



High School Academic Pyramid Questions

2008-2009
Four Quarter Set

Round 14

First Quarter:
Ten Tossups

1. Marcus Terentius Varro showed that this deity was not worshipped in old records. One temple to this god worships a “dies meretricum” in honor of prostitutes, and as Verticordia she protected chastity. Julius Caesar built a temple worshipping her as a “begetting mother” and claimed descent from her through Aeneas. She was totally lacking of original myths, and absorbed the traits of the Greek goddess who had an affair with Adonis. The wife of Vulcan and mother of Cupid, for 10 points, name this Roman goddess of love.

ANSWER: Venus [do not accept or prompt on Aphrodite]

2. 1-chloronaphthalene is the most effective solvent of these compounds, which can spawn side chains in the Bingel reaction. They have been found with helium in meteorites, and pure substances of them are a dark purple color. Discovered by Kroto, Smalley, and Curl, these molecules always have structures containing twelve pentagons, regardless of whether there are seventy or over two hundred atoms in them. For 10 points, name these allotropes containing sixty or more carbon atoms, examples of which include carbon nanotubes and “buckyballs.”

ANSWER: buckminsterfullerenes [prompt on “buckyballs” before read; prompt on buckytubes; prompt on “C₆₀”]

3. The two most recent people to accomplish this on the high school level were Tigran Grigorian and Dajuan Wagner. The only person to do this at the DI level was a Furman player nicknamed "The Corbin Comet," Frank Selvy, while it was also achieved against Hillsdale and Ashland by a Rio Grande's Bevo Francis. Also accomplished by Lisa Leslie in only one half, the best-known person to do this did it while being guarded Dave Budd and Darrall Imhoff of the Knicks and attempting sixty-three field goals in a 1962 game in Hershey, Pennsylvania. For 10 points, identify this scoring mark achieved by the Philadelphia Warriors' Wilt Chamberlain.

ANSWER: scoring at least 100 points in a basketball game [accept anything that mentions hitting or breaking the 100-point mark; also accept equivalents for "100" like "century"]

4. Mountain ranges in this country include the Espinhazo, Serra do Mar and Mantiqueira while it is the owner of the archipelagos Fernando de Noronha, Trindade and Martim Vaz, the Rocas Atoll and Marajo Island. Rivers in this nation include the Araguaia, a tributary of the Tocantins, and its largest, the Sao Francisco, while the Iguazu Falls are formed by another. With its highest point at Neblina Peak, this nation is the source for both the Uruguay and Parana Rivers. For 10 points, name this country whose largest cities include Salvador, Sao Paolo and Rio de Janeiro.

ANSWER: Federative Republic of Brazil

5. In a novel by this author, the White Council rules a socialist future unintentionally financed by Graham. Besides *The Sleeper Awakes*, the author wrote a novel in which the narrator takes his wife to Leatherhead, and later, a torpedo ram named the Thunder Child holds its position near Tillingham Bay to allow refugees to escape. Half-man, half-animal creations terrorize Prendick in his *The Island of Doctor Moreau*, and another of his protagonists encounters the Eloi and Morlocks. For 10 points, name this author of *The Invisible Man* and *The Time Machine*.

ANSWER: Herbert George **Wells**

6. In X-linked adrenoleukodystrophy, a membrane protein in this organelle is defective, so transport of a certain enzyme into this organelle fails. It is responsible for the manufacture of many acetyl groups, a byproduct of its most important function, and it contains the enzyme catalase as well as several oxidases. Often found in the liver and kidney cells, for 10 points, name this organelle, responsible for oxidizing fatty acids and other toxic molecules, including this organelle's namesake, H₂O₂.

ANSWER: **peroxisomes**

7. He took John Clopton's seat in the US House of Representatives and was elected to the Senate where he served as President pro tempore, the only future President to do so. During his presidency, the explosion of the *USS Princeton* killed two of his cabinet members, and he oversaw Dorr's rebellion and the annexation of Texas. He was nicknamed His Accidency after he acceded to the office of president. For 10 points, name this Virginian who succeeded William Henry Harrison in 1841.

ANSWER: John **Tyler**

8. One of his works opens with the god of love talking to a daisy queen. That work includes Cleopatra and Medea and is entitled *The Legend of Good Women*. Another of his works represents John of Gaunt as a man in black and is entitled *The Book of the Duchess*, while another work is about birds meeting on Valentine's Day, *The Parlement of Fowls*. His most famous work involves a woman who tells about a knight learning what women want, *The Wife of Bath*, who is staying at the Tabard Inn. For 10 points, name this poet of the Canterbury Tales.

ANSWER: Geoffrey **Chaucer**

9. The convention of Cintra occurred in this nation during the Napoleonic wars. Philippa of Lancaster married one ruler of this country, and another ruler became the queen consort of Charles II of England. Another ruler financed explorers like Gil Eanes. The Carnation revolution marked the end of the Estado Novo, established by this country's dictator Antonio Salazar. For 10 points, identify this country that was once led by the Aviz family, including Prince Henry the Navigator, the smaller of the two countries on the Iberian Peninsula.

ANSWER: **Portugal**

10. One of his incidental scores for a play includes the movements "Roma militaria" and "The Eclipse of Cleopatra." That work is his *Egyptian Nights*, and his first symphony in D major uses a Gavotte movement and is known as the *Classical* symphony. This composer also depicted "Capulets and Montagues" in his *Romeo and Juliet*. The composer of the *Scythian Suite*, for 10 points, name this composer of the "Lieutenant Kije Suite" and a work where the oboe portrays a duck, "Peter and the Wolf."

ANSWER: Sergei **Prokofiev**



HSAPQ

High School Academic Pyramid Questions

2008-2009
Four Quarter Set

Round 14

Second Quarter:
Ten Tossups
with Bonuses

1. In the lower right of this painting, a group of people, pierced by swords, huddle next to a large rabbit. The upper right shows a pair of large ears pierced by an arrow under a burning landscape. Its left is far more peaceful, depicting Adam and Eve in the Garden of Eden. When this work is closed, the exterior panels show the world on the third day of creation, but it may be more striking for the giant strawberries and bird-headed monster eating men in the “hell” panel. For 10 points, name this triptych by Hieronymus Bosch.

ANSWER: **Garden of Earthly Delights**

BONUS. Identify some subatomic particles, for 10 points each.

[10] This particle is thought to convey mass to objects, and is the only particle in the standard model yet to be isolated. The Large Hadron Collider is the latest device looking for it.

ANSWER: **Higgs** particle or boson [prompt on **God** particle]

[10] These particles are thought to mediate the strong nuclear force between quarks.

ANSWER: **gluons**

2. During this conflict, the Heilbronn League dissolved following the Battle of Nordlingen, and the Hague Alliance was formed to restore Frederick V. Baltazar de Zuniga led Spain into this conflict, and two of its battles were Jankov and Allerheim. Count Tilly and Axel Oxenstierna were some of the leaders in this conflict, and its Battle of Lutzen saw the death of Gustavus Adolphus. Albert of Wallenstein was a key general for the Catholic forces in, for 10 points, what war, which ended with the Peace of Westphalia and lasted from 1618 to 1648?

ANSWER: the **Thirty Years' War**

BONUS. Identify these Egyptian gods, for 10 points each.

[10] This god was cut up by his brother Seth. When Anubis and this god's wife put all of his parts back together, he became king of the underworld while his son Horus became a sky God.

ANSWER: **Osiris**

[10] This goddess was represented as the “Lady of the West” at Deir el-Bahri. The later form of Sekhmet, she was called the “eye of Re,” and was a fertility Goddess often represented by a cow.

ANSWER: **Hathor**

3. The narrator of this poem wonders if he will “Have the strength to force the moment to its crisis” and he wonders whether it would be worthwhile to say “I am Lazarus, come from the dead.” The narrator claims he “should have been a pair of ragged claws” and that he has measured out his “life with coffee spoons,” and this poem opens with an invitation to “go through half deserted streets.” For 10 points, name this poem in which “the women come and go, speaking of Michelangelo,” a work of T.S. Eliot.

ANSWER: “The Love Song of J. Alfred **Prufrock**”

BONUS. Name these pieces of lab equipment, for 10 points each.

[10] The conical shape of these objects, named for a German chemist, helps reduce losses due to evaporation as compared to a beaker.

ANSWER: **Erlenmeyer** flask

[10] Named for another German chemist, this apparatus burns natural gas to provide the heat needed for reactions when heating mantles are unavailable.

ANSWER: **Bunsen burner**

4. Under Julio Roca, this country attacked indigenous Native Americans in the War of the Desert. Manuel Belgrano led an unsuccessful independence movement in this country, and it was led by the dictator Juan Manuel de Rosas until 1852. Paraguay invaded this country to begin the War of the Triple Alliance. Led by Carlos Menem in the 1990s, this country fought the Falklands War with the United Kingdom in 1982. The *descamisados* supported the rule of its president Juan Peron. For 10 points, name this South American country, where the *gauchos* roamed the *pampas*.

ANSWER: **Argentina**

BONUS. This character's response to most inquiries is "I would prefer not to." For 10 points each:

[10] Name this reluctant character who is eventually sent to the Tombs for "vagrancy."

ANSWER: **Bartleby** the Scrivener

[10] Bartleby is a creation of this novelist of *White-Jacket* and *Typee*.

ANSWER: Herman **Melville**

5. This company dubbed its collaboration process with Publicis Groupe "Project Spaghetti," and one of its founders announced in 2008 that he carries a gene for Parkinson's disease. It is co-developing a green "smart-grid" power infrastructure with General Electric. This company announced that T-Mobile will debut its Android phone-based operating system, after introducing a PC version of its Chrome internet browser. For 10 points, name this company that uses an innovative PageRank in its search results, founded by Larry Page and Sergey Brin.

ANSWER: **Google**, Inc.

BONUS. The Vltava River flows through many exciting parts of Central Europe. For 10 points each:

[10] Containing St. Vitus Cathedral and the Charles Bridge over the Vltava River, this city is the capital of the Czech Republic.

ANSWER: **Prague** [or **Praha**]

[10] After flowing through Prague, the Vltava joins this river at Melnik before flowing through Dresden and Hamburg.

ANSWER: **Elbe** River [or **Labe**]

6. Self-sustaining plasmas require a factor denoted by this letter to be infinite, and a rotometer measures another quantity denoted by this letter. In addition to the fusion energy gain factor and volumetric flow rate, this letter denotes a quantity which is divided by mass to find its "latent" version, and the Lorentz force is found by multiplying another quantity denoted by this letter by the cross product of velocity and magnetic field. For 10 points, name this letter of the alphabet which is commonly used to represent heat and charge.

ANSWER: **g**

BONUS. Name these Holy Roman Emperors, for 10 points each.

[10] This man got caught up in the lay investiture crisis and had to go barefoot in the snow before Pope Gregory VII at Canossa to reverse his excommunication.

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

[10] Gaining his epithet in honor of his ruddy facial hair, this man joined up with the Third Crusade but drowned in shallow water when he tripped wearing heavy armor.

ANSWER: **Frederick I** [or **Frederick Barbarossa**; prompt on **Frederick**]

7. One author from this country wrote about Martim, who meets Vitoria and Ermelinda in a farm in *Apples in the Dark*. In addition to Clarice Lispector, another author from this country wrote a novel whose title narrator is buried in a grave, *The Posthumous Memories of Bras Cubas*. Yet another author described the Bahia region of this country in works like *Dona Flor's Two Husbands* and *Gabriela, Cinnamon, and Clove*. For 10 points, identify this South American country, home to Joaquim Machado de Assis and Jorge Amado, who wrote in Portuguese.

ANSWER: Federative Republic of **Brazil**

BONUS. It ended when Nicholas II and his family were taken into a basement and shot by Bolsheviks. For 10 points each:

[10] Name this Russian dynasty that lasted from 1613 to 1917.

ANSWER: House of **Romanov**

[10] The rise of the Romanovs marked the end of this fifteen-year period of calamities, which saw the rule of Boris Gudonov after the end of the Rurik dynasty.

ANSWER: the **Time of Troubles**

8. A theorem named for this man states the equilibrium consumption of an economy doesn't change if the consumer is taxed today or tomorrow. He first described the law of diminishing marginal returns, and another concept developed by him is illustrated by the specialization of cloth production in Britain and wine production in Portugal. For 10 points, identify this author of *Principles of Political Economy*, a Portuguese born British economist who developed the ideas of comparative advantage and whose work also led to the "iron law of wages."

ANSWER: David **Ricardo**

BONUS. Identify some poems by Percy Shelley, for 10 points each:

[10] In this poem, a traveler describes a statue with "two vast and trunkless legs of stone" at whose base is inscribed "Look on my works, ye mighty, and despair."

ANSWER: "**Ozymandias**"

[10] Beginning with the words "Hail to thee, blithe spirit!" this poem compares the singing of the title creature to notes which "flow" in a "crystal stream."

ANSWER: "**To a Skylark**"

9. In cities that were once protected by a wall, this holiday's "Shushan" version occurs. Gifts are given on this day to prove unity, a custom known as "mishloach manot." Events that this holiday recounts include the festival of Ahasuerus, and one tradition on this holiday is drinking until the phrases "Blessed is Mordecai" and "Cursed is Haman" are indistinguishable. For 10 points, name this holiday celebrated on the fourteenth day of Adar, a holiday that commemorates the Jewish people's delivery from the Persians as told in the book of Esther.

ANSWER: **Purim** [prompt on **Lots**]

BONUS. This work documented several of its namesake episodes, such as "Irma's Injection." For 10 points each:

[10] Name this book, which claimed that the title visions were "wish fulfillment."

ANSWER: *The **Interpretation of Dreams*** [or *Die **Traumdeutung***]

[10] This author of *Civilization and its Discontents* wrote *The Interpretation of Dreams*.

ANSWER: Sigmund **Freud** [or Sigismund Shlomo **Freud**]

10. Viviani's theorem states that the sum of altitudes to all sides from a point inside one of these is equal to the length of its altitude. Morley's theorem states that one of these is formed by extending the trisectors of a triangle. Napoleon's theorem states that a fourth one of these can be produced by joining the centroids of ones erected on the sides of any triangle, and they are the repeating units of a Koch snowflake and Sierpinski's triangle. For 10 points, identify these geometric figures which have three congruent sides.

ANSWER: **equilateral triangles** [prompt on **equiangular triangles**; prompt on **triangles**]

BONUS. Name some influential figures in the evolution of jazz, for 10 points each.

[10] "Anthropology" and "Ornithology" are two of the best known songs by this bebop pioneer, who turned his earlier song "Cherokee" into the bebop piece "Koko."

ANSWER: Charlie "Bird" **Parker**

[10] Famous for *Kind of Blue*, this trumpeter blew off Juilliard so that he could spend time playing with Charlie Parker. Later, he recorded *Birth of the Cool* with Gil Evans.

ANSWER: Miles **Davis**



HSAPQ

High School Academic Pyramid Questions

2008-2009
Four Quarter Set

Round 14

Third Quarter:
Team Rounds

Choices: DOLLARS
 DOUGHNUTS

DOLLARS

This round discusses different uses of “dollars.”

[10] One of many countries to use a unit of currency called the dollar, this African state was founded at Monrovia by freed American slaves in the nineteenth century.

ANSWER: **Liberia**

[10] Sand dollars, along with sea urchins and starfish, use a water vascular system because they are members of this marine phylum.

ANSWER: **echinodermata** [or **echinoderms**]

[10] A physical ratio known as the “dollar” is calculated from the reactivity of a sample undergoing this process, the splitting of an atomic nucleus to generate energy.

ANSWER: nuclear **fission**

[10] From 1946 to 1971, the international financial system was pegged to the dollar under this agreement, named for the New Hampshire town where it was negotiated.

ANSWER: **Bretton Woods** agreement/system

[10] An early painting by this pop artist was a picture of a one-dollar bill; he went on to create such comic book-inspired paintings as *Whaam!*

ANSWER: Roy **Liechtenstein**

[10] Near the end of this author’s *The Ballad of the Sad Café*, Amelia changes the price of everything on the menu to a dollar. She also wrote *The Heart is a Lonely Hunter*.

ANSWER: Carson **McCullers** [or Lula Carson **Smith**]

[10] Leon Festinger’s experiments on this psychological phenomenon included paying some people one dollar and others twenty dollars for the same job, then evaluating opinions of the job.

ANSWER: **cognitive dissonance**

[10] Secretary of State Philander Knox advocated “dollar diplomacy” during the administration of this Republican president, who went on to serve as Chief Justice of the Supreme Court.

ANSWER: William Howard **Taft**

[10] You wouldn’t want to bet a dollar on the namesake “wager” of this seventeenth-century French philosopher, who expressed his opinions in the *Pensees* or *Thoughts*.

ANSWER: Blaise **Pascal**

[10] A man wraps peanuts in dollar bills and gives them to panhandlers in “One Ordinary Day, with Peanuts,” a story by this author of “The Lottery” and *The Haunting of Hill House*.

ANSWER: Shirley **Jackson**

DOUGHNUTS

This round explores the many facets of doughnuts.

[10] The “donas” variation on the doughnut comes from this country, home to such authors as Carlos Fuentes, Sor Juana de la Cruz, and Juan Rulfo.

ANSWER: **Mexico**

[10] This U.S. President was actually speaking perfect German when he proclaimed “Ich bin ein Berliner,” and did not confuse any native speakers with a term for jelly doughnuts.

ANSWER: **John Fitzgerald Kennedy** [or **JFK**; prompt on **Kennedy**]

[10] A type of doughnut called “sufganiyah” is often eaten in this country, whose leaders have included Golda Meir and David Ben-Gurion.

ANSWER: State of **Israel**

[10] The large stone doughnut money of Yap is found within this Pacific Island state, comprising four islands to the north of Indonesia.

ANSWER: Federated States of **Micronesia**

[10] Seven colors are needed to properly color a map on this doughnut-shaped mathematical surface.

ANSWER: a **torus**

[10] Bo Decker tells Cherie to eat more than just a doughnut for dinner in *Bus Stop*, a play by this American author of *Picnic* and *Come Back, Little Sheba*.

ANSWER: William **Inge**

[10] An “oliebollen” is a Dutch doughnut, and this artist of *The Tower of Babel* and *Hunters in the Snow* was a Dutch painter.

ANSWER: Pieter **Brueghel** the Elder

[10] An immense chalking of Homer Simpsons raising a doughnut was painted next to the Cerne Abbas giant, which, like Stonehenge, is allegedly an ancient religious construct in this country.

ANSWER: **Great Britain** [or **United Kingdom**; or **England**]

[10] A doughnut-shaped device called a tokamak is used for magnetic containment of this superheated, ionized state of matter.

ANSWER: **plasma**

[10] Eva Booth launched the “doughnuts for doughboys” campaign while leading this quasi-military Christian evangelical and charitable organization, founded by Eva’s father William.

ANSWER: the **Salvation Army**



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Round 14

Fourth Quarter:
Ten Tossups

1. One of his paintings features a window of four pentagonal panes in the background to reveal an ethereal body above the watery landscape of *The Sacrament of the Last Supper*. On a similar religious theme, he showed Jesus crucified on a hypercube in *Corpus Hypercubus*. He painted the “Disintegration” of one of his earlier works by flooding the landscape, and his collaboration with director Luis Buñuel produced the films *L'age d'or* and *Un chien andalou*. For 10 points, name this surrealist who showed several melting watches in *The Persistence of Memory*.

ANSWER: Salvador Dali [or Salvador Domingo Felipe Jacinto Dalí i Domènech, First Marquis of Púbol]

2. Hashimoto’s disease is an autoimmune disease which may result from low levels of a hormone produced by this gland; congenital errors in that hormone’s synthesis can lead to cretinism. Another disease of this gland is Graves’ disease, which is characterized by the presence of a goiter, an enlarged one of these glands. It produces calcitonin but is better known for two namesake hormones that contain three and four iodine ions. For 10 points, name this gland in the neck that secretes Thyroxine.

ANSWER: thyroid gland

3. This man’s lost plays include *The Frying-Pan Men* and *The Storks*. In one of his extant plays, Trygaeus flies to Mount Olympus on a dung beetles to liberate the title figure. In addition to *Peace*, he wrote of the farmer Dicaeopolis, who opens a market for Athens’s enemies to the chagrin of the title charcoal burners, *Acharnians*. He also wrote about the burning of Sophocles’s school, the Thinkery, and the building of a city in the clouds called Cloudcuckooland. For 10 points name this ancient Greek Old Comedy playwright of *The Clouds* and *The Birds*.

ANSWER: Aristophanes

4. John Maurice Clark wrote about *An Alternative* to this status. Another work argues that this concept is accompanied by “The End of Truth” and uses as examples Nazi Germany and Soviet Russia. That work argues that this concept arises because coercion becomes necessary to implement central planning, claiming that this condition is the result of government control of the economy. For 10 points, name this concept that Friedrich Hayek wrote about *The Road to*, and which describes the state of peasants in feudalism.

ANSWER: serfdom

5. When heated, adatom pair chain structures form compact islands on the surface of one of these objects. A “compound” one of these objects is a likely source of solar cells. Ion implantation is used to create extra electrons or an “electron hole” in these objects in a process called “doping,” which results in the *n* and *p* types of these objects. The most common of these objects is elemental silicon. For 10 points, name these materials with intermediate conductivity, prevalent in integrated circuits.

ANSWER: semiconductors

6. This man composed an opera based on the novel *Waiting for the Barbarians*, while another of his works takes its title from Apollo's punishment of a bird. In addition to composing *White Raven*, this man used portions of Seneca the Younger's texts for the libretto of *the CIVIL warS*, but he is better known for operas taken from excerpts of the lives of Galileo, Akhenaten, and a certain physicist. His "Portrait Trilogy" contains *Satyagraha* and another opera with the sections "Train" and "Trial." For 10 points, name this minimalist composer of *Einstein on the Beach*.

ANSWER: Philip **Glass**

7. This government's foreign minister Walther Rathenau was assassinated, and this government faced down a revolt led by Hermann Ehrhardt and Wolfgang Kapp. During its rule, the country was plagued by hyperinflation to the point that, by 1923, it took 4.2 trillion marks to equal one dollar. The Spartacus Revolt attempted to overthrow it, and, following the assassination of Frierich Ebert in 1925, Paul von Hindenberg was elected its president. For 10 points, identify this government of Germany following World War I, ultimately displaced by the Nazis.

ANSWER: **Weimar** Republic

8. This man cites overhanging cliffs and thunder clouds as examples of how nature is "dynamically sublime," arguing that "organized beings" are "natural ends" in one work. In addition to "On the Use of Teleological Principles in Philosophy", he introduced the notion of a maxim to supplement his idea of a *priori* basis for morality in *Groundwork of the Metaphysics of Morals*. This man also discussed the agreeable and the beautiful in *The Critique of Judgment*. For 10 points, name this philosopher who introduced the "categorical imperative" and authored *The Critique of Pure Reason*.

ANSWER: Immanuel **Kant**

9. In *Dom Casmurro*, Bento sees a performance of this play. One character visits the prostitute Bianca, and he is later made governor by Lodovico after wounding Montano in a duel. The servant of one character steals a handkerchief and gives it to her husband, while the daughter of Brabantio travels to Cyprus and is eventually "smothered" after she is suspected of having an affair with Michael Cassio. The source of the phrase "jealousy, that green-eyed monster," for 10 points, name this play in which Iago hates the titular "Moor of Venice," a work of Shakespeare.

ANSWER: **Othello**; or *The Moor of Venice*

10. During a four year hiatus, this party was known as the National Statesman Party, and congressman Charles Randall of California and Governor Sidney Catts of Florida were its only members to ever gain office. Earl Dodge campaigned for the presidency six consecutive times on this party's ticket, most recently in 2004, and its first ticket featured James Black and founder John Russell. Concerned with achieving the goals of the temperance movement, for 10 points, name this political party, whose greatest success was the passage of the Eighteenth Amendment.

ANSWER: **Prohibition** Party