

ATHENA (Academic Tournament for High School Education N' Achievement) II

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PACKET 9 TOSSUPS

1. A song by this artist compares the title entity to “the holes in your heart” and “the folds of your brain” and features the artist Grimes. In one of this artist’s music videos, this artist plays an asylum patient who is able to walk through walls. A concept film for one of this artist’s albums is subtitled “An Emotion Picture” and follows the android Jane 57821. This person played Juan’s girlfriend Teresa in the film (*) *Moonlight* and NASA engineer Mary Jackson in *Hidden Figures*. For ten points, name this actress and singer-songwriter behind the single “Tightrope” and the science fiction-inspired albums *The Electric Lady* and *Dirty Computer*.

ANSWER: Janelle Monae Robinson (accept either underlined name) <KK>

2. A director with this surname, the second-ever woman to win Cannes' Best Director award, depicted Bob Harris meeting Charlotte at a Tokyo hotel in *Lost in Translation*. The making of a film by a director of this name was documented in *Hearts of Darkness*. A man with this name juxtaposed a man being shot through his glasses while receiving a massage with an infant baptism scene. That father of Sofia won his first *Palme d'or* for *The* (*) *Conversation*, and another for a film in which a water buffalo is slaughtered as Willard slips into the quarters of Colonel Kurtz to kill him. For 10 points, give this surname of the director of *Apocalypse Now* and *The Godfather*.

ANSWER: Coppola [specifically, accept Sofia, Eleanor, or Francis (Ford) Coppola] <CS>

3. A teacher of this tradition who wrote a prayer asking "if I worship You because of Fear of Hell, then burn me in Hell" was named Rabia. Books like *The Path to [this tradition]* and *Revival of the Religious Sciences* popularizing this tradition were written by the Asharite al-Ghazali. Teachers in this tradition are termed *wadi*. The Mevlevi order of this tradition practices *sama*, a communal form of (*) *dhikr*. Ibn al-Arabi described how members of this tradition sought a "mystical marriage" with God, for which love for the Prophet is seen as prerequisite. Some dervishes in this tradition whirl to remember Allah. For 10 points, name this mystical Islamic tradition associated with the poet Rumi.

ANSWER: Sufism [prompt on Islam; prompt on Sunni Islam] <CS; Religion and Mythology>

4. This substance can form draas. Animals that live in areas composed of this substance are called psammophiles, and it is studied by arenophiles. At certain humidities, this material might "bark" or "sing" when walked upon. Bagnold's formula describes the mass movement of this material through saltation. Areas dominated by this material are called (*) ergs. This material lends its name to a colloidal hydrogel that it forms with salt water, which makes it spongy and no longer able to support weight. This material is coarser than silt but finer than gravel, and this substance's main constituent is silicon dioxide. For 10 points, name this material that accumulates into dunes.

ANSWER: sand <CS>

5. A ruler of this dynasty advised monarchs to visit all of their kingdoms every three years in his *Basilikon Doron*. Another ruler of this dynasty began to favor Abigail Masham over Sarah Churchill due to political differences with the latter. The Rising of the North attempted to restore this house in a certain country's throne. That last monarch of this house oversaw the (*) Act of Union between England and Scotland. The Jacobite Risings attempted to put this house back on the English throne. For ten points, name this British house that included Queen Anne and Mary, Queen of Scots as well as two kings named James.

ANSWER: House of Stuart <KK>

6. Along with the histamine granules found in mast cells, this structure is one of few that is stained by hematoxylin, making it basophilic. Plasmogamy in fungi may result in multiple of these structures. This structure contains complexes known as Cajal bodies. The sieve tube cells of vascular tissue lack these, and they are notably absent in (*) erythrocytes. A common cloning procedure inserts one of these structures into a specially prepared egg cell. The disappearance of this structure's namesake "envelope" marks the end of prophase. For ten points, identify this organelle which houses DNA.

ANSWER: Nucleus <JP>

7. In a story by this author, Corvick pursues the secret of Hugh Vereker's latest novel, which is compared to "a complex figure in a Persian carpet." In one work by this author, the narrator bargains with Miss Tita and Juliana Bourdreau for the title documents, which were written by a recently-deceased poet. This author of *The Aspern Papers* wrote a work in which the title character walks through the (*) Colosseum and catches a fatal case of Roman fever. In another work by this author, Flora is scolded by her governess for talking to the ghost of Miss Jessel. For ten points, name this American author of novellas like *Daisy Miller* and *The Turn of the Screw*.

ANSWER: Henry James <KK+ TDG; American Literature>

8. This person raised funds through the Mutual Film Company, which dictated that this person's battles should be fought in daylight and reenacted if necessary. A general who defeated this leader at Celaya most likely approved this leader's assassination to allow Plutarco Calles to become president and was named Alvaro Obregón. This man led numerous (*) "border raids" to supply an army, which culminated in the Battle of Columbus. That battle made this leader the target of a man nicknamed "Black Jack." For 10 points, name this Mexican bandit who was pursued by John Pershing but ultimately evaded capture.

ANSWER: Francisco "Pancho" Villa (or Jose Doroteo Arango Arambula) <KK>

9. Poetry in this form was produced by Bacchylides and his father Simonides. The author of one poem in this form brags of making a "monument more lasting than bronze." Abraham Cowley popularized an author of these poems classically divided into a strophe, epistrophe, and epode. That author wrote books of Nemean, Isthmian, Pythian, and Olympic examples of these poems. The idea that "to die for one's country" is (*) "sweet and fitting," or "dulce et decorum," appears in one of these poems, another of which says to "seize the day." Pindar wrote "Victory" types of these poems for athletes, and Horace wrote four books of them. For 10 points, name this form of a Keats poem "on a Grecian Urn."

ANSWER: odes <CS; Ancient and World Literature>

10. **Men of this culture would "sleep crawl" into the house of young women they were interested in. A woman named Fa'amua from whom primary-source information about this culture was gathered confessed to joking about it all after the fact. Chicken blood was used to get around the taupou system of this culture, which publically broke the (*) hymen before weddings. "The Making and Unmaking of an Anthropological Myth" is the subtitle of a Derek Freeman book criticizing the most famous researcher of this culture. For 10 points, *The Coming of Age in* what culture was the subject of Margaret Mead's most famous work?**

ANSWER: Samoa [accept Samoans]

11. **The phenomenon was first proposed by Ida Noddack in her paper "On Element 93". Leona Woods helped solve the xenon poisoning problem encountered during this process with John Wheeler. Otto Frisch wrote a memorandum with Rudolf Peierls concerning this process that first calculated the size of its necessary (*) critical mass. His aunt, Lise Meitner, came up with an explanation for this process after observing barium in a sample of uranium bombarded by neutrons. For ten points, name this process in which a nucleus is split up into smaller nuclei.**

ANSWER: nuclear fission <KK>

12. **An event in this city was motivated by Proposition 14, which overturned the Rumford Act. That event started when a fight broke out in this city after Lee Minikus pulled over Marquette Frye for reckless driving. An "effect" named for this city's longest serving mayor refers to inaccurate polling responses when a white candidate runs against a non-white candidate. That mayor, (*) Tom Bradley, presided over an event in this city whose namesake stated "can't we all just get along?" after being pulled over and beaten by four police officers. For 10 points, name this location of the Watts riots and the Rodney King riots, the largest city in California.**

ANSWER: Los Angeles, California <KK>

13. **This country was home to the experimental "Scandal Concert," which ended prematurely due to a riot. A composer from this country wrote the characteristically short *Concerto for Nine Instruments*, and another wrote a violin concerto "To the memory of an angel" for Manon Gropius. A composer from here wrote a piece rejected for using a "nonexistent" inverted ninth chord, which is set to a Richard Dehmel poem about a wife (*) pregnant with another man's child. That composer used Sprechstimme in his *Gurrelieder* and *Pierrot Lunaire*. For 10 points, name this country home to Arnold Schoenberg, who was the founder of the Second Viennese School.**

ANSWER: Austria

14. **During this war, the "British Hotel," where sick soldiers were quartered and fed, was cofounded by the Jamaican immigrant Mary Seacole. Another figure in this war worked at the Selimiye Barracks in Scutari, and developed a pie graph known as the coxcomb to show causes of death. Isembard Kingdom Brunel built a prefabricated (*) hospital at Renkioi during this war to aid that woman, who was known as the "Lady of the Lamp" and aided the wounded after the Siege of Sevastopol and the Battle of Balaclava. For 10 points, name this war that saw nurses such as Florence Nightingale heal soldiers as they fought over a namesake Russian peninsula.**

ANSWER: Crimean War <KK>

15. **This place previously contained a building made of beeswax and feathers. Plutarch wrote an essay about a large "E" inscribed at this location, whose 147 namesake maxims include the inscription "know thyself." Strands of unwoven wool were offered here to a stone anointed with oil, which Cronus once swallowed. Visitors to this place in Phocis washed in its (*) Castalian Spring . This site was home to the Omphalos, considered the "navel" of the world. The dedicatee of this place on the southwestern slope of Mount Parnassus used darts to kill Python here. For 10 points, name this Greek site home to Pythia, a priestess of Apollo also called the Oracle.**

ANSWER: **Delphi** [Delf-"EYE" or Del-"FEE"] [prompt on "Hyperborea" by asking for the other place that temple was; prompt on "Phocis" and "Omphalos" before mention]

16. **A poem in this language whose third stanza opens "I woke up with this marble head in my hands" is titled "Mythistorema." The speaker decides that the title group of another poem in this language "were a kind of solution" after asking "What are we waiting for, assembled in the forum?" The "wine-dark sea" and "rosy-fingered dawn" were epithets used in this language, which was used to write "Waiting for the Barbarians." The exemplary (*) "Nine Lyric Poets" who wrote in this language wrote in elegiac and iambic meters, and English meters get their names from this language. It was used in *Works and Days* and the *Theogony*. For 10 points, name this language used by Hesiod and Homer.**

ANSWER: **Greek** [accept Ancient **Greek** or Modern **Greek**] <CS; European Literature>

17. **The left side of one work in this form contains St. Sebastian below a painting of two angels, while on the right a demon in a window bothers St. Anthony. Jef Vanderveken copied a portion of another work of this type after its theft. A monastery that helped plague victims commissioned one of them from (*) Matthias Grunewald in Isenheim. Fourteen angels surround a lamb bleeding into a golden chalice in another piece in this form created with the help of the artist's brother Hubert for a church in Ghent. For 10 points, name this type of artwork placed on or behind a central table in a church.**

ANSWER: **altarpieces** [prompt on "polyptych" or "triptych"; prompt on "crucifixion" before "Vanderveken," asking for the for the type of painting those crucifixions are found in] [Jef Vanderveken copied *The Just Judges* from the Ghent Altarpiece] <CS>

18. **A man in this novel who gives a woman the last of his apples scolds her for getting letters from the postal office in the rain. A riddle, or "charade," decoded as the word "courtship" is sent by a man who marries Miss Hawkins in this novel. That man, Mr. Elton, admires a watercolour portrait of the protagonist's friend in this work where (*) Jane Fairfax and Frank Churchill are secretly engaged. Robert Martin marries Harriet Smith in this work where the protagonist of this novel realizes she is in love with Mr. Knightley. For ten points, name this Jane Austen novel titled for a matchmaking heroine.**

ANSWER: **Emma** <CM; British Literature>

19. **Mayer's relation states that the difference between two types of this quantity equals the ideal gas constant. A model that accurately predicts the value of this quantity at low temperatures models solids as phonons in a box. This quantity equals 3 times the ideal gas constant for a solid according to the (*) Dulong-Petit law, and it is defined as the derivative of enthalpy with respect to temperature. Hydrogen bonds give water an unusually high value of 4.18 Joules per Kelvin for this quantity. For ten points, name this quantity, the thermal energy needed to raise the temperature of a material.**

ANSWER: specific **heat capacity** (accept **specific heat**) <KK>

20. **Jim Woodman theorized that features in this country were built with primitive hot air balloons; those features were discovered by Paul Kosok and Maria Reiche. The Band of Holes appears on a plateau in this country. A culture in this country built the site of Cahuachi. The southmost province of its Ica region is named for that people, who borrowed Paracas motifs to make a spiral-tailed monkey, a (*) spider's legs in two groups of four, along with the "Hummingbird," and "Condor" made with white rocks in it; Greenpeace damaged those features here in 2014. For 10 points, the Nazca people made namesake "lines" in the desert of what country with capital Lima?**

ANSWER: **Peru** <CS; Geography>

PACKET 9 BONUSSES

1. Answer the following about causes of the English Civil War, for 10 points each:

[10] The English Civil War was a rebellion against this Stuart king, who succeeded his father James I. This king ruled without a Parliament during the Eleven Years' Tyranny.

ANSWER: **Charles I**

[10] One cause of discontent against Charles I was this typically wartime tax, which he decided to levy during peacetime. Charles also unusually extended this tax to inland counties, further angering the populace.

ANSWER: **ship money**

[10] This body, which was called to finance the Bishops War, was the driving force behind the English Civil War. This body's Self-denying Ordinance separated legislative and military positions, creating the New Model Army.

ANSWER: **Long Parliament** (prompt on "Parliament" alone) <KK; British History>

2. A note from this object asks for "Macaroni Pastitsio. Ormitha Macarounada," which a character claims are Greek dishes. For ten points each:

[10] Name this object which, in the play it titles, delivers several orders through notes to the hitmen Ben and Gus.

ANSWER: the **dumb waiter**

[10] *The Dumb Waiter* is a play by this British author known for his "comedies of menace." This playwright also wrote about Goldberg and McCann's visit to Stanley Weber in *The Birthday Party*.

ANSWER: Harold **Pinter**

[10] Another motif throughout *The Dumb Waiter* is this object, which is always "off left" in the stage directions and works on delay. This malfunctioning object often interrupts the dialogue.

ANSWER: the **toilet** [accept the **lavatory** or equivalents] <CM; British Literature>

3. Passport controls have been abolished in the Schengen Area, which is closely associated with this alliance. For ten points each,

[10] Name this political alliance of 28 states who share a common currency. This alliance was established to create lasting peace on its namesake continent.

ANSWER: **European Union** (accept **EU**)

[10] The European Union was established by this treaty along with the Treaty of Rome. This treaty was amended by the Treaty of Lisbon, which allowed member states to leave and strengthened the European Parliament.

ANSWER: **Maastricht** Treaty (accept Treaty of **Maastricht**)

[10] The idea of a "European Union" was conceived by a man from this country in his namesake "Declaration". This country temporarily left the European Economic Community after losing veto power in the Empty Chair Crisis.

ANSWER: **France** <KK; European History>

4. The arrangement of this organism's flowers is regulated by the SUPERMAN gene. For 10 points each:

[10] Name this model plant in the mustard family. It was the first plant to have its genome sequenced.

ANSWER: **Arabidopsis** thaliana [or A. Thaliana; accept thale cress]

[10] The ABC model of flower development in this group of plants was based on research on *Arabidopsis*. Darwin was frustrated by the "abominable mystery" of the evolution of these flowering plants.

ANSWER: **angiosperms** [or **Angiospermae**; accept **Magnoliophyta**; accept **magnoliophytes**]

[10] The name "angiosperm" comes from the fact that those plants produce these things in an enclosed space, whereas they are "naked" in gymnosperms. Before they are fertilized, these are called ovules, and the process by which they become a new plant is called germination.

ANSWER: **seeds** <CS; Biology>

5. In this work, a woman who falls from the moon gives birth to a woman who is seduced by the West Wind, who then gives birth to the title hero. For ten points each:

[10] Name this American epic which chronicles the adventures of the title hero and his lover, Minnehaha.

ANSWER: The ***Song of Hiawatha***

[10] *The Song of Hiawatha* was written by this Fireside Poet, the first American to translate *The Divine Comedy*.

ANSWER: Henry Wadsworth **Longfellow**

[10] Longfellow wrote *The Song of Hiawatha* in this four-footed meter, which he borrowed from the *Kalevala*.

Lewis Carroll mocked the “easy jingle” of this meter seen in the recurring line “By the shore of Big-Sea-Water.”

ANSWER: **trochaic tetrameter** [prompt on partial or “trochee”] <CM; American Literature>

6. In one of these stories, Fujio and Kiyoko’s lanterns shine over each other’s hearts as Fujio hands her a bell cricket. For 10 points each:

[10] Name these very short stories by Yasunari Kawabata, the most famous of which concerns a man who realizes a drum-playing girl he fell in love with is much younger than first thought during a trip in Izu.

ANSWER: ***Palm-of-the-Hand Stories*** [those stories are “The Grasshopper and the Bell Cricket” and “The Dancing Girl of Izu”]

[10] Because of their brevity, Yasunari Kawabata’s *Palm-of-the-Hand Stories* are often compared to this Japanese poetic form. “The Great Four” masters of this poetic form were Issa, Buson, Shiki, and Basho.

ANSWER: **haiku** [or **hokku**]

[10] Kawabata also wrote this novel, which chronicles the love affair of Shimamura and the geisha Komako in a hot spring town.

ANSWER: ***Snow Country*** <CS; Ancient and World Literature>

7. This institution was led by Tomas de Torquemada, and targeted Marranos and Mariscos. For 10 points each:

[10] Name this institution founded by Ferdinand and Isabella that ordered the expulsion of Jews from its country under the Alhambra Decree.

ANSWER: **Spanish Inquisition**

[10] This comedy group’s series of sketches based on the Spanish Inquisition is the origin of the often quoted line “Nobody expects the Spanish Inquisition!”

ANSWER: **Monty Python**

[10] This American-born member of Monty Python started out as the group’s as an animator, after which he became an actor and the director of the 1985 dystopian film *Brazil*.

ANSWER: Terry **Gilliam** <NR; Popular Culture>

8. While Meret Oppenheim was wearing a bracelet covered in this stuff, Picasso suggested that anything could be covered in it, leading to her most famous artwork. For 10 points each:

[10] Name this substance which Meret Oppenheim covered a teacup, saucer, and spoon with to make her *Object*. George Caleb Bingham depicted workers of this material in his most famous painting.

ANSWER: **fur** [accept *Object: Breakfast in Fur*; accept *Fur Traders Descending the Missouri*]

[10] Meret Oppenheim, Leonora Carrington, Dorothea Tanning, and Leonor Fini were female members of this art movement whose manifesto was written by Andre Breton. It sought to represent the logic of dreams and the unconscious.

ANSWER: **Surrealism**

[10] Meret Oppenheim sometimes posed nude for the photographer Man Ray, who photographed this artist as his female alter-ego Rose Selavy. He made a lot of readymades like *Bicycle Wheel*.

ANSWER: Marcel **Duchamp** <CS; Fine Arts Visual>

9. One leader with this surname built a school at Purple Mountain for children of dead soldiers, or “warphans”. For ten points each,

[10] Give this surname shared by sisters who were the wives of Sun Yat-Sen and Chiang-Kai Shek. One leader with this name was jointly appointed by Dong Biwu as vice president after Zhu De stepped down.

ANSWER: **Soong** (accept **Soong** May-Ling and **Soong** Ching-Ling)

[10] The Soong sisters were originally part of this Chinese political party, which was exiled to Taiwan after their defeat by the Communists. However, Soong Ching-Ling broke with her family to support the Communists instead.

ANSWER: **Kuomintang** (accept **KMT**)

[10] Another former Chinese First Lady, Jiang Qing, was in charge of this political faction that helped drive the Cultural Revolution. This group controlled China after the death of Mao until they were arrested by Hua Guofeng.

ANSWER: **Gang of Four** <KK; World History>

10. In one poem from this collection, a woman’s hair is described as an “ebony ocean” which “holds a dazzling dream.” For 10 points each:

[10] Name this collection of French poetry which includes works such as “The Vampire” and “The Albatross.” It was dedicated to Theophile Gautier.

ANSWER: ***Les Fleurs du Mal*** [accept ***The Flowers of Evil***]

[10] This friend of Gautier was part of a club of French authors who smoked hashish, which also included Alexandre Dumas and Victor Hugo. This man wrote *Les fleurs du mal*.

ANSWER: Charles **Baudelaire**

[10] This woman, a Haitian-French actress who inspired poems such as “The Vampire,” was the lover of Charles Baudelaire.

ANSWER: Jeanne **Duval** <CS + CM; European Literature>

11. Answer the following related to the Haggadah, for 10 points each:

[10] The Haggadah describes this number of sons with varying degrees of wisdom. It includes this number of questions, which the youngest child is instructed to ask at the seder.

ANSWER: **four**

[10] The Haggadah describes how to go about the Passover seder, which celebrates God freeing the Israelites from slavery in Egypt in this Bible book. Eddie Glaude investigated how this book affected 19th-century black Americans' view of their enslavement, as seen in spirituals like "Go Down, Moses."

ANSWER: Book of **Exodus**

[10] A "sandwich" of bitter herbs between two pieces of matzah eaten during the seder is named for this man, who often feuded with Shammai. He also lends his name to a campus organization which, unlike Chabad, has opened its doors to non-Jews.

ANSWER: **Hillel** the Elder <CS; Religion and Mythology>

12. Name some prominent women in Ancient Greek thought. For 10 points each:

[10] Name this mathematician who is believed to have edited Ptolemy's *Almagest*, and later became icon of the women's rights movement.

ANSWER: **Hypatia** of Alexandria

[10] This woman was the wife of Socrates, whose argumentative spirit Socrates appreciated, according to Xenophon's *Memorabilia*.

ANSWER: **Xanthippe**

[10] Hipparchia and her husband Crates were members of this school of thought that was founded by Diogenes and encouraged a form as asceticism.

ANSWER: **Cynicism** or **Cynic** <NR; Philosophy and Social Science>

13. This composer's liturgical drama *Ordo Virtutum* is considered the oldest known morality play. For 10 points each:

[10] Name this medieval abbess and mystic who composed the *Symphonia armoniae celestium revelationum*, sometimes considered the first female composer of Western art music.

ANSWER: **Hildegard** von Bingen [or **Hildegard** of Bingen]

[10] Hildegard's music is often compared to Gregorian chant, because both contain this many melodic lines. This is the number of the Brahms's symphony called "Beethoven's Tenth."

ANSWER: **one** [accept **monophonic**]

[10] Like Hermannus Connatus and Johannes Brahms, Hildegard lived in this modern-day country. Bach wrote his Brandenburg Concertos for a margrave in this modern country.

ANSWER: **Germany** [accept **Deutschland**] <CS; Fine Arts Auditory>

14. This field's twelve principles include maximizing atom economy and designing chemical products for degradation. For 10 points each:

[10] Name this area of chemistry whose principles were outlined by Paul Anastas and John Warner. It is focused on environmentally friendly chemical practices and products.

ANSWER: **green** chemistry [or **sustainable** chemistry]

[10] A green alternative for producing this compound is the Peroxide Process. This compound with chemical formula N_2H_4 was first widely used in rocket fuels, but is now mostly used as a foaming agent to produce polymer foams.

ANSWER: **hydrazine** [or **diamidogen**]

[10] After Dow Chemical's use of the supercritical form of this gas as a blowing agent to form polystyrene instead of CFCs, it became a popular green catalyst. The uptake of this greenhouse gas is the leading cause of ocean acidification.

ANSWER: **carbon dioxide** [or **CO₂**] <CS; Chemistry>

15. A politician from this country was told to “stop shagging men” in a debate over arming women with tasers to prevent sexual assaults. For 10 points each:

[10] Name this country where firearms have been highly regulated since the 1996 Port Arthur Massacre. It is home to the far-right One Nation party, though its main two parties are the Liberal and Labour Parties.

ANSWER: **Australia**

[10] This former Australian PM responded to opposition Tony Abbott in a talk since dubbed the “Misogyny Speech,” which went viral in 2012.

ANSWER: Julia **Gillard**

[10] Julia Gillard has since become the CEO of a nonprofit named “beyond” this color, which addresses issues related to anxiety, depression, and suicide. This primary color typically symbolizes left-wing parties.

ANSWER: **blue** <CS; Current Events>

16. The Thesmophoria was only celebrated by these people. For 10 points each:

[10] Name this type of person, the only members of a group led by Antiope and descended from Ares and Harmonia.

ANSWER: **women**

[10] The Thesmophoria centered on this goddess and her daughter. The Eleusinian Mysteries centered on this deity and her daughter Persephone, who were both agriculture deities.

ANSWER: **Demeter** [or **Ceres**]

[10] This queen of the Amazons was slain by Achilles, who right after fell in love with her corpse. She entered the Trojan War to die honourably after accidentally killing Hippolyta struck her with grief.

ANSWER: **Penthesilea** <CS; Religion and Mythology>

17. Unlike many of the wealthy in colonial America, this person did not own slaves. For 10 points each,
[10] Name this woman who sent over 1,000 letters to her husband John Adams discussing domestic and foreign political issues. She was the first First Lady to live in the White House.

ANSWER: **Abigail** Adams

[10] This Abigail Adams quote urges her husband to recognize a certain group, or else it would be “determined to foment a Rebellion”. This feminist quote is followed by the claim that “all men would be tyrants if they could”.

ANSWER: “**Remember the Ladies**”

[10] Abigail Adams convinced her husband to pass these bills, which curtailed criticism of the federal government and gave the president more power to deport non-citizens. They enabled the arrest of Congressman Matthew Lyon.

ANSWER: **Alien and Sedition Acts** <KK; American History>

18. Georgian danseur Vakh-tang Chabukiani created a large portion of the male repertoire of these dances. For 10 points each:

[10] Give this term for a solo dance. In a grand pas de deux, both the ballerina and danseur will perform one.

ANSWER: **variation** [accept **pas seul**]

[10] Ballerinas occasionally dance *en pointe*, meaning they are standing with this portion of the foot on the floor.

ANSWER: **toes**

[10] Everyone aside from the ballerinas and danseurs makes up this group led by a coryphee ["CORE"-uh-fay]. The French term is required.

ANSWER: **corps** ["core"] de ballet [prompt on "body"; coryphee and corps are etymologically unrelated, for anyone who asks] <CS; Fine Arts Other>

19. The Weierstrass M-test tests for the uniform and absolute varieties of this property. For 10 points each:

[10] Name this property which is notably not possessed by the harmonic series. The sequence of partial sums of a series with this property will tend to a limit.

ANSWER: **convergence**

[10] Sequences with this property that are also bounded must converge. If a function is entirely non-increasing or entirely non-decreasing, it has this property.

ANSWER: **monotone** [or **monotonic**]

[10] D'Alembert's criterion is another name for a test that uses one of these things to determine if a series diverges or is absolutely convergent. Any number that can be written as a quotient of two integers belongs to a set of numbers named for these things.

ANSWER: **ratio** [accept **rational** numbers] <CS; Science Other>

20. The double pendulum and logistic map both exhibit this phenomenon. For 10 points each:

[10] Name this phenomenon that describes systems that are deterministic but sensitive to initial conditions. It is often explained with reference to the butterfly effect.

ANSWER: **chaos** [or word forms like **chaotic**]

[10] All dynamical systems evolve towards one of these sets of values. Edward Lorenz names one for a chaotic system with a graph that looks like butterfly wings. Lorenz's one of these has fractal dimension, which leads to its being termed a "strange" one.

ANSWER: (strange) **attractor**

[10] The "swinging" version of this system is also notably chaotic. This system consists of two weights on opposite ends of a ideal massless string hung over a frictionless pulley.

ANSWER: **Atwood's machine** <CS; Physics>