



HSAPQ

High School Academic Pyramid Questions

2008-2009
Four Quarter Set

Round 7

First Quarter:
Ten Tossups

1. The Hedgehog is one of these and reduces to the Dirac one sufficiently far from the origin, and they are examples of topological solitons, and some Grand Unified Theories posit that dyons are merely excited ones. Their existence leads naturally to a condition also named for Dirac, which explains why charges are quantized; moreover, if they exist, then Maxwell's equations may be written symmetrically, having introduced a new kind of point charge. For 10 points, identify these hypothetical objects that lack distinct north and south ends.

ANSWER: magnetic monopoles

2. He wrote about Colonel John Hepburn, who introduces the title character to Gustavus Adolphus in *Memoirs of Cavalier*, and in another work a feather bed thrown out of a burning house hits a protagonist who was posing as Gabriel Spencer while cross dressing. That character marries her half-brother Humphry, who forces her to move to Virginia before she is sent to Newgate Prison, while Xury and Friday befriend the title character of his most famous novel, which is based on the life of Alexander Selkirk. For 10 points, name this author of *Moll Flanders* and *Robinson Crusoe*.

ANSWER: Daniel Defoe

3. At this battle, Confederate forces under Robert Toombs held at Rohrbach's Bridge, and Hood's attack from the West Woods maintained a stalemate in the Cornfield. Lee probably would have been defeated had McClellan acted earlier on the copy of Special Order 191 which two soldiers found wrapped around a cigar. Immediately preceding the Emancipation Proclamation, for 10 points, identify this Maryland battle, best known for Bloody Lane, which contributed to its twenty-three thousand casualties, the most of any day of the Civil War.

ANSWER: Battle of Antietam [or Battle of Sharpsburg]

4. One polymer produced by this organ is found in higher concentrations in pre-eclampsia sufferers, and contains phosphocholine which it can use to suppress immune responses. In addition to producing Neurokinin B, it increases the amount of lipids and glucose present by producing somatomammotropin. The syncytiotrophoblast, a part of this organ, digests the walls of blood vessels in the endometrium, and is part of the chorion. It is short-lived in marsupials, leading to short gestation periods. For 10 points, name this organ, which in mammals nourishes the fetus.

ANSWER: placenta

5. Cimon received a command to retrieve this man's bones from Scyros, where he fled during an uprising led by Menestheus. A man who met him trying to steal his cattle, Pirithous, aided him in stealing Helen, and they were both imprisoned in Hades for trying to capture Persephone. He killed a man who tore people apart by tying them to pine trees and a man who cut or stretched people to fit his bed. He also received twine from Ariadne so he would not get lost in the labyrinth. For 10 points, name this Athenian king who killed Sinis, Procrustes, and the Minotaur.

ANSWER: Theseus

6. The Rybinsk reservoir is made up of water from this river, and is found north of the Uglich Highlands. It runs past Saratov, and its tributaries include the Oka and Vyatka. It has hydroelectric power stations at Ivankovo, and this river rises in the Valdai hills and has a Baltic canal. Its major tributary is the Kama, and this river flows past Nizhy Novgorod and Samara. It has a reservoir at Volgograd and flows out of Astrakhan into the Caspian after its canal with the nearby Don. For 10 points, name this longest Russian river.

ANSWER: **Volga** River [or **Ra**; or **Etil**]

7. The website for this game describes a "mama's boy" named Gooplet and a witch doctor whose only magic trick is "The Never-Ending Hat of Feathers." Inspired by the Drake Equation, this game allows players to use didgeridoos and flaming torches in its third stage. In its final stage, players control a spaceship that can terraform planets or explore the galaxy. Designed by Will Wright, for 10 points, name this game where players evolve from a multicellular organism to an animal to a tribe to a civilization, which allows players to design their own creatures.

ANSWER: **Spore**

8. His protégé is Amyas le Poulet, and La Cote Male Taile is one of his soap missionaries, who uses the slogan "Patronized by the Elect." After the blacksmith Dowley complains about wages, this man explains the concept of real wages to a perplexed audience, and the common people call him The Boss. Early in the novel in which he appears, he is saved by a solar eclipse, and after getting hit in the head with a crowbar, he is transported to Camelot. For 10 points identify this character, the protagonist of a Mark Twain novel who is transported to King Arthur's court.

ANSWER: **Hank Morgan** [either or both names; accept *A **Connecticut Yankee** in King Arthur's Court*]

9. This man appears in Percy Shelley's "The Masque of Anarchy" for his defense of Lord Sidmouth. This man had to resign his post after the failure of the Walcheren Expedition and had earlier resigned to avoid the Ministry of All Talents. Leader of the House of Commons after Spencer Perceval's assassination, this man shot George Canning in a duel and later killed himself with a letter-opener. British Foreign Secretary from 1812 to 1822, for 10 points, name this man who represented Great Britain at the Congress of Vienna.

ANSWER: Viscount **Castlereagh** [or Robert **Stewart**, Second Marquis of Londonderry]

10. In the foreground of this painting, Maria Sotomayor can be seen offering a red cup on a golden tray while Nicolas Pertusato and Maria Barbola play with a mastiff. Its background shows a copy of a Jacob Jordaens work by Juan del Marzo and some paintings by Rubens. The subject of over fifty Picasso paintings, this work depicts the artist in the foreground with a red cross on his chest. For 10 points, name this painting depicting the Infanta Margarita, the daughter of Philip IV of Spain, and her maids of honor sitting for a portrait by Diego Velazquez.

ANSWER: **Las Meninas** [accept *The **Maids of Honor*** before it is read]



High School Academic Pyramid Questions

2008-2009
Four Quarter Set

Round 7

Second Quarter:
Ten Tossups
with Bonuses

1. Castelnuovo-Tedesco wrote for this instrument to accompany a narrator in *Platero y Yo*, and it was modernized by Antonio Torres. Its variants include the Andean *charango* and *jarana*. Heitor Villa-Lobos wrote twelve etudes for it, and one person who plays it performed the *Three O'Clock Blues*. The main promoter of its classical use in the twentieth century was Isaac Albeniz, and it is frequently used in Flamenco music. For 10 points, name this instrument related to the lute and mandolin, which has six strings and is played by B.B. King.

ANSWER: guitar

BONUS. A dihybrid cross produces a four-by-four version of this diagram. For 10 points each:

[10] Name this diagram that shows all of the possible offspring of two parents for a certain number of alleles.

ANSWER: Punnett square

[10] The phenotypic ratios expected from a Punnett square do not occur in this situation governing retriever fur color, when one gene interferes with the expression of another gene.

ANSWER: epistasis

2. Preceded by the marriage of Lampade to Mununza, an account of this engagement was thought to be given by Isidorus Pacensis of Beja but has since been proven false. It occurred near the meeting of the Clain and Vienne rivers. According to the Chronicle of Fredegar, this battle was fought to protect the Abbey of Saint Martin at the request of Eudes of Aquitaine. Also called the Battle of the Court of Martyrs, for 10 points, name this defeat for Abdul Rahman Al Ghafiqi and the Umayyads, which halted the Muslim invasion of Europe, a victory for Charles Martel in 732.

ANSWER: Battle of Tours [or Battle of Poitiers; accept Battle of the Court of Martyrs before it is read]

BONUS. This island, which contains the Zapata Swamp and Milk Lagoon, has its highest point at Pico Turquino in the Sierra Maestra. For 10 points each:

[10] Name this Caribbean island nation, which owns the Isle of Youth and contains the Escambray Mountains.

ANSWER: Republic of Cuba

[10] Another Caribbean island of the Greater Antilles is this nation, containing the Blue Mountains, with capital at Kingston.

ANSWER: Jamaica

3. He wrote of a phenomenon that “performs its secret ministry, unhelped by any wind,” and he left unfinished a long poem about a girl who discovers Geraldine, who claims to have been abducted. In one of his poems a “damsel with a dulcimer” plays by the sacred Alph river, where the title figure constructed a “stately pleasure dome,” and in another poem by this man a wedding guest is accosted by a man who shot an albatross with a crossbow. For 10 points, name this poet of “Frost at Midnight,” *Christabel*, “Kubla Kahn,” and *The Rime of the Ancient Mariner*.

ANSWER: Samuel Taylor **Coleridge**

BONUS. Name these battles of ancient Greece, for 10 points each.

[10] In this 371 BCE battle, the Theban general Epaminondas led the Sacred Band to victory over the Spartans, thus ending the myth of Spartan invincibility.

ANSWER: **Leuctra**

[10] Leonidas and his three hundred Spartan troops died to a man in this 480 BCE battle against Xerxes, named for the pass of “hot gates” in which it took place.

ANSWER: **Themopylae**

4. Andrew Sullivan speculated that some of these people were named after witches on *Buffy* and *Charmed*, and one of them is named after a Norse word for “strength.” One is named after a sport, one is named after a bay, and the oldest enlisted in the U.S. Army on September 11, 2007. The youngest has Down’s syndrome, and another’s pregnancy has prompted questions about the efficacy of abstinence-only sex education. For 10 points, Track, Bristol, Willow, Piper, and Trig comprise what group, who all share a mother who ran for Vice-President of the United States?

ANSWER: Sarah **Palin’s children** [accept obvious equivalents]

BONUS. Name some female poets, for 10 points each.

[10] Her poems were collected in *The Tenth Muse Lately Sprung up in America*, and this author of “Upon the Burning of Our House” was the first female poet published in colonial America.

ANSWER: Anne **Bradstreet** [or Anne **Dudley**]

[10] This former U.S. Poet Laureate wrote *Annie Allen* and a poem about some people who “jazz June,” “We Real Cool”.

ANSWER: Gwendolyn **Brooks**

5. The Chikyu Hakken mission is attempting to explore this region. This region contains such polymorphs of rocks as wadsleyite and ringwoodite, as well as the perovskite-structured pyroxene enstatite. The D’ [D double prime] region is found in its homogeneous lower portion, while a Low Velocity Zone extends several kilometers in this layer. A sudden increase in velocity occurs at the top of this region, known as the Moho discontinuity. For 10 points, name this layer of the Earth above the outer core and below the crust.

ANSWER: **mantle**

BONUS. This philosopher first talked about his educational philosophy in “My Pedagogic Creed.” For 10 points each:

[10] Name this pragmatist who wrote *Democracy and Education*.

ANSWER: John **Dewey**

[10] Another educational philosopher was Paulo Freire, whose *The Pedagogy of the Oppressed* updated the ideas of this man, who wrote a *Critique of the Gotha Program* and *Das Kapital*.

ANSWER: Karl Heinrich **Marx**

6. This author's "Mind and Earth" and "A Psychological Approach to the Trinity" introduced one of his landmark concepts, which he dubbed a structural element of the psyche. In his *Psychological Types*, he divided people into introverts and extroverts, and he also developed the concepts of the animus and anima. Breaking with Freud after the publication of his *Psychology of the Unconscious*, for 10 points, name this psychologist who theorized archetypes and the collective unconscious.

ANSWER: Carl Gustav **Jung**

BONUS. It ended as the governor sent in the National Guard, which proceeded to kill the hostages, blame the inmates, and torture them for hours. For 10 points each:

[10] Name this New York prison that saw a revolt in which prisoners took guards hostage and demanded political representation and more sanitary conditions

ANSWER: **Attica** prison revolt

[10] This governor in question ordered the assault because he wanted to appear especially tough on crime for the sake of his presidential ambitions. Gerald Ford appointed him Vice-President.

ANSWER: **Nelson Rockefeller**

7. In 1956, this country reacted against its earlier populism by electing Juscelino Kubitschek as president. His succession resulted in a 1964 military coup, ten years after the suicide of the man who was dictator between 1930 and 1954, Getulio Vargas. Earlier, the Golden Law had ended slavery here during the rule of Emperor Pedro II. For 10 points name this former Portuguese colony, the largest country in South America.

ANSWER: Federative Republic of **Brazil** [*Republica Federativa do Brasil*]

BONUS. Its second movement is a dance in 5/4 time, possibly a limping waltz, and common orchestrations replace a bassoon with a bass clarinet for one solo. For 10 points each:

[10] Identify this symphony, famous for a romantic theme in its first movement which fades to a dynamic marked with six "p"s.

ANSWER: **Tchaikovsky's Sixth** symphony [or Symphony **Pathétique**]

[10] Tchaikovsky is also known for an overture to this Shakespeare play about the two titular lovers, which was inspired by the failure of *Fatum*.

ANSWER: **Romeo and Juliet**

8. A 2 second lag in the stellar-occultation light curve characteristic of this body shows asymmetrical mass distribution possibly caused by winds. It was described to possess a "cantaloupe" terrain by its discoverer William Lassell, and its high density and retrograde motion suggest that it is a captured Kuiper Belt object. It is notable for exhibiting cryovolcanism, and it is the coldest object in the solar system. For 10 points, identify this largest moon of Neptune.

ANSWER: **Triton**

BONUS. The narrator of this work is introduced to a curious traveller by Peter Giles in Antwerp. For 10 points each:

[10] Name this work. whose narrator discusses life on the title island with Raphael Hythloday.

ANSWER: **Utopia**

[10] *Utopia* was written by this man, himself the subject of Robert Bolt's *A Man for All Seasons*. He was executed for not supporting Henry VIII's marriage to Anne Boleyn.

ANSWER: Sir Thomas **More**

9. In one of this man's novels, the successful writer Toshio Oki meets his old flame and inspiration Otoko Ueno. Another of his novels is narrated by Uragami and features a five-month contest between Shusai and Otake. The aging Shingo worries about Kikuku's abortion in one novel, and he wrote of the middle aged Shimamura's visits to the title hot springs locale to have an affair with a geisha. For 10 points name this Japanese author of *Beauty and Sadness*, *The Master of Go*, *The Sound of the Mountain* and *Snow Country*.

ANSWER: Yasunari **Kawabata** [accept in reverse order]

BONUS. He avenged his father's death by defeating Goll MacMorna, and he led the Fianna. For 10 points each:

[10] Name this hero of the Fenian cycle, the father of Ossian who supposedly built Giant's Causeway.

ANSWER: **Finn MacCumhail** [or **Finn MacCool**]

[10] Finn MacCumhail became very smart after he burned his finger and licked it while cooking this fish, which itself ate the hazelnuts of wisdom.

ANSWER: **Salmon** of Knowledge [or **Salmon** of Wisdom; or **bradán feasa**]

10. He went to Lydda and healed Aeneas after encountering the magician Simon Magnus. He worked with the sons of Zebedee in Capernaum, and while imprisoned by Herod, the angel of the lord removed his chains. In Galatians, he was entrusted with the conversion of the circumcised, and he denied knowing Jesus three times. Constantine built his basilica on Vatican Hill after he was crucified on an inverted cross by Nero. For 10 points, name this fisherman apostle of Jesus whose name means "the rock" and who was the first pope.

ANSWER: Saint **Peter** [accept **Simon Peter**; prompt on **Simon**; prompt on **Cephus**]

BONUS. Name these parts of a phase diagram, for 10 points each.

[10] Above this temperature, liquid and gas phases are indistinguishable, and the compound is referred to as a superheated liquid.

ANSWER: **critical** temperature [or **critical** point]

[10] At this point, three phases of the compound can coexist in equilibrium.

ANSWER: **triple** point



HSAPQ

High School Academic Pyramid Questions

2008-2009
Four Quarter Set

Round 7

Third Quarter:
Team Rounds

Choices: AFRICA
POLAND

AFRICA

This round will relate to Africa.

[10] African myths and music inspired Darius Milhaud, a member of The Six, a group of composers also including Arthur Honneger, that was based in this European country.

ANSWER: **France**

[10] A coffee plantation outside of Nairobi is the setting for this work which describes the experiences of Isak Dinesen.

ANSWER: ***Out of Africa***

[10] The Victoria Falls lie along this body of water which borders Namibia, Zimbabwe, and empties into the Mozambique Channel.

ANSWER: **Zambezi** River

[10] Olurun is an example of an Orisha, which are the gods of this religion that is mostly found in Nigeria.

ANSWER: **Yoruba**

[10] *Africa* is a work dedicated to Scipio Africanus written by this man, whose *Canzoniere* contains sonnets dedicated to his love Laura.

ANSWER: **Petrarch** [or Francesco **Petrarca**]

[10] The Jameson raid occurred during this conflicts provoked by President Kruger's policies, which was ended by the treaty of Vereeniging.

ANSWER: Second **Boer War**

[10] This empire was founded by Sundiata Keita and shares its name with a present-day West African country.

ANSWER: **Malinke** empire

[10] Donald Johanson discovered the remains of Lucy, who was a member of this genus with species like *afarensis* and *africanus*.

ANSWER: **Australopithecus** [or **Australopithecines**]

[10] Eratosthenes of Cyrene used some data from Egypt to calculate this value to be approximately 40,000 kilometers.

ANSWER: **circumference** of the **earth** [accept obvious equivalents]

[10] This Frenchman painted *The Women of Algiers* in addition to depicting a horrific event in the Greek independence struggle in *Massacre at Chios*.

ANSWER: Ferdinand Victor Eugene **Delacroix**

POLAND

This round will pertain to Poland and Polish people.

[10] This astronomer posited a heliocentric theory of the universe in his *On the Revolutions of the Heavenly Spheres*.

ANSWER: Nicolaus **Copernicus** [or Mikolaj **Kopernick**]

[10] Vasily Shuisky of this neighboring country was deposed by Polish king Sigismund III Vasa at the turn of the seventeenth century.

ANSWER: **Russia**

[10] This landmark graphic novel, which depicts Poles as pigs and Jews as the titular type of mammal, was written by Art Spiegelman and takes place largely in Poland.

ANSWER: **Maus**

[10] Marcus Vicinius falls in love with Lygia and Petronius commits suicide in this work by Henryk Sienkiewicz, which has a Latin title.

ANSWER: **Quo Vadis**

[10] Originating in the Beskid mountains, this river flows through Warsaw and Krakow before emptying into the Baltic Sea.

ANSWER: **Vistula** [or **Wisla**]

[10] Casimir Funk was a Pole who established a link between a deficiency of this vitamin and Beriberi.

ANSWER: Vitamin **B1** [or **thiamine**]

[10] Jerzy Kurylowicz and Henryk Jazdzewski were Polish academics studying this. Other people who worked in this field included Benjamin Whorf and Michael Ventris, who decoded Linear B.

ANSWER: **linguistics**

[10] This Nazi death camp, paired with Birkenau, was located in Poland.

ANSWER: **Auschwitz**

[10] During his highest post, this former pope apologized for the Catholic Church's wrongs against Galileo and the Crusades.

ANSWER: Pope **John Paul II** [or Karol Joseph **Wojtyla**]

[10] Though he's not exactly Polish, this man wrote a trilogy named for the Polish city of Danzig, containing *Dog Years*, *Cat Walk*, and a novel about Oskar Mazerath, *The Tin Drum*.

ANSWER: Gunter **Grass**



HSAPQ

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Round 7

Fourth Quarter:
Ten Tossups

1. The Ac, Ds, and P elements are all made up of this material. In fluorescent in situ hybridization, the target section of it shows up as yellow while the rest of it is red. "Backward slippage" is thought to be the origin of the "microsatellite" variety, and sticky ends may be produced when it is cleaved by restriction enzymes. It is duplicated in the polymerase chain reaction. For 10 points, name this nucleic acid, which typically forms a double helix structure and contains the genetic code for all higher lifeforms.

ANSWER: **DNA** [or **deoxyribonucleic acid**]

2. Nicole D'Oresime used this idea to spurn Aristotelian cognitive species, and along with Dourand de Sainte-Pourcain, applied this law to defend hypotheses of the heavens, a stance Galileo borrowed. This statement is also called the principle of parsimony, and it was first stated as "Entia non sunt multiplicanda praeter necessitatem" or "Plurality should not be posited without necessity." For 10 points, name this idea of a Franciscan philosopher, who argued that, all else being equal, the simplest solution should be considered the truest.

ANSWER: **Occam's Razor**

3. In one of his works of incidental music, he took the overture from *Alfonso und Estrella* and the ent'racte from his song *Der Leidende*. In addition to the music for *Rosamunde*, he wrote a string quartet of variations on his song *Death and the Maiden*. He also composed a song that begins with two Gs being played in triplets and describes an evil elf who kills a boy, as well as a symphony that he abandoned after finishing two movements. For 10 points, name this composer of *Gretchen at the Spinning Wheel*, *Der Erlkoenig*, and the *Unfinished* Symphony.

ANSWER: Franz **Schubert**

4. Five people in a doorway look over the artist's shoulder in one painting by this man; another is a depiction of the George Washington cherry tree legend. In addition to painting *Return from Bohemia* and *Parson Weems' Fable*, this man co-founded the Stone City Art Colony during the Great Depression. His other paintings include *Daughters of Revolution*, *The Midnight Ride of Paul Revere* and *The Birthplace of Herbert Hoover*. The painter of a work depicting Nan and dentist Byron McKeeby, for 10 points, name this Iowa native and artist of *American Gothic*.

ANSWER: Grant DeVolson **Wood**

5. In one work, he says that a certain murderer, "clad in beggar's weeds for purple robes," shall soon "grope his way" "to a strange land." In that first work, he has "foresuffered all / enacted on this same divan or bed." He was said to unite all the characters of "The Waste Land" since he had been a woman for seven weeks. He betrayed Hera by admitting that women derive more pleasure from sex, leading her to strike him blind; later, he attempts to aid Creon. For 10 points, name this transsexual prophet of literary works set in Thebes, who also tries and fails to advise Oedipus.

ANSWER: Tiresias

6. A form of magnesium named for Riecke is used to produce Grignard reagents containing this element. A sodium aluminum salt used to dissolve alumina contains six atoms of this element, and uranium oxide is converted into a salt of this element before it can be used to enrich uranium. The first compound involving xenon also contains six atoms of this. Four atoms of this element replace ethylene in the monomer of Teflon. It is the most electronegative of all elements. For 10 points, identify this element with atomic number 9 and symbol F.

ANSWER: fluorine [accept F before read]

7. The first English colony in this modern-day state was at Popham in 1607, and the War of 1812 saw the British attempt to form New Ireland here. After the Civil War, it became legendary for its support of the Republican Party, and in 1936, it and Vermont were the only states to vote for Alf Landon. Formerly part of Massachusetts, this state was admitted to the union in the Compromise of 1820, and its land disputes with British Canada led to the Aroostook War. For 10 points, name this northernmost state in the contiguous United States.

ANSWER: Maine

8. This author's studies in the Oaxaca (wah-HAWK-ah) Valley of Mexico led to a book that called culture an "instrumental apparatus." In addition to *A Scientific Theory of Culture*, he wrote the forward of his student Jomo Kenyatta's *Facing Mount Kenya*, and he examined the methods of tilling the soil in his work about agricultural rites, *Coral Gardens and Their Magic*. In another work, he discussed the Kula exchange among the Trobriand Islanders. For 10 points, name this Polish anthropologist, who penned *Argonauts of the Western Pacific*.

ANSWER: Bronislaw Kasper Malinowski

9. As a boy, the protagonist of this novel delivers messages with his Great Uncle Charles and is bullied by Nasty Roche. Other people its protagonist meets at the Clongowes Wood School include a teacher who punishes him for breaking his glasses, Father Dolan, and the religious Father Arnall, whose sermon inspires a phase of religious fervor. This work's protagonist meets Cranly, Lynch, and Davin at the University College and writes love letters to E. C. For 10 points name this bildungsroman about a character who later appeared in *Ulysses*, Stephen Dedalus, by James Joyce.

ANSWER: A Portrait of the Artist as a Young Man

10. His grandfather ordered the man whom he would later defeat at the Battle of Hyrba, Harpagus, to kill him as an infant, but this man was not defeated until fighting Tomyris of the Massagetae. After removing the capital from Pasargadae, this man went on campaigns which led to the battles of Opis, Pteria and Thymbra, in which he defeated Belshazzar and later Croesus. This member of the Achaemenid dynasty was the victor against the Lydians and Medes. For 10 points, name the grandson of Astyages and son of Cambyses, who founded the Persian Empire.

ANSWER: Cyrus the Great [or Cyrus II; or Cyrus the Elder; prompt on Cyrus]