# $\underline{\Delta}$ HSAPQ <br> High School Academic Pyramid Questions 

Round 4
First Quarter: Ten Tossups

1. The western Kakamega Forest is the last remnant of a rainforest in this country. Containing the Ewaso Ng'iro and Athi-Galana-Sabaki Rivers, this nation's economy is based in a city with landmarks such as Fort Jesus, Tudor Creek and Kilindi Harbour while the capital's name translates as "Place of Cool Waters" in Maasai. Halford Mackinder was the first person to climb its namesake seventeen-thousandfoot peak. For 10 points, name this East African country whose cities include Mombasa and the capital, Nairobi.
ANSWER: Republic of Kenya
2. One type of these which is able to store information even when current does not pass through it was a breakthrough application developed by HP labs, and they can be found in parallel with the signals as opposed to capacitors in high pass filters. Their namesake property decreases with increasing area of cross section; that property is directly proportional to length, and increases with increasing temperatures. For 10 points, identify these circuit components, whose namesake property is equal to voltage divided by current according to Ohm's law.
ANSWER: resistors
3. A very short poem by this author notes that "you fit into me / like a hook into an eye." In addition to "Occasional Poem," this author wrote such novels as one where Marian gets an eating disorder and bakes a female-shaped cake. This writer of The Edible Woman wrote about sci-fi author Alex Thomas and Iris Chase in The Blind Assassin. In another work, the protagonist enjoys Scrabble and befriends Moira. For 10 points, name this author who wrote about "Offred" in her dystopian feminist novel The Handmaid's Tale.
ANSWER: Margaret Eleanor Atwood
4. The colonizers of this nation instituted a welfare program called the Ethical Policy, and the Padri War was fought in what is now this country. Budi Utomo was this country's first independence movement, and the non-aligned movement was formed here at the 1955 Bandbung Conference. The Christopher Koch novel The Year of Living Dangerously follows the overthrow of this nation's President Sukarno in 1965, after which it was led by Suharto. For 10 points, name this archipelagic nation, home to the world's largest Muslim population.
ANSWER: Indonesia
5. One of these named after Beilstein is used to detect organo-halogen compounds. Adding a saturated ammonium bromide solution improves the results of the one involving calcium. Often performed using a wire inoculation loop, it distinguishes between barium and boron in that the former yields alkaline residues while the latter does not, and between strontium and lithium the same way. For 10 points, name this test for detecting metals, in which strontium solutions turn red and sodium solutions turn yellow when subjected to the namesake source of heat.
ANSWER: flame test
6. He had a vision of a boiling pot from the north causing destruction, and he was a supporter of Josiah's reforms and an opponent of Jehoiakim. He stated, "I do not know how to speak, for I am only a youth," when he was called to prophesy by Yahweh, and he was saved from prison by the Ethiopian eunuch Ebed-melech. Some traditions have him being stoned to death by his fellow exiles in Egypt, and his scribe was Baruch. For 10 points name this prophet, who placed a yoke around his neck in his call to submit to the yoke of Babylonia.
ANSWER: Jeremiah [or Yirmeyahu; or Jeremias]
7. This school won the 1945 and 1946 NCAA basketball championships under Coach Henry Iba, and with players such as Pete Incaviglia and Robin Ventura, it made seven straight College World Series appearances. This school's annual football game against its chief rival is known as Bedlam, and its basketball court is named for Eddie Sutton. T. Boone Pickens has provided this school with record financial gifts for athletics, and notable alums include Thurman Thomas and Barry Sanders. For 10 points name this Stillwater-based university, a rival of the Sooners.
ANSWER: Oklahoma State University [or OSU]
8. Eviction and Strong Man, Clown, and Dancer are two works by a member of this group. In addition to Everett Shinn and William Glackens, it included a man who painted Sixth Avenue Elevated at Third Street. Its leader painted Snow in New York and wrote The Art Spirit, and another man in this group painted Both Members of this Club along with other boxing scenes such as Stag at Sharkey's. For 10 points, George Bellows and Robert Henri were members of what realistic American painting school that evolved from The Eight?
ANSWER: Ashcan School [accept The Eight before it is read; accept Everett Shinn before "this group" is first read]
9. In this play, the doctor Yevgeny Dorn offers advice on how to write to the main character, as does Pyotr Sorin, who suggested that main character write a story called "The Man Who Wished." This play was based on a real-life incident involving the author's friend llya Levitan. The actress Irina Arkadina is the object of Trigorin's affection, and the main character kills himself after failing to gain the affection of Nina Zaretchyn. For 10 points name this play in which Konstantin Treplev kills the titular bird, a work of Anton Chekhov.
ANSWER: The Seaqull
10. The first shot of this engagement was fired by the soil chemist Edmund Ruffin, and the defenders here were later awarded the Gillmore Medal. Comer Woodward won the 1982 Pulitzer for editing an account of this incident which was recounted in the diary of Mary Boykin Chestnut who viewed it from The Battery. With commanders including the legendary founder of baseball, Abner Doubleday, Robert Anderson and PGT Beauregard, for 10 points, name this April 1861 engagement in South Carolina which saw the first shots of the Civil War.
ANSWER: Battle of Fort Sumter

# $\underline{\underline{2}} \mathrm{HSAPQ}$ 

 with Bonuses1. A poet from this country penned the "Elegy for Alto" and died fighting against its government in 1967. Another author from here wrote a novel in "Rotten English" titled Sozaboy; those works were penned by Christopher Okigbo and Ken Saro-Wiwa. The spirit-child Azaro is the protagonist of The Famished Road, a work by an author from this country named Ben Okri. Another of its writers penned Death and the King's Horseman and The Lion and the Jewel. For 10 points, name this home country of Wole Soyinka, whose literature often addresses the Biafran War.
ANSWER: Nigeria

BONUS. This man decided to murder his son with a flagpole in 1581, leading to severe consequences for Russia. For 10 points each:
[10] Name this notoriously severe tsar, who also led Russia into the disastrous Livonian War and established a secret police force known as the oprichnina.
ANSWER: Ivan the Terrible [or Ivan IV; or Ivan Grozny; prompt on Ivan]
[10] Instead of the competent son of Ivan, this mentally retarded tsar had to take over on the death of Ivan IV, leading to the end of the Rurik dynasty.
ANSWER: Fyodor I Ivanovich [or Fyodor the Bellringer; prompt on Fyodor]
2. An August 2008 white paper recommended that fifty thousand positions be cut from this organization. Jean Mucyo recently alleged that its Operation Turquoise contributed to the Rwandan genocide. Although it rescued two people from Somali pirates in September, it has lately come under fire for losing ten of its members in an ambush, an incident which stifled public support for Nicholas Sarkozy's attempts to send seven hundred of its members to Afghanistan. For 10 points, name this historically-mocked group of soldiers serving a certain European country.
ANSWER: the French army [accept equivalents]

BONUS. He studied under John Paul Russell, but soon tired of Impressionism. For 10 points each: [10] Name this painter of Woman with a Hat and La Danse.
ANSWER: Henri Matisse
[10] Matisse's work was typical of this movement, which favored unnatural color over representational accuracy and is named from a French term for "wild beasts."
ANSWER: Fauvism [or Les Fauves; accept word forms]
3. Nicolaus Copernicus may have originated this idea in a work presented to the Prussian Diet at Graudenz. A contemporary of its namesake, John Hales, may have been the first Englishman to describe it. Named by Henry Dunning Macleod, this phenomenon was postulated by its namesake after he reversed the failures of William Dauntsey and William Dansell, known as the Great Debasements. For 10 points, name this law about currency named for a founder of the Royal Exchange, which states that "bad money drives out good."
ANSWER: Gresham's Law
BONUS. They were united by Mangas Coloradas. For 10 points each:
[10] Name this Native American tribe of the Southwest, whose divisions include the Chiricahua and Mimbreno.

## ANSWER: Apache

[10] This Apache leader surrendered to Nelson Miles in 1887. He had previously waged a war against white settlers and he later dictated his autobiography to S.S. Barrett.

## ANSWER: Geronimo

4. It includes the waltz-tempoed "Tout le monde danse," and its original choreography by Julius Reisinger has been lost. In the beginning, the tutor Wolfgang welcomes his student, who is told to choose a bride at a ball the next day. The hero goes hunting with Benno and encounters a woman under the curse of a man who turns into an owl. This ballet also features the double Odile, who is accompanied to the ball by Rothbart. For 10 points, name this ballet about prince Siegfried's love for Odette, who turns into the title bird each day, a work by Tchaikovsky.
ANSWER: Swan Lake
BONUS. The Strait of Bonafacio separates it from its northern neighbor. For 10 points each:
[10] Name this Island bordered by the Tyrrhenian Sea on the east, which contain cities like Sassari and Cagliari.
ANSWER: Sardinia
[10] This other island nation, which is also located in the Mediterranean Sea, includes Gozo Island and Kemmuna Island. Its capital is Valetta.
ANSWER: Republic of Malta
5. This man served as a cabin boy on the ship Dorothea, which wrecked off the coast of the Netherlands en-route to Venezuela, and he was later assisted by Wilhelm Dorpfeld in his work at Tiryns. A business partner of Frank Calvert, this man consulted Emile Burnouf about his discovery of swastikas, while other findings of his included the Treasury of Minyas at Orchomenus, the so-called mask of
Agamemnon, and the excavation of a site at Hisarlik. For 10 points, name this German archeologist who excavated Mycenae and Troy.
ANSWER: Heinrich Schliemann

BONUS. Answer the following about traveling really fast, for 10 points each.
[10] This number, named after an Austrian physicist, is the ratio of an object's speed to the speed of sound in the medium.
ANSWER: Mach number
[10] This sudden change in pressure occurs when shock waves produced by an object traveling at supersonic speed finally catch up to the observer.
ANSWER: sonic boom
6. This structure contains several members of the $A B C$ protein family, and another major component of these objects is a derivative of sphingosine. Singer and Nicholson developed the fluid mosaic model of this structure. Clathrin-coated pits in it are involved in endocytosis, and specialized areas of this structure include tight junctions and gap junctions. In plants this structure is surrounded by the cell wall. Often described as a phospholipid bilayer, for 10 points, name this barrier between the cell and its outside environment.
ANSWER: cell membrane [or plasma membrane]

BONUS. This author wrote about Mersault killing an Arab in The Stranger. For 10 points each:
[10] Name this author of The Plague and The Fall.
ANSWER: Albert Camus
[10] Camus concluded that the title mythological figure must be "imagined happy" and fulfilled by the struggle in this philosophical essay.
ANSWER: The Myth of Sisyphus [or Le Mythe de Sisyphe]
7. He published a series of character sketches called Bracebridge Hall under a pen name, and he used that pen name for Tales of a Traveler, which contains a short story in which a man agrees to become a loan shark working for the devil. In addition to "The Devil and Tom Walker," he credited Geoffrey Crayon as the author of his Tales of the Alhambra, but he is better known for a tale wherein a man who plays ninepins with some strange people in the Catskills. For 10 points, identify this author who wrote about a man who sleeps for twenty years, Rip van Winkle.
ANSWER: Washington Irving [accept Geoffrey Crayon before it is read]

BONUS. Identify these bones, for 10 points each.
[10] This bone extends from the shoulder to the elbow. The ulnar groove passes through a cavity in this bone, and it is often incorrectly described as the "funny bone."
ANSWER: humerus
[10] This bone is found below the sacrum and consists of three to five vertebrae fused together. It is mostly non-functional in humans and is commonly called the "tail bone."
ANSWER: coccyx
8. This kingdom established its capital at Zaragoza under Alfonso I's rule. This kingdom fought a war with the French Angevin dynasty that was sparked by the Sicilian Vespers. Alfonso V's wars in Italy helped add Naples to its territories. Its most famous king issued the Alhambra decree with his wife, with whom he oversaw the completion of the reconquista. For 10 points, identify this Spanish region, whose king Ferdinand unified Spain by marrying Isabella of Castile.
ANSWER: Aragon

BONUS. This work claims that chicken blood can be used to skirt the Taupau system. For 10 points each:
[10] Name this anthropological work that was controversial for its idea that looser sexual restrictions were beneficial for youth on a Pacific island.
ANSWER: Coming of Age in Samoa
[10] This female anthropologist wrote Sex and Temperament in Three Primitive Societies as well as Coming of Age in Samoa.
ANSWER: Margaret Mead
9. Martin Heidegger claimed that it referred to philosophy itself in an essay published in Holzwege. The "madman" gleefully suggests that the subject of this phrase "took an ocean voyage" or "lost his way like a little child" in the work it appears in, which later states of it that "there has never been a greater deed." The speaker of another work says of it that "this old saint in the forest has not yet heard anything of this." Originating in The Gay Science, for 10 points, name this phrase used by Friedrich Nietzsche to suggest that a certain deity is no longer useful as a moral source.
ANSWER: "God is dead" [or "Gott ist tot"]
BONUS. She wrote about the Ramsay family in To the Lighthouse. For 10 points each:
[10] Name this member of the Bloomsbury group and author of Orlando and The Waves.
ANSWER: Adeline Virginia Woolf
[10] The title character of this Virginia Woolf novel is named Clarissa, who plans and hosts a party. This work also sees Septimus Hardy commit suicide.
ANSWER: Mrs. Dalloway
10. Luminosity is approximately equal to the seven-halves power of this quantity for main-sequence stars, and negative $h$ bar squared is divided by two times this quantity in the Hamiltonian operator. The "reduced" form of this quantity is frequently employed in two body problems. The "flow rate" associated with this quantity in incompressible fluids must be constant according to the continuity equation, and a form of energy is equal to this quantity multiplied by the square of the speed of light. For 10 points, identify this quantity commonly measured in grams.
ANSWER: mass
BONUS. Alexander the Great spread her worship around the Hellenic world despite the fact that she was an Egyptian goddess and Caligula even permitted a festival to her. For 10 points each:
[10]Nepthys once assumed the likeness of this goddess to seduce Set. She is particularly known for her powerful magic.
ANSWER: Isis
[10] Isis's magical powers stem from a story in which she managed to acquire this sun god's true name by poisoning him and forcing him to invoke it in order to save himself.
ANSWER: Ra [or $\underline{\mathbf{R e}]}$

# 三 HSAPQ <br> High School Academic Pyramid Questions 

Third Quarter: Team Rounds

Choices: NEW YORK CITY<br>THE LETTER K

## NEW YORK CITY

This round deals with New York City.
[10] This poet of the elegy "When Lilacs Last in the Dooryard Bloomed" wrote "Crossing Brooklyn Ferry" about the Fulton Street ferry. Those are both found in Leaves of Grass.
ANSWER: Walt Whitman
[10] This author created Karl Rossman, who visits his uncle Edward Jacob, a senator from New York in the novel Amerika. He also created Gregor Samsa.

## ANSWER: Franz Kafka

[10] This mayor, who had worked as an interpreter at Ellis Island, co-sponsored an act to restrict bans on boycotts and unseated Tammany Hall on a "fusion" ticket in 1933.
ANSWER: Fiorello Henry La Guardia
[10] This man was inaugurated in New York City, after winning the battles of Trenton and Princeton. ANSWER: George Washington
[10] This nuclear physicist born in New York names an approximation with Max Born which states that nuclear and electronic motion can be separated.
ANSWER: Julius Robert Oppenheimer
[10] This Czech composer once directed the National Conservatory in New York.
ANSWER: Antonin Leopold Dvorak
[10] This cantilevered structure was initiated by John A. Roebling, who died early into the project to make his son Washington direct the construction. It crosses the East River.
ANSWER: Brooklyn Bridge
[10] This teacher at The New School for Social Research in New York discussed the banality of evil in Eichmann in Jerusalem.
ANSWER: Hannah Arendt
[10] This Mexican muralist's The Allegory of Science, Labor and Art can be found in New York, and he painted The Coming of Quetzalcoatl.
ANSWER: Jose Clemente Orozco
[10] Gilbert Stork from Columbia University were first able to run a fully stereochemically controlled synthesis of this substance derived from the Cinchona tree.
ANSWER: quinine

## THE LETTER K

This round deals with things that may begin with the letter K or involve things that prominently use K.
[10] This very tall man served as King Arthur's seneschal and was the son of sir Ector, which meant he grew up with Arthur as his foster brother.
ANSWER: Sir Kay
[10] This author reworked Robinson Crusoe in his Foe, and wrote about David Lurie in Disgrace. He wrote The Life and Times of Michael K.
ANSWER: John Maxwell Coetzee
[10] Dag Hammarskjold was killed while on a peace-keeping mission involving this breakaway state in the Republic of the Congo, led by Moshe Tshombe.

## ANSWER: Katanga

[10] He analyzed the data of Tycho Brahe to develop laws like "All planets move in elliptical motion, with the sun as one of the foci," his laws of planetary motion.
ANSWER: Johannes Kepler
[10] This protein's stability comes from disulfide bonds formed by the presence of cysteine, and it is insoluble in water. This protein provides structure of hair and nails.
ANSWER: keratin
[10] This flute playing figure found in Anansazi artwork takes his name from Hopi for "wooden back" and is believed to be a fertility symbol.
ANSWER: Kokopelli
[10] This man's music was catalogued by Ludwig von Kochel. His operas include Cosi Fan Tutte and The Abduction from the Seraglio.
ANSWER: Wolfgang Amadeus Mozart
[10] He wrote the Critique of the Gotha Program, and co-wrote a work that claimed "a spectre is haunting Europe" with Friedrich Engels, the Communist Manifesto.
ANSWER: Karl Marx
[10] Mount Khan-Tengri is the highest point in this former Soviet Republic, which owns the top half of the Aral Sea. This nation's capital is Astana.
ANSWER: Republic of Kazakhstan or Qazaqstan Respūblīkasy
[10] The ruling dynasties of this nation have included the Jeosun and Chosun.
ANSWER: Korea

## 三 HSAPQ High School Academic Pyramid Questions

## 2008-2009

 Four Quarter SetRound 4
Fourth Quarter: Ten Tossups

1. The gene ART4 codes a protein for one of these, while genes on chromosome 6 code for the li system, a rare version. In addition to the Dombrock and Knops types of them, the Xk version is encountered in chickens, and proteins for the Diego system are notably found in East Asian peoples. A test for the best known system for them also detects the Rhesus factor; that system uses $I^{A}$ and $I^{B}$ as alleles. For 10 points, name these systems, the most common of which yields $A, B, A B$, and $O$ varieties. ANSWER: blood type systems [or blood groups]
2. Felix Blumenfeld created a virtuosic piano arrangement of the first "Concert" one of these by Alexander Glazunov. In Mahler's ninth symphony, one of these alternates with two landler, which was the peasant dance it originated from. One was written by Franz Lehar for The Merry Widow, and some of the most performed include "Wine, Women, and Song" and one beginning with a D-D-F sharp-A-A melody that depicts a river's course through Vienna. For 10 points, name this dance in three-four time that was the domain of its "king," Johann Strauss.
ANSWER: waltz
3. This poet wrote defenses of piety in "An Address to the Atheist" and "An Address to the Deist." She wrote that "A monarch's smile can set his people free" in "To the King's Most Excellent Majesty" which celebrated the repeal of the Stamp Act and gained prominence with an elegy on the death of George Whitefield. Most of her poems were published in the book Poems on Various Subjects, Religious and Moral, and she described her own situation in "On being brought from Africa to America." For 10 points, name this early African-American poet.
ANSWER: Phillis Wheatley
4. The ruling in this case was upheld in the later cases of Colorado v. Connelly, Missouri v. Seibert, and Dickerson v. US, while it consolidated the cases of Westover v. US, Vignera v. New York, and California $v$. Stewart. The defendant in this case was mortally wounded in a knife fight at the La Amapola Bar ten years after the ruling, and separate dissents were provided by Justices Clark and Harlan. Concerning a man convicted of kidnapping and raping a woman, for 10 points, name this Warren Court decision of 1966 regarding the reading of certain rights to suspects.
ANSWER: Miranda v. Arizona [or Arizona v. Miranda]
5. One work by this man depicts Saint Thomas with a girdle and the coronation of Mary, while his first commission was painted with Evangelista di Meleto. The artist of The Fire in the Borgo and The Mass at Bolsena, in addition to the Oddi Altar and Baronci Altarpiece, this artist was a pupil of Pietro Perugino. One work by this man depicts two figures surrounded by Saints Barbara and Sixtus, while another shows Plato, Socrates and other philosophers gathering on some steps. For 10 points, name this Renaissance artist of the Sistine Madonna and The School of Athens.
ANSWER: Raphael Sanzio
6. In one of his roles, he is known as diemporos and as empolaios, and in that role he presided over the first game of dice. He sometimes served as a psychopomp, and in a more famous role, he stated that two cow hides were a sacrifice to the twelve Olympian gods, surprising Zeus and Apollo, who only knew of eleven. He fathered a man who joined together with Salmacis, and he went with Zeus to the house of Baucis and Philemon. He also slayed the watchman Argos and gave Perseus his slippers. For 10 points, name this Greek messenger god.
ANSWER: Hermes [accept Mercury before "Zeus" is read; do not accept or prompt afterwards]
7. Internal gravity waves cause luminosity shifts in the "pulsating" type of this star. These stars are the "primaries" in a cataclysmic variable system and are supported by electron degeneracy pressure. Most main sequence stars become these at the end of their life-cycle, and their upper mass limit of around 1.44 solar masses is given by the Chandrasekhar Limit. For 10 points, name this type of star found in the lower left of the Hertzsprung-Russell diagram that are small and emit light made up of all colors. ANSWER: white dwarfs [prompt on dwarfs]
8. This person collaborated with Furtmuller and Wexberg on the essay collection To Heal and to Educate. He wrote about "The Jealousy Mania" and "A Lupus Phobia" in his "interpretation of a life story," titled The Case of Miss R. He discussed how physical disability could make a person feel substandard in one work, and in another, he argued for the "drive to mastery" as the force behind the psyche. For 10 points, name this author of Study of Organ Inferiority and The Neurotic Constitution, a psychologist who introduced the "inferiority complex."
ANSWER: Alfred Adler
9. This battle was preceded by action at Quatre Bras and Ligny and followed by Wavre. Corps leaders here included Bulow and Thielmann, and William the Silent was wounded at this battle. Victory was assured here by Gebhard von Blucher's Prussian forces, whose timely arrival marked the end of the Hundred Days. For 10 points name this 1815 battle, at which coalition forces under the Duke of Wellington defeated Napoleon Bonaparte for the final time.
ANSWER: Battle of Waterloo
10. One American in this novel introduces the protagonist to Life of Jesus, which precedes his reading of The Bohemians of the Latin Quarter after his first sexual encounter. The protagonist almost signs on as a ship's doctor after news of his Uncle William's death, but a holiday trip with the Athelneys changes his mind. Mildred earlier wrecks the protagonist's apartment; while living at Blackstable during this novel's opening, the main character is ridiculed for a club foot. For 10 points, name this work about Philip Carey, by Somerset Maugham.

## ANSWER: Of Human Bondage

