# 金 HSAPQ <br> High School Academic Pyramid Questions 

Round 9
First Quarter: Ten Tossups

1. This religion's ceremonies include "bingis," involving drumming all night, and "itation," which is an lyric abbreviation for meditation. This faith uses the I-tal dietary laws, and practitioners attempt to reach a consciousness named "I-and-I." Their God, Jah, has his seat in Ethiopia, and they believe that all American blacks will be repatriated in Africa. For 10 points, name this religion that believed Haile Selassie was the messiah and which advocates smoking "ganja."
ANSWER: Rastafarianism
2. Newton "corrected" this law by squaring both sides of one form of it, and this law is used to compute the Gaussian gravitational constant. Joseph Privat de Molieres proved one case of it by showing that if the normal force and centripetal force are proportional, then one over $r$ squared is proportional to $v$ squared over $r$, and since $v$ is proportional to $r$ over $t, r$ cubed is proportional to $t$ squared. For 10 points, name this law, which states that the square of the orbital period of a planet is proportional to the cube of the semi-major axis of that orbit.
ANSWER: Kepler's Third Law [or harmonic law]
3. In one incident in this novel, the narrator goes to borrow a lantern from the servant Joseph, only to have the dogs set on him. In the room where Zillah hides him, he sees the ghost of a major character. Another dog attack had earlier led a man to become acquainted with the Linton family, and shortly thereafter, a woman fell in love with Edgar, infuriating her childhood friend. For 10 points, identify this novel about the romance between Catherine and Heathcliff, centering on the title moors-accessible estate, the only novel by Emily Brontë.
ANSWER: Wuthering Heights
4. B lymphocytes dominate in the germinal centers of the follicles of Peyer's patches, which are found in one portion of this region. Meissner's plexus dominates the enteric nervous system in this area, while Brunner glands are located above the sphincter of Oddi, which controls the rate of secretions into this organ's first and shortest portion. The other two sections, the jejunum and ileum, have vastly increased surface area due to the presence of villi. For 10 points, name this coiled digestive organ that contains the duodenum and is much longer than its "large" neighbor.
ANSWER: small intestine
5. The "Pig Pen" of Abraham Martling was the first meeting place of this group, and it was later opposed by a faction led by William Leggett whose name is Spanish for "crazy lights," the Locofocos. Eventually exposed by the Lexow Committee of Charles Parkhurst, its late leaders included Carmine DeSapio, while early on it was led by such men as George Plunkitt and Richard "King" Croker. Deriving its name from a leader of the Lenape, for 10 points, name this group led by Fernando Wood and Boss Tweed, a political machine from New York.
ANSWER: Tammany Hall
6. One landmark in this country is a park commemorating the 2-28 massacre, and another site in that city is the Snake Alley night market. It controls the Penghu islands and the Pescadores, and one island it owns that was bombed is Quemoy. Its major port is at Keelung, and the major mountain range is the Chang-yang Shan-mo. It is involved in a dispute with Malaysia, the Phillippines and Vietnam over control of the Spratley islands, and its capital city contains the Chiang kai-Shek Memorial Hall. For 10 points, name this island nation centered on Taipei.
ANSWER: Taiwan [or Republic of China; prompt on Chinese Taipei]
7. In one game in which he appears, he battles against the Battle Kukku army in order to save Cocoa island, and in another he is able to summon a group of four robot-killing birds upon collecting all seven Super Emeralds. The inventor of the "Cyclone" mechanized armor and a plane dubbed "Tornado," he appears in another game as the flight-type member of one team, and in his first appearance he was prized for his ability to carry his friend while flying. For 10 points, name this creature with real name Miles Prower, a vulpine sidekick of Sonic the Hedgehog.
ANSWER: Miles "Tails" Prower
8. Ensign Alanin dies at the end of the title action in this man's short story "The Raid."Mitritch impels Nikita to go to Akoulina's wedding in his drama The Power of Darkness, and one of his novels sees Vasyla Pozdnishef murder his wife. In addition to The Kreutzer Sonata, he wrote of Olyenin's time in the Caucasus in The Cossacks as well as a short story in which Gerasim comforts Ivan Ilyich in his last hours. Ending one novel with the title heroine throwing herself in front of a train, for 10 points, name this Russian author of Anna Karénina and War and Peace.
ANSWER: Lev/Leo Nikolayevich Tolstoy
9. The most successful force in this battle was the Kosciuszko squadron led by Witold Urbanowicz. This battle included six raids on Biggin Hill, and began in earnest on August 13th, known as "Eagle Day." It was the precursor to the abortive Operation Sealion, and was fought between attacking Stukas and defending Hurricanes and Spitfires. The victorious side in this battle was aided by the new radar, as well as Goebbels's decision to focus on bombing London. For 10 points, name this 1940 air battle which prevented Germany from invading the namesake country.
ANSWER: the Battle of Britain
10. He composed The Wandering Scholar as an opera with only four soloists, and one of his suites ends with "the Dargason." His Hindu-inspired works include Sita and Savitri, and he used a brass processional mixed with an oboe melody in Egdon Heath. He composed a seven-movement work that opens with a $5 / 4$ march and was added onto by Colin Matthews. For 10 points, name this composer of the St. Paul's Suite and a work that includes "Mars, the Bringer of War," The Planets.
ANSWER: Gustavus Theodore von Holst

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Second Quarter: Ten Tossups with Bonuses

1. This institution began after the papal bull Exigit Sinceras Devotionis Affectus was issued by Pope Sixtus IV. This institution became much more active after the La Guardia trial, and targeted "Alumbrados," "moriscos," and "conversos." During public ceremonies called auto-da-fes, prisoners of this institution were burned at the stake. Led by figures such as Diego de Deza and Tomas de Torquemada, and beginning in the late fifteenth century, for 10 points, name this institution which persecuted Muslims and Jews in a country led by Ferdinand and Isabella.
ANSWER: the Spanish Inquisition [prompt on Inquisition]
BONUS. Identify some authors who left their home countries and wrote in France instead, for 10 points each.
[10] This originally Irish author wrote plays in French about Hamm and Clov and Vladimir and Estragon, entitled Endgame and Waiting for Godot.
Answer: Samuel Beckett
[10] Once this Romanian got back to France, he never left, publishing such works as The Chairs, Rhinoceros, and The Bald Soprano while there.

## Answer: Eugene Ionesco

2. This man wrote about his time in Nicaragua in The Jaguar Smile and about Flapping Eagle's 777 years on Earth in Grimus. Iff, a "water genie", controls the title character's imagination in another of his works. In addition to writing Haroun and the Sea of Stories, he wrote of Omar Khayyam Shakil in his novel Shame, and Saleem Sinai narrates his novel about the titular people born on the day of the partition of India. For 10 points, name this author of Midnight's Children, who created Saladin Chamcha and Gibreel Farishta in The Satanic Verses.
ANSWER: Sir Ahmed Salman Rushdie
BONUS. This man is the author of Time Perspectives in Aboriginal American Culture. For 10 points each: [10] Name this linguist who, along with Benjamin Whorf, names a hypothesis that perception of the world is influenced by the language that one speaks.
ANSWER: Edward Sapir
[10] Sapir studied the language of this Arizona American Indian tribe, noting that this people had no word for past or future, and called a dragonfly and an airplane by the same word.
ANSWER: the Hopi
3. The solution of the Poincaré conjecture via Ricci flow requires a general solution of a partial differential equation of this kind. An aberration known as a coma occurs in reflectors of this shape. The hyperbolic version of its three-dimensional analog is shaped like a saddle, and rolling it along a straight line produces a catenary curve. It is the locus of points equidistant from a focus and directrix, and is produced when a plane intersects a right circular cone. For 10 points, name this conic section with an eccentricity of 1 , the shape of curves like $y=x^{2}$.
ANSWER: parabola [or word forms like parabolic]
BONUS. The first "dark horse" candidate, he led America into the Mexican-American War. For 10 points each:
[10] Name this Tennessean and eleventh president.
ANSWER: James Knox Polk
[10] This two-word expansionist catchphrase, coined during the Polk administration, described the idea that owning the North American continent was a divine right for the U.S.
ANSWER: Manifest Destiny
4. One watercolor by this artist shows a dark blue and turquoise house with pink blotches in Roof with Snow, while airplanes inspired this painter's mural of closely packed clouds disappearing at a pink horizon, Sky Above Clouds 4. One of her oils shows a red stone above a pink one with teeth underneath, and one of her signature paintings shows red hills behind two sets of yellow and pink petals. Famous for paintings of cow skulls inspired by her time in New Mexico, for 10 points, name this subject of Alfred Stieglitz's photography, who painted lots of flowers.
ANSWER: Georgia O’Keeffe
BONUS. The Edict of Turda granted religious freedom here, and it was the site of the 1437 Budai Nagy Antal Revolt. For 10 points each:
[10] Name this region, the birthplace of Vlad the Impaler and legendary home of vampires, which, along with Carpathia and Wallachia, makes up modern-day Romania.
ANSWER: Transylvania
[10] Romania's independence was recognized through this 1878 treaty, which ended the Russo-Turkish War and led to the Congress of Berlin.
ANSWER: Treaty of San Stefano
5. He was awarded Cassandra as part of his spoils from the Trojan War, and his fleet was unable to leave because Artemis sent him calm winds. Along with his brother, he took refuge with Tyndareus in Sparta, and that brother succeeded Tyndareus. He also married the sister of a woman who was kidnapped by Paris. He sacrificed his daughter Iphigenia, and his brother Aegisthus plotted his murder. Avenged by his son Orestes and daughter Electra, for 10 points, name this brother of Menelaus, husband of Clytemnestra, and king of Mycenae.

## ANSWER: Agamemnon

BONUS. Identify the following about solving redox reactions, for 10 points each.
[10] This is the term for the substance that is reduced.
ANSWER: oxidizing agent
[10] When writing the reduction half-reaction, the number of electrons gained is equal to the difference in this property, the effective charge of the atom in a compound.
ANSWER: oxidation number [or oxidation state]
6. This group attempted to establish the Political Union party, whose 1990 presidential candidate Bernardo Ossa was murdered along with three thousand other party members. This organization's founder Manuel Marulanda died in March 2008, and in June, it was asked to perform a "humanitarian gesture" and free its hostages, after computer equipment linking it to Hugo Chavez was found. For 10 points, identify this rebel organization that seeks to install a Marxist regime in Colombia and is responsible for much of the cocaine trade from that country.
ANSWER: FARC [or RAFC or Fuerzas Armadas Revolucionarias de Colombia or Revolutionary Armed Forces of Colombia]

BONUS. Its port, Apapa, is connected to the ocean by Badagry Creek, while its historical centre is Tinubu Square and suburbs of this city include Agege and Ikeja. For 10 points each:
[10] Name this largest city in Africa, which lies on Ikoyi and Victoria Islands.
ANSWER: Lagos
[10] Lagos is found in this West African nation, whose other large cities include Kano, Ibadan, and Abuja.
ANSWER: Federal Republic of Nigeria
7. The ships Volage, Hyacinth, Royal Saxon and Thomas Coutts were involved in this conflict. Caused by David Sassoon and William Jardine, this war ended in victory for the fleet under Anthony Stransham and Charles Elliot. Precipitated by the destruction of a temple and murder of Lin Weixi, this conflict began after the reforms of Lin Zexu, including burning a certain shipment on the beach. For 10 points, name this war between Great Britain and Ching China, ended by the Treaty of Nanjing in 1842, the first of two conflicts over the namesake commodity.
ANSWER: First Opium War [accept First Anglo-Chinese War before "China" is read; prompt on Opium War; prompt on Anglo-Chinese War]

BONUS. After feeling remorseful about selling his soul to the devil, Jabez Stone enlists this man as his lawyer. For 10 points per part:
[10] Name this New Hampshire senator, who successfully defends his client against Mr. Scratch.
ANSWER: Daniel Webster
[10] Another literary appearance of Daniel Webster is as the namesake of the titular amphibian of this Mark Twain story. Jim Smiley loses a bet when a stranger fills it with quail shot.
ANSWER: "The Celebrated Jumping Frog of Calaveras County" [or "The Notorious Jumping Frog of Calaveras County" or "Jim Smiley and his Jumping Frog"]
8. In one of his stories, the young Robin eventually finds the title relative tarred and feathered, while in another work, passengers on the title mode of transportation realize that Satan is its conductor. In addition to "My Kinsman Major Molineaux" and "The Celestial Railroad," he wrote about Aylmer's attempt to remove the title blemish from his wife's face and a man who realizes that his wife Faith is participating in devilish rituals with his whole town. For 10 points, name this author of "The Birthmark" and "Young Goodman Brown," who also wrote The Scarlet Letter.
ANSWER: Nathaniel Hawthorne

BONUS. This god was depicted with a double-faced head. For 10 points each:
[10] Identify this Roman god of doorways and arches.

## ANSWER: Janus

[10] Another early Roman deity was this goddess of the hearth whose temple in the Roman forum contained a fire that was maintained by this deity's namesake virgins.

## ANSWER: Vesta

9. One common form of this process is often driven by failed meiosis and self-fertilization. Gould theorized that it principally takes place in sudden spurts in his theory of punctuated equilibrium. It is reinforced by the Wallace effect, which allows the sympatric form to proceed, while geographic isolation results in the allopatric form. For 10 points, identify this process through which a population of organisms becomes unable to interbreed, having formed separate taxa at a level one lower than genus.

## ANSWER: speciation [prompt on species]

BONUS. In the second act, one character sings the aria "La fleur que tu m'avais jetée," but he refuses to desert the army for the woman he loves. For 10 points each:
[10] Identify this Georges Bizet opera, in which the Corporal Don José falls for the titular gypsy girl.

## ANSWER: Carmen

[10] This character in Carmen sings the "Toreador Song." Don Jose kills Carmen out of jealousy for Carmen's love of this man.
ANSWER: Escamillo
10. Heavily influenced by the ideas of Jacques Loeb, this man also collaborated with Knight Dunlap and Adolf Meyer. He published Methods of studying vision in animals with Robert Yerkes, with whom he cofounded the Journal of Animal Behavior. However, he is better known for his study with Rosalie Rayner of a small child who was conditioned to fear a white rat, and transferred this fear to other white furry objects. For 10 points, name this founder of behaviorism.
ANSWER: John Broadus Watson

BONUS. Name these bodily fluids, for 10 points each.
[10] Secreted by the parotid, submandibular, and sublingual glands, this fluid's "active" ingredients include the enzyme amylase and the bacteria-killing lysozymes.
ANSWER: saliva
[10] Collected in its namesake "nodes," this fluid contains substances that leak out of blood plasma and the interstitial fluid. Cells named after this fluid are important in the immune system.
ANSWER: lymph

# Е HSAPQ <br> High School Academic Pyramid Questions 

Choices: RUSSIA, AGAIN<br>WORDS STARTING WITH "RE"

RUSSIA, AGAIN
This round once again has to do with things related to Russia.
[10] This blue-light-associated radiation is emitted by a particle that travels faster than light in a medium and is named for its Russian discoverer.
ANSWER: Cerenkov radiation
[10] This last leader of the Soviet Union initiated liberalization programs such as glasnost and perestroika.
ANSWER: Mikhail Gorbachev
[10] This Russian-born author immigrated to America and wrote his later works, such as Pale Fire, in English, after starting off with Russian novels such as Invitation to a Beheading.
ANSWER: Vladimir Nabokov
[10] These mountains run north and south through Russia and typically are considered the boundary between Europe and Asia.
ANSWER: Ural Mountains [or Urals or Riphean Mountains]
[10] Russian folklore includes the character Baba Yaga, who is this type of mythical magical person, much like Circe and Medea.
ANSWER: witch [accept very close equivalents such as sorceress]
[10] This psychologist and physician worked on respondent conditioning with some namesake dogs. ANSWER: Ivan Petrovich Pavlov
[10] One of the greatest accomplishments of this U.S. President was his negotiation of the Treaty of Portsmouth to end the Russo-Japanese War.
ANSWER: Theodore Roosevelt [or Teddy Roosevelt; prompt on Roosevelt]
[10] Boris Pasternak, the author of Dr. Zhivago, once was described as this female poet "in trousers." This American wrote poems like "Because I could not stop for Death."
ANSWER: Emily Dickenson
[10] This Russian composer created The Love for Three Oranges. ANSWER: Sergei Prokofiev
[10] Chebyshev's inequality can prove this statistical prediction, that the mean of a variable for a sample will approach the mean for the population as the sample grows.
ANSWER: weak law of large numbers [accept LLN]

WORDS STARTING WITH "RE"
Either the questions or the answers in this round will have a word starting with "re," though it may or may not act as a prefix.
[10] Minor components of this organ system of the body include the Cowper's glands and Skene's glands; diseases that it may transmit include HPV.
ANSWER: reproductive system
[10] This event followed the arrival of Matthew Perry and the Black Ships and brought a constitution and a modern military for Japan.
ANSWER: Meiji Restoration [or Meiji Ishin; or Meiji Revolution; or Meiji Renewal]
[10] The name of this capital and largest city of Iceland translates to "Smoky Bay."
ANSWER: Rejkjavik
[10] In this 1671 poem about the last temptation of Christ, Jesus does not give in to Satan's temptation, whereas in another poem Eve did. It is a sequel to another John Milton work.
ANSWER: Paradise Regained
[10] John Calvin and Ulrich Zwingli were among the leaders of this general religious movement.
ANSWER: Protestant Reformation
[10] The Battle of Re saw the death of Eystein Meyla, a king of this nation who was enthusiastically supported by Sweden.

## ANSWER: Norway

[10] In this novel by Cao Xueqin about the Jia family, Baoyu loves Daiyu but ends up marrying Baochai. ANSWER: Dream of the Red Chamber [or The Red Chamber Dream; or A Dream of Red Mansions; or The Story of the Stone; or The Record of the Rock; or The Play of Golden Days; or The Twelve Beauties of Jinling]
[10] The total internal sort of this phenomenon occurs at the critical angle. It's frequently employed to make telescopes that aren't refracting telescopes.
ANSWER: reflection
[10] The Reformation symphony was by this composer of the Elijah oratorio and Fingal's Cave. ANSWER: Felix Mendelssohn
[10] Marcel Duchamp referred to his works like Fountain, a urinal, and Bicycle Wheel, a bicycle wheel, as this, because he merely signed and named them.
ANSWER: ready-mades

# 三 HSAPQ High School Academic Pyramid Questions 

## 2008-2009

 Four Quarter Set
## Round 9

Fourth Quarter: Ten Tossups

1. In 1998, wreckage from this engagement was found by Robert Ballard. Prior to it, one commander faced an attack of psoriasis before being replaced by Raymond Spruance. Preceded by the breaking of the code JN- 25 and Operation AI, an invasion of Kiska and Attu, this battle resulted in Tamon Yamaguchi going down with his ship. The aircraft carriers Akagi, Kaga, Soryu and USS Yorktown were sunk during, for 10 points, what naval battle between Isoroku Yamamoto and Chester Nimitz, fought exactly six months after Pearl Harbor in 1942?
ANSWER: Battle of Midway
2. The hysteresis hypothesis plots a statistic known as NAIRU against this quantity. NAIRU was developed to mathematically express the "natural rate" of this quantity, defined by Milton Friedman and Edmund Phelps during their criticisms of the Phillips Curve, which pairs this quantity with inflation. Consisting mainly of cyclical, structural, and frictional varieties, for 10 points, name this concept in which people who want to work are unable to find work.

## ANSWER: unemployment

3. One man in this work defines justice as "what is good for the stronger," while another gives the "idea-bed" as an example of the form sought by normal objects. That character concedes that the Guardians are better trained with patriotic poetry, but lambasts imitative art. Featuring Polemarchus, whose father Cephalus initiates this dialogue at a festival at Piraeus, it contains allegories of the divided line, the ring of Gyges, and the cave. For 10 points, name this Socratic dialogue in which the idea of a philosopher king was put forth, a work by Plato.

## ANSWER: The Republic [or Politeía]

4. One form of the law of conservation of energy states that, like internal energy, the change in this quantity equals the amount of heat flow minus the amount of work done, because it is equal to the sum of internal energy and the product of pressure and volume. The change in this state variable can also be given by the sum of the change in Gibbs free energy and the product of temperature and the change in entropy. With units of joules per kilogram, for 10 points, name this thermodynamic quantity denoted H .
ANSWER: enthalpy [prompt on $\underline{H}$ before read]
5. This student of Jacques Ochard and Eugene Boudin showed his wife Camille Doncieux in his The Woman in the Green Dress. The artist of a series depicting a structure that houses the heart of Richard I of England, this man also created a series that includes thaw and snow effects. Painted while living at Argenteuil, one of his works depicts the port of Le Havre, and many of his other works were painted in Giverny. The creator of the Rouen Cathedral and Haystacks series, for 10 points, name this French artist of Water Lilies and Impression: Sunrise.
ANSWER: Claude Monet
6. He was accused of anti-Semitism for a poetry collection which was titled after pawnbrokers, Fine Clothes to the Jew. One poem describes the title music as a "raggy tune" and a "drowsy syncopated tune" and in another poem the narrator's "soul has grown deep" after he "bathed in the Euphrates when dawns were young." In perhaps his most famous poem he asks if the title object "dries up, like a raisin in the sun." For 10 points name this poet who asked what happened to a "Dream Deferred," a leader of the Harlem Renaissance.
ANSWER: Langston Hughes
7. This character sings the arias "The hourglass shows midnight" and receives the Clavis Astartis Magica in a work titled after him by Busoni. This character's love interest sings about the King of Thule in a work about him which features the "Dance of the Sylphs" and the "Hungarian March" and ends with the "Apotheosis of Marguerite." For 10 points, identify this character whose "damnation" is the subject of a Berlioz opera and who titles Gounod's masterwork, in which he sold his soul to Mephistopheles. ANSWER: Faust [or Doktor Faustl or Damnation of Faust]
8. X-ray crystallography can be used to determine this value based on unit cell length, and the namesake of a value similar to it, Josef Loschmidt, expounded the "irreversibility paradox". It is obtained by dividing the Faraday constant by the electron charge, and its namesake hypothesized that equal volumes of ideal gases have the same number of particles. The number of atoms in a mole, for 10 points, name this constant named after an Italian chemist equal to $6.02 \times 10^{23}$.
ANSWER: Avogadro's number [or Avogadro's constant; or Avogadro's value, etc]
9. This ruler's final campaign targeted Godefrid the Northman. This king ruled his empire with orders called "capitulas," and he baptized his longtime enemy Widukind to quell Saxon revolts. He invited Alcuin to become "The Master of the Palace School" at Aachen, and his life was chronicled by Einhard. The successor of Carloman II and the father of Louis the Pious, his rearguard was decimated at the Battle of Roncevaux. For 10 points, name this son of Pepin the Short, a king of the Franks who was crowned by Pope Leo III on Christmas Day in 800.
ANSWER: Charlemagne [or Carolus Magnus; or Karl der Grosse; prompt on partial answer]
10. He wrote of the mixed-up relationships of Rhodophil and Palamede, as well as the romance of Palmyra and Leonidas, in Marriage a la Mode, and he wrote a play about three Mughal emperors in Aureng-Zebe. He employed music by Henry Purcell in his adaptation of Moliere's play about Amphitryon, but he is much better known for a satire whose second part attacks Elkanah Settle and Thomas Shadwell, and whose first part casts the Duke of Monmouth and the Earl of Shaftesbury as the title characters. For 10 points, identify this author of Absalom and Achitophel.
ANSWER: John Dryden
