

PRISON BOWL IX

Questions written and edited by Hunter College High School (Gilad Avrahami, Sam Brochin, Christopher Chilton, David Godovich, Lily Goldberg, Ada-Marie Gutierrez, Diane Hwangpo, Joshua Kwan, Chloe Levine, Alice Lin, Brian Lu, Helen Lyons, Daniel Ma, Albert Tai, Luke Tierney, and Rachel Yang), with contributions from Rohan Nag and Jeff Xie

Round 11

Tossups

1. This building was heavily influenced by Frank Lloyd Wright's hypothetical building, *The Illinois*. It boasts the world's largest choreographed fountain system, whose musical repertoire includes the *Mission Impossible* theme song. This building's footprint was modeled after the desert flower *Hymenocallis*, leading to its Y-shaped base. Its 27 setbacks are reminiscent of the spiral minarets of Islamic architecture. For ten points, identify this building in downtown Dubai, currently the tallest man-made structure in the world.
ANSWER: **Burj Khalifa** [accept **Burj Dubai** before mention of Dubai; do not accept "Burj Al-Arab"] <CC>

2. This modern country's province of Ostrobothnia exported "Stockholm tar" under the policies of the "Caps". It's not Sweden, but troops from this country called Hakkapeliitta were at the battle of Breitenfeld. This nation suffered the Greater Wrath under Russian occupation during the Great Northern War. This was the first European country to allow women to vote and run for Parliament. The Grand Duchy of this nation was created under Alexander I of Russia after Sweden lost control of it. This nation and Russia fought the Winter War. For 10 points, name this Scandinavian country with its capital at Helsinki.
ANSWER: **Finland** <LT>

3. This element frequently participates in redox reactions in catalytic converters, and it is the central atom in Zeise's salt. With small quantities of rhodium, this element serves as a catalyst in a process that converts ammonia into nitric acid, named for Ostwald. The international prototype kilogram is mostly comprised of this element. It serves as a reference for the thermodynamic scale of oxidation-reduction potentials, the standard hydrogen electrode. The least reactive metal, this element names a group of six transition metals, which contains palladium, iridium, and osmium. For 10 points, name this element symbolized Pt.
ANSWER: **platinum** (accept **Pt** before mention) <AT>

4. An Andante in C for this instrument and orchestra was written by Mozart to replace the second movement of an earlier G major concerto for this instrument. A piece for this instrument featuring innovative key clicks was titled *Density 21.5*. Debussy's *Syrinx* was the first piece written for the Boehm variety of it. This instrument is the first to be introduced in Peter and the Wolf, and represents the bird. A theme starting on C sharp played by this instrument opens a symphonic poem by Claude Debussy, *Prelude to the Afternoon of a Faun*. For 10 points, name this reedless woodwind instrument, the lower cousin of the piccolo.
ANSWER: **flute** [do not accept or prompt on "piccolo"] <CL>

5. This deity prophesies that Zeus' son with Thetis will be greater than Zeus himself. One of his brothers whose name means "hindsight" caused this figure to play the trick at Mecone. He warns his son to build a chest in order to survive an impending flood; that son was Deucalion. This deity is blasted into an abyss by a lightning bolt in his namesake play by Aeschylus. This figure notably sided with the gods in the Titanomachy. Heracles frees him from the rock he is chained to, where an eagle pecks at his liver every day. For 10 points, name this creator of mankind in Greco-Roman mythology, who was punished for bringing humans fire.
ANSWER: **Prometheus** <JK>

6. In human experiments, D-T is the most common type of this process, and usually, tokamaks are used to allow this process to happen without damaging equipment. One type of this process occurs in protostars and stops the rise of temperature in them temporarily. This process is exothermic when the end product is Nickel-62, based on the mass defect produced as energy. The CNO cycle and the proton-proton chain use this process to combine elements in stars. For 10 points, name this process in which atoms are combined together to create energy, the opposite of fission.
ANSWER: **fusion** <DM>

7. In Catalonia, depictions of this event include a figure called a caganer, who defecates in the background. One account of this event describes Simeon and Anna's blessing of this event, and the Massacre of the Innocents occurred after this event. Eastern Orthodox Christians celebrate a fast, more commonly known as Advent, before this event. The Adoration of the Shepherds happened during this event, and gifts of frankincense, gold and myrrh were presented by the three Magi to a baby in a manger. For ten points, give the name for the birth of a certain Biblical figure, which occurred in Bethlehem and is celebrated on Christmas.
ANSWER: **Nativity** of Jesus Christ [accept **birth of Jesus** or similar, prompt on "Christmas" before read] <DG>

8. One work of this type features a tiny white cross-holding figure swooping in through a window. Another of these entities includes two sculptures of its donors painted much larger than its other figures. A portion of that work depicting Just Judges riding on horseback was stolen in 1934. In another example of this type of work, a man builds a mousetrap in the right-hand portion. One of these works features nude depictions of Adam and Eve in its upper left and upper right corners, as well as an *Adoration of the Mystic Lamb* section. Exemplified by the Merode and Ghent ones, for 10 points, identify this type of work placed behind their namesake place in a church.

ANSWER: altarpieces [prompt on altar or specific types of altarpieces like pala, diptych, triptych, or polyptych, accept Merode Altarpiece or Ghent Altarpiece before mention] <CL/AT>

9. In this novel, James Forster is fired when he brings shaving water two degrees too cold. Another episode features a mutiny on the *Henrietta*. The protagonist of this novel is arrested by Fix after he is mistaken for a bank robber. At the end of this book, Aouda, who was supposed to be sacrificed by suttee, marries the protagonist, who is accompanied by a man whose name means “goes everywhere.” At the beginning of this book, the protagonist argues to the Reform Club that a new railway section in India makes the title achievement, completed with Passepartout, possible. For 10 points, name this adventure novel by Jules Verne about Phineas Fogg’s circumnavigation of the globe.

ANSWER: *Around the World in Eighty Days* [accept *Le tour du monde en quatre-vingts jours*] <CL>

10. Nouns in this language are often produced by the reduplication of verbs, and verbs can agree with either the subject or the object. One notation for this language was created by William Stokoe, and it has been proposed that this language is a creole with a French version of the language as a superstrate. This language is thought to be derived from a version originating in Martha’s Vineyard, and the first school to use it was founded in Hartford by Thomas Gallaudet. Reciprocity is signified by using two hands for a one-handed sign in, for 10 points, what language used among the deaf in the United States?

ANSWER: American Sign Language [prompt on sign language]

11. In a set of 124 of these works by one writer, each one begins with “Seneca lucilio suo salutem” (“sen-a-KAH loo-SILL-ee-o SOO-oh sa-LOO-tem”) and ends with the word “Vale” (VAH-lay). Cicero wrote 35 books comprising these works, and a similar number of which are lost, many of which concern his depression during his exile at Thessalonica. Pliny the Younger described the eruption of Vesuvius in these works, in which he recounts the death of his uncle, Pliny the Elder, and requests advice from the Emperor Trajan about how to deal with the Christians. For 10 points, name this form of writing which includes those exchanged between Brutus and Cicero in common resentment of Julius Caesar.

ANSWER: letters [accept messages until mentioned] <GA>

12. This organization’s lawyer Walter White investigated the Elaine Riots. The 1918 “Close Ranks” editorial was published in this group’s magazine. Detroit’s housing system was the focus of this organization’s defense of Dr. Ossian Sweet. In 1950, this group won the case *Sweatt v. Painter* over two law schools’ admissions policies. This organization continues to issue the publication *The Crisis*. Ralph David Abernathy was first part of this group before he led the SCLC. This group, preceded by the Niagara Movement, organized the Montgomery bus boycotts. In 1954, this organization won *Brown v. Board*. For 10 points, name this organization founded by W.E.B. Du Bois and others.

ANSWER: NAACP [or the National Association for the Advancement of Colored People]

13. Buys-Ballot’s law describes objects in response to this phenomenon. Objects will feel lighter or heavier as a result of the Eotvos effect, which is caused by it. Velocity is divided by the product of this phenomenon’s namesake parameter and the length scale to derive the Rossby number, which measures the prevalence of this effect. This effect causes precession in Foucault’s pendulum, and causes the deflection of moving objects in a rotating reference frame. For 10 points, name this effect that causes cyclones in different hemispheres to rotate in different directions.

ANSWER: coriolis effect (accept coriolis forces) <AT>

14. Domingo Mercante made a housing plan for this city before resigning as governor. Cipriano Reyes was detained in a hospital-turned-torture-chamber in this city. Crowds in this city waiting for a man who had declared that “the spilled blood will not be negotiated” were fired upon at an airport in the Ezeiza massacre. This city was also the first capital of the Viceroyalty of the Rio de la Plata. The Casa Rosada is located in this city. Atilio Lopez was assassinated here during the Dirty War. The Evita City development is located south of this city and was named for the wife of President Juan Perón. For 10 points, name this Argentine capital.

ANSWER: Buenos Aires <CL/RN>

15. One poem by this man is “The Fragment,” although its title was later changed to “An Inscription upon the Entrance to a Wood.” The first published work by this man was “The Embargo; or, Sketches of the Time.” Thomas Holley Chivers accused this man of “[stealing his most famous poem] *line by line* from the Spanish.” That poem by this man mentions “The innumerable caravan, which moves / To that mysterious realm,” and it opens with the lines, “To him who in the love of Nature holds / Communion with her visible forms, she speaks.” For 10 points, name this long-time editor of the *New York Evening Post* and poet of “Thanatopsis.”

ANSWER: William Cullen Bryant <CL>

16. The Tumen river forms the only border between this country and one neighbor. It's not Germany, but the historical capital of Königsberg is now in this country. A canal in this country connects Lake Onega with the Northern Sea Route, connecting the Pacific Ocean to the Barents Sea, which is projected to rapidly grow in use due to global warming. Entirely within this country, the Yenisey river originates at the oldest lake in the world, Lake Baikal. The Trans-Siberian Railway transverses, for 10 points, which country stretching between Europe and Asia with capital at Moscow?

ANSWER: Russian Federation (do not accept Soviet Union or USSR)

17. According to the Vedantist Swami Vivekananda, the "very words" naming this concept "are a contradiction." Daniel Dennett's *Elbow Room* is subtitled *The Varieties of this concept Worth Wanting*, and was based on his *John Locke Lectures*. Schopenhauer said that phenomena do not have this concept and wrote an essay titled for it which argues that "in any given moment of your life," only one thing is done. Incompatibilism, which addresses the dilemma of determinism, says that this concept is incompatible with the idea that there is only one possible course of action. For 10 points, name this two-word term for the ability to act contrary to necessity or fate.

ANSWER: free will [prompt on descriptions and equivalents; prompt on will or freedom] <CL>

18. One poem by this figure titled "On Monsieur's Departure" contains the line "I love, and yet am forced to seem to hate" and may have been written about the Duke of Anjou. One poem about this figure ends with the line "Her love hath end; my woe must ever last." One allegory for this figure is named Belphebe, while another has a Court of Pride to hide a dungeon and is named Lucifera. In that work, another allegory for this figure is named Gloriana, and that work is Spenser's *The Faerie Queene*, which is dedicated to her. Born and christened in Shakespeare's play *King Henry VIII*, for 10 points, name this queen of England often memorialized as "Good Queen Bess."

ANSWER: Queen Elizabeth I [prompt on "Elizabeth," accept Elizabeth Tudor] <CC>

19. De la Chapelle syndrome occurs when an SRY region is relocated onto one of these entities. These entities are associated with CT genes, and the absence of one of them causes a condition characterized by lymphedema and a webbed neck. The lyonization of these objects forms a Barr body. Other conditions caused by these entities include lower testosterone levels in humans and calico fur patterns in male cats. A lack of one of these entities in females causes Turner syndrome, while an extra one in males causes Klinefelter syndrome. For 10 points, name this sex chromosome that women possess two of, contrasted with the Y chromosome.

ANSWER: X chromosome (prompt on allosomes, accept X after end of question, prompt on chromosomes before mention) <AT>

20. Ramon Castilla was a noted liberador in this country, and under Castilla's rule slavery was abolished in this country. Guano played a significant role in this nation's economy until it was supplanted by nitrate production, an industry that was hurt following this non-Bolivian nation's defeat in the War of the Pacific at Chilean hands. This country's native leader Tupac Amaru rebelled in 1780 and Jose de San Martin became its Protector in 1821. This country became independent from Spain after the battle of Ayacucho. For 10 points, name this country once home to most of the Incan Empire including Machu Picchu, which has a capital at Lima.

ANSWER: Perú

TB. Lordosis behavior is triggered by this substance, and a precursor to it is produced in the theca interna. The replacement of serotonin (5-HT) neurons explains how this hormone suppresses binge eating. It's not progesterone, but this hormone is produced by granulosa cells and synthesized by aromatase. A spike in luteinizing hormone follows increased amounts of this hormone, which is responsible for the thickening of the endometrium. The E3 form of this derivative of cholesterol is produced in greater form during menopause. For 10 points, name this primary female sex hormone produced in the body, contrasted with testosterone.

ANSWER: estrogen <JK>

Bonuses

1. The protagonist of this book moves from Peshawar to Fremont, California. For 10 points each:

[10] Identify this 2003 best-selling novel about Amir and Hassan. In it, Assef mocks Amir for associating with a Hazara. Ali, Amir's father's servant, is killed by a landmine in this book, according to Rahim Khan.

ANSWER: *The Kite Runner*

[10] This author of *The Kite Runner* was a physician until its success led him to pursue writing full-time. His *A Thousand Splendid Suns* and *And the Mountains Echoed* were also best-sellers.

ANSWER: Khaled Hosseini

[10] Khaled Hosseini was born in this country and lived there until he was 11. Part I of *The Kite Runner* is set in this country's capital city of Kabul.

ANSWER: Islamic Republic of Afghanistan <CL>

2. One side of this equation features the natural log of the oxidizing agent's chemical activity over the reducing agent's chemical activity. For 10 points each:

[10] Name this equation that can be used to find the reduction potential of a half-cell.

ANSWER: **Nernst** equation

[10] Two half-cells combine to form a galvanic cell, which generates energy via the spontaneous occurrence of this type of reaction. These reactions involve either the gain or loss of electrons between chemical species.

ANSWER: **redox** reactions (prompt on **oxidation** reactions or **reduction** reactions)

[10] This primitive galvanic cell was comprised of copper and zinc disks, which respectively served as cathodes and anodes. A brine solution served as the electrolyte for this device.

ANSWER: **voltaic** pile (accept **voltaic** cell) <AT>

3. Supreme Court judge (and Hunter College High School alum) Elena Kagan analyzed this text in her journal article about draft-card burning and flag burning. For 10 points each:

[10] Name this text, relied on in *United States v. Alvarez* to strike down the Stolen Valor Act, which had prohibited false statements about military awards.

ANSWER: The **First Amendment** to the United States Constitution [prompt on **Bill of Rights**; prompt on U. S. **Constitution**]

[10] This former Supreme Court judge wrote a scathing dissent to *Lee v. Weisman*, which held that the establishment clause of the first amendment prevented religious figures from leading prayers in schools. He also wrote dissents in *Lawrence v. Texas* and *Obergefell v. Hodges*.

ANSWER: Antonin **Scalia**

[10] This plaintiff in this case, on which the Supreme Court issued a 4-4 split decision in March, claimed the mandatory payment of union dues violated her first amendment right of free speech. Observers have suggested that Scalia's death may have prevented a 5-4 decision eliminating mandatory union dues.

ANSWER: **Friedrichs** v. California Teachers Association <GA>

4. Give complete answers to these questions about famous unfinished works for 10 points each.

[10] George Gordon, Lord Byron, finished sixteen cantos of this epic poem before his death in 1824. Byron depicted the epic's title hero as someone easily seduced, rather than a compulsive womanizer.

ANSWER: "**Don Juan**" ("Don JOO-uhn")

[10] This prolific author left *The Mystery of Edwin Drood* unfinished when he died in 1870, dooming readers never to discover who murdered Edwin, though it was likely his opium-addicted uncle John Jasper.

ANSWER: Charles **Dickens**

[10] This author died of Addison's disease in 1817 before she could finish her novel *Sanditon*. Like another of her characters, Sir Thomas Bertram, several characters in *Sanditon* make their fortunes from their financial interests in the West Indies.

ANSWER: Jane **Austen** <CC>

5. One of these parties was led by Helmut Kohl, while another, the Popular Republican Movement, defeated Charles de Gaulle. For 10 points each:

[10] Name these centrist political parties that took power in France, Germany, and Italy during economic miracles. They promoted "social-market economies", and differ in some respects from their "Social" counterparts in Britain and Scandinavia.

ANSWER: **Christian Democrat** [prompt on "**Democratic**"]

[10] This nation was reunited with its eastern, Soviet counterpart under Chancellor Helmut Kohl of the Christian Democratic Union.

ANSWER: **West Germany** or the **Federal Republic of Germany**

[10] The Christian Democrats were led by Aldo Moro who was killed by the Red Brigades, in this heavily corrupt country. Enrico Berlinguer ("BUR-ling-er") created 'Euro-Communism' here.

ANSWER: **Italy**

6. Answer some questions about the prevalence of a certain number in mythology, for 10 points each:

[10] The nine realms of this world-tree include Muspelheim, a realm of fire, and Niflheim, a realm of ice. Odin hung for nine days and nights from this place to discover the runes.

Answer: **Yggdrasil**

[10] In his *Theogony*, Hesiod said that an anvil falling from the earth would take a total of nine days to reach this lowest part of the underworld, the place of eternal punishment which contains the Titans.

Answer: **Tartarus**

[10] A variation of Navratri, a nine day Hindu festival, celebrates not only the forms of Durga, but also those of Sarasvati and this goddess of wealth, who is the wife of Vishnu.

Answer: **Lakshmi** <JK>

7. This function first proposed by John Napier is the inverse of the exponential function. For 10 points:

[10] Give this operation that gives the exponent to which a base must be raised to produce a number. The “natural” form of this operation is often used to model continuous growth.

ANSWER: **logarithm**

[10] If the variable Z equals the natural log of x divided by the natural log of b, express Z in terms of a single function.

ANSWER: **log base b of x** (accept **log of x base b**, prompt on unclear answers like **log b x**)

[10] By using implicit differentiation, one can find this derivative of the natural logarithm of x. This function’s graph has asymptotes at x equals zero and y equals zero.

ANSWER: **one over x** (or **one divided by x**, accept clear equivalents) <AT>

8. This figure was held hostage in Thebes during his rule. For 10 points each:

[10] Name this basileus who developed the sarissa. He won the Battle of Chaeronea (“kay-RAW-knee-uh”) and created the League of Corinth.

ANSWER: **Philip II**; prompt on “Philip”

[10] At Chaeronea, Philip II defeated a coalition of these political entities, which were also called *poleis* (“po-LAY-is”). The Delian and Peloponnesian Leagues were groups of these political entities.

ANSWER: **city-states**

[10] This kingdom north of Greece was Philip II’s home. Its capital was Pella during the reigns of Philip II and Alexander the Great.

ANSWER: **Macedonia**

9. Some have claimed that Robert E. Lee’s face can be seen in the subject of this work’s hair. For 10 points:

[10] Name this marble statue located in the National Mall. It features a certain U.S. President sitting atop a circular ceremonial chair.

ANSWER: **Abraham Lincoln** (or the **statue of Lincoln at the Lincoln Memorial**, be lenient with accepting knowledge equivalents)

[10] This man, who frequently depicted scenes from American history, sculpted the aforementioned statue of Abraham Lincoln. He also created *Minuteman* in Concord, Massachusetts.

ANSWER: Daniel Chester **French**

[10] French famously created a seated bronze sculpture of this location’s founder. Other sculptures in this location include Henry Moore’s *Large Four Piece Reclining Figure* and a hyper-realistic rhinoceros.

ANSWER: **Harvard** University (accept **Harvard** College or **Harvard** Extension School, do not accept “Harford Community College”) <AT>

10. You are playing in a quiz bowl tournament, when you are asked to name a novel that you may or may not have read (depending on your desire to impress fellow bookstore patrons or the attractiveness of the bookseller). For 10 points:

[10] Name this novel, whose “even” passages are the first chapters of ten different novels that break off in the middle of the story. You may also recall that its protagonist investigates the ancient Cimmerian language with Ludmilla.

ANSWER: ***If on a winter’s night a traveler*** [accept ***Se una notte d’inverno un viaggiatore***]

[10] Now, you have been tasked to name this Italian author of *If on a winter’s night a traveler*. This postmodernist also wrote the *Our Ancestors* trilogy, along with a work featuring Marco Polo and Kublai Khan, *Invisible Cities*.

ANSWER: Italo **Calvino**

[10] *If on a winter’s night a traveler* and this bonus employ this literary technique, where the author directly addresses “you,” the reader.

ANSWER: **second-person** narrative <CL/AT>

11. The Ciompi (“chompy”) rebellion was led by workers in this industry, which was governed by the “putting-out system” in England. For 10 points each:

[10] Name this industry which shears sheep to make fabrics, which was also centered in Toulouse, France. The Etruscans first used this good to make white togas.

ANSWER: **wool** [prompt on **textiles** or **cloth**]

[10] The Ciompi were from Florence in this wool-gathering region in Italy, earlier home to the Etruscans. The de Medici family later made Florence into the “Grand Duchy of” this region.

ANSWER: **Tuscany**

[10] English sheep, which were favored for their thicker wool, were often exported to this region’s cities of Bruges, Ghent, and Ypres (“EE-pruh”).

ANSWER: **Flanders** [prompt on **Belgium**]

12. This collection contains poems such as “Owl,” which is thought to be written by the Duke of Zhou. Since the Qin Dynasty, its contents’ rhyme patterns have been analyzed in the study of Old Chinese phonology. For 10 points each:

[10] Name the oldest existing collection of Chinese poetry, which contains “Lesser” and “Major Court Hymns,” among other poems.

ANSWER: **Classic of Poetry** [accept **Shijing**, **Shih-ching**, **Book of Odes**, and **Book of Songs**; prompt on partial answer]

[10] One part of this large collection contained classic texts such as *Great Learning* and *Analects*, and the other part contained Chinese books such as *Classic of Poetry* and *Spring and Summer Annals*.

ANSWER: **Four Books** and **Five Classics** [prompt on partial answer]

[10] This Chinese man allegedly compiled the Four Books and Five Classics, and is sometimes thought to have written and edited parts of it. His teachings were compiled in the *Analects*.

ANSWER: **Confucius** [accept **Kongzi**] <RY>

13. The “Tequila crisis” of 1994 occurred in one signatory of this treaty but was stabilized by another signatory. For 10 points each:

[10] Name this trade agreement between the US, Canada, and Mexico, signed in 1992. It led to many maquiladoras being built in Mexico.

ANSWER: **NAFTA** or the **North American Free Trade Agreement**

[10] This President’s first term saw NAFTA ratified. This “New Democrat” who preceded George W. Bush promised the end of big government as the 42nd president.

ANSWER: William Jefferson Bill **Clinton**

[10] Clinton heralded the coming of a “New Century” after he supported this nation’s entry into the World Trade Organization, though it did not join until 2001. It had two exchange rates until 1994.

ANSWER: **China** or the **PRC**

14. Minor characters on this show include Bob Vance and a blue-collar worker that the protagonist calls “Pudge.” For 10 points each:

[10] Identify this show that starred Steve Carell as Michael Scott. It follows the lives of employees like Jim and Pam, and is filmed in a mockumentary style.

ANSWER: **The Office**

[10] The title “Office” is the Scranton, Pennsylvania branch of this paper company. Throughout the series, corporate workers and members of “The Office” alike complain that this company is losing business to OfficeMax.

ANSWER: **Dunder Mifflin**

[10] This writer and executive producer of “The Office” played Ryan, a temp-turned-job-stealer who dumps Kelly Kapoor and leaves Scranton for corporate headquarters in New York.

ANSWER: Benjamin Joseph Manaly “B.J.” **Novak** <CL>

15. This quantity is divided by the perpendicular velocity gradient in a certain quantity governing the behavior of fluids. For 10 points:

[10] Name this component of stress that is parallel to the surface of applied force, in contrast to the perpendicular nature of the normal stress.

ANSWER: **shear** stress

[10] The aforementioned quantity is this measure of a fluid’s resistance to flow. Fluids that have a constant value for this quantity are called Newtonian.

ANSWER: **viscosity**

[10] This quantity, equal to the ratio of inertial forces to viscous forces, is also used to characterize the nature of fluids. The magnitude of this quantity is an indicator of if a fluid will undergo turbulent or laminar flow.

ANSWER: **Reynolds number** (accept **Re**) <AT>

16. This man attempted to depict the struggles of climbing a mountain in his *An Alpine Symphony*, and drew from Greek mythology to write his opera *Elektra*. For 10 points:

[10] Name this German chromaticist composer. He wrote the comic opera *Der Rosenkavalier*, as well as a tone poem inspired by Friedrich Nietzsche’s *Also Sprach Zarathustra*.

ANSWER: **Richard (Georg) Strauss** [prompt on **Strauss**; do not accept or prompt on “Johann Strauss”]

[10] This other Richard Strauss tone poem is dedicated to Friedrich Rosch and includes an *allegro molto agitato* part representing memories. At the end, a dying artist reaches “the infinite reaches of heaven.”

ANSWER: **Death and Transfiguration** [accept **Tod und Verklärung**]

[10] Richard Strauss adapted an Oscar Wilde play to compose this opera, titled for a Biblical character. Featuring the “Dance of the Seven Veils,” its scandalous nature caused it to be banned in both London and New York.

ANSWER: **Salome**

17. This process causes humans to have the best coordination at around 2:30 PM and the fastest reaction time at about 3:30 PM. For 10 points each:

[10] Name this process which dictates the patterns of biological processes over a roughly 24-hour cycle. It can be adjusted to different environments based on changes in light and temperature.

ANSWER: circadian rhythms [prompt on **biological clock**]

[10] In mammals, circadian rhythms are controlled by the suprachiasmatic nucleus of the brain located inside this area. Its name comes from its location below the brain's "relay station", and it is a neuroendocrine area.

ANSWER: hypothalamus

[10] Konopka and Benzer discovered the circadian *period* gene by testing mutagens on this model insect. Thomas Hunt Morgan used this organism, called *Drosophila melanogaster*, in his Columbia experiments.

ANSWER: fruit fly(ies) [prompt on fly(ies)] <GA>

18. North America has some of the world's oldest rocks. For 10 points each:

[10] This geological region has been the location of the findings of the oldest rocks in the world. It is a large area of Precambrian rocks surrounding Hudson Bay.

ANSWER: Canadian Shield or Laurentian Plateau or fan

[10] This Eastward mountain range from Georgia to Maine was formed 480 million years ago. It is along a namesake trail.

ANSWER: Appalachians

[10] The Canadian Shield is this type of rock, as are the namesake "Vishnu" ones in Arizona and the Grenville ones below the Appalachians. This usually-granite rock layer is the oldest and lowest in the crust.

ANSWER: basement rocks <DM>

19. This man's opera about the hijacking of the Achille Lauro ocean liner by the Palestine Liberation Front recently received criticism for glorifying terrorism and being anti semitic. For 10 points:

[10] Name this composer of *The Death of Klinghoffer*. He used a children's choir and pre-recorded sounds in his composition commemorating 9/11, *On the Transmigration of Souls*.

ANSWER: John (Coolidge) Adams

[10] John Coolidge Adams also wrote this two-act opera about the Manhattan Project, with characters such as Robert Oppenheimer and Edward Teller.

ANSWER: Doctor Atomic

[10] In Act I of Adams' opera *Nixon in China*, Mao is visited by representatives from this nation, who arrive in "The Spirit of '76." Adams himself also hailed from this country.

ANSWER: United States of America [accept either underlined portion, or USA or any other reasonable knowledge equivalents] <GA>

20. The speaker of this poem ominously says, "They tell me you are wicked and I believe them." For 10 points each:

[10] Identify this poem about the "City of the Big Shoulders," with which its poet tried to found an American version of social realism. It is addressed to the "Hog Butcher for the World, / Tool Maker, Stacker of Wheat."

ANSWER: Chicago [grudgingly accept **Chicago Poems**]

[10] This poet of "Chicago" also wrote the collections *Cornhuskers*, *Smoke and Steel*, and *Good Morning, America*.

ANSWER: Carl (August) Sandburg

[10] Sandburg also compiled this very popular anthology of folk music, which was in continuous print for more than 70 years. He said it was "rich with the diversity of the United States," and it was regarded as a landmark by folk singer Pete Seeger.

ANSWER: *The American Songbag* <CL>

TB. This nation designed the "Cultivation System" to control one of its colonies. For 10 points each:

[10] Name this nation, which fully colonized Indonesia. It fought the Aceh ("AH-chay"), Java, and Padri Wars for control over Indonesia.

ANSWER: the Netherlands or the Dutch

[10] During the Dutch colonization of Indonesia, this current Indonesian capital was its main trading center.

ANSWER: Jakarta or Batavia

[10] During this war, air raids from the Dutch East Indies were conducted against Darwin and Broome. Commandos contested the island of Timor for one year before it was occupied during the conflict.

ANSWER: World War II or WWII <DM>