



# HSAPQ

High School Academic Pyramid Questions

2008-2009  
NSC-Format Set #1

Round 15

Related Tossups &  
Bonuses

1. This dynasty faced the Zaydi Revolt, and its leader Hisham put down a major Berber revolt. Harran was made its capital by Marwan II during the Third Fitna, and they rose to power at the Battle of Karbala although it was ended by the Battle of Zab. Their general Abdul Rahman was defeated by Charles Martel at the Battle of Tours, but they had earlier captured Cordoba, which became their capital after Damascus was taken by the Abbasids. For 10 points, name this seventh and eighth century Islamic caliphate.

ANSWER: Umayyad Caliphate

This incident escalated when Peter Kakhovsky shot Count Miloradovich, who had been sent to attempt to peacefully disperse the demonstrators. For 10 points each:

[10] Name this uprising, largely of the Russian military, which took place after the death of Alexander I, and whose members supported making Constantine tsar.

ANSWER: Decembrists uprising or revolt

[10] Despite being elected dictator by the Decembrists, this man failed to show up to the Senate Square demonstration. He's loosely related to the Prague School author of *Principles of Phonology*.

ANSWER: Sergei Petrovich Troubetzkoy

2. This work discusses "Tabooed Acts" and "Tabooed Persons," and Ludwig Wittgenstein notably wrote some *Remarks* on it. It divides one of its major subjects into contagious, sympathetic, and homeopathic varieties, and it opens by the discussing "The King of the Wood," who was killed by his successor. It discusses Adonis, Balder, and Osiris as examples of sacrifice myths, and it derives its title from an object used in the *Aeneid* to gain entrance to the underworld. For 10 points, name this "Study of Magic and Religion," a work by Scottish anthropologist James Frazer.

ANSWER: *The Golden Bough*

Its formulator wrote a book that described the reactions of a cult whose prophecy of being taken by UFOs did not come true. For 10 points each:

[10] Name this two-word term that describes the mental conflict that occurs when one's beliefs are contradicted by new information.

ANSWER: cognitive dissonance

[10] This author of *When Prophecy Fails* developed the theory of cognitive dissonance.

ANSWER: Leon Festinger

3. This man fought a series of conflicts with Tassilo III before claiming Bavaria for himself at the Synod of Frankfurt, and he fought a war over Italian coastal lands with Nicephoros I. He defeated Desiderius, the last king of Lombardy, and his rear-guard met disaster passing through the Pyrenees at Roncevaux Pass. After the death of his son, the Treaty of Verdun divided his lands between Lothair, Louis the German, and Charles the Bald. For 10 points, name this king of the Franks crowned Holy Roman Emperor in 800 CE.

ANSWER: **Charlemagne** [or **Carolus Magnus** or **Charles the Great**; prompt on "Carolus" or "Charles"]

Together with Richard the Lionheart, he signed the Treaty of Ramla, which allowed pilgrimages to Jerusalem. For 10 points each:

[10] Name this Sultan of Egypt who defended Jerusalem during the Third Crusade.

ANSWER: **Saladin** [or **Salah ad-Din** Yusuf ibn Ayyub]

[10] During his return to England from the Third Crusade, Richard the Lionheart was captured and held for ransom by this Duke of Austria.

ANSWER: **Leopold** V of Austria

4. In this work, the title character repairs the masonry in the bottom of a well, and that character eventually marries Sandy, and has a child named Hello-Central, whose illness forces a trip to France. The protagonist of this work finds himself backed into a cave with his protégé Clarence, with whom he makes a final stand against all the knights of England with a few Gatling guns and electrocuted fences. For 10 points, name this novel in which Hank Morgan travels back in time to Camelot, a work by Mark Twain.

ANSWER: A **Connecticut Yankee in King Arthur's Court**

The professor of Greek Adolphus Cusins realizes that his parents' marriage in Australia is not valid in England at the end of this play. For 10 points each:

[10] Name this play, in which the title character fails to prevent the Salvation Army from taking a donation from her father, the munitions manufacturer Andrew Undershaft.

ANSWER: **Major Barbara**

[10] This Irish-British author of *How He Lied to Her Husband*, *Mrs. Warren's Profession*, and *Pygmalion* wrote *Major Barbara*.

ANSWER: George Bernard **Shaw**

5. He depicted a boy behind a flower vase in his *Boy Bitten By A Lizard*, and he painted a woman breastfeeding a man while four angels look down in his *Seven Acts of Mercy*. In one work this artist modeled Levi off a figure in his *Cardsharps*, and in another work, the rear of a donkey is prevalent, and a man is being blinded on the way to Damascus. In addition to *The Conversion of St. Paul*, this man showed a seated Jesus holding his hand over a bird. For 10 points, name this user of chiaroscuro who painted *The Supper at Emmaus* and *The Calling of St. Matthew*.

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

One work by this man was composed after the death of his mother, and another work is a set of variations on the theme *St. Anthony's Chorale*. For 10 points each:

[10] Name this German who composed *A German Requiem* and *Variations on a Theme by Joseph Haydn*, and was closely associated with Joseph Joachim and the Schumanns.

ANSWER: Johannes **Brahms**

[10] This work by Brahms was written for the University of Breslau and contains several German student songs. It is a companion piece to the *Tragic Overture*.

ANSWER: **Academic Festival Overture** [or **Akademische Festouvertüre**]

6. In this region, gravity waves drive both the quasi-biennial and semiannual oscillations that occur near the equator. Hydrogen gas in this layer is thought to be among the most isotopically enriched materials on Earth, as it contains over thirty percent more deuterium than hydrogen near the earth's surface. This region of the atmosphere is an inversion layer, where temperature increases with height due to the presence of ultraviolet rays. For 10 points, name this layer of the atmosphere below the mesosphere and above the troposphere.

ANSWER: **stratosphere**

Commonly measured in torr or atmospheres, it is equal to the force exerted on a unit area. For 10 points each:

[10] Identify this physical quantity, one of those commonly determined by equations of state for gases.

ANSWER: **pressure**

[10] This principle states that pressure exerted on a fluid is transmitted through that fluid. Its classical example is a hydraulic lift, which is able to lift a car using a small force because the force increases with the ratio of the areas.

ANSWER: **Pascal's** principle

7. This man's educational philosophy emphasized virtue as self-control and rationality. Philip von Limborch published a letter from this man in which he argued that all Christian sects were permissible. In addition to *Some Thoughts Concerning Education* and *A Letter Concerning Toleration*, he argued that the social contract allowed the people to revolt against an unjust ruler in the second of his *Two Treatises on Government*. For 10 points, name this British philosopher who theorized the tabula rasa in his *Essay Concerning Human Understanding*.

ANSWER: John **Locke**

Identify these Greek youths who never should have learned to fly, for 10 points each.

[10] He and his father, Daedalus, were trapped in a tower; Daedalus made them both wings with which to escape, but he flew too close to the sun and the wings melted.

ANSWER: **Icarus**

[10] He wanted to prove to everyone that he was Phoebus Apollo's son, so he asked his father to fly his chariot. He scorched the earth and stars both, so Zeus killed him with a thunderbolt.

ANSWER: **Phaeton**

8. The walls of this organ are composed of four layers, which are known as tunics, one of which is the serosa. The greater omentum is located below this organ's greater curvature, and it is composed of sections such as the cardia, antrum, and fundus. The cell types of this organ include chief and parietal, the later type of which secretes intrinsic factor and hydrochloric acid. It is separated from the esophagus by the cardiac sphincter and from the small intestine by the pyloric sphincter. For 10 points, name this sac that stores food.

ANSWER: **stomach**

Dicentric chromosomes have two of them. For 10 points each:

[10] Name this tightly constricted region that holds the two identical sister chromatids together until they separate during anaphase.

ANSWER: **centromere**

[10] This protein complex found in the centromere is responsible for attaching the chromosome to the microtubules, allowing the chromatids to separate during anaphase.

ANSWER: **kinetochore**



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Category Quiz  
Bonus Choices

Arts  
Current Events  
Geography  
History  
Literature  
Math Calculation  
Philosophy  
Social Science

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Category Quiz Tossups

8. A formula for the expected value for the number of these at a given pressure and temperature invokes a factor of zeta of three. A Bose gas was first formulated to consist of these, which, when put in a box, would have energy equal to  $h\omega$  times the number of these. De Broglie extended a property commonly associated with them to any particle with momentum. For 10 points, gamma radiation consists of high energy ones of these massless particles, the bosons of the electromagnetic force and quantization of light.

ANSWER: **photons**

9. This author wrote about Filbert, who drowns after purchasing a statue of a rain god who comes to life, in his short story "Chac Mool." This author represented Hernan Cortes as Guzman in a novel about Philip II's construction of the Escorial, and wrote a novel about a love triangle involving Harriet Winslow and Ambrose Bierce. In addition to *Terra Nostra* and *The Old Gringo*, this author wrote about a tycoon who reminisces about the loss of his former idealism on his deathbed. For 10 points, name this Mexican author of *The Death of Artemio Cruz*.

ANSWER: Carlos **Fuentes**

10. This action was presaged by a raid on the Hotel des Invalids and in its aftermath Jacques de Flesselle was killed. Its immediate cause was indecisive negotiations between Camille Desmoulins and Bernard-Rene de Launay, who had released the Marquis de Sade ten days earlier. One hundred and fourteen soldiers whose responsibility was guarding seven prisoners were soon forced to defend against an angry mob of sans culottes and other Parisians. For 10 points, name this July 14, 1789 action against a symbolic prison that helped incite the French Revolution.

ANSWER: Storming the **Bastille** [or anything with Bastille in the answer]

11. He wrote orchestral songs like "At Sunset" and "Spring" in a work for soprano that prominently uses the French horn, *Four Last Songs*. He used a clarinet to portray a trickster being hanged, and a solo cello portrays his *Don Quixote* in a tone poem. His free treatment of a work that includes "Of Science" and "The Convalescent" is a tone poem that famously opens with trumpets ascending a fifth then a fourth. For 10 points, name this composer of *Till Eulenspiegel's Merry Pranks* and *Thus Spoke Zarathustra*.

ANSWER: **Richard Strauss** [prompt on "Strauss"]

12. Mary Lou Pardue and Joe Gall developed their namesake banding technique, and the one named for Philadelphia is associated with chronic myelogenous leukemia. Polytene and lampbrush are large types of these structures, whose ends are protected by telomeres. An extra copy of a certain one of these is the cause of Down syndrome, and the term polyploidy is used to describe a cell with more than two sets of them. For 10 points, name these thread-like strands of DNA, of which most humans have forty-six.

ANSWER: **chromosomes**

13. This band sang “I’ve been the beggar / I’ve played the thief” in “14 Years,” and claimed that with “your cocaine tongue you get nothing done” in “You Could Be Mine.” Another song by this group fades out to “everybody needs somebody” after the singer claims “it’s hard to hold a candle” in the titular weather, “November Rain.” They sang about a place “where the grass is green and the girls are pretty,” “Paradise City,” and also recorded “Sweet Child o’ Mine” and “Welcome to the Jungle.” For 10 points, name this band fronted by Axl Rose.

ANSWER: **Guns N’ Roses** [prompt on **GNR**]

14. Neighborhoods of this city include Podil, Pechersk, and Darnytsia, while its main street is Khreshchatyk. Legend says that it was founded by its namesake and his siblings Schek, Khoryv and Lybid. This city’s metropolitan area extends to the Kaniv Reservoir, and landmarks of it include the Mariyinsky Palace and the Monastery of the Caves. Lying at the confluence of the Desna and Dnieper Rivers, for 10 points, name this largest city and capital of Ukraine.

ANSWER: **Kiev** [or **Kyiv**]



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Bonuses

### Arts

He gives his name to a system of hand signals representing solfege, and one of his works includes a movement about a "Viennese Musical Clock." The composer of *Psalmus Hungaricus*, for 15 points, name this Hungarian composer of *Hary Janos*.

ANSWER: Zoltan Kodaly

### Current Events

One city in this country recently saw a protest after it was rumored that Timothy Gyang Buba of the People's Democratic Party won an election. For 15 points, name this African nation home to the city of Jos, where four hundred people have recently been killed in riots.

ANSWER: Nigeria

### Geography

It is the capital of Nuevo Leon and is located in northeastern Mexico. For 15 points, name this city, a major manufacturing center located at the foot of Mount Silla.

ANSWER: Monterrey

### History

The victims of this event were part of the Baker-Fancher party, who were traveling from Arkansas to California. For 15 points, name this 1857 massacre of approximately 120 people by Paiute Indians and Mormons led by John D. Lee in southern Utah.

ANSWER: Mountain Meadows massacre

### Literature

His poetry collections include *Buckdancer's Choice*, and he wrote a novel where Ed scales a cliff to avenge the death of Drew, who was shot while canoeing down a river in Georgia. For 15 points, name this American author of *Deliverance*.

ANSWER: James Dickey

### Math Calculation

Find the area enclosed by the graph of the polar equation  $r$  equals 4 times the square root of 4 times cosine theta.

ANSWER: 4 pi

**Philosophy**

This work claims that people should be able to do whatever they want as long as those actions don't effect others, and it argues that the title concept should not be subsumed by a "tyranny of the majority." For 15 points, name this John Stuart Mill work that argues for individual rights.

ANSWER: **On Liberty**

**Social Science**

Reaffirming the "chain of responses" hypothesis, this experiment saw the distance between an animal and its food be shortened, and a barrier placed. For 15 points, name this experiment in which the animals always ran into the barrier, making the title sound.

ANSWER: **Kerplunk** experiment



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Stretch Phase

15. The title character of William Wells Brown's novel *Clotel* commits suicide after learning she is one of these people. David Walker's *Appeal* describes the injustices done to these people, and the title character of the novel *Dred* leads an unsuccessful uprising of them. Authors like Henry Bibb, Harriet Jacobs, and Olaudah Equiano were among the many types of these people to write namesake "narratives" about their lives. For 10 points, name this group supported by William Lloyd Garrison's newspaper *The Liberator*, which argued for their immediate emancipation.

ANSWER: slaves [or clear-knowledge equivalents]

Name some events from the Protestant Reformation, for 10 points each.

[10] This meeting arranged by Frederick, Elector of Saxony featured Martin Luther's famous utterance "Here I stand; I can do no other," but he still got outlawed for heresy.

ANSWER: Diet of Worms

[10] This meeting in the Netherlands branded the Remonstrant followers of Jacob Arminius as heretics, basically establishing Calvinism as the official religion.

ANSWER: Synod of Dort

[10] The Catholic church finally realized that Protestantism was a real problem and responded with this council beginning in 1545 which started the Counter-Reformation.

ANSWER: Council of Trent

16. Eugippio provides a chronicle of this nation during the Middle Ages, and while under the rule of the Duchy of Spoleto, it was governed by an assembly known as the Arengo. Against the orders of Pope Clement XII, this country was invaded by Cardinal Giulio Alberoni in 1739, and it was later recognized through the Treaty of Tolentino by Napoleon. It was founded on land donated by Felicissima to its namesake Dalmatian stonemason, who was escaping persecution from Diocletian. For 10 points, name this Most Serene Republic, a small country in the Apennines surrounded by Italy.

Answer: Most Serene Republic of San Marino

An example of it is the separation of finches on the Galápagos Islands. For 10 points each:

[10] Name this type of speciation that is caused by geographic isolation.

ANSWER: allopatric speciation

[10] The finches on the Galápagos Islands are sometimes named for this Englishman who took a voyage on the *Beagle* in the 1830s and wrote *On the Origin of Species*.

ANSWER: Charles Darwin

[10] The most studied trait of Darwin's finches is the size and shape of this structure.

ANSWER: beak

17. A cloud contained in it is known as "Chain A." The tentatively-named Virgo Stellar Stream lies perpendicular to one extension of it, and the 14 surviving dwarf companions of it orbit within its dark matter halo. The cluster RSGC1 is located in its Scutum-Crux Arm, which itself is found between the Sagittarius and Norma Arms. The Monoceros ring has been proposed to encircle it, and it's the most notable thing in the Local Group. Containing the Large Magellanic Cloud, for 10 points, name this galaxy, home of the Solar System.

ANSWER: **Milky Way** [prompt on "The Galaxy"]

He was hired to replace his idol Roy Eldridge in the Teddy Hill Orchestra, and became Arturo Sandoval's mentor. For 10 points each:

[10] Name this jazz performer who composed the songs "Groovin' High" and "Salt Peanuts."

ANSWER: Dizzy **Gillespie**

[10] Dizzy Gillespie is argued to be the greatest jazz performer on this brass instrument, although others contend that Louis Armstrong was more talented.

ANSWER: **trumpet**

[10] Dizzy Gillespie, along with Charlie Parker, helped develop this style of jazz that is featured in the song "A Night in Tunisia."

ANSWER: **bebop**

18. This poet chronicled time in a hospital, where the nurses "handsome, ugly, all are women," and where "laughs the happy April morn / thro' my grimy, little window" in "Anterotica." Another poem by this author concludes that "I am the Will of God: I am the Sword," and was dedicated to Rudyard Kipling. In his most famous poem, he writes his "head is bloody, but unbowed," and declares "I am the master of my fate: I am the captain of my soul." For 10 points, identify this British poet of "Invictus."

ANSWER: William Ernest **Henley**

The Stefan-Boltzmann law relates their radiant flux to temperature. For 10 points each:

[10] Identify these hypothetical objects that absorb all light that falls on them.

ANSWER: **black body** [or **black bodies**]

[10] Two approximations to the intensity of a black body's radiation at an arbitrary temperature were given by Planck's Law and the Rayleigh-Jeans law. This third one predicted that the wavelength of peak intensity was inversely proportional to temperature.

ANSWER: **Wien's** displacement law

[10] One of the downfalls of the Rayleigh-Jeans law was that it predicted that intensity would increase without bound at small wavelengths, a phenomenon known as this.

ANSWER: **ultraviolet catastrophe**

19. Gyorgy Dozsa led a rebellion here in 1514 which was put down by Janos Sapolyai, and its early capitals include Fehervar and Esztergom. This nation was ruled by the Arpad Dynasty for three hundred years, during which the Battle of Mohi was lost to Batu Khan by Bela IV. Other battles lost by it include one under the leadership of Pal Tomori and Louis II, and another to Otto the Great. Military losses, including the battles of Lechfeld and Mohacs, are staples of the history of, for 10 points, which Central European nation whose people are Magyars.

ANSWER: **Hungary**

He wrote about Captain Michaelis and the Cretan rebellion against the Ottomans in *Freedom or Death*.  
For 10 points each:

[10] Name this author of *Zorba the Greek*.

ANSWER: Nikos **Kazantzakis**

[10] This work by Nikos Kazantzakis chronicles the final days of Jesus, and includes a scene in which an angel leads Jesus down from the Cross.

ANSWER: *The **Last Temptation of Christ***

[10] Kazantzakis wrote a "modern sequel" to this work, which contains encounters with the Lotos-Eaters and the cattle of Hyperion.

ANSWER: **Odyssey**

20. Only for certain circuit components is its differential form, equal to the slope of the U-I graph, equal to its more common formulation. Eddies in nearby magnetic fields are generated by other nearby alternating currents in the proximity effect, which increases this quantity. Below the Debye temperature, it decreases as temperature to the fifth, since it arises from scattering off phonons. Generally, it is proportional both to a wire's length and the reciprocal of its cross-section. For 10 points, give this quantity, the reciprocal of conductance and measured in ohms, equal to the ratio of the voltage to the current.

ANSWER: **resistance**

Name these landed classes, for 10 points each:

[10] The Romanovs were a member of this highest class of Russian nobles. Their power was weakened after the rule of Ivan the Terrible, and this class was abolished by Peter the Great.

ANSWER: **boyars**

[10] This class of landed Prussian nobles made up most of the officers in the Prussian army.

ANSWER: **junkers**

[10] This class of landowning peasants opposed Soviet collectivization policies and was virtually eradicated by Stalin's purges.

ANSWER: **kulaks**

21. In this figure's honor Thor kicked the dwarf Litur into a fire, and he owns the largest ship in the world, Hringhorn. He is the father of the god of justice, Forseti, with his wife Nanna. Thok thwarted Hermod's attempt to rescue this god by refusing to weep, and Vali was created with the express purpose of avenging him. When this god started having bad dreams, Frigga extracted oaths from every object not to harm him, but skipped mistletoe. For 10 points, name this Norse god killed by his blind brother Hoder.

ANSWER: **Balder**

Novelists from this country include the author of *Voss* and *Riders in the Chariot*, Patrick White. For 10 points each:

[10] Name this country whose other authors include Thomas Keneally, who wrote about its Aborigines in *The Chant of Jimmie Blacksmith*.

ANSWER: Commonwealth of **Australia**

[10] A Thomas Keneally work about this person is named after his "Ark;" he saved many Jews during the Holocaust.

ANSWER: Oskar **Schindler**

[10] This Australian wrote about the Jerilderie Letter in *True History of the Kelly Gang*. Another of his works, *Oscar and Lucinda*, centers on transporting a glass cathedral through the Outback.

ANSWER: Peter Philip **Carey**

22. A crucifix and white cliffs loom in the background of one of this artist's works, and his early portraits include a relief depiction of Countess Karoly. He scandalized Europe with his depiction of a woman's groin in his *The Origin of the World*. He depicted himself painting a landscape while a scantily clad woman looks on in *The Artist's Studio*, and another work by this artist depicts one man wielding a basket and another a hammer. For 10 points, name this realist French painter of *The Stone Breakers* and *Burial at Ornans*.

ANSWER: Jean Desire Gustave **Courbet**

This man was a leader of the forces of Emperor Go-Shirakawa which defeated the forces of Taira no Kiyomori in the Heiji Rebellion. For 10 points each:

[10] Name this man who won the Battle of Dan-no-ura during the Genpei War.

ANSWER: **Minamoto** no **Yoritomo** [accept either]

[10] Minamoto no Yoritomo was the first to claim this Japanese feudal title which means "Commander of the Armies".

ANSWER: **Shogun**

[10] Minamoto no Yoritomo established this first Bakufu or Shogunate which faced the Mongol invasions and was succeeded by the Ashikaga.

ANSWER: **Kamakura** Shogunate