



High School Academic Pyramid Questions

Fall 2008  
ACF-Format Set #1

Round 11

Tossups

1. One American author of this last name wrote *The Barracks Thief* and *This Boy's Life*. Another author of this name wrote about a student who reunites with Joel Pierce and Robert Weaver at Harvard, Eugene Gant, in *Of Time and the River* and *You Can't Go Home Again*. A third author with this last name described the Merry Pranksters in *The Electric Kool-Aid Acid Test*, and wrote about a racial crisis sparked by Sherman McCoy in *The Bonfire of the Vanities*. For 10 points, give this last name of authors Tobias, Thomas, and Tom.

ANSWER: Wolfe [spelled Wolff, in Tobias Wolff's case]

2. This man downplayed differences between Protestant and Catholic concepts of God in his *Letter to Voetius*. The four rules he used in all of his investigative work included dividing problems into simple parts and accepting only the self-evident as true; he codified his approach in *Rules for the Direction of the Mind* and *Discourse on Method*. He used that approach to write a religious text, the *Meditations on First Philosophy*. For 10 points, name this skeptical philosopher who started his investigations by declaring "Je pense, donc je suis" or "I think, therefore I am."

ANSWER: René Descartes

3. With the encouragement of Senator Arthur Vandenberg, this man defeated Bartel Jonkman to win a House seat. He was a leader of the House's "Young Turks", and he served as a member of the Warren Commission. Elected minority leader in 1965, he was panned for his performance in a presidential debate in which he stated that, "There is no Soviet domination of Eastern Europe", and his presidency was noted for its Whip Inflation Now program. For 10 points, name this only President not to be elected to any national office, who pardoned his predecessor, Richard Nixon.

ANSWER: Gerald Ford [or Leslie King]

4. The Peclet number is equal to the ratio of this quantity for convection to that for diffusion. A Pitot Tube is used to measure this quantity in gases, while its value in liquids can be determined using a Venturi Meter. Both of these devices make use of the idea that, like volume, as pressure increases, this decreases, a principle known as Bernoulli's Equation. When this is constant, acceleration is zero. For 10 points, name this kinematic quantity, the derivative of position, whose magnitude is equal to speed.

ANSWER: velocity [prompt on speed before it is read]

5. This artist's version of the Last Judgment portrays the Archangel Michael standing on a skeletal bat covering the roof of Hell. St. Donatian and St. George present the title character to the Virgin Mary, who wears a red robe, in his painting *The Madonna With Canon George van der Paele*. This artist painted a self-portrait with a red turban, and collaborated with his brother Hubert on the *Ghent Altarpiece*. He also painted a mirror reflecting a couple holding hands during the title ceremony. For 10 points, name this 15th century Flemish painter of *The Arnolfini Wedding*.

ANSWER: Jan van Eyck

6. They extend south from the Kuma and Manych river basins, and between their two ranges lie the Shirak Steppe. They include the Dykshu, Bezingi, and Karaugom glaciers, and the largest lake in this mountain system is Sevan. Mount Aragats is located to the west of Lake Sevan, and the Talish Mountains are located in this system. Divided into the Greater and Lesser ranges, for 10 points name this mountain system located between the Caspian and Black seas with their highest peak at Mount Elbrus.

ANSWER: Caucasus Mountains

7. One film from this country features a man who steals away on a horse with his future wife Dora at her wedding, and ends up getting shot after convincing his son Joshua to play a game that requires one to earn 1,000 points to win a tank. Another film from this country sees a flyer-poster seek out the man who stole his means of transportation. The country of origin for *Eight and a Half*, *The Bicycle Thief*, and *Life is Beautiful*, for 10 points, name this country whose notable filmmakers include Federico Fellini and Roberto Benigni.

ANSWER: Italy [or Italia]

8. One of her poems accuses a character of being "pithy and historical as the Roman Forum," and another ends "I eat men like air." In addition to "The Colossus" and "Lady Lazarus," she wrote about "the substanceless blue" in "Ariel" and about how "every woman adores a fascist" in "Daddy." Her only novel was published under the pseudonym Victoria Lucas and describes the mental breakdown of magazine intern Esther Greenwood. For 10 points, name this author of *The Bell Jar*, which was published in the same year that she killed herself with a gas oven.

ANSWER: Sylvia Plath

9. One man with this last name was the maestro di capella of Novara Cathedral who composed *L'uomo contento* and *Christus*. The more famous man with this name composed 14 variations for violin with a repeated guitar accompaniment entitled *Carmagnola*, as well as a collaboration with Panny on variations entitled *La Tempesta*. One of his works inspired a series of variations that incorporate the Dies Irae melody, a rhapsody by Rachmaninoff. For 10 points, name this composer of *24 caprices*, the most renowned Italian violin virtuoso of the 1800s.

ANSWER: Nocolo Paganini

10. This man made a cameo appearance in the 1988 film *Never On Tuesday* as a man in a red sports car, and he played Johnny Collins in the 1991 thriller *Zandalee*. He was the first pick to star as The Green Goblin in *Spider-Man*, but a more recent role had him play John McLoughlin, a policeman pulled out from under the rubble in *World Trade Center*. Starring as Fu Manchu in the fake trailers to *Grindhouse*, and the title role in *Ghost Rider*, for 10 points, name this actor who played Ben Gates in two *National Treasure* films.

ANSWER: Nicholas Cage [prompt on Nicholas Kim Coppola]

11. Cheney's algorithm concerns an operation often performed on it. One kind of it has both NOR and NAND types, and wear-leveling preserves its lifespan, and the Von Neumann bottleneck concerns the limit on computer speed imposed by the ability for a CPU to perform computations faster than it can retrieve data from this. Garbage collection is a common form of automated management of, for 10 points, what form of data storage which comes in varieties like "random-access" and "flash?"

ANSWER: memory

12. In this novel, one character refuses to sell Lady Bareacres horses to escape from an invading army because the Lady had been rude to her in Brussels. Joseph mysteriously dies after getting an expensive life insurance policy, while Captain Dobbin marries the wife of George Osborne, who died at Waterloo. At the ball of the Duchess of Richmond, the protagonist's coquetry, despite the presence of her husband Rawdon Crawley, ruins her friendship with Amelia Sedley. For 10 points, name this novel about Becky Sharp, by William Makepeace Thackeray.

ANSWER: Vanity Fair

13. The Union of Krevo and the Union of Lublin formed a commonwealth between it and Lithuania, though that state was ended by a series of divisions, splitting it between Austria, Prussia, and Russia. Occasionally referred to as its "Fourth Partition" was its division by Molotov and Ribbentrop in 1939, and a shipyard strike here in 1980 was led by Lech Walesa and resulted in the Solidarity movement.. For 10 points, identify this nation, which, while occupied by the Nazis, saw a substantial uprising in 1944 in the capital, Warsaw.

ANSWER: Poland [prompt on Lithuania before it is read]

14. Simon Newcomb helped to develop the "quantity theory" of *this*. Ludwig von Mises wrote a book about the theory of this and credit, and according to the Fisher Equation, the amount of it can be determined by dividing  $PT$  by  $V$ , which stands for its velocity. In the United States, its supply is divided into  $M1$ ,  $M2$ , and  $M3$  by the Federal Reserve. Inflation causes its purchasing power to decrease. For 10 points, name this keystone of the economy, whose examples include coins and dollar bills.

ANSWER: money [accept currency or clear-knowledge equivalents]

15. The Frye-Edidin experiments can be rationalized by it as being the result of free diffusion, but one problem with it was discovered by Kusumi and concerned a "skeleton fence." First developed in 1972 by Singer and Nicolson, it states, among other things, that lipids and proteins can rotate. In addition, it describes a certain structure as a functionally asymmetric lipid bilayer studded with embedded proteins that aid in transport. For 10 points, name this model used to conceptualize cell membranes.

ANSWER: fluid mosaic model

16. Alfred Graf von Waldersee led punitive expeditions after the main fighting of this event, and it was quelled by the Eight Nation Alliance. Its spread was checked by the actions of Liu-K'un-i, and it led to the occupation of T'ang-shan by Russian troops. It was sparked in part by a severe drought in the Shangdong province, and it originated in the work of the Eight Trigrams Society and was championed by the Dowager Empress Cixi. For 10 points, name this anti-Western Chinese uprising of 1900 led by the Society of Righteous and Harmonious Fists.

ANSWER: Boxer Rebellion [accept equivalents, such as Boxer Revolt]

17. Before meeting the scorpion men at Mount Mashu, he tells Ninsun about his prophetic dreams. His subjects protest to Anu at the demanding labor that this king requires in order to build a wall. Aruru attempts to distract him by sending a figure who later joins this hero in a battle in the cedar forest against Khumbaba and in slaying the Bull of Heaven. Bearing the genetically implausible lineage of two-thirds god and one-third man, this king of Uruk and friend to Enkidu learns about eternal life from Utnapishtim. For 10 points, name this hero of a Sumerian epic.

ANSWER: Gilgamesh

18. This event was chronicled by Guibert of Nogent and Fulcher of Chartres. During this conflict's Battle of Dorylaeum, one side captured the treasury of Kilij Arslan, who had earlier defeated the forces of Walter the Penniless. Its leaders included Raymond of Toulouse and Peter the Hermit, and it was sparked by a speech at the Council of Clermont given by Pope Urban II. For 10 points, name this late eleventh century conflict which saw Godfrey de Boullion capture Jerusalem, which was followed by eight subsequent wars between Christians and Muslims.

ANSWER: **First Crusade** [prompt on The **Crusades**]

19. Stars in this constellation form lines that can be used to locate Procyon, Sirius, and Aldebaran, and its iota star is a quadruple system known as Hatsya. It features a nebula that is the nearest area of massive star formation and is Messier Object 42. Its gamma star is Bellatrix, while the most notable feature of this constellation is made up of Alnitak, Alnilam, and Mintaka. Containing the stars Rigel and Betelgeuse, for 10 points, name this constellation known as "The Hunter" that has a namesake "belt."

ANSWER: **Orion**

20. This author suggested that Jack the Ripper belongs in a class by himself in the essay "Decline of the English Murder." He argued that cliches and ready-made phrases erode the capability for intelligent thought in "Politics and the English Language." In one of his novels, Julia works for the Anti-Sex League, and Emmanuel Goldstein is the target of the Two Minutes Hate, mandatory for all citizens of Oceania. He also wrote about a donkey named Benjamin and pigs named Napoleon and Snowball. For 10 points, name this author of *1984* and *Animal Farm*.

ANSWER: George **Orwell** [or Eric **Blair**]

21. In one of his plays, the audience leaves for intermission to find the actors in the lobby having conversations. That play is dominated by the director Doctor Hinkfuss. In another of his plays, Doctor Dionysius attempts to scare the title character back into sanity after he fell off a horse and began to think he was a Holy Roman Emperor. In addition to *Tonight We Improvise* and *Henry IV*, another of his plays ends when the Child drowns in a fountain despite the instructions of the Manager. For 10 points, name this Italian playwright of *Six Characters in Search of an Author*.

ANSWER: Luigi **Pirandello**

22. The Franck-Hertz experiment used a tube filled with this element in a gaseous state, and various isotopes of this element were used to change in the critical temperature of superconductors due to the isotope effect. Found together with chlorine in calomel and sulfur in vermilion, it can be obtained from cinnabar, and forms alloys with other metals called amalgams. For 10 points, name this only element this is liquid at room temperatures, whose symbol is Hg.

ANSWER: **mercury** [accept **Hg** before it is read]



# HSAPQ

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Bonuses

1. His servant is Wagner, while the spirit Homunculus relays what he is thinking to Mephistopheles. For 10 points each:

[10] Name this main character of a two part play by the creator of Wilhelm Meister. This lover of Gretchen foolishly sells his soul to the devil to gain knowledge.

ANSWER: **Faust**

[10] Name this author of *Faust*, who also wrote *The Elective Affinities* and *Egmont*.

ANSWER: Johann Wolfgang von **Goethe**

[10] This is the name of Edward's wife in *The Elective Affinities*. Young Werther kills himself after Albert marries this woman, who titles a Thomas Mann novel where she is "in Weimar."

ANSWER: **Charlotte** [or **Lotte**]

2. This author of "The American Scholar" wrote "both shadow and sunlight are the same" in his poem "Brahma." For 10 points each:

[10] Name this onetime Unitarian pastor and author of "Self-Reliance," a leading figure in the transcendentalist movement.

ANSWER: Ralph Waldo **Emerson**

[10] Advanced in a namesake essay of 1841, this concept from Emerson's theology is a universal spirit to which all beings return.

ANSWER: the **oversoul**

[10] Emerson's "Nature" describes the possibility of becoming an agent through which the Universal Being acts, using the analogy of a "transparent" variety of this body part.

ANSWER: **eyeball**

3. Its five numbered declensional paradigms each can exist in up to seven cases, though the vocative and locative cases are less commonly seen than the other five. For 10 points each:

[10] Name this language, whose purification was a goal of the early Humanists.

ANSWER: **Latin**

[10] Noun declension and verb conjugation in Latin are forms of this general linguistic phenomenon, in which a word has many possible forms, each encoding specific meanings.

ANSWER: **inflection**

[10] This Latin case can be used in partitive, material, or charge kinds, but most commonly expresses possession.

ANSWER: **genitive** case

4. For 10 points each, name these poems by Allen Ginsberg.

[10] This poem for Carl Solomon begins, "I saw the best minds of my generation destroyed by madness."

ANSWER: "**Howl**"

[10] This elegy for his mother Naomi notes, "No more suffering for you. I know where you've gone, it's good." It takes its name from a Jewish prayer for the dead.

ANSWER: "**Kaddish**"

[10] This poem puts "Wives in the avocados, babies in the tomatoes!" and asks "Garcia Lorca, what were you doing down by the watermelons?"

ANSWER: "A **Supermarket in California**"

5. The title character's daughter Abigail falls in love with Matthias, who dies along with Lodowick in a duel arranged by the title character's servant Ithamore. For 10 points each:

[10] Name this play in which Barabbas falls into his own trap of boiling liquid.

ANSWER: *The **Jew of Malta***

[10] This author of *Doctor Faustus* and *Tamburlaine the Great* wrote *The Jew of Malta*.

ANSWER: Christopher **Marlowe**

[10] In this Marlow poem, the title character asks his girlfriend to "come live with me and be my love" and offers her "silver dishes," and "a gown made of the finest wool," among other things.

ANSWER: "The **Passionate Shepard to His Love**"

6. His time in Brittany inspired his painting *The Vision After the Sermon*. For 10 points each:

[10] Name this French artist who painted *The Yellow Christ* and *Where Do We Come From? What Are We? Where Are We Going?* after moving to Tahiti.

ANSWER: Paul **Gauguin**

[10] Gauguin's contemporaries Paul Signac and Georges Seurat developed this style of painting, which used tiny dots of color instead of large brushstrokes. Paintings in this style include *Sunday Afternoon on the Island of La Grande Jatte*.

ANSWER: **pointillism**

[10] Around the same time, Paul Cezanne painted a series of canvases of this French mountain located in Aix-en-Provence.

ANSWER: Mont **Sainte-Victoire**

7. Name these French rivers, for 10 points each.

[10] The Allier flows into this river, which moves north, then west through central France near such cities as Orleans, Tours, and Nantes before flowing into the Bay of Biscay.

ANSWER: **Loire** River

[10] Moving northwest into the English Channel, this river passes through both Troyes and Paris.

ANSWER: **Seine** River

[10] Flowing through Switzerland and crossing the border near Lake Lemman, this southeastern river receives the Saone at Lyon and then continues through Avignon to the Mediterranean.

ANSWER: **Rhone** River

8. He was introduced in the plays of Pierre de Beaumarchais. For 10 points each:

[10] Name this central figure of two major operas—his “marriage” is depicted by Mozart, and another composer used him as the title character of *The Barber of Seville*.

ANSWER: **Figaro**

[10] This composer of such operas as *Semiramide* and *Cinderella* created the music for *The Barber of Seville*.

ANSWER: Gioachino **Rossini**

[10] In this other Rossini opera, a Swiss patriot resists the cruel bailiff Gessler by performing an amazing feat of archery. This six-hour-long opera is less well-known than its rousing overture.

ANSWER: **William Tell** [or **Guillaume Tell**]

9. They may be easily identified by their four fused rings, and they all derive from squalene cyclization. For 10 points each:

[10] Give the name for this class of biological molecule, including glucocorticoids and estrogen.

ANSWER: **steroids**

[10] This class of steroids is that most commonly abused by athletes, increasing the rate of protein synthesis by affecting androgen receptors.

ANSWER: **anabolic** steroids

[10] This mineralocorticoid hormone is produced by the adrenal cortex and results in water retention, which raises blood pressure. Addison's disease results in a decrease in its activity.

ANSWER: **aldosterone**

10. Name these glacial features, for 10 points each.

[10] Kettles, paternosters, and tarns are this type of landform. A gigantic one named after Louis Agassiz covered much of central North America during the last glacial period.

ANSWER: glacial **lakes**

[10] Lateral, ground, and terminal are three varieties of this landform, which are ridges of debris that pile up along the borders of a glacier.

ANSWER: **moraines**

[10] Also known as a "braided stream," these winding ridges of sand and sediment form from flowing water runoff underneath a glacier.

ANSWER: **eskers**

11. Answer the following about 2008 primary-hopping, for 10 points each.

[10] It all started when this Midwestern state moved both primaries up to January 15; some major candidates refused to campaign here because its delegates were only given half a vote.

ANSWER: **Michigan**

[10] Michigan's primary-hopping caused this state to move its primaries up to January 8 due to a state law requiring it to host its primary at least a week before any other primary.

ANSWER: **New Hampshire**

[10] Florida's primary-hopping spurred this other Southern state to move its primaries up to stay ahead of Florida; the Republican one took place on January 19, the Democratic on January 26.

ANSWER: **South Carolina**

12. John Maynard Keynes railed against its harshness and its reparations left Germany with hyper inflation. For 10 points each:

[10] Name this treaty that ended World War I.

ANSWER: Treaty of **Versailles**

[10] This than president of France led the French delegation where he negotiated for heavy reparations and clashed with the more moderate Woodrow Wilson.

ANSWER: Georges Benjamin **Clemenceau**

[10] Despite his inability to speak English, this Italian attended the conference where his clashes with fellow diplomat Sidney Sonnino led to problems.

ANSWER: Vittorio Emanuele **Orlando**

13. The Miller-Urey experiment used water, ammonia, hydrogen, and this compound. For 10 points each:

[10] Name this simplest alkane, with formula CH<sub>4</sub>.

ANSWER: **methane**

[10] In VSEPR theory, trigonal pyramidal and bent are two variations on this type of basic geometry, which is possessed by methane, in addition to phosphate and sulfate.

ANSWER: **tetrahedral**

[10] Methane can exist in these hydrated crystals whose lattices usually contain other trapped atoms or molecules.

ANSWER: **clathrates**

14. Los Angeles has a long history of riots. For 10 points each:

[10] Comedian Dick Gregory was shot while trying to keep the peace during the 1965 riots in this predominantly African-American neighborhood. These riots resulted in 34 deaths.

ANSWER: **Watts**

[10] Watts and Compton were again the scene of a massive riot in 1992 following the acquittal of L.A. police officers by an all-white jury in the videotaped beating of what black motorist?

ANSWER: Rodney **King**

[10] Occurring after the Sleepy Lagoon murder case, these 1943 race riots involved servicemen who cruised through Mexiacan neighborhoods and attacked youths wearing stylish clothing.

ANSWER: **Zoot Suit** Riots

15. Its total population is almost 500 million, and Romania and Bulgaria joined it in 2007. For 10 points each:

[10] Name this organization.

ANSWER: the **European Union**

[10] One early treaty in the formation of the EU was the 1957 treaty signed here that created the European Community. This city also saw a 1922 "march" which secured fascist control.

ANSWER: **Rome**

[10] This 1992 treaty, signed in a namesake Dutch city, established the European Union.

ANSWER: **Maastricht** Treaty

16. He was originally a Basque soldier, but his most famous work is divided into four “weeks” for the reader and was compiled at Manresa. For 10 points each:

[10] Identify this author of *Spiritual Exercises*.

ANSWER: **Ignatius** of Loyola [or Íñigo Oñaz López de **Loyola**]

[10] Francisco Xavier and Nicolas Bobadilla were among the first adherents of this order. It was established during the rule of Pope Paul III Ignatius of Loyola.

ANSWER: **Jesuits** [or **Society of Jesus**]

[10] Paul III called for this ecumenical council in 1545 which sought to elucidate Protestant Heresies and begin a reformation in the Catholic Church.

ANSWER: Council of **Trent**

17. At the end of this opera, the title character heals Amfortas with a spear, then attracts a white dove by exhibiting the Holy Grail. For 10 points each:

[10] Name this 1882 opera about an Arthurian knight.

ANSWER: **Parsifal**

[10] This eccentric German composer of *The Flying Dutchman*, *Tristan and Isolde*, and *Tannhäuser* wrote *Parsifal*.

ANSWER: Richard **Wagner**

[10] *The Valkyrie* and *The Rheingold* are two of the four operas in the cycle by Wagner named for this object, manufactured by dwarves known as Nibelung.

ANSWER: **ring**

18. Identify some terms from chemistry, for 10 points each.

[10] A red type featuring six atoms and blue ozone featuring three atoms are examples of this term for oxygen, which is defined as existing forms of an element.

ANSWER: **allotropes**

[10] NMR spectroscopy and radiometric dating are some of the uses of ones for carbon. They are defined as forms of the same element that differ only in the number of neutrons in their nuclei.

ANSWER: **isotopes**

[10] This is the name given to stereoisomers that form non-superimposable mirror images. A mixture containing equal parts of these is called racemic.

ANSWER: **enantiomers**

19. He once abdicated in favor of the Tatar Simeon Bekbulatovitch, and he killed his son and only legitimate heir over the issue of his son’s wife’s dress. For 10 points each:

[10] Name this paranoiac who irrationally ruled Russia until his 1584 death, when he was succeeded by his retarded son Fyodor.

ANSWER: **Ivan IV** Vasilyevich [or **Ivan the Terrible**; or **Ivan Grozny**; prompt on **Ivan**]

[10] From a young age, Ivan was distrustful of this upper class of Russian nobility, which was finally abolished by Peter the Great.

ANSWER: **boyars**

[10] Ivan IV’s first wife, Anastasia, was from this family of boyars. Starting with Mikhail in 1613, this family ruled Russia for over 300 years.

ANSWER: **Romanov**

20. Common legend holds that the Aztecs mistook Hernan Cortez for this god. For 10 points each:

[10] Name this Aztec feathered serpent god.

ANSWER: **Quetzalcoatl**

[10] Quetzalcoatl's rival, Tezcatlipoca, has a name meaning a "smoky" type of this object. Another one of these was used to trick Amaterasu to come out of her cave in Shinto myth.

ANSWER: a **mirror**

[10] The demanding Aztec god Tlaloc really likes child-sacrifices and is the god of this natural phenomenon. Chac was the Mayan god of this phenomenon.

ANSWER: **rain** [or **precipitation**, etc; do not accept or prompt on "weather" or other more general answers, as Tlaloc was not the god of weather in general]

21. Answer the following about novelists from a certain country, for 10 points each.

[10] This novelist wrote about Maureen Smales in *July's People*. Her other novels include *Burgher's Daughter* and *The Conservationist*.

ANSWER: Nadine **Gordimer**

[10] This author fictionalized the life of Dostoyevsky in *The Master of Petersburg*. He also wrote *Waiting for the Barbarians*.

ANSWER: J. M. **Coetzee**

[10] Nadine Gordimer and J. M. Coetzee both hail from this African country. Gordimer's novels *The Lying Days* and *July's People* are set in its city of Johannesburg.

ANSWER: **South Africa**

22. Identify the following from thermodynamics, for 10 points each.

[10] The "bomb" type of these devices are volume invariant. They are used to measure the heat liberated by a reaction.

ANSWER: **calorimeters**

[10] The most efficient heat cycle consists of two isothermal steps and two adiabatic steps, and is named for this Frenchman.

ANSWER: Nicolas Leonard Sadi **Carnot**

[10] In any reversible adiabatic process, such as the Carnot cycle, the change in this quantity must be zero.

ANSWER: **entropy** [or **isentropic**]