



# HSAPQ

## High School Academic Pyramid Questions

2008-2009  
Four Quarter Set

Round 11

First Quarter:  
Ten Tossups

1. This river's Inga Dam will soon produce double the output of the Three Gorges Dam, and it was independently explored by Diogo Cam and James Tuckey. This waterway has tributaries including the Inkisi, Sangha and Kasai rivers, while it reaches the ocean near Muanda. Forming Boyoma or Stanley Falls, this river flows through Kisangani and the Malebo Pool while its largest tributaries include the Lualaba and Ubangi. The city of Brazzaville lays on, for 10 points, which second-longest river in Africa, once known as the Zaire?

ANSWER: Congo River [accept Zaire River before it is read]

2. This law becomes inapplicable when excess chemical potential of solute is relatively constant, and effects such as H-bond percolation are negligible. The temperature variance of its namesake constant can be found using the Van't Hoff-Arrhenius relation. This law's namesake "region" is located at the bottom left of an activity-composition diagram, and it works best with low solute concentration and low partial pressures. For 10 points, name this law relating the amount of gas dissolved in a liquid to the partial pressure of the gas above that liquid.

ANSWER: Henry's Law

3. These products are advertised in a commercial that depicts a green-clad flight attendant, a woman on a yellow scooter being stopped by a cop in sunglasses, and a Japanese girl watching a monster stomp through a city. One of them sold at a discounted price in October 2008 is the Chicken Pizzioli, while the Veggie Delite and Meatball Marinara are other discounted examples. For 10 points, name these products that a catchy jingle informs us are just five dollars, and are twelve-inch sandwiches from Subway.

ANSWER: Subway "foot-long" sandwiches [or five-dollar foot-longs; prompt on Subway sandwiches; prompt on sub sandwiches; prompt on sandwiches]

4. One cultic fire for this faith was called Farnbag and was transported to Kabulistan. The spherical primal man in this faith is Gayomart, and one heresy in this faith believes that time created the two major gods and is called Zurvanism. The founder of this faith wrote the hymns the *Gathas*, and the Parsi followers of this religion place their dead on *dakhmas*, or towers of silence, instead of using burial or cremation. With the holy text called the *Avesta*, for 10 points, name this Persian religion focusing on the evil Ahriman and his counterpart Ahura Mazda.

ANSWER: Zoroastrianism

5. These cells are enlarged and ineffective in individuals with Bernard-Soulier syndrome. Alpha granules within these bodies contain the protein vitronectin and von Willebrand Factor, which allows these cells to bind to collagen. These cells, produced from megakaryocytes in the red marrow, are sometimes called thrombocytes due to their release of thromboxanes during the formation of a namesake plug. For 10 points, name these cells found in blood that assist in clotting.

ANSWER: platelets [accept thrombocytes before read]

6. Minor characters in this play include the Marshall Herrick and the clerk Ezekiel Cheever. The sudden illnesses of Ruth and Betty fuel the action in this play, after they are caught dancing in the forest. The Barbados born slave Tituba performs voodoo rituals and Thomas Putnam uses the events of the play to buy up prime real estate. John Proctor rejects Abigail William's advances, knowing this will get him accused of witchcraft. For 10 points name this Arthur Miller play in which the town of Salem is gripped by a witch hunt.

ANSWER: The **Crucible**

7. In one of his novels, Giles Winterbourne is promised the hand of Grace Melbury. Along with *The Woodlanders*, he wrote about a man who is tricked into marriage by Arabella Donn but has children with his cousin Sue Bridehead. He created Damon Wildeve, who pursues the wife of a diamond merchant. In another work, Gabriel Oak marries Bathsheba Everdene. The creator of Eustachia Vye and Clym Yeobright, for 10 points, name the author of *The Return of the Native*, *Far From the Madding Crowd*, and *The Mayor of Casterbridge*.

ANSWER: Thomas **Hardy**

8. This man appointed Samuel von Cocceji to govern a territory he conquered, and he later ordered the construction of St. Hedwig's Cathedral. The composer of the *Hohenfriedberger March* and over one hundred flute sonatas, this man authored *Anti-Machiavel* with Voltaire. The creator of the Furstenbund, this man was imprisoned in Kustrin for attempting to flee with Hans van Katte. The leader of his country during the War of the Austrian Succession and Seven Years War, for 10 points, name this enlightened despot and Prussian king from 1740 to 1786.

ANSWER: **Frederick the Great** [or **Frederick II** of Prussia; or **Frederick IV of Brandenburg**; prompt on **Frederick**; prompt on **Frederick IV**]

9. Robert Philson and Herman Husband were arrested after this event, which led to the assembling of a twelve thousand man militia known as the Watermelon Army to put it down. That army was led by Lighthouse Harry Lee and George Washington, who wanted to prove federal power by opposing the insurrection of farmers unhappy with the excise tax on a certain good. For 10 points name this 1794 Pennsylvania rebellion led by farmers with small time distilleries.

ANSWER: **Whiskey Rebellion**

10. He painted a woman running her fingers across the palm of a man with a black and white feathered hat in *The Fortune Teller*, and he painted a man sticking his finger in Jesus's torso in *The Incredulity of Saint Thomas*. He painted a ram next to a boy, whose father holds a knife to him and is talking to an angel in *The Sacrifice of Isaac*, and he painted a man at a tax collector's desk, with his head down, being pointed out in *The Calling of St. Matthew*. The painter of a man in red who fell off his horse, for 10 points, name this artist of *The Conversion of St. Paul*.

ANSWER: **Caravaggio** [or Michelangelo **Merisi**]



# HSAPQ

High School Academic Pyramid Questions

2008-2009  
Four Quarter Set

Round 11

Second Quarter:  
Ten Tossups  
with Bonuses

1. Conrad Atkinson showed streaming blood in a work entitled “A Few Bits Like” this painting. This painting was premiered with Joan Miro’s *The Reaper* in a building next to one funded by the Nazis, and Dora Maar collaborated on it. On the bottom center, a man holds a broken sword; above that man, an arm holds a candle underneath an almond shape that contains a lightbulb. Also showing a horse in agony and a bull, for 10 points, name this mural inspired by the Condor Legion’s bombing of the title Basque village, painted by Pablo Picasso.

ANSWER: Guernica

BONUS. Members of this domain are thought to have been among the first organisms on Earth, as their fossil record extends back about 300 million years before that of eubacteria. For 10 points each:

[10] Name this domain discovered in the 1970’s, consisting of microorganisms which thrive under intense conditions, and which includes extreme thermophiles, acidophiles, and halophiles.

ANSWER: Archaea [or Archaeobacteria]

[10] Archaea often stain Gram-negative along with bacteria possessing relatively low levels of this compound, a sugar and amino acid polymer often found in bacterial cell walls.

ANSWER: peptidoglycan

2. He was led to declare “though the people support the Government, the Government should not support the people” in his message accompanying the veto of the Texas Seed Bill. He was frustrated with the Wilson-Gorman tariff, wanting to deal a harsher blow to the earlier McKinley tariff, but it was nonetheless a small victory for his Democratic party. Losing Indiana due to fraud but winning the popular vote in 1888, for 10 points, identify this man, who was both the twenty-second and twenty-fourth president.

ANSWER: Grover Cleveland

BONUS. Typically, the auditory threshold is used as a reference and is said to be zero of these units. For 10 points each:

[10] Identify this logarithmic measure of volume. It is analogous to the neper, except the neper uses  $e$  as a base, not ten, and exposure to sounds above 85 of these may cause hearing loss.

ANSWER: decibel [or dB]

[10] Vibrations, including those of sound, are quantized in these particles, which travel at the speed of sound notably through crystal lattices.

ANSWER: phonons

3. Minor characters in this play include the executioner Abhorson and the prisoner Barnardine, who is given clemency in the end. Comic relief is provided by the bachelor Lucio and the buffoonish constable Elbow. The protagonist of this play emerges from a nunnery when her brother Claudio is sentenced to death for impregnating his fiancée Juliet. This is ordered by the tyrannical Angelo who rules Venice while the Duke is disguised as a friar. For 10 points, name this play about Isabella, by William Shakespeare.

ANSWER: **Measure for Measure**

BONUS. Some interesting things happened after Odysseus returned to Ithaca. For 10 points each:

[10] This son of Odysseus and Penelope tried to find Odysseus in Pylos and Sparta, and he assisted his father in killing Penelope's suitors.

ANSWER: **Telemachus**

[10] After Odysseus returned home, he was recognized only by his nurse and this mistreated dog, who was so happy to see his master that he died.

ANSWER: **Argos**

4. This polity is the home of Hal-Saflieni Hypogeum, which is believed to be the largest group of prehistoric European rock-cut chamber tombs. It was captured by Napoleon Bonaparte in 1798, who left it in 1802 pursuant to the Treaty of Amiens. In the treaties of Paris of 1814 and 1815, it submitted to British sovereignty, and under the leadership of Jean de la Valette, this country held off the Ottoman siege of 1565. For 10 points identify this Mediterranean island country, which was made home to its namesake order of knights in 1530.

ANSWER: **Malta**

BONUS. This general system of thought was applied to anthropology by Claude Levi-Strauss, who wrote about the elementary type of system's namesake constructs "of kinship." For 10 points each:

[10] Name this approach that views the social sciences as a system of interrelated parts, and attempts to diagram their arrangement.

ANSWER: **structuralism** [accept **structures**]

[10] Linguistic structuralism was promulgated by this group of linguists named after a European capital city, whose members included Nikolai Trubetskoy.

ANSWER: the **Prague** School [accept **Prague** Circle or similar equivalents including **Prague**]

5. One character in this work, Petit Gervais, runs away after the protagonist refuses to give back his coin. Monsieur Gillenormand is unwittingly used in a ploy by one character to gain child support, and this novel includes a group called The Friends of the ABC, who are led by Enjolras. Éponine takes a bullet for one character, who had earlier lived next to the Thénardiens. Marius falls in love with Cosette, the adopted daughter of the central character, an ex-convict hounded by Javert. For 10 points, name this novel about Jean Valjean, the best known work of Victor Hugo.

ANSWER: **Les Misérables**

BONUS. The successor to Theobald of Bec, this man resisted the Constitutions of Clarendon and was later canonized by Pope Alexander III. For 10 points each:

[10] Name this predecessor of Richard of Dover as Archbishop of Canterbury, who was assassinated by Breton, de Tracy, de Moreville and FitzUrse in 1170.

ANSWER: Saint Thomas a **Becket**

[10] Made heir through the Treaty of Wallingford, this first Plantagenet monarch of England supposedly ordered the murder of Thomas a Becket.

ANSWER: **Henry II** [or **Henry Curtmantle**; prompt on **Henry**]

6. He stated in 1997 that Greenpeace and Amnesty International “have taken over mankind's concerns” from the likes of Michelangelo and Bach. A French-Columbian hostage was recently freed and hugged him during a private meeting; during captivity, Ingrid Betancourt had heard him praying for her on the radio. In 2006, he was rumored to have ordered a commission to investigate the morality of condom use, but he also stated that “we wait for the instant in which Israel will say yes to Christ.” For 10 points, identify this man, who succeeded John Paul II.

ANSWER: Pope **Benedict XVI** [prompt on Joseph Alois **Ratzinger**; prompt on **Benedict**]

BONUS. He contributed a sixth variation on a theme by Bellini to his friend Franz Liszt's *Hexameron*. For 10 points each:

[10] Identify this Polish-French composer of the *Revolutionary Etude*, dedicated to Liszt, and the *Military Polonaise*, all of whose works involved the piano in some way.

ANSWER: Frédéric **Chopin** [or Fryderyk **Szopen**]

[10] Originally nicknamed “Little Dog,” this dance piece by Chopin was the first of three written for the Countess Delphine Potocka.

ANSWER: “**Minute Waltz**” [or **Waltz in D-flat major**]

7. Gerhard Ertl won the 2007 Nobel in chemistry partially for his work on this reaction, and one of the reactants is obtained by heating methane with steam to produce a syngas mixture. It is facilitated by the introduction of an iron oxide catalyst at low temperatures, and the product is continually removed, which forces the reaction to move towards completion according to the Le Chatelier principle. For 10 points, name this industrial process which uses three hydrogen molecules and one nitrogen molecule to produce two molecules of ammonia.

ANSWER: **Haber**-Bosch process

BONUS. He represented Great Britain at the Potsdam Conference. For 10 points each:

[10] Name this politician, who succeeded Winston Churchill as Prime Minister.

ANSWER: Clement **Attlee**

[10] Attlee was as a member of this party, whose first Prime Minister was Ramsey MacDonald. In the 1924 elections, it was defeated because of the Zinoviev Letter.

ANSWER: **Labour** Party

8. This concept was linked to the paranoid-schizoid position by Melanie Klein, and Otto Rank believed in the importance of a stage before it. It was explored in the case study of a boy who feared horses, "Little Hans," and this concept was posited as an explanation for the creation of the super-ego, as subjects internalize their fear of castration. Carl Jung proposed that the female form of this, which arises from penis envy, be named for Electra. For 10 points, name this complex explored by Sigmund Freud in which a boy feels sexual attraction to his mother.

ANSWER: **Oedipus** complex [or **Oedipal** complex]

BONUS. This collection's section "Scenes from a Private Life" includes *Le Pere Goriot*. For 10 points each:  
[10] Name this collection of novels that includes *Cousin Bette* and *Eugenie Grandet*.

ANSWER: *The **Human Comedy*** [or *La **Comédie humaine***]

[10] This French author of the tragic poem *Cromwell* wrote *The Human Comedy*.

ANSWER: Honore de **Balzac**

9. The primary kind of this process directly uses stored energy, while the secondary kind uses special proteins to combine two events: antiporters pair the motions of two ions, while symporters use ion diffusion to transport bulky molecules. The best known examples of this process occur with F-class proton pumps, notably involved in ATP synthesis, and P-class pumps, which include the sodium-potassium pump. For 10 points, give the term for all processes which move molecules across a cell membrane by consuming energy.

ANSWER: **active transport** [prompt on "transport against a gradient" or equivalents]

BONUS. The title character is held captive in an estate managed by Mr. Jewkes. For 10 points each:  
[10] Name this work of Samuel Richardson, whose title character accepts a marriage proposal by her master, Mr. B.

ANSWER: **Pamela**; or, *Virtue Rewarded*

[10] This author's *Joseph Andrews* and *Shamela* are parodies of *Pamela*, but he is better known for creating a foundling found by Squire Allworthy who loves Sophia Western, Tom Jones.

ANSWER: Henry **Fielding**

10. One adherent to this school wrote a work celebrating reverence for cosmic order, the *Hymn to Zeus*, and that man, Cleanthes of Assos, was succeeded as its leader by a man who tried to show fate and free will are not mutually exclusive, Chrysippus of Soli. One adherent wrote *De officiis*, while another was a Roman ruler, one of the "five good emperors," who wrote the *Meditations*. For 10 points, name this school of philosophy advocating lack of passion and followed by Cicero, Marcus Aurelius, and Zeno of Citium.

ANSWER: **Stoicism** [accept word forms]

BONUS. The north-central portion of this state includes the Sand Hills, which lie north of the Platte River. For 10 points each:

[10] Name this state.

ANSWER: **Nebraska**

[10] Originally named Lancaster, this Nebraska city is home to the nation's only unicameral state legislature.

ANSWER: **Lincoln**



# HSAPQ

## High School Academic Pyramid Questions

2008-2009  
Four Quarter Set

Round 11

Third Quarter:  
Team Rounds

Choices: DOGS  
CATS

DOGS

Either the clues or the answers in this round will have to do with dogs.

[10] *The Eight Dog Chronicle* is a novel by Kyokutei Bakin, a Japanese author who left home at fourteen leaving this kind of poem as a note, with a 5-7-5 syllable pattern.

ANSWER: haiku

[10] Giacomo Balla's *Dynamism of a Dog on a Leash* is a key painting in this movement, a largely Italian trend in art which praised machinery and speed in the 1910s.

ANSWER: Futurism

[10] *Heart of a Dog* is a short story written by Mikael Bulgakov, more famous for this novel in which Satan visits the Soviet Union.

ANSWER: The *Master and Margarita*

[10] The Brown Dog riots in Trafalgar Square were fought over vivisection while this king was in power. His son, George V, renamed their royal house "Windsor."

ANSWER: Edward VII

[10] This genetic phenomenon, occurring when a subpopulation is selected and bred with itself, explains the emergence of distinct dog breeds through pedigreeing.

ANSWER: founder effect

[10] This dog of Odysseus waits faithfully for his master to return and recognizes him immediately, even though he is disguised, then dies.

ANSWER: Argus

[10] This "Game of High Steaks & Bones," which is celebrating its twenty-fifth anniversary in 2008, replaces Boardwalk from its inspiration with a St. Bernard.

ANSWER: Dogopoly

[10] The Dog Islands are part of this group of islands, including Tortola, whose capital is Road Town.

ANSWER: British Virgin Islands [prompt on Virgin Islands]

[10] The War of the Stray Dog occurred in this country in 1925; this country was later led during the Cold War by Communist dictator Todor Zhivkov.

ANSWER: Bulgaria

[10] Electric shocks on dogs were used to test the "learned helplessness" model of this emotional condition, now thought to be caused by insufficient serotonin.

ANSWER: depression

## CATS

Either the clues or the answers in this round will have to do with cats.

[10] In 2008, the Audobon Nature Institute announced the birth of a genetically modified cat with this ability, normally associated with anglerfish and fireflies.

ANSWER: **bioluminescence** [prompt on **glowing in the dark** or other descriptive answers]

[10] Traditionally, cats rode on soldier's shoulders in this country, whose Chakri dynasty had a lot of kings named Rama.

ANSWER: **Thailand** [prompt on **Siam**]

[10] Assassinated by Charles Guiteau, he argued for the petitioners in *Ex parte Milligan* and defeated Winfield Scott Hancock in the 1880 election.

ANSWER: James **Garfield**

[10] "The Black Cat" is one short story by this American author of "The Pit and the Pendulum" and "The Gold Bug."

ANSWER: Edgar Allen **Poe**

[10] This Egyptian goddess had a cat for her sacred animal. A patron of Lower Egypt, her more domestic character placed her as goddess of perfumes.

ANSWER: **Bast** [or **Bastet**, or **Ubasti**; prompt on **Ailuros**]

[10] This artist's 1978 painting of a cat was dubbed "worthless" by Sotheby's, even as his preserved shark and diamond-encrusted skull pieces sold for over a hundred million pounds.

ANSWER: Damien **Hirst**

[10] A cat breed called the *this* coon cat is named for this U.S. State, bordering the Bay of Fundy and Penobscot Bay, with ports like Portland and capital Augusta.

ANSWER: **Maine**

[10] The Bengal is a breed of cat unrelated to Bengal tigers such as Shere Khan, the tiger from this Rudyard Kipling work.

ANSWER: *The* **Jungle Book**

[10] Cats who lived in the Himalayas would be accustomed to breathing thinner air because this law indicates that pressure and volume are inversely proportional.

ANSWER: **Boyle**'s law

[10] The musical *Cats*, based on T. S. Eliot's *Old Possum's Book of Practical Cats*, was composed by this man, also famous for *Jesus Christ Superstar* and *The Phantom of the Opera*.

ANSWER: Andrew Lloyd **Webber**



High School Academic Pyramid Questions

2008-2009  
Four Quarter Set

Round 11

Fourth Quarter:  
Ten Tossups

1. Measures in its second movement indicate *Trombone basso e tuba*, and the triangle and cymbals are used solely in its third and fourth movements respectively. The piccolo plays a small section in its first movement, and its largo was supposedly adapted into the spiritual "Goin' Home." Its composer compared the music it drew from to "the music of Scotland," and its scherzo references a dance during a feast in *The Song of Hiawatha*. Premiering in Carnegie Hall during an 1893 visit, for 10 points, name this Native American-influenced symphony by Antonin Dvořák.

ANSWER: **From the New World** [or **Symphony No. 9 in E Minor**; accept **New World Symphony**]

2. The Stark effect sees the splitting of spectral lines of atoms due to the presence of these, and a time varying one necessitates the introduction of a displacement current in Ampere's law. Their energy density is equal to their magnitude squared times half of the permittivity constant. It is the gradient of the electric potential, and a test charge will experience a force when placed in these regions, whose magnitude is given by  $kq$  over  $r$  squared. For 10 points, identify these regions, whose lines point in the direction where a positive charge will travel.

ANSWER: **electric field**

3. He supported the Corn Laws in *Grounds of an Opinion* and argued for an endogenous interpretation of money. In his most famous work, framed partially as a response to William Godwin's optimistic *Political Justice*, he argues that England's poor laws actually cause the poor to become more destitute and more numerous. His central contention was that a linear increase of available resources is naturally insufficient. For 10 points, identify this economist who made dire predictions about the inevitability of war, famine, and misery in his "Essay on Population."

ANSWER: Thomas Robert **Malthus**

4. He fathered the six-headed Skandi by spreading his seed in Agni's mouth, and in his role as Pashupati he was a benevolent lord of animals. Depicted as the cosmic dancer Nataraja, he was the consort to a woman who built her child from mud caked onto her as she bathed, and he later sliced that child's head off. As a result, this god, with a destroying third eye, placed an elephant head on Ganesha. For 10 points, name this consort of Parvati, the Hindu god of destruction.

ANSWER: **Shiva** [or **Siva**; or **Siwa**]

5. VW Cephei contains what is probably the largest red giant yet discovered, and is the contact variety of this entity. Astrometric ones contain a very dim or invisible object. Objects in this type of system have regions of gravitational influence known as Roche lobes. One variety of these systems, exemplified by Algol, has two dips in luminosity as the rotating objects come between the viewer and a star; that is the eclipsing type of these systems. For 10 points, name these systems that consist of two stars.

ANSWER: **binary** systems [or **binary** stars]

6. This poem asks what “little town by river or sea-shore” is “emptied of its folk this pious morn.” The poet orders a “happy melodist” to “pipe to the spirit ditties of no tone” because “heard melodies are sweet, but those unheard are sweeter.” The poet describes “boughs that cannot shed” and calls the title object a “Sylvan historian,” a “foster child of Silence and slow Time,” and a “still unravish’d Bride of quietness.” For 10 points, name this poem which concludes that “Beauty is truth, truth beauty,” a John Keats poem about some Greek pottery.

ANSWER: “**Ode on a Grecian Urn**”

7. This man wrote a work with chapters entitled “New Problems” and “Nationalism versus Imperialism” while imprisoned at Ahmednagar Fort after hoisting a flag of independence on the Ravi River. The coiner of the term “Non-Alignment,” this man agreed to the five pillars of Zhou Enlai known as Panchsheel. Succeeded in his highest post by Gulzari Nanda, this man conflicted with his ministers Menon and Patel over how to pursue the Sino-Indian War. For 10 points, name this father of Indira Gandhi, the first Prime Minister of India.

ANSWER: Jawaharlal **Nehru** [prompt on **Panditji**]

8. In the opening scene of this work, a Page is disgusted by one character’s apostrophizing of another. That character is easily swayed by another’s promise of a smile; however, Narroboth commits suicide when the title character begs for a kiss. The sound of wings beating is heard by one character who later sings *Tanz für mich*, and the title character makes love to Jochanaan’s head. Adapted from a play by Oscar Wilde about Herodias, a title daughter who performs the Dance of the Seven Veils, and John the Baptist, for 10 points, name this Richard Strauss opera.

ANSWER: **Salome**

9. Lord Rowton served as private secretary to this man, who recounted his affair with Lady Sykes in one work and told the tale of the namesake member of the Ferrars family in another. The author of *Tancred* and *Coningsby*, in addition to *Henrietta Temple*, this man negotiated British control of the Suez Canal and supported participation in the Great Game. For 10 points, name this first Jewish Prime Minister of the United Kingdom and author of *Sybil* and *Vivian Grey*, a Conservative known for expanding the franchise and his rivalry with William Gladstone.

ANSWER: Benjamin **Disraeli** [or First Earl of **Beaconsfield**]

10. In one novel by this author, a girl becomes mute after witnessing her sister's autopsy; that narrator later gets her teeth knocked out by her husband after her daughter Bianca's amorous activities are revealed to Esteban. This author depicted a title character living with Riad and Zulema who occasionally encounters the guerilla Huberto Naranjo before marrying Rolf Carlé, in her novel *Eva Luna*. For 10 points, identify this author of a novel about Clara, a girl with magic powers and a member of the Chilean Trueba family in *The House of the Spirits*.

ANSWER: Isabel **Allende**