk and Novosibirsk.

ANSWER: **oblasts**

[10] This Siberian lake has been dubbed the “Galapagos of Russia” due to its rich ecology. This deepest lake in the world is located north of the Mongolian border.

ANSWER: Lake **Baikal**

[10] The Angara River, a tributary of *this* other river, is the only outflow of Lake Baikal. Along with the Ob and Lena, it is considered one of the three “great” Siberian rivers, and it divides Siberia into eastern and western portions.

ANSWER: **Yenisei** River [accept **Enisei** River, **Jenisej** River] <CS, Geography>

5. Answer the following about the clinker method. For 10 points each:

[10] The clinker method is used to build these devices, which include the Portuguese caravel. The clinker method is often contrasted with the carvel method, which lays hull planks side to side to build these watercrafts.

ANSWER: **boats** [accept **ships** and long**ships**]

[10] This group used the clinker method to build their cogs that traveled around the Baltic sea for trade. This group was centered at Lubeck, and signed the Treaty of Stralsund with Denmark to maintain a monopoly in Scandinavia.

ANSWER: **Hanseatic** League

[10] The clinker method was also used to build skiffs that would travel the length of this river. Evidence of those skiffs can be found at sites such as Snape and Sutton Hoo.

ANSWER: **Thames** River <AN, European History>

6. The movements of Acmeism and Russian Symbolism are sometimes associated with this period. For 10 points each:

[10] Name this period of Russian poetry during the 19th and early 20th centuries. It was named by comparison with an earlier period of Russian poetry that included Alexander Pushkin.

ANSWER: **Silver Age** of Russian poetry [do not accept or prompt on “Golden Age”]

[10] Anna Akhmatova, a Silver Age poet, wrote a *Poem Without* one of these figures. Golden Age poet Mikhail Lermontov wrote a novel about Pechorin titled for one of these figures *of Our Time*.

ANSWER: a **hero** [or **geróy**]

[10] Silver Age poet Osip Mandelstam wrote an “Epigram” to this leader that calls him the “Kremlin Caucasian.” This man actually wrote his own poetry under the pseudonym “Soseto” before becoming the Soviet leader during World War II.

ANSWER: Joseph **Stalin** <AMB, Non-Epic Poetry>

7. This man has touted his campaign by saying the biggest contrast to President Trump is an Asian who can do math. For 10 points each:

[10] Name this businessman and former candidate for the 2020 Democratic presidential nomination. Among his distinctive policies include a call for universal basic income.

ANSWER: Andrew **Yang**

[10] Yang has honed in on his math skills by promising a \$1,000/month universal basic income known by this two-word phrase. This proposed policy was named to be more appealing to companies than the idea of UBI.

ANSWER: **freedom dividend**

[10] Andrew Yang founded this nonprofit organization in 2011. The goal of this organization is to recruit recent college graduates to work in cities such as Detroit and New Orleans.

ANSWER: **Venture for America** <AN, Current Events>

8. Steven Mann added to André Schaeffner’s system for classifying these things by grouping them based on physical elements like earth, water, and air. For 10 points each:

[10] Name these things that can be distinguished by their timbre [**“TAM-burr”**], which are also classified by the Dewey Decimal-inspired Hornbostel-Sachs system.

ANSWER: musical **instruments**

[10] The fifth category in the Hornbostel-Sachs system, electrophones, includes this instrument played by moving one’s hands between two perpendicular antennae and controlling pitch and volume using an oscillator.

ANSWER: **theremin**

[10] The Hornbostel-Sachs system classifies this family of instruments as non-free aerophones. Wind instruments are traditionally made of woodwinds and this family, which includes trumpets and trombones.

ANSWER: **brass** <WZ, Other Fine Arts>

9. Following this phase, ATR and ATM kinases check for any double-strand breaks. For 10 points each:

[10] Name this phase in which DNA replication occurs.

ANSWER: **S** phase [or **Synthesis** Phase]

[10] The S phase takes place before this process, in which somatic cells divide to form two identical daughter cells. This process ends with the formation of a cleavage furrow during cytokinesis [“SYE-tow-kin-ee-sis”].

ANSWER: **mitosis** [prompt on **cell cycle**]

[10] The progress of the cell cycle is controlled by the levels of this family of proteins. During mitosis, the B variety of these proteins bind to their namesake “dependent kinases,” activating MPF.

ANSWER: **cyclins** <HP, Biology> <ed. KL>

10. The first government of Argentina is commonly known as the “Primera” this word. For 10 points each:

[10] Name this Spanish term which nowadays refers to a government dominated by the military. One government of this type, the SPDC, was responsible for changing the name of Burma to Myanmar.

ANSWER: **junta** [“hoon-ta”]

[10] Another military junta was this Ethiopian one, which took power after overthrowing Emperor Haile Selassie in 1974. Led by Mengistu, this regime perpetrated the “Red Terror” to suppress competing communist ideologies.

ANSWER: the **Derg** [or the **Provisional Military Government of Socialist Ethiopia**]

[10] George Papadopoulos [“PAH-pah-DOO-pole-us”] came to power during a 7-year long military junta in this country known as the Regime of the Colonels. During that junta, it fought with Turkey for control over Cyprus.

ANSWER: **Greece** <AN, World History>

11. Answer some questions about the benzoin condensation. For 10 points each:

[10] The benzoin condensation is a reaction that works by inducing umpolung, which reverses this quality for molecules. Only asymmetric molecules have this property, which is denoted by a delta-plus and delta-minus.

ANSWER: **polarity** [prompt on having **partial charges** or (dipole) **moment** or **hydrophilicity**]

[10] The benzoin condensation dimerizes two molecules with this functional group. Ozonolysis of ethylene results in molecules with this functional group.

ANSWER: **aldehyde** [prompt on **carbonyl**]

[10] The benzoin condensation was first observed in this species of nuts because it contains hydrogen cyanide. Cyanide is often said to smell like bitter nuts of this type.

ANSWER: **almonds** [accept *Prunus dulcis* or *Prunus amygdalus*] <DB, Chemistry>

12. For 10 points each, answer the following about unique gender constructs in pre-colonial societies:

[10] On this island, people who were assigned male at birth but exhibit “feminine” tendencies are referred to as “Fa’afafine.” Margaret Mead wrote a study about adolescents “coming of age” on this island.

ANSWER: **Samoa**

[10] Hijra, a group of transgender and intersex people predominantly in this country, often faces discrimination on the basis of gender expression. This country officially recognized hijra as a “third gender” in 2014.

ANSWER: **India**

[10] In her book *The Invention of Women*, one scholar argues that this culture had no fixed concept of “woman” before being colonized. This people’s language of Lucumí is sacred in a faith syncretized with Catholicism.

ANSWER: **Yoruba** [the scholar is Oyèrónké Oyèwùmí; the faith is Santería] <DP, Social Science>



13. As a result of this event, Robert E. Poli resigned as head of the labor union at its center. For 10 points each:  
[10] Name this event in which Transportation Secretary Andrew Lewis searched to find replacements for workers of a certain profession. As a result of this event, tens of thousands of workers were banned from federal service by a sitting president.

ANSWER: Professional **Air Traffic Controllers** Organization's 1981 **Strike**

[10] The Air Traffic Controllers' Strike has resurfaced in a controversy surrounding this president's recent induction into Labor's Hall of Honor. This president defeated Jimmy Carter in the Presidential Election of 1980.

ANSWER: Ronald Wilson **Reagan**

[10] Some have argued that Reagan should not be inducted because he surrendered names of union members to this anti-communist organization during the Second Red Scare. The Hollywood Ten testified before this organization.

ANSWER: **House Un-American Activities Committee** [or **HUAC**] <AN, American History>

14. You have just died in ancient Egypt. Answer some things about the weighing of your heart, for 10 points each:

[10] This canine-headed deity performs the weighing of the heart to determine whether you are worthy of entering the land of the dead. This deity helped embalm Osiris after he was reassembled, making him the patron god of mummification.

ANSWER: **Anubis**

[10] In the weighing of the heart, the heart is weighed against concept of Ma'at, which was often represented by this object. The goddess Ma'at wears this object as her symbol on her headdress.

ANSWER: an ostrich **feather**

[10] Souls lighter than the feather would be allowed to enter into the afterlife, but souls heavier than the feather would be devoured by this creature with a body that was part lion, part crocodile, and part hippopotamus.

ANSWER: **Ammut** [accept **Ammut** or **Ahemait**] <SZ, Mythology>

15. In a novel by an author from this country, a woman's hair suddenly turns white while she is riding on a Ferris Wheel. For 10 points each:

[10] Name this home country of an author who repeats tropes like cooking spaghetti and missing cats in his novels like *The Wind-Up Bird Chronicle* and *Kafka on the Shore*. That author from this country is Haruki Murakami.

ANSWER: **Japan** [or **Nihon** or **Nippon**; the leadin references *Sputnik Sweetheart*, by Murakami]

[10] In this lengthy Murakami novel, which is often split up into 3 books, Aomame finds herself in a parallel world that has two moons. The novel *Air Chrysalis* parallels various events in this novel.

ANSWER: **IQ84** ("one-Q-eight-four" or "one-Q-eighty-four") [**Ichī-Kyū-Hachi-Yon**]

[10] This most recent Murakami novel is titled for a painting by Tomohiko, which depicts a scene from the Don Giovanni story.

ANSWER: **Killing Commendatore** [or **Kishidanchō-goroshi**] <VS, Long Fiction>

16. Answer some questions about the physics of the universe right after the Big Bang. For 10 points each:

[10] At about  $10^{-36}$  ["ten to the negative 36"] seconds after the Big Bang occurred, our known universe expanded rapidly in a process known by this term. This process can explain why particles at one end of the universe behave like particles at the other end, thereby solving the horizon problem.

ANSWER: cosmic **inflation**

[10] Milliseconds after the Big Bang, the universe consisted of this soup of molecules at about 2 times  $10^{12}$  ["ten to the twelve"] Kelvin. Experiments at ATLAS and ALICE have been trying to recreate this substance through heavy-ion collisions.

ANSWER: **quark-gluon plasma** [or **QGP**]

[10] One problem that scientists are still dealing with is why the Big Bang produced more matter than this kind of substance. This substance has the same mass but opposite charge when compared to ordinary matter.

ANSWER: **antimatter** [accept **antibaryons**] <HP, Physics>

17. Kenneth Noland produced many circular paintings in this style. For 10 points each:

[10] Name this style used by Helen Frankenthaler in works like *The Bay*. Barnett Newman used thin vertical lines called “zips” when he painted in this style.

ANSWER: **color field** [prompt on, BUT DO NOT OTHERWISE REVEAL, abstract expressionism]

[10] Color field is closely related to this art movement that began in New York. Jackson Pollock, a member of this art movement, flung paint at the canvas to create paintings like *Lavender Mist* and *Autumn Rhythm*.

ANSWER: **abstract expressionism** [prompt on partial answer]

[10] Newman designed a statue called *Broken Obelisk* for an octagonal one of these buildings in Houston dedicated to Rothko. This type of building was chosen to commemorate Rothko in part because of the spirituality generally attributed to his paintings.

ANSWER: **chapel** <AMB, Visual Fine Arts>

18. A politician from this family leads the right-wing Fuerza Popular party. For 10 points each:

[10] Name this family. A president from this family was pardoned by Pedro Kuczynski [“koo-zin-ski”], despite using his Grupo Colima death squad to commit several massacres during his reign of terror.

ANSWER: **Fujimori** [accept Keiko Sofia **Fujimori** Higuchi or Alberto Fujimori **Fujimori**]

[10] The Fujimoris are powerful politicians from this country. The Tarata bombing took place in this country’s capital of Lima during the administration of Alberto Fujimori.

ANSWER: Republic of **Peru**

[10] This group perpetrated the Tarata bombing during the presidency of Alberto Fujimori. In addition to fighting the Peruvian government, this Maoist group led by Abimael Guzman frequently brawled with the MRTA as well.

ANSWER: **Shining Path** [accept **Sendero Luminoso**] <AN, World History>

19. This character explains that a gnat makes a buzzing sound because its butthole is shaped like a trumpet. For 10 points each:

[10] Name this character, a teacher. He dismisses Strepsiadesthe Thinkery in the play in which he appears.

ANSWER: **Socrates**

[10] Socrates is extensively mocked in this comedy, whose title characters are a group of wise goddesses. This play ends with the Thinkery getting burnt down.

ANSWER: *The **Clouds***

[10] *The Clouds* is by this Greek playwright. This playwright wrote a comedy in which Lysistrata leads a group of women in denying men sex to protest the Peloponnesian War.

ANSWER: **Aristophanes** <ML, Drama>

20. According to its originator, this concept is necessary for one to wish for eternal recurrence. For 10 points each:

[10] Give this Latin term from philosophy that implies wanting “nothing to be different, not forward, not backward, not in all eternity.”

ANSWER: **amor fati** [or **love of fate**]

[10] The ideas of eternal recurrence and *amor fati* was proposed by this German philosopher. He wrote about how “God is dead” in his book *Thus Spoke Zarathustra*.

ANSWER: Friedrich **Nietzsche**

[10] Nietzsche introduced the aforementioned ideas of “God is dead” and *amor fati* in this work. This book’s title refers to the art of writing poetry.

ANSWER: **The Gay Science** [or **The Joyful Wisdom**; or **Die fröhliche Wissenschaft**] <AMB, Philosophy>