



HSAPQ

High School Academic Pyramid Questions

2008-2009
Four Quarter Set

Round 1

First Quarter:
Ten Tossups

1. One of his last works depicts a dominant figure clad in blue on the left as angels or cherubs bring robes of salvation to martyrs, during the titular *Opening of the Fifth Seal*. Another cluster of angels witnesses the title event in his *Adoration of the Shepherds*. Another of his paintings shows the yellow-robed Saints Stephen and Augustine carrying out the title postmortem event in *The Burial of Count Orgaz*. For 10 points, name this painter who also showed his adopted Spanish hometown in the Mannerist landscape *View of Toledo* and was named for his birth on Crete.

ANSWER: El Greco [or Doménicos Theotokópoulos]

2. DiOC₆ is a fluorescent dye specific for this organelle. One type of this organelle contains calsequestrin protein and releases calcium to trigger muscle contraction. In addition to the “sarcoplasmic” variety, another type of this organelle is important in breaking down hydrophobic poisons and is ubiquitous in liver cells. The type of this organelle that is most often used in lipid and protein production has ribosomes attached to it. For 10 points, name this organelle that comes in “rough” and “smooth” varieties.

ANSWER: endoplasmic reticulum [prompt on ER]

3. This city's initiative to provide free wireless internet started at its Cathedral Square Park. Its Monarch Trail is a good place to check out migrating butterflies, and this city is also home to the Boerner Botanical Gardens. The Root River rises in New Berlin and flows through this city, the largest on that river's course. This city spans three counties, including Washington and Waukesha. It is located at the confluence of its namesake river with Kinnickinnic and the Menomonee. Situated on Lake Michigan, for 10 points, name this largest city in Wisconsin.

ANSWER: Milwaukee, Wisconsin

4. The Tachash animal was created to provide skins to cover this object, and the Quran states that it will be found by the Mahdi in Lake Tiberias. David brought it to the house of Obed-edom the Gittite after Uzzah was smitten for touching it, while the people of Ashdod were afflicted with hemorrhoids for refusing to give it back. It also caused the statue of Dagon to twice be prostrate towards it, while manna and Aaron's rod are two of its contents. For 10 points, name this sacred vessel containing the tablets of stone with the Ten Commandments.

ANSWER: The Ark of the Covenant

5. Ministers during this man's rule included Jean Phelypeaux, Charles Calonne and William Malesherbes, and this man was the focus of the Declaration of Pillnitz. An attempt by this son of Marie-Josephe of Saxony to flee to Montmedy ended with his capture at Varennes, and he was subsequently imprisoned at Tuileries. Influenced by finance ministers Turgot and Necker, events of this man's reign include the Tennis Court Oath and the storming of the Bastille. For 10 points, name man beheaded with his wife Marie Antoinette, the last pre-Revolutionary king of France.

ANSWER: Louis XVI [prompt on Louis]

6. In one music video, she sits in a blue room with checkerboard floor across a table from Adam Levine, and she sings about how "it makes you burn to learn I'm with another man." One of her singles samples heavily from Soft Cell's "Tainted Love," while her *Music of the Sun* included a single that sampled *Mon de Reggae*. In one of her singles, Jay-Z calls her "little miss sunshine" and she sings "you can stay under my arm forever." For 10 points, name this singer of *Unfaithful* and *Pon de Replay*, who also performed *Never See Your Face Again*, *SOS*, and *Umbrella*.

ANSWER: Robyn **Rihanna** Fenty

7. Georges Bernanos wrote the diary of this kind of priest, and Turgenev wrote of Natalya's bored marriage to Arkadi, flirtation with Mikhailo, and love for Aleksei in the novel *A Month In this place*. The title character encounters a groom who bites his servant Rosa's cheek in a story about this kind of doctor by Franz Kafka, and its "custom" was discussed by Edith Wharton. For 10 points, give this common location, which is also "of the pointed firs" in a Sarah Orne Jewett novel and which is given up by the titular "man" of an Edward Everett Hale novel.

ANSWER: **country**

8. These compounds react with reducing sugars in the Maillard reaction. These compounds can be formed using a cyanide nucleophile in the Strecker synthesis. A carboxyl group and a namesake nitrogen-containing group are found in these molecules, twenty of which are coded for in the human body. For 10 points, name these compounds, exemplified by tryptophan and phenylalanine, which are linked by peptide bonds to form proteins.

ANSWER: **amino acids**

9. This politician composed "Melody in A Minor," a piece that was later set to words and became the standard "It's All in the Game." After serving as ambassador to Great Britain, he became the director of the Reconstruction Finance Corporation, and while running for Vice-President, he campaigned against the Ku Klux Klan. This author of *A Journal of Reparations* served as Calvin Coolidge's vice-president. For 10 points, name this man, whose namesake plan relieved the burden of German reparations following World War I and was succeeded by the Young Plan.

ANSWER: Charles **Dawes**

10. In this novel, the servant Planchet carries a letter that employs the Puritan John Felton as a prison guard. However, this novel's antagonist corrupts Felton and convinces him to assassinate the Duke of Buckingham before travelling to France and poisoning the protagonist's love interest, Constance. That protagonist earns the ire of Lady de Winter through his services protecting the honor of the queen of France. For 10 points, name this novel in which d'Artagnan joins the namesake group of Athos, Porthos, and Aramis, a work of Alexandre Dumas.

ANSWER: *The* **Three Musketeers** [or *Les* **Trois Mousquetaires**]



High School Academic Pyramid Questions

2008-2009
Four Quarter Set

Round 1

Second Quarter:
Ten Tossups
with Bonuses

1. The fiftieth section of this document removed the relatives of Gerard of Athee from power, and its thirty-third section promised the removal of fish-weirs from local rivers. It also prevented the imposition of scutage without consent, and it was signed one year after its target lost the Battle of Bouvines. Its final section established a committee of Lords to check the power of the monarchy, and its thirty-eighth and thirty-ninth sections established the right of habeas corpus. For 10 points, name this document written by English barons, which was signed in Runnymede in 1215 by King John.

ANSWER: the Magna Carta

BONUS. This poem asserts that "Every woman adores a fascist," and ends with a description of villagers "dancing and stamping" on the title figure. For 10 points each:

[10] Name this poem from *Ariel* whose final stanzas describe the poet's relationship with her husband Ted Hughes.

ANSWER: "Daddy"

[10] "Daddy" was written by this American poet and author of *The Bell Jar*, who committed suicide in 1963.

ANSWER: Sylvia Plath

2. He attacked Foucault's interpretation of Descartes in his "Cogito and the History of Madness," and his *Geschlecht I-IV* discussed the issues of race and sex in the works of Martin Heidegger. Two hundred pages of love letters to no one can be found in his *Post Card: From Socrates to Freud and Beyond*, and he employed his most noted philosophical tool to analyze communism in his 1993 work *Specters of Marx*. For 10 points, name this French-Algerian philosopher who wrote *Of Grammatology* and advocated finding hidden meanings in texts through deconstruction.

ANSWER: Jacques Derrida

BONUS. Name these French dramatists, for 10 points each.

[10] This man described a queen who commits suicide by poisoning herself after the death of Hippolyte in *Phèdre*. His other works include *Andromaque* and *Athalie*.

ANSWER: Jean Racine

[10] Contemporaneous with Jean Racine, this man wrote about the hypocrite *Tartuffe* as well Harpagon's love for Mariane, who is actually in love with Harpagon's son Cleante in *The Miser*.

ANSWER: Moliere [or Jean-Baptiste Poquelin]

3. A thought experiment which maps the future of the universe based on the knowledge of this property and location of all particles is known as Laplace's demon. The one dimensional quantum mechanical operator for it is equal to negative i times h bar times the partial derivative of x . The change in this quantity is equal to impulse, and its time derivative is equal to force. For 10 points, identify this vector quantity which is the product of mass and velocity and is often symbolized p .

ANSWER: linear **momentum** [do not accept "angular momentum"]

BONUS. Name these African rivers, for 10 points each.

[10] Victoria Falls is located on this river, between Zimbabwe and Zambia.

ANSWER: **Zambezi** River

[10] This river serves as the border between South Africa and Botswana before emptying into the Indian Ocean in southern Mozambique.

ANSWER: **Limpopo** River

4. One author from this country wrote "The Pursuer" and a work in which a Table of Instructions guides the leader through the multi-layered novel titled *Hopscotch*. Another author from this country described Toto's obsession with Hollywood films in his *Betrayed by Rita Hayworth*, and the relationship of the prisoners Molina and Valentin in *Kiss of the Spider Woman*. For 10 points, name the home country of the authors Julio Cortazar and Manuel Puig, as well as the author of "El Aleph" and *Ficciones*, Jorge Luis Borges.

ANSWER: **Argentina**

BONUS. In a certain plant, R codes for red flowers and W codes for white flowers. For 10 points each:

[10] R and W stand for this term, the variant forms of a gene that allow for different genotypes and phenotypes. They can come in dominant and recessive types.

ANSWER: **alleles**

[10] If the F1 generation has a 3:1 ratio of red to white flowers, then the parent generation likely has this property of having one dominant and one recessive allele.

ANSWER: **heterozygote** [or word forms like **heterozygous**]

5. One of this man's appointees is under impeachment for falsely claiming to possess several honorary doctorates from prestigious universities, and health concerns that surfaced in October 2008 due to a heavy workload have cast doubts on his reelection bid. This man's request to visit Ground Zero was denied in September 2007, when he gave a speech in Columbia University. He sparked outrage after claiming that the Holocaust was "a myth" and wanted Israel to be "wiped off the map." For 10 points, identify this man, the current President of Iran.

ANSWER: Mahmoud **Ahmadinejad**

BONUS. He is remembered for stealing the Trojan Palladium, which was a statue that protected Troy from falling. For 10 points each:

[10] Name this commander of 80 Argive ships who slew Rhesus.

ANSWER: **Diomedes**

[10] Not only did Diomedes steal the palladium statue of this goddess of Wisdom who sprung forth from Zeus's head, he even wounded this goddess in battle at Troy.

ANSWER: Pallas **Athena**

6. Laurent used his addition to Dumas' law of substitution to divide these entities into fundamental and derived types. Two of them form the Gomberg dimer, and the release of nitrogen by azo compounds results in another two of these. These substances are produced in the initiation stage of a chain reaction. For 10 points, name these substances usually denoted by a dot to the right of the element or compound, which have a single unpaired electron and whose neutral variety is known as "free".

ANSWER: **radicals**

BONUS. This author wrote a book about *Gandhi's Truth*. For 10 points each:

[10] Name this repetitively-named psychologist whose *Childhood and Society* contained his eight stages of psychosocial development.

ANSWER: Erik Homberger **Erikson**

[10] Erikson postulated that the most important problem faced in human development is this crisis that occurs in the teenage years.

ANSWER: **identity** crisis

7. This civilization was divided into the awilu, or upper classes, musheknu, or lower classes, and wardu, or slaves. It declined when its king, Nabonidus, was captured by the Persians. One of its kings defeated the Egyptians at the Battle of Carchemish. Its king Nabopolassar allied with the Medes to defeat the Assyrians in 612. Another of its rulers developed a law code based on the principle of "an eye for an eye." For 10 points, name this Mesopotamian civilization led by Hammurabi and Nebuchadnezzar, who built a series of hanging gardens in its capital.

ANSWER: **Babylonia** [prompt on **Chaldeans**; accept **neo-Babylonians**]

BONUS. It relates the infinitesimal magnetic field created to the cross product of the infinitesimal length with the vector in the direction in which it is calculated. For 10 points each:

[10] Identify this law named for two French physicists.

ANSWER: **Biot-Savart** law

[10] The Biot Savart law is analogous to this law from electrostatics, which describes an inverse square force between two charges.

ANSWER: **Coulomb's** law

8. He wrote about Rowland Mallet, who meets an artist enamored with Christina Light, in the novel *Roderick Hudson*, and Nanda Brookenham reminds Mr. Langdon of former lover Lady Julia in this author's *The Awkward Age*. In another novel, Winterbourne's lover dies after contracting malaria during a nighttime visit to the Coliseum, and a governess thinks she sees Miss Jessel and Peter Quint's ghosts in another of his works. For 10 points, name this creator of Isabel Archer who wrote *The Turn of the Screw* and *The Portrait of a Lady*.

ANSWER: **Henry James** [prompt on **James**]

BONUS. It captured Gustav von Kahr, Otto von Lossow, and Hans von Seisser. For 10 points each:

[10] Name this 1923 event, during which Hitler and other early Nazis briefly overthrew the leaders of Bavaria in Munich.

ANSWER: the **Beer Hall Putsch**

[10] During the Beer Hall Putsch, members of the SA were commanded by this World War I fighter pilot, the future head of the German military during World War II.

ANSWER: Hermann **Goering**

9. This opera's principal tenor sings several duets, including "In thy visage I trace" and "Heavenly spirit, descend." Another aria opens with the line "If only I were that warrior." Act IV sees the priests led by Ramfis try the title character's lover for treason, shortly after he rejects a marriage proposal from Amneris. Amonasro, the title character's father, is among the characters captured by the forces of Radames in this opera. First performed at the Khedival Opera House in Cairo, for 10 points, identify this Giuseppe Verdi work about the titular Ethiopian princess.

ANSWER: **Aida**

BONUS. Sanford Dole became the president of the republic located in this future U.S. state in 1894. For 10 points each:

[10] Dole opposed King Kalakaua in order to get what polity admitted to the United States?

ANSWER: **Hawaii**

[10] This sister of Kalakaua was overthrown by Dole and was both the first and last Queen of Hawaii.

ANSWER: **Liliuokalani**

10. This thinker argued that scientific advances are caused by the human instinct of idle curiosity, and contrasted the instinct of workmanship with the instinct of predation. This economist wrote that businessmen deliberately sabotage production in order to increase prices artificially in *The Theory of Business Enterprise*. In another work, he argued that the invention of ownership caused people to demonstrate their status through pecuniary emulation and conspicuous consumption. For 10 points, name this economist who wrote *The Theory of the Leisure Class*.

ANSWER: Thorstein **Veblen**

BONUS. Identify these abstract expressionists, for 10 points each.

[10] This painter of *Blue Poles* is better known for *Number 5* and *Full Fathom Five*. He also developed the method of drip painting.

ANSWER: Jackson **Pollock**

[10] This Dutch-American painter's more sympathetic depictions of women include *Woman V*. Less sympathetic portrayals are titled *Sag Harbor* and *Clam Digger*.

ANSWER: Willem de **Kooning**



HSAPQ

High School Academic Pyramid Questions

2008-2009
Four Quarter Set

Round 1

Third Quarter:
Team Rounds

Choices: RUSSIA
WORDS STARTING WITH "MA"

RUSSIA

This round includes people, places and things associated with Russia.

[10] This son of Vasili III was the first man to take the title "Tsar of Russia."

ANSWER: **Ivan the Terrible** [or **Ivan IV**; or **Ivan Grozny**; prompt on **Ivan**]

[10] In addition to the short story "The Lady with the Dog", this Russian author is known for the plays *Three Sisters*, *Uncle Vanya* and *The Cherry Orchard*.

ANSWER: Anton Pavlovich **Chekhov**

[10] Russian chemist Dmitri Mendeleev was the first to create one of these chemistry references, now arranged by atomic numbers.

ANSWER: **periodic table** of the chemical elements

[10] Fed by the Svir, Volkhov and Vuoksi rivers, this body of water contains the Valaam archipelago and is the largest lake in Europe.

ANSWER: Lake **Ladoga** [or **Ladozhskoye Ozero**]

[10] Andrei Rublev was a noted Russian painter of these devotional works, whose namesake "clasm" divided the Byzantine Empire in the eighth century.

ANSWER: **icons**

[10] This dissenting Russian religious group emerged from the Raskol controversy in protest of Patriarch Nikon's reforms, especially regarding how the sign of the cross was to be made.

ANSWER: the **Old Believers**

[10] A leader in the Soviet Union's creation of the hydrogen bomb, this nuclear physicist later became a human rights activist and received the Nobel Peace Prize in 1975.

ANSWER: Andrei Dmitrievich **Sakharov**

[10] The sailors of this battleship joined the Revolution of 1905 and had their story made into a film by Sergei Eisenstein.

ANSWER: the **Potemkin**

[10] Centering on Arkady Kirsanov and Evgeny Bazarov, this novel popularized nihilism and was written by Ivan Turgenev.

ANSWER: **Fathers and Sons** [or **Ottsy i Deti**; or **Fathers and Children**]

[10] Simon Kuznets and Nikolai Kondratiev were notable Russians working in this field; its American scholars include Paul Krugman and Milton Friedman.

ANSWER: **economics**

WORDS STARTING WITH "MA"

Answers in this round begin with the letters "Ma."

[10] In addition to the *Resurrection Symphony* and *Songs of a Wayfarer*, this Austrian composer created the *Symphony of a Thousand* and *The Song of the Earth*.

ANSWER: Gustav **Mahler**

[10] With a name meaning "Splendid Foundation", this legendary son of either Viracocha or Inti was an early leader of the Kingdom of Cuzco and the first ruler to claim the title Sapa Inca.

ANSWER: **Manco Capac**

[10] Featuring the "Tomorrow and tomorrow and tomorrow" soliloquy, the title Thane of Cawdor usurps the throne from Malcolm and Donaldbain in this Shakespeare tragedy.

ANSWER: **Macbeth**

[10] An early histologist, this Italian served as Papal physician to Pope Innocent XII and is the namesake of several anatomical structures including the deepest layer of the epidermis.

ANSWER: Marcello **Malphigi**

[10] Lake Alaotra is the largest lake in this country and its highest point is Maromokotro. The fourth largest island in the world, it has its capital at Antananarivo.

ANSWER: Republic of **Madagascar** [or **Malagasy** Republic]

[10] Associated with the astronomical body Nibiru, this wielder of Abuba and Imhullu is the patron deity of Babylon and slayer of Tiamat.

ANSWER: **Marduk**

[10] Showing a pale woman in a black dress leaning on a table, this depiction of the Parisian socialite Virginie Amelie Gautreau was painted by John Singer Sargent.

ANSWER: *Portrait of* **Madame X**

[10] With a name meaning "bad air", this tropical disease's causative agents are members of the *Plasmodium* genus.

ANSWER: **Malaria**

[10] The author of *Midaq Alley* and *The Thief and The Dogs*, this Egyptian novelist is also known for *Children of Gebelawi* and his *Cairo Trilogy*.

ANSWER: Naguib **Mahfouz**

[10] The Second Bank of the US was created by Albert Gallatin during this president's administration. He earlier fled Washington as the White House burned during the War of 1812.

ANSWER: James **Madison**



HSAPQ

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Round 1

Fourth Quarter:
Ten Tossups

1. Leonard Bernstein asserted in the lecture "The Unanswered Question" that this piece facilitated the rise of atonal twentieth-century works. This piece's first minute contains an entire bar of silence, a break from the development of the main theme, which alternates between solo flute and oboe. Its name refers to its intended position at the start of a full suite of three movements; the final two were never written. Inspired by a poem of Stéphane Mallarmé, for 10 points, name this short orchestral work by Claude Debussy depicting a mythical satyr.

ANSWER: *Prelude to the Afternoon of a Faun* [or *Prélude à l'après-midi d'un faune*]

2. He wrote about Beatrice Lfor, who is seduced by her schoolmate Sammy Mountjoy, in his novel *Free Fall*. In another work of his, Lok, the consort of Fa, narrates from the perspective of a Neanderthal, and in another work Nat Walterson is an innocent counterpart to the title character, a British naval lieutenant. In addition to *The Inheritors* and *Pincher Martin*, this author wrote a novel in which a conch shell is crushed by boys who are stranded on an island and features Piggy, Jack, and Ralph. For 10 points, name this author of *Lord of the Flies*.

ANSWER: William Gerald **Golding**

3. The calmecacs, or religious colleges, venerated him as the god of learning. This god's name was adopted by the ruler Topiltzin, and he gathered the bones of the ancient dead in Mictlan. Some legends have him immolating himself on a pyre and emerging as what we know as the planet Venus, and his calendar name was One Reed. Expelled from Tula by Tezcatlipoca, for 10 points, identify this god who left for exile on a raft, the feathered serpent god of Aztec myth for whom Hernan Cortes was mistaken.

ANSWER: **Quetzalcoatl**

4. K-complexes appear during the second stage of this state, whose fifth stage manifests in tonic and phasic categories. Its first stage is marked by the disappearance of alpha waves and the appearance of theta waves, while its later stages are categorized by long, slow delta waves. This state's fifth and final stage is characterized by increased neuron activity and rapid eye movements, as well as vivid dreams. For 10 points, name this state, prevented by insomnia.

ANSWER: **sleep**

5. One character in this work is forced to gather pig nuts and carry wood after one mishap and later believes a butler and jester come from the moon. Stephano and Trinculo suffer disaster after the wedding of Claribel to the King of Tunis in this work, and the witch Sycorax is the mother of the deformed Caliban. After being freed from a tree, the spirit Ariel serves one character in this work, which sees the marriage of Ferdinand and Miranda. For 10 points, name this Shakespeare play about the rightful Duke of Milan and sorcerer Prospero who creates the titular storm.

ANSWER: *The* **Tempest**

6. One structure designed by this man features Pyrex tubing and over two hundred types of bricks, while another uses a bipartite design separated by a loggia. In addition to the Westcott House, this man planned out the Broadacre City and proposed his idea of suburbs in *The Disappearing City*. The creator of the Johnson Wax Headquarters and the Unity Temple in Oak Park, this man also designed the Robie House and two Taliesin studios. For 10 points, name this architect, a leader of the Prairie School who designed the New York Guggenheim Museum and Fallingwater.

ANSWER: Frank Lloyd **Wright**

7. These particles were detected in a Faraday box after a nickel target was rotated, which allowed for the calculation of lattice spacing in the Davisson-Germer experiment; previously, they had been discovered in cathode rays. They were the first particles to be hypothesized to exhibit spin. They were also shown to be the particles involved in carrying current in metals. For 10 points, identify these particles which orbit the nucleus of an atom and have a negative charge.

ANSWER: **electrons**

8. The majority opinion in this case noted that “there is no phrase which... excludes incidental or implied powers” and argued that a Constitution that enumerated “accurate detail” of all powers would be impossible for the public to comprehend. That opinion, written by Chief Justice Marshall, also noted that “the power to tax involves the power to destroy.” For 10 points, identify this Supreme Court case, motivated by the attempt of a certain state to oppose its branch of the First Bank of the United States.

ANSWER: **McCullough v. Maryland** [or *Maryland v. McCullough*]

9. The sieges of Kronstadt and Petropavlovsk were conducted in this conflict’s lesser known Pacific and Baltic theaters, and it began with the naval Battle of Sinope, the last of the sailing era. Begun due to the *Charlemagne’s* violation of the London Straits Convention, this war saw the first use of naval mines and tactical railroads, and its major battles include the Alma River, Inkerman, Sevastapol and Balaclava. For 10 points, name this conflict between Britain, France and Russia ended by the Treaty of Paris in 1856, fought on its namesake Ukrainian peninsula.

ANSWER: **Crimean** War

10. The generation of long Wavenumber 1 or 2 Rossby waves causes namesake “sudden warmings” in this region, and a set of winds in this region alternate between east and west every 13 months. Those winds, the Krakatoa winds, constitute the quasi-biennial oscillation encountered in this layer. It is situated below a region containing Appleton and Kennelly-Heaviside layers, the ionosphere. For 10 points, name this layer of the atmosphere where commercial airlines fly, located 6 to 31 miles above sea level, just above the troposphere.

ANSWER: **stratosphere**