



# HSAPQ

High School Academic Pyramid Questions

2008-2009  
NSC-Format Set #1

Round 7

Related Tossups &  
Bonuses

1. This man faced the rebellion of Waltheof, Roger de Breteuil and Ralph de Guader after he defeated his cousin Gui of Brionne at the Battle of Val-es-Dunes. He gathered a war council at Lillbonne before amassing his army at Saint-Valery-sur-Somme, eventually resulting in a landing at Pevensey. The son of Herlette of Falaise and Robert the Magnificent, this man had the Tower of London constructed and commissioned the Domesday Book. For 10 points, name this man who became king of England upon his defeat of Harold Godwinson at the Battle of Hastings.

ANSWER: William the Conqueror [or William I of England]

This man's split with Stalin led to the Informbiro period. For 10 points each:

[10] Name this man who held the first official Non-Aligned Movement Summit in Belgrade.

ANSWER: Josip Broz Tito [or Marshal Tito; or Josip Broz]

[10] Josip Tito served as the president of this former country from 1953 to 1980.

ANSWER: Yugoslavia

2. His works for the general public included *What Life Should Mean to You*, and his colleague Rudolf Dreikurs founded institutes named for this man in Tel Aviv and Chicago. He downplayed the idea that sexual conflicts in childhood cause mental illness, and his system of individual psychology was outlined in *Understanding Human Nature*. Breaking with Freud with his publication of 1907's *Study of Organ Inferiority and Its Psychological Compensation*, for 10 points, name this psychiatrist who wrote *The Neurotic Constitution* and formulated the concept of the inferiority complex.

ANSWER: Alfred Adler

This type of sleep is characterized by high brain activity, giving it the nickname "paradoxical sleep." For 10 points each:

[10] Name this stage of sleep associated with vivid dreams.

ANSWER: Rapid Eye Movement sleep [or REM]

[10] These large, slow brain waves are smaller than four Hertz on an EEG. They only appear in stage three sleep.

ANSWER: delta waves [or delta rhythms]

3. This character pledges never to be a slave at the end of *The Phoenician Women*. In another play, she arrives at an olive grove that is sacred to the Furies, and Theseus is asked to protect her, as she ends her years of guiding her blind father. Jean Anouilh updated the work in which this character plays her most prominent part; in that play, this woman is betrothed to Haemon and is killed by being sealed in a cave, leading to Creon's suicide. For 10 points, name this sister of Ismene and daughter of Oedipus, a female who buries her brother Polynices in a Sophocles play.

ANSWER: Antigone

For 10 points each, name these Canterbury Tales by Geoffrey Chaucer.

[10] This tale sees the titular man relate the story of Palamon and Arcite's feud over Emily.

ANSWER: "The **Knight's** Tale"

[10] In this second tale, Nicholas convinces the carpenter John to hang from the ceiling in a bathtub while he cuckolds his wife Alison.

ANSWER: "The **Miller's** Tale"

4. He is identified in Second Kings chapter 14 verse 25 as prophesizing during the reign of Jeroboam II, and he was the son of Amittai. He predicted the extension of Israel's borders from the Dead Sea to the entrance of Hamath, and as he awaited the destruction of a city, this man was distressed by the destruction of a tree by a great worm. He boarded a ship in Joppa and attempted to flee from God's call to prophesy against Nineveh. For 10 points name this Old Testament prophet who was eaten by a giant fish and later vomited out.

ANSWER: **Jonah**

After claiming that there was nothing in the Bible to suggest angels exist or that the soul is immortal, this man was excommunicated by the Jewish community of Amsterdam in 1656. For 10 points each:

[10] Name this Dutch philosopher who wrote the *Tractatus Theologico-Politicus*, along with *Ethics*, which contains a section entitled "Of Human Bondage or the Strength of the Emotions."

ANSWER: Benedict **Spinoza** [or Baruch **Spinoza**]

[10] Spinoza disagreed with aspects of the philosophy of this other philosopher, whose wrote *Meditations on First Philosophy* and believed "Cogito, Ergo Sum."

ANSWER: Rene **Descartes**

5. Larmor proved that Fitzgerald-Lorentz contraction is a result of Lorentz transformations in a paper titled "[this] and Matter." Stokes' "Silly Putty" Model describes it as a rigid solid for high frequency oscillations and a fluid for low frequency oscillations. Maxwell attempted to measure its effect on the Earth's motion, but its existence was disproved by an experiment that involved an interferometer, and was conducted by Michelson and Morley. For 10 points, name this hypothetical substance necessary for the transmission of light waves.

ANSWER: luminiferous **ether** [or luminiferous **aether**]

It transports fats by forming an emulsion referred to as chyle. For 10 points each:

[10] Identify this system which roughly follows the circulatory system and whose best-known function is in aiding in the immune response.

ANSWER: **lymphatic** system

[10] These components of the lymph system are sometimes removed in young children. Found at the back of the throat, they come in lingual and pharyngeal types, the latter type of which are also known as adenoids.

ANSWER: palatine **tonsils**

6. He lived on land provided by the philanthropist Gerrit Smith, who was one of this man's chief financial backers, as was the preacher Thomas Higginson. His agent in New England, Franklin Benjamin Sanborn, urged this man not to undertake his most famous action, and in Chatham, Ontario, this man proposed a new constitution for the United States. After the burning of Lawrence, this man led a retaliatory raid at Pottawatomie Creek. For 10 points name this man who was hanged in 1859 for leading the abolitionist raid on Harpers Ferry.

ANSWER: John **Brown**

Also known as the Transcontinental Treaty, it established definite western boundaries for the Louisiana Purchase. For 10 points each:

[10] Name this 1819 treaty in which the Spanish ceded East Florida to the United States.

ANSWER: **Adams-Onís** Treaty

[10] In the Adams-Onís treaty, the United States also secured Spanish claims to this polity. Joseph Lane was a Senator from this state, where the Champoege Meetings occurred in the 1840s.

ANSWER: **Oregon**

7. One important step during this phase sees CKI-p16 inhibit CDK4/6; when this is overcome, cyclin E interacts with CDK2 to being the next step of this phase. Another step in this phase sees MPF activate CDK to begin the phase after this one. Those two steps are the G1 and G2 checkpoints. Another stage that occurs during this period sees the formation of two sister chromatids and is known as S phase. For 10 points, name this phase that occupies the majority of the cell's life cycle, the stage in which there is no cell division through mitosis.

ANSWER: **interphase**

The addition of an entrainer allows them to be separated by distillation, but until that point, their components evaporate in the same proportion. For 10 points each:

[10] Identify this system of two solvents, such as 96% ethanol, which cannot be separated given their vapor pressure.

ANSWER: **azeotrope**

[10] Azeotropes are non-ideal and hence deviate from this law that states the vapor pressure of a solution is directly proportional to the mole fraction of the solvent.

ANSWER: **Raoult's** law

8. He painted a dog next to a patriarch being told by five of his sons about one's death in *Joseph's Bloody Coat*, and he painted the British signing a treaty with the Dutch in *The Surrender at Breda*. Francis Bacon modeled his *Head Surrounded by Slabs of Beef* on this man's portraits of Innocent X, and he painted the royal couple in a mirror and himself painting a scene that includes some dwarves and servants attending to the Infanta Margerita. The court painter of Philip IV, for 10 points, name this Spanish painter of *Las Meninas*.

ANSWER: Diego **Velázquez**

Giorgio de Chirico is sometimes considered a precursor to this movement, and a Belgian associated with it painted *The Son of Man* and *Time Transfixed*. For 10 points each:

[10] Name this artistic movement that was inspired by the writings of Sigmund Freud, and whose members included Dorothea Tanning, René Magritte, and its founder, Andre Breton.

ANSWER: **Surrealism**

[10] This painter of *Harlequin's Carnival* was a Surrealist from Catalonia who included a tall ladder in his painting *Dog Barking at the Moon*.

ANSWER: Joan **Miró**



**HSAPQ**  
High School Academic Pyramid Questions

2008-2009  
NSC-Format Set #1

Round 7

Category Quiz  
Bonus Choices

**Arts**  
**Current Events**  
**Geography**  
**History**  
**Literature**  
**Math Calculation**  
**Mythology**  
**Social Science**

**Arts**  
**Current Events**  
**Geography**  
**History**  
**Literature**  
**Math Calculation**  
**Mythology**  
**Social Science**



# HSAPQ

## High School Academic Pyramid Questions

2008-2009  
NSC-Format Set #1

Round 7

Category Quiz Tossups

9. The Nettilling and Amadjuak are its largest lakes, while its two highest peaks, mounts Asgard and Odin, are located in the Auyittuq National park. This island is bordered by the Gulf of Boothia and Lancaster Sound, while the Cumberland Peninsula is in its eastern portion. Separated from Labrador by the Hudson Strait, the capital of Nunavut lies on its Frobisher Bay. The Hudson Strait separates it from Labrador, and this home of Iqaluit is located between Greenland and mainland Canada. For 10 points, identify this fifth largest island in the world.

ANSWER: **Baffin** Island [or **Qikiqtaaluk**]

10. The runtime of algorithms that employ this paradigm can be found with the Akkra-Bazzi method or the Master theorem, and it can be less efficient than other methods due to the need to store the call stack. It is utilized by divide and conquer algorithms such as binary search, and it can be used to solve the Towers of Hanoi problem or implement the factorial function, which can be defined as “n time n-1 factorial.” For 10 points, name this programming model, the opposite of iteration, in which a function’s definition includes a call to itself.

ANSWER: **recursion** [accept **divide and conquer** until it is read]

11. Francisco Gabarro, Ken Essex, Tony Gilbert, and Sidney Sax are four of the musicians credited on this song, which starts with an unusual seven-bar phrase. Originally released on the B side of “Act Naturally,” its working title was “Scrambled Eggs.” This song notes that “There’s a shadow hanging over me,” and the singer doesn’t know “Why she had to go” because “she wouldn’t say.” For 10 points, name this song in which Paul McCartney laments that, at the title time, “all my troubles seemed so far away.”

ANSWER: “**Yesterday**”

12. Shortly after the end of this conflict, the New Plant Decrees were issued, and early battles in it include Chiari and Carpi. One battle in this conflict, fought between the Dyle and Mehaigne rivers, saw a victory for Count Overkirk over the Duke of Villeroy, while another took place near Oberglau and resulted in defeat for Maximilian II Emmanuel and the Duke of Tallard. The battles of Ramillies and Blenheim, which were won by Eugene of Savoy and the Duke of Marlborough, were part of, for 10 points, what conflict ended by the Treaty of Utrecht.

ANSWER: War of the **Spanish Succession**

13. This author wrote about Reverend Colley and Edmund Talbot in *Rites of Passage*, and he wrote about the discovery of a corpse that still has on its sea boots, revealing that the titular naval lieutenant’s struggles to survive on a barren rock were hallucinations. In addition to *Pincher Martin*, this man wrote a novel in which Simon discovers the body of an airman that had been mistaken for “the beast,” and Ralph attempts to keep order with a conch shell. For 10 points, name this author who wrote about boys stranded on an island in *Lord of the Flies*.

ANSWER: William **Golding**

14. He directed a film where a mob leaves the innocent Joe Wilson in a burning building before he becomes a vigilante, and in another detective Lohmann tracks down the title character. Along with *Fury* and *The Testament of Dr. Mabuse*, one of his films was recut by Giorgio Moroder, who added a rock soundtrack, and in another Peter Lorre plays a child killer who whistles "In the Hall of the Mountain King." Most famous for a film that used smash-zoom during Freder's search for the worker Maria, for 10 points, name this German director of *M* and *Metropolis*.

ANSWER: Fritz **Lang**



# HSAPQ

## High School Academic Pyramid Questions

2008-2009  
NSC-Format Set #1

Round 7

Category Quiz  
Bonuses

### Arts

Her underwater photography is collected in *Wonder under Water*, and her most famous work chronicles the 1934 Nazi Party Congress in Nuremberg. For 15 points, name this female German film director of *Triumph of the Will*.

ANSWER: Leni Riefenstahl

### Current Events

In April 2008, this country's national space program launched a record ten satellites at once. For 15 points, name this country, which became the sixth space program to plant a flag on the moon in November 2008.

ANSWER: India

### Geography

This country's largest city is home to a monument dedicated to Joaquin Olmedo, and its capital is located on the lower slopes of the Pichincha volcano. For 15 points, name this South American country that owns the Galápagos Islands.

ANSWER: Ecuador

### History

He signed the Heligoland-Zanzibar treaty with Britain. For 15 points, name this man who succeeded Bismarck as chancellor, and is the namesake of a Namibian strip of land.

ANSWER: Georg Leo von Caprivi [or Georg Leo Graf von Caprivi de Caprera de Montecuccoli; or Count George Leo of Caprivi, Caprera, and Montecuccoli]

### Literature

An unfinished epic about the members of this town was written by Jonathan Swift Somers, and its inhabitants include Daisy Frazier, Lucinda Matlock, and Thomas Rhodes. For 15 points, name this fictional Illinois town which appears in the title of an "anthology" Edgar Lee Masters.

ANSWER: Spoon River

### Math Calculation

For 15 points, how many distinct permutations of the word VELVET exist?

ANSWER: 180 [6!/(2!)(2!)]

**Mythology**

He fell into the river Eridanus, which put out his fire, and the Heliades turned into poplar trees on his grave. For 15 points, name this son of Helios and Clymene, who unwisely asked his father to be able to drive his chariot for a day.

ANSWER: **Phaëthon**

**Social Science**

Near Kanapoi, the remains of this genus' *anamensis* species were found. For 15 points, identify this genus which also contains members such as *afarensis* and *africanus*.

ANSWER: **Australopithecus**



High School Academic Pyramid Questions

2008-2009  
NSC-Format Set #1

Round 7

Stretch Phase

15. In fluvial systems, this material is governed by a statement of the conservation of mass that relates the transported and stationary type of this, the Exner equation. One type of this material is created by gravitational collapse and is known as talus. Another type of this material stems from Aeolian forces and is known as loess. Glaciers can create a type of this material called till, while the type dissolved in water is known as runoff. For 10 points, name this matter made up of small particles that stems from erosion and eventually settles in a solid layer.

ANSWER: **sediment**

This poem is addressed to the poet's sister, Dorothy. For 10 points each:

[10] Name this poem that was written "on revisiting the banks of the Wye" in 1798, that begins "Five years have past."

ANSWER: "Lines Composed a few miles above **Tintern Abbey**, on Revisiting the Banks of the Wye during a Tour, July 13, 1798"

[10] This poet, who collaborated with Coleridge on *Lyrical Ballads*, wrote "Tintern Abbey."

ANSWER: William **Wordsworth**

[10] In the Wordsworth poem "I Wandered Lonely as a Cloud," the speaker comes upon a host of these "golden" flowers.

ANSWER: **daffodils**

16. This person was paired with "love" in the title of a work by Hannah Arendt. Near the end of his life, he looked back on his writing in the book *Reconsiderations*. An opponent of both the Donatists and Pelagians, this writer responded to Alaric's sack of Rome by writing a book that contrasted Rome with the titular metaphorical Jerusalem, *The City of God*. He described his upbringing by Monica and conversion by Ambrose of Milan in another work. For 10 points, name this North African theologian who died in 430 CE after writing his *Confessions*.

ANSWER: St. **Augustine** of Hippo [or Aurelius **Augustinus**]

Answer some questions related to properties of light, for 10 points each.

[10] It may be circular or elliptical, but many interesting optical phenomena are associated with the plane type. This term denotes the manipulation of light waves to create oscillations in a cohesive pattern.

ANSWER: **polarization**

[10] De Broglie supposed that all particles with momentum have one of these; for light, it is equal to the speed of light over the frequency.

ANSWER: **wavelength**

[10] Dividing the product of this number, symbolized "h," with the speed of light, by the wavelength, gives the energy of light.

ANSWER: **Planck**'s constant

17. This engagement was preceded by trickery of the slave Sicinnus, and it began after a war council at Phaleron. One commander viewed this from Mount Egaleo, and the main fighting occurred between Saint George Island and the Kynosoura Peninsula. Psyttaleia was captured by Aristides during this, and the force stationed at Piraeus under Ariamenes and Artemesia lost to that of Eurybiades. For 10 points, name this victory for the fleets of Themistocles over those of Xerxes, a 480 BCE naval battle of the Persian Wars.

ANSWER: Battle of **Salamis**

He composed the early orchestral piece *Fireworks*, and his serial works include the song for soprano and piano "The Owl and the Pussycat." For 10 points each:

[10] Name this composer of *Apollon Musagete* and the ballet *Petrushka*, who is remembered for ballets commissioned by Sergey Diaghilev.

ANSWER: Igor Feodorovich **Stravinsky**

[10] This other ballet by Stravinsky is divided into *The Adoration of the Earth* and *The Sacrifice*. It opens with an ad libitum bassoon solo and uses polytonality.

ANSWER: *The **Rite of Spring*** (or ***Vesna svyashchennaya***; or *Le **Sacre du Printemps***)

[10] This work's second movement has a fugal wind opening, and it is scored without violins or violas. It is a three movement work with chorus setting the titular biblical texts.

ANSWER: *The **Symphony of Psalms***

18. One character in this novel carries on an affair with a Polynesian man named Avihenna. A brother and sister named Peter and Hazel become engaged to two of the central characters, though both engagements are broken. One character's brother, Dave, ran off with an Indian girl named Marie Brantome. That union produced Adam Brant, who has an affair with Christine, who kills Ezra. For 10 points, name this play in which Orin commits suicide at the behest of Lavinia, a work about the Mannons that is a retelling of the *Orestia* by Eugene O'Neill.

ANSWER: **Mourning Becomes Electra**

This man successfully negotiated for the life of Chiang Kai-Shek during the Xian Incident, and he later attempted to restrain the Cultural Revolution. For 10 points each:

[10] Name this Chinese Communist Party leader, who controlled Chinese foreign relations as the premier of China from 1949 until his 1976 death.

ANSWER: **Zhou** Enlai

[10] Near the end of his life, Zhou successfully arranged the 1972 summit between Mao Zedong and this U.S. President.

ANSWER: Richard Milhous **Nixon**

[10] Mao's wife Jiang Qing was among this numeric group, who opposed Zhou's associates Liu Shaoqi and Deng Xiaoping during the Cultural Revolution.

ANSWER: the **Gang of Four** [or **Sirenbang**; or **Ssujenpang**]

19. He submitted a fugue that contained parallel fifths and ended on a chord with a major seventh, which led to him being eliminated from contention for the Prix de Rome. One work by this composer describes *fin de siècle* decadence, and is entitled *La Valse*. Another of his works, *Piano Concerto for Left Hand*, was written for Paul Wittgenstein. This composer of a *Pavane for a Dead Princess* composed a work that has a snare drum ostinato and features numerous instruments playing the same theme repeatedly. For 10 points, name this composer of *Bolero*.

ANSWER: Joseph Maurice **Ravel**

They are necessary for converting substrates into products. For 10 points each:

[10] Name these biological catalysts, which include amylase and pepsin.

ANSWER: **enzymes**

[10] According to transition state theory, the intermediate in which the substrate is bound to the enzyme typically occurs at the highest energy state of the reaction and is known by this two-word term.

ANSWER: **activated complex**

[10] This doubly-eponymous model of enzyme kinetics assumes that the rate of production of the activated complex is constant.

ANSWER: **Michaelis-Menten**

20. Hans Giebenrath befriends Hermann Heilner and drowns after sinking into mental illness in one of this author's works, and another of his works tells of the title character's prodding of Emil Sinclair to spiritual realization; those works are *Beneath the Wheel* and *Demian*. Mozart judges one of this author's characters after he meets Pablo and stabs Hermine in the Magic Theater. This author wrote about Joseph Knecht, who succeeds Thomas van der Trave as Magister Ludi. For 10 points, name this author of *The Glass Bead Game*, *Der Steppenwolf*, and *Siddhartha*.

ANSWER: Hermann **Hesse**

Name these people important in the revolt of the Spanish Netherlands, for 10 points each.

[10] The revolt was against the rule of this Catholic King of Spain. The son of Charles V, he married Mary I of England and built the Escorial.

ANSWER: **Philip II** [prompt on "Philip"]

[10] The revolt was led by this stadtholder until his 1584 assassination by Balthasar Gerard.

ANSWER: **William I**, Prince of **Orange** [or **William the Silent**; prompt on "William"]

[10] The revolt arose in response to the harsh policies of this "iron duke" who ruled as Governor of the Spanish Netherlands from 1567-1573 and established the Council of Blood.

ANSWER: Duke of **Alba** [accept Don Fernando **Alvarez** de Toledo y Pimentel]

21. This state's governor during the Civil War was Zebulon Vance, and it was the site of a 1979 massacre of members of the Communist Workers Party by the Ku Klux Klan and Nazis. Governor William Tryon won the Battle of Alamance in this state, and during the Revolutionary War, it was the site of the Battle of Guilford Courthouse. For 10 points, name this state that saw the Regulator Movement in the 1760s, the Greensboro sit-ins in 1960, and is home to a place nicknamed the "Hornet's Nest" by Cornwallis, the city of Charlotte.

ANSWER: **North Carolina**

Antanas drowns in the street, and Ona becomes a prostitute in this novel. For 10 points each:

[10] Name this story of Jurgis Rudkus, which attracted the most attention for its graphic description of a Chicago meat-packing plant.

ANSWER: *The **Jungle***

[10] This author of *Dragon's Teeth* wrote *The Jungle* to advance his socialist views.

ANSWER: Upton **Sinclair**

[10] This Upton Sinclair novel, which *The Believer* magazine notably counted as using 1,539 exclamation points, excluding the one in the title, was the basis for the film *There Will be Blood*.

ANSWER: **Oil!**

22. McBurney's point becomes tender when this organ is inflamed. Creationists use the "absence" of this organ in various non-mammals to argue for a flaw in evolution. It has been theorized to act as a holding cell for new digestive bacteria, as inflammation of this organ is far more common in countries with good health care. For 10 points, name this worm-shaped organ, long thought to be vestigial, whose inflammation affects over half a million Americans each year.

ANSWER: (vermiform or cecal) **appendix**

This man told the river-god Asopus that he had seen Zeus carrying the god's daughter Aegina away. For 10 points each:

[10] Name this king of Corinth who was sentenced to forever attempt to roll a rock up a hill in Hades.

ANSWER: **Sisyphus**

[10] This son of Sisyphus who also ruled Corinth fed his horses on human flesh until he was thrown from his chariot and eaten by them.

ANSWER: **Glaucus**

[10] Glaucus died during the funeral games of this king of Iolcus, the uncle of Jason who sent him after the golden fleece.

ANSWER: **Pelias**