![HSAPQ logo](High School Academic Pyramid Questions)

1. This person created the Val-Kill furniture factory to combat unemployment in Hyde Park. As the first U.S. delegate to the United Nations, she chaired the committee that drafted the Universal Declaration of Human Rights. This woman arranged for Marian Anderson to sing outside the Lincoln Memorial and was the spokesperson for her husband's New Deal policies. For 10 points, name this First Lady of the U.S. from 1933 to 1945.
ANSWER: Anna **E**leanor **Roosevelt** [prompt on **Roosevelt**]

005-09-3-01101

2. This poet wrote of "great wings beating still above the staggering girl" in his "Leda and the Swan." This author of a series of poems about Maud Gonne wrote of a place "that is no country for old men" in another poem. This author of "Sailing to Byzantium" warned that "a terrible beauty is born" in a poem about an unsuccessful uprising. This poet wrote "things fall apart, the center cannot hold" in "The Second Coming." For 10 points, name this Irish poet and author of "Easter, 1916."
ANSWER: William Butler **Yeats**

045-09-3-01102

3. In 2011, Discovery Health Channel will be replaced by a network named for this person, who opened a "Leadership Academy for Girls" in South Africa in 2007. She played Sophia in Steven Spielberg's film of Alice Walker's novel *The Color Purple*. Tom Cruise declared his love for Katie Holmes while jumping on this person's couch. In 2004 she gave away 276 G6 Pontiacs to members of her audience. For 10 points, name this founder of *O Magazine* and Harpo Productions, who recently announced that her talk show would end production in 2011.
ANSWER: Oprah **Winfrey** [or **Oprah**]

045-09-3-01103

4. One character in this novel plans to leave with two others on a ship to Bristol after the Election Sermon. That character later lets down her hair and removes an item of clothing, frightening her illegitimate daughter. Reverend Dimmesdale drops dead after being kissed by that daughter, Pearl, and displaying the title emblem on his chest. For 10 points, name this novel in which Hester Prynne, after being unfaithful to Chillingworth, is compelled to wear a red "A," a work by Nathaniel Hawthorne.
ANSWER: The **Scarlet Letter**

032-09-3-01104

5. The victor of this battle was able to deal with an uphill cavalry charge with no cavalry of his own. This battle ended when the winner surrounded the forces of Abd el-Rahman (ROCH-mon). The winner of this battle earned the nickname "the hammer" while fighting for the Merovingians (mer-oh-VIN-jee-unz) in 732. For 10 points, name this battle at which Charles Martel halted the advance of Islam into France.
ANSWER: Battle of **Tours** [or Battle of **Poitiers**; or Battle of the **Court of the Martyrs**]

020-09-3-01105

6. An ancient playwright from what is now this country wrote about a king who forgets his betrothed until reminded by a ring. An epic poem from this country depicts another king, who must ally with a monkey to reclaim his wife from Ravana (ruv-VAH-nuh). In another of this country's epics, the Kaurava (core-AH-vuh) and Pandava (pon-DAH-vuh) brothers fight a war that is interrupted by the "song of God." For 10 points, identify this home country of the epic poems *Ramayana* (rahm-eye-AH-nuh) and *Mahabharata* (mah-hah-BRA-tuh).
ANSWER: Republic of **India** [or **Bharat**iya Ganarajya]

019-09-3-01106

7. One national park in this country contains area sacred to the Anagu people. That park contains a set of domed rock formations known as The Olgas and the largest extrusive sandstone in the world. That park is located near Alice Springs, the second largest city in this country's Northern Territory, and is called Uluru-Kata Tjuta (oo-LOO-roo KAH-tah teh-YOO-tuh) Park. The largest city in this country is home to a performing arts center that has a white, sail-like roof. For 10 points, name this country that contains a notable opera house in Sydney.
ANSWER: Commonwealth of **Australia**

8. The Maxwell-Boltzmann distribution gives the distribution of "root mean square" form of this value for classical particles. Centripetal (sen-TRIP-et-uhl) force is proportional to the square of this value, which is equal to the quotient of an object's momentum and its mass. The second time derivative of this quantity is jerk, while its first time derivative is acceleration. For 10 points, what quantity is the vector equivalent of speed?
ANSWER: **velocity** [prompt on **speed**]

9. He commemorated "the founder of Danish literature" by composing the *Holberg Suite*. "Wedding Day at Troldhaugen" and "March of the Trolls" are part of his piano *Lyrical Pieces*. "Solveig's Song," "Morning Mood" and "In the Hall of the Mountain King" are in the first suite of his most notable work. For 10 points, name the romanticist composer of the incidental music for *Peer Gynt*, a play by Henrik Ibsen, a fellow Norwegian.
ANSWER: Edvard **Grieg**

10. In one scene in this play, the protagonist is horrified when a woman tries to sell her "flowers for the dead." That character leaves Belle Reve to live on Elysian Fields Avenue in New Orleans. This play's protagonist says that she has "always depended on the kindness of strangers." The sister of the protagonist in this play, Stella, is married to the brutish Stanley Kowalski. This play ends with the attendants of an asylum taking away Blanche Dubois. For 10 points, name this play written by Tennessee Williams.
ANSWER: *A **Streetcar Named Desire***

11. This group of mammals contains the order Microbiotheria (MY-kro-BYE-oh-THAIR-ee-uh), whose only species, monito del monte (mo-NEE-toe del MON-tay), is found in South America. Like monotremes, organisms in this order lack a corpus callosum (CORE-pus kuh-LOSS-um). Although they give birth live, their short gestation period forces their young to fully develop for up to several months in their most distinctive feature. For 10 points, name this group of mammals known for their distinctive pouch, which includes koala bears and kangaroos.
ANSWER: **marsupials** [or **Marsupialia**]

12. This ruler demand for tribute from the Bishop of Dorpat sparked the Livonian War. Dog's heads were carried by the oprichniks (oh-PREACH-nix), the secret police of this ruler. He led the conquests of the Kazan and Astrakhan (OSS-truh-con) khanates and established the zemsky sobor (ZEM-ski soh-BORE) parliament. This ruler blinded the architect of St. Basil's Cathedral and killed one son, but was succeeded by Feodor, whose death began the Time of Troubles. For 10 points, name this last Rurikid tsar of Russia, who was notorious for his cruelty.
ANSWER: **Ivan the Terrible** [or **Ivan IV** Vasilyevich; or **Ivan Chetvyorty**; or **Ivan Grozny**; prompt on **Ivan**]

13. This economist criticized his country's decision to return to the gold standard in "The Economic Consequences of Mr. Churchill." That title paralleled this economist's earlier criticism of the Treaty of Versailles, *The Economic Consequences of the Peace*. This man's best-known work argued against liquidationism, claiming that governments could stimulate the economy through deficit spending. For 10 points, name this British economist who wrote *The General Theory of Employment, Interest, and Money*.
ANSWER: John Maynard **Keynes**

14. One poem by this man compares his love to a "melody that's sweetly played in tune" and a certain flower "that's newly sprung in June." Another poem by this man notes that "we'll take a cup of kindness yet" in honor of the title time period. A third poem by this man claims that "the best-laid schemes o' mice an' men gang aft agley." For 10 points, name this poet of "A Red, Red Rose," "Auld Lang Syne," and "To A Mouse," who is known for his use of the Scottish dialect.
ANSWER: Robert **Burns**

15. Important books in this religion include the *Blue Cliff Record* and the *Gateless Gate*. One important event in this religion was the Flower Sermon. This religion's Soto sect was introduced by Dogen (DOH-jen) to Japan in the 13th century. Esoteric koans (KOH-ahns) like "Two hands clap and there is a sound; what is the sound of one hand?" are pondered by followers of this religion, which is popular in Japan. For 10 points, name this sect of Buddhism which emphasizes meditation and is associated with rock gardens.
ANSWER: **Zen** Buddhism [or **Chan** Buddhism; prompt on **Buddhism**]

1A. Astronomical redshift and blueshift are manifestations of what physical effect, which is also responsible for the changing pitch of a siren as a vehicle passes by?
ANSWER: **Doppler** effect

1B. What Russian author wrote the works *Notes from Underground* and *The Brothers Karamazov* (car-uh-MAH-zoff)?
ANSWER: Fyodor Mikhaylovich **Dostoyevsky**

2A. Name the actor who starred as Rusty Ryan in the *Ocean's Eleven* series and played the title role in *The Curious Case of Benjamin Button*.
ANSWER: William Bradley "Brad" **Pitt**

2B. It is measured on a scale from zero to one. Give this term for an object's reflectivity of the sun's radiation.
ANSWER: **albedo**

3A. What Italian word, meaning "soon" or "quickly," denotes a musical tempo marking that is faster than allegro?
ANSWER: **presto**

3B. This actor dressed up as a swamp monster in his guest appearance on Family Guy and played Stuart Little's dad in *Stuart Little*. Name this British actor who uses a New Jersey accent to play Princeton-Plainsboro diagnostician Dr. Gregory House.
ANSWER: Hugh **Laurie**

4A. This is a 10-second calculation question. Multiply: $(3x+9)(2x-6)$.

ANSWER: $\underline{6x^2 - 54}$

4B. This is a 10-second calculation question. Solve for y: $3x - 5y = -30$.
ANSWER: $\underline{6 + 3x/5}$ [or $\underline{(30 + 3x)/5}$]

5A. The literary sense of what term refers to an additional meaning in a line of dialogue due to information that the audience, but not the character speaking, has access to?
ANSWER: dramatic **irony**

5B. Identify the second-largest saltwater lake in the United States, which is located just north of New Orleans in Louisiana.
ANSWER: Lake **Pontchartrain**

6A. This is a 20-second calculation question. Divide: 1 and two-fifths by seven-fifteenths.
ANSWER: **3**

6B. This is a 20-second calculation question. You receive a $50 gift certificate as a gift. What is the most you can buy, to the nearest penny, so that the amount after 7% sales tax is applied can be covered by the gift certificate?
ANSWER: $**46.73**

7A. Name the painting by Sandro Botticelli (BAH-tih-CHEL-ee) that portrays Flora strewing flowers next to the three Graces, who dance next to Mercury in front of a forest.
ANSWER: *La **Primavera*** [or *Allegory of **Spring***]

7B. Medieval examples of this verse form include "Lord Randall" and his love-gone-wrong, as well as several recounting the adventures of Robin Hood. What is this narrative poetic form, that is characterized by regular rhyme and meter and often set to music?
ANSWER: **ballad**

8A. What social critic argued that American society was becoming dominated by the interlocking "higher circles" of military, political, and economic elites in his book *The Power Elite*?
ANSWER: Charles Wright **Mills**

8B. What Democrat from Nevada currently serves as the Majority Leader in the U.S. Senate?
ANSWER: Harry Mason **Reid**

9A. This is a 30-second calculation question. If a rectangle is six feet longer than twice its width, and its area is 140 square feet, what are the dimensions of the rectangle?
ANSWER: **7 by 20** feet [or **width is seven**, **length is twenty** or equivalents]

9B. This is a 30-second calculation question. Find the probability of drawing either a red card or a face card, if you draw a single card from a standard 52-card deck.
ANSWER: **8/13** [or **32/52**]

10A. Name the organelle of eukaryotic (YOU-care-ee-AH-tick) cells whose acidic enzymes break down and digest molecules.
ANSWER: **lysosome**s

10B. What British chemist proposed the first atomic theory of chemistry as well as a namesake law of partial pressures?
ANSWER: John **Dalton**

1. This disease's original meaning as "siphon" refers to the increased frequency of urination among patients. One form of this condition is characterized by the complete failure of the beta cells in the Islets of Langerhans (LANE-gur-"hans"). Obesity may cause the "adult-onset" form of this disease. This disease requires patients to constantly monitor their blood glucose level. For 10 points, name this medical condition in which the body does not get enough insulin.
ANSWER: **diabetes** mellitus

064-09-3-01117

2. This country was ruled by the Solomonic Dynasty from the overthrew of the Zagwe (ZOG-way) Dyansty in 1270 to the twentieth century, when the Marxist Derg took power. This country defended itself at the Battle of Adowa from invasion by Italy. Its ruler at the time was Emperor Menelik II. This country's last emperor was venerated as an incarnation of God by Rastafarians. For 10 points, identify this east African country, once ruled by Haile Selassie (HIGH-lay suh-LAH-say), from which Eritrea split off in 1993.
ANSWER: Federal Democratic Republic of **Ethiopia** [or **Ityoppya**]

005-09-3-01118

3. In one story by this author, Julian accompanies his bigoted mother, Mrs. Chestney, on an integrated bus. This author wrote a novel in which Enoch Emery steals a mummy from a museum while working with the preacher Hazel Motes. This author of "Everything that Rises Must Converge" and *Wise Blood* wrote a short story in which the Grandmother takes her family to Red Sammy's Diner before being killed by the Misfit. For 10 points, name this exemplar of the Southern Gothic style who wrote "A Good Man is Hard to Find."
ANSWER: Mary Flannery **O'Connor**

045-09-3-01119

4. Interactive and Zero Knowledge ones are recent additions to computational theory, while Appel and Haken's work on the four color theorem used a computer assisted one. Types include direct, by exhaustion, and by contradiction which is also refered to as reductio ad absurdum. Starting with known facts and axioms, they use inductive and deductive reasoning to reach a conclusion followed by the phrase QED. For 10 points, identify these arguments from math and logic that attempt to show that something is true.
ANSWER: **proof** [accept word forms]

001-09-3-01120

5. This colony's namesake river was explored by Adriaen Block. This colony's constitution was hidden from Edmund Andros in the Charter Oak. In 1639, this colony proclaimed one of the first written constitutions in the Americas, its "Fundamental Orders." Roger Sherman hailed from this state, making it the namesake of a Constitutional Convention compromise between the Virginia and New Jersey plans. For 10 points, identify this state, founded by Thomas Hooker, which later merged with the New Haven colony.
ANSWER: **Connecticut**

040-09-3-01121

6. Perugino (pair-uh-JEE-no) painted the birth of Moses as part of a series on the south wall of this structure. One wall in this structure includes a self-portrait in the flayed skin of St. Bartholomew. That work shows a beardless Jesus enthroned on a cloud, floating above eternally damned. This room has a painting of nine scenes from the book of Genesis. It is home to the fresco of *The Last Judgement*, and an image of God reaching out to give life to Adam is found here. For 10 points, name this room in the Vatican City, whose ceiling Michelangelo painted.
ANSWER: the **Sistine Chapel** [or **Cappella Sistina**]

027-09-3-01122

7. The process in which polymers form bridges between flocs of these compounds is called flocculation (FLOCK-yu-LAY-shun). Scattering of light by these compounds is the Tyndall (TIN-doll) Effect. Classifications of them include gel, foam, sol, and emulsion. This term denotes a mixture that is neither a solution nor a suspension. For 10 points, name this heterogeneous mixture of particles dispersed in a continuous phase, examples of which include mayonnaise and paint.
ANSWER: **colloid**s

034-09-3-01123

8. This figure is the adoptive mother of Erichthonius (ERIK-though-knee-us), who was born from Hephaestus's failed attempt to rape this goddess. This goddess's mother was swallowed to avert a prophecy. She was born only after an ax split her father's forehead open. This daughter of Metis transforms Arachne into a spider after out-weaving her and offers an olive tree to beat Poseidon to patronage of her namesake city. Known as Nike and Pallas, this virgin goddess was honored by the Parthenon. For 10 points, name this Greek goddess of wisdom.
ANSWER: **Athena** [or **Athene**; prompt on "Pallas" or "Nike" before mention]

020-09-3-01124

9. One character in this work disguises himself as both the Knight of the Wood and Knight of the White Moon. That character, Samson Carrasco (cah-RAS-co), eventually convinces the title character of this novel to return home. The title character of this work chooses to rename a peasant "Dulcinea" (DOOL-seh-NAY-uh). This novel includes the horse Rocinante (ROW-sih-NON-tay), whom the title character uses to charge some windmills, and the servant Sancho Panza. For 10 points, name this work, about a Spaniard obsessed with chivalry, by Miguel de Cervantes (ser-VAHN-tayz).
ANSWER: *The Ingenious Hidalgo **Don Quixote*** (kee-HO-tay) *of la Mancha* [or *El ingenioso hidalgo **don Quixote*** *de la Mancha*]

023-09-3-01125

10. One example of these objects was discovered by Andrew Lawson, and they are studied by an observatory at Parkfield. Grabens (GRAH-benz) and horsts are bordered by either normal or reverse forms of these boundaries, which consists of the hanging wall and the footwall. Depending on the direction of the movement, they are characterized as either dip-slip or strike-slip. Between tectonic plates, they occur at transform boundaries. For 10 points, name these fractures of the crust created by two plates moving past each other, exemplified by the San Andreas one.
ANSWER: **fault**s [or **fault** lines; or transform **fault**]

034-09-3-01126

11. This monarch's plans to lead the army proved unnecessary due to the Battle of Trafalgar. This leader made Charles Townshend the Chancellor of the Exchequer, causing the passage of the Intolerable Acts, and also oversaw the passage of a law taxing documents, the Stamp Act. Such actions caused this leader to be accused of plundering the seas and burning the towns in the Declaration of Independence. For 10 points, name this King of England during the American Revolution.
ANSWER: **George III** [prompt on **George**]

059-09-3-01127

12. At the 2009 White House Correspondents Association dinner, this man was the subject of the line "I hope his kidneys fail." In 2004, the ACLU of Florida defended this man when state officials attempted to seize his medical records in a probe over illegal use of Oxycontin. In December 2009, he stated "I don't think there's one thing wrong with the health care system" after being rushed to a Hawaii hospital for chest pains. For 10 points, name this influential conservative who hosts the most-listened-to radio show in the United States.
ANSWER: Rush Hudson **Limbaugh** III

13. One dynasty that ruled this country had rulers nicknamed "Philadelphus" and "Soter" (SEW-ter). Another ruler of this country was defeated by a fleet led by Agrippa at the Battle of Actium. That ruler had successfully fought her brother Ptolemy XIII (TAHL-uh-mee the thirteenth) for rule of this country, with the help of her lover Julius Caesar. For 10 points, name this African country, once ruled by Cleopatra VII (the seventh), that contains the Great Pyramid at Giza.
ANSWER: Arab Republic of **Egypt** [or **Masr**; or **Misr**; or **Kimi**; or **Kemet**]

14. Recent improvements in these devices include perpendicular recording and native command queuing. An important metric in their performance is seek time and they have multiple rotating platters which are manipulated by heads. Concentric circles on the platters are known as tracks, which have smaller parts called sectors that can store 512 bytes. For 10 points, name this piece of hardware which stores the files on a computer, which generally has more storage space than the no longer as common floppy disk.
ANSWER: **hard** drive [or **hard** disk drive; or **HDD**; or **hard** disk]

15. In 1951, a treaty signed in this city ended the U.S. occupation of Japan following World War II. This city was the site of the White Night Riots, which protested the exoneration of a man charged with killing Mayor George Moscone. Diane Feinstein became this city's mayor following that killing, which also claimed the life of gay rights activist Harvey Milk. For 10 points, name this California city, which suffered devastating 1906 and 1989 earthquakes.
ANSWER: **San Francisco**

1. Allred and Rochow (ROE-shou) developed one formula to calculate this property, which can also be calculated by taking the arithmetic mean of electronic affinity and ionization energy in the Mulliken scale. The most commonly used scale for this property, developed by Linus Pauling, gives fluorine a value of just under 4.0. For 10 points, name this chemical property that describes the ability of an atom to attract electrons towards itself in a covalent bond.
ANSWER: **electronegativity**

064-09-3-01132

2. This composer celebrated the end of the War of the Austrian Succession with a suite for a festival in Green Park. This man wrote an orchestral suite for George I, which was played on a barge as the king and his party sailed up the Thames River. He composed *Music For the Royal Fireworks* and *Water Music*. This man composed an oratorio whose second part ends with a movement inspired by a passage from Revelation called the "Hallelujah" chorus. For 10 points, name this German-born composer of the *Messiah*.
ANSWER: George Frideric **Handel**

052-09-3-01133

3. This philosopher equated despair with original sin in *The Sickness Unto Death*. One of his works includes a section called "Diary of a Seducer." He introduced the "Knight of Faith" and the "Knight of Infinite Resignation" in a work that discusses Abraham's willingness to sacrifice Isaac. He also wrote a work that contrasts the aesthetic and ethical stages of life. For 10 points, name this existentialist who wrote *Fear and Trembling* and *Either/Or*.
ANSWER: Søren Aabye **Kierkegaard**

024-09-3-01134

4. Edward Tatum, George Beadle and Joshua Lederberg won the 1958 Nobel Prize for studying the relationship of genes to these objects. Recombinant DNA technology uses "restriction" examples of these objects. Competitive inhibitors bind to the active site of these objects, thus preventing them from binding to substrates. Examples of these objects include catalase (CAT-uh-lace) and amylase (AMM-ih-lace). For 10 points, what proteins function as biochemical catalysts that speed up reactions?
ANSWER: **enzyme**s [accept "one **gene**, one enzyme hypothesis" or similar answers before "these objects" is read]

034-09-3-01135

5. This author wrote about an impresario putting a panther in a cage, which was once used by a starved man who never found the food he liked. That story is "A Hunger Artist." Another character created by this author lives with Frau Grubach (frow GRUE-bahk) and is taken to court. A different work by this author shows a man slowly wasting away after waking up one morning as a bug. This author created Joseph K. and Gregor Samsa. For 10 points, name this author of *The Trial* and "The Metamorphosis."
ANSWER: Franz **Kafka**

027-09-3-01136