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| High School Academic Pyramid Questions | **VHSL Scholastic Bowl****Regular Season 2014****Round 8****First Period, Fifteen Tossups** |

1. This text declares that the “feudal system of industry” is no longer valid, crediting the establishment of the world market to the discovery of America. Beginning by describing a “specter” haunting Europe, this pamphlet defines its title group’s goal as “the abolition of bourgeois property.” For 10 points, name this political pamphlet that defined the history of society as the history of class struggle, co-authored by Friedrich Engels and Karl Marx.

ANSWER: "The **Communist Manifesto**" [or "The **Manifesto of the Communist Party**"; or "Das **Kommunistische Manifest**"]

2. A man on this show has two ex-wives named Tammy, a name shared by his mother. At the end of its second season, Chris Traeger and Ben Wyatt were introduced as auditors from the capital. On this show, Ron Swanson leads a group including its blond main character, Leslie Knope, who is played by Amy Poehler. For 10 points, name this NBC TV show about a department focused on outdoor activities in Pawnee, Indiana.

ANSWER: ***Parks and Recreation***

3. This family revered an ancestor who legendarily battled the spider demon Tsuchigumo and trained the superhuman child Kintaro while serving the Fujiwara clan. The Kiyohara lost the Gosannen war to this clan's Seiwa branch, whose leaders kidnapped Go-Shirakawa in the Heiji Rebellion. The warrior monk Benkei served Yoshitsune, a member of this family who won at Dan-no-Ura in the Genpei War against the Taira. For 10 points, name this Japanese clan that included Yoritomo, founder of the Kamakura shogunate.

ANSWER: **Minamoto**

4. A non-Euclidean geometry named for this shape has the property that the interior angles of a triangle sum to more than 180 degrees. Points directly opposite each other on these shapes are known as "antipodal," and their bisectors are known as great circles. All of its points are equidistant from its center, and its surface area four pi times radius squared. For 10 points, name these 3-dimensional shapes.

ANSWER: **sphere**s

5. The exodus of civilians that followed this battle is called the Runaway Scrape. Susanna Dickinson's account of this battle mentions the "line in the sand" incident that preceded it. Along with the Goliad massacre, this battle provided a battle cry used at the Battle of San Jacinto. Davy Crockett and James Bowie were among those killed at this battle. For 10 points, name this battle in which Santa Anna's troops massacred the Texan defenders of a certain mission.

ANSWER: Battle of the **Alamo**

6. In this poem, a character discovered “squat like a toad” is repelled by Ithuriel. Its author seeks to “justify the ways of God to men” and depict the circumstances "Of Man's first disobedience." The first major character in this poem declares, “Better to reign in Hell, than serve in Heav’n,” before convincing Eve to eat a forbidden apple. For 10 points, name this English epic about the Fall of Man written by John Milton.

ANSWER: ***Paradise Lost***

7. When adopting the form of Vikata, this god rides a peacock. He used a snake to cover a wound in his stomach, and cut the moon’s face when the moon laughed at him. This brother of Skanda, a son of Parvati, is often hailed as the “destroyer of obstacles.” After this god’s decapitation by his father Shiva, he was given a head with tusks. For 10 points, name this Hindu god often depicted with an elephant’s head.

ANSWER: **Ganesh**a

8. This city was home to a World’s Fair whose grounds were designed by Daniel Burnham. A series of locks completed in 1900 connected this city’s namesake river to the Mississippi watershed, reversing its flow. This home of the 1893 Columbian Exposition’s White City features a downtown named for the circular configuration of its El tracks. For 10 points, what city on Lake Michigan, home to the Loop and the former Sears Tower, is the largest in Illinois?

ANSWER: **Chicago**, Illinois

9. A tree in this story is treated with “a mixture of respect and superstition” and is connected to Major Andre, who had been imprisoned nearby. Largely set in Tarry Town, this story features a man who falls in love with Katrina von Tassel. The protagonist of this story runs away from town after Brom Bones dresses up as the Headless Horseman. For 10 points, name this Washington Irving story about Ichabod Crane.

ANSWER: “The **Legend of Sleepy Hollow**”

10. Resistance to this disease is conferred by individuals lacking the Duffy antigen. The genus that causes this disease undergoes a life cycle in which a merozoite can penetrate erythrocytes. Species of that genus that causes this disease include *vivax* and *falciparum*. Treatments for it once included chewing on cinchona bark, which contains quinine. For 10 points name this disease caused by the *Plasmodium* genus that is spread by mosquitoes.

ANSWER: **malaria**

11. The subjects of a painting by this artist stage a mock wedding and inflate pigs' bladders. This artist included literal depictions of parables and idioms such as ""the big fish eats the little fish"" in his paintings *The Blind Leading the Blind* and *Netherlandish Proverbs*. In another painting by him, a plowman and a shepherd fail to see its title character splash into the sea. For 10 points, name this Flemish painter of *Landscape with the Fall of Icarus*.

ANSWER: Pieter **Bruegel** the Elder

12. The most biodiverse example of this biome is Brazil's *Cerrado*. This biome can be categorized as "derived" when converted from a forest that supported a canopy, as it contains scattered trees that do not form a canopy. Rain in this biome is concentrated into six to eight months of the year, leaving a period of drought during which fires can occur that maintain this grassland biome. For 10 points, identify this tropical grassland biome typical of Africa, which contains examples like the Sahel and Serengeti.

ANSWER: **savanna**h [or **tropical grassland** until it is read]

13. During this battle, Eustace of Boulogne was injured at the Malfosse, or "Evil Ditch." The losers of this battle had earlier beaten Tostig at the Battle of Stamford Bridge. Troops called housecarls took a defensive position at Senlac hill during this battle. A king is shown with an arrow in his eye in a depiction of this battle, the Bayeux tapestry. For 10 points, name this 1066 battle at which Harold Godwinson was defeated by Norman invader William the Conqueror.

ANSWER: Battle of **Hastings**

14. These particles are rapidly "captured" in the r-process. Control rods absorb these particles. These particles effectively turn into protons during beta-minus decay. In Chicago Pile-1, the emission of these particles led to the first successful self-sustaining nuclear chain reaction. When added to Z, the atomic number, the number of these particles equals the atomic mass. For 10 points, name these nucleons which have a mass similar to a proton but a neutral charge.

ANSWER: **neutron**s

15. It's not fertility, but Voodoo spirits of this phenomenon are known as the Guede and are led by Baron Samedi. Flowers appeared to Sikhs after Guru Nanak experienced this phenomenon, resolving differing Hindu and Muslim approaches to it. Zoroastrians place those who have experienced this phenomenon on Towers of Silence, exposing them to vultures. Muslims wrap those who have experienced it in a shroud, as cremation is forbidden. For 10 points, name this phenomenon that precedes funerary rituals.

ANSWER: **death** [or equivalents]

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| High School Academic Pyramid Questions | **VHSL Scholastic Bowl****Regular Season 2014****Round 8****Directed Round** |

1A. What generic device employs a series of extended metaphors that create a correspondence between a story’s surface meaning and a deeper, symbolic meaning, often by personifying concepts such as Love and Sin?

ANSWER: **allegory**

1B. In chapter 13 of Matthew, Jesus compares the kingdom of heaven to what kind of precious object “of great price,” which a man sells all his goods to obtain?

ANSWER: **pearl**

2A. What Italian operatic composer used a Walter Scott novel as the basis for *Lucia di Lammermoor?*

ANSWER: Gaetano **Donizetti**

2B. During what phase of mitosis that follows metaphase do the cell's sister chromatids migrate to opposite ends of the cell?

ANSWER: **anaphase**

3A. This is a 20-second calculation question. Evaluate the expression "*a* times the quantity *b* minus *c*, all over *d*" if *a* equals 8, *b* equals 12, *c* equals 6, and *d* equals 4.

ANSWER: **12**

3B. This is a 20-second calculation question. There are 32 teams in the NFL. Given that the home team and away team are distinct, how many different possible NFL games can be played?

ANSWER: **992**

4A. What greenhouse gas, the simplest alkane, is consumed in the troposphere when it reacts with a hydroxyl radical?

ANSWER: **methane** [or **CH4**]

4B. What economist was appointed by President Obama to succeed Ben Bernanke, and is now the current Chairwoman of the Federal Reserve?

ANSWER: Janet **Yellen**

5A. What nation joined Romania and Yugoslavia in the Little Entente in 1921 and experienced the Prague Spring before dividing along ethnic lines in 1992?

ANSWER: **Czechoslovakia** [do not accept “Czech Republic”]

5B. What city, which contains the Hassan II Mosque, Africa’s largest, is the most populous city of Morocco?

ANSWER: **Casablanca** [or ed-**Dar El-Bida**]

6A. What Soviet economic scheme replaced War Communism and triggered the Scissors Crisis in 1923?

ANSWER: The **NEP** [or the **New Economic Policy**]

6B. What first novel by Umberto Eco follows William of Baskerville and Adso of Melk as they try to solve a series of murders in a medieval monastery?

ANSWER: *The* ***Name of the Rose*** [*Il* ***Nome della Rosa***]

7A. What American wrote the autobiographical novel *A Death in the Family*?

ANSWER: James **Agee**

7B. What English satirist created Becky Sharp in his novel *Vanity Fair*?

ANSWER: William Makepeace **Thackeray**

8A. This is a 30-second calculation question. A feeding trough can be modeled as a rectangular prism with length *l* feet and height and width both *s* feet. A second trough is modeled as a half cylinder with length *l* feet and radius *r* feet. If both troughs have the same volume, what is the ratio of *s* to *r*? Express your answer in terms of pi.

ANSWER: square **root** of **one-half pi**

8B. This is a 30-second calculation question. Angle A and angle B, two angles between 0 and 2 pi radians, are separated by pi over 2 radians. If sine of A equals sine of B, then what, in radians, are the measures of angle A and angle B?

ANSWER: **pi/4 and 3pi/4** [or **3pi/4 and pi/4**; or **5pi/4 and 7pi/4**; or **7pi/4 and 5pi/4**]

9A. "Push" and "pop" are operations on what data structure, which has a last-in, first-out system of organization?

ANSWER: **stack**

9B. What NBA team acquired Chandler Parsons in 2014 after the Houston Rockets declined to match their offer sheet?

ANSWER: **Dallas** Mavericks [or Dallas **Mavericks**]

10A. In what Arizona city did the famous "Gunfight at the OK Corral" take place in 1881?

ANSWER: **Tombstone**

10B. The German pronoun forms "du" (DOO), "dich" (DEEK), "ihr" (EER), and "euch" (OYK) are all in what grammatical person?

ANSWER: **second** person

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| High School Academic Pyramid Questions | **VHSL Scholastic Bowl****Regular Season 2014****Round 8****Third Period, Fifteen Tossups** |

1. In her youth, this woman was abducted and held by Theseus until Tyndareus raised an army. This woman was hatched from the same egg as either Clytemnestra or Castor. In a beauty contest between Athena, Hera, and Aphrodite, Aphrodite won because she could give this woman to Paris, who whisked her away from the court of Menelaus. For 10 points, name this most beautiful woman in the world, whose abduction sparked the Trojan War.

ANSWER: **Helen** of Troy [or **Helen** of Sparta]

2. This musician claims that a wild night created an “information overload, situation lost control,” on her song “Waking Up In Vegas,” and she collaborated with Kanye West on the song “E.T.” Kenny G plays this singer’s uncle in the music video for her song “Last Friday Night.” This artist sings that “I got the eye of a tiger, a fighter, dancing through the fire” on the first single from her 2013 album *Prism.* For 10 points, name this singer of “Teenage Dream” and “Roar.”

ANSWER: Katy **Perry** [or Katheryn Elizabeth **Hudson**; or Katy **Hudson**]

3. As a young man, this character is abandoned by his fiancée Belle and works for Mr. Fezziwig. He is frightened when he sees the face of his old partner appear on his doorknocker. That partner of his, Jacob Marley, wears a bandage around his head. This character employs Bob Cratchit, the father of the cripple Tiny Tim. For 10 points, name this miser created by Charles Dickens who is visited by a series of ghosts on Christmas Eve.

ANSWER: Ebenezer **Scrooge** [or **Ebenezer** Scrooge]

4. Most members of this phylum feed using an odontophore supporting a toothy ribbon called the radula. Some members of this phylum produce an iridescent material called nacre, and others produce a purple dye. They have dorsal mantles that may include a muscular "foot" used for motion. This second-largest phylum after the arthropods includes divisions like gastropods and bivalves. For 10 points, name this phylum that includes shelled organisms like snails.

ANSWER: **mollusk**s [or **Mollusca**]

5. This physicist proposed that objects have complementary properties that cannot be measured arbitrarily accurately at the same time, which is known as complementarity and is central to his Copenhagen formulation of quantum mechanics. This person's model of the atom gained fame for explaining the Rydberg formula and superseded the model of Ernest Rutherford. For 10 points, name this Danish physicist who proposed that electrons exist in quantized orbits around the nucleus.

ANSWER: Niels **Bohr**

6. The first mission of this program ended with the deaths of Roger Chaffee and Gus Grissom. In its seventh mission, James Lovell made a Christmas broadcast for viewers on Earth. This program succeeded the Mercury and Gemini projects. Its most famous mission featured a man saying the line “The Eagle has landed” upon a successful arrival. For 10 points, name this NASA program whose eleventh mission succeeded in putting Neil Armstrong on the moon.

ANSWER: **Apollo** program

7. In the last act of this play, a dead woman watches people and asks, “Does anyone ever realize life while they live it?” In this play, the town choir is managed by an alcoholic named Simon Stimson. This play is narrated by a Stage Manager and follows the relationship between Emily Webb and George Gibbs. For 10 points, name this play set in Grover’s Corners, New Hampshire, a work by Thornton Wilder.

ANSWER: ***Our Town***

8. This man opposed the Popular Front after their victory in a 1936 election and allied with a movement founded by Jose Primo de Rivera to create the Falange. The Luftwaffe bombed the town of Guernica with the permission of this man. For 10 points, name this leader of the Nationalists and victor of the Spanish Civil War, a fascist who led Spain from 1939 until 1975.

ANSWER: Francisco **Franco** [Francisco Paulino Hermenegildo Teodulo Franco **Bahamonde**] [prompt on **El Caudillo**]

9. In this book, the protagonist sees an admiral being shot while discussing philosophy with the Manichaean Martin. This novella depicts a catastrophic earthquake in Lisbon after several characters are kicked out of Baron Thunder-ten-Tronckh’s castle. The title character of this novella loves Cunegonde and is accompanied by the optimistic tutor Pangloss. For 10 points, name this novella by Voltaire.

ANSWER: ***Candide*** [or ***Candide****, or Optimism*, or ***Candide****, ou l’Optimisme*]

10. A Holy Roman Emperor with this name put down Imry Thokoly's rebellion and sent an army under Eugene of Savoy that won at Zenta, securing the Treaty of Karlowitz with the Ottomans. After surrendering to the Nazis, a king with this name was forced to abdicate to his son Baudouin. The second king of this name brutally administered his private colony in Africa, the Congo Free State. For 10 points, give this name held by three kings of Belgium.

ANSWER: **Leopold**

11. In April 2014, Marine LePen’s National Front gained twenty three seats in the elections for this body’s parliament. In July 2013, Croatia became the twenty-eighth member of this organization, and Ukraine’s desire to join this organization helped lead to its 2014 civil war. The 1993 Treaty of Maastricht formally created this organization, which won the 2012 Nobel Peace Prize. For 10 points, name this organization which has its headquarters at Brussels.

ANSWER: the **European Union** [or **E.U.**]

12. A seven movement piece of this type is best known for its central soprano aria "Pie Jesu." Benjamin Britten wrote a composition of this type for the dedication of Coventry Cathedral that utilized Wilfred Owen’s poetry and was named “War.” Another piece of this type has finished “Kyrie” and “Dies Irae” movements and was completed by Franz Sussmayr after Mozart’s death. For 10 points, name this type of composition, a mass for the dead.

ANSWER: **requiem** mass [prompt on **mass** before it is mentioned; prompt on **missa** before "mass" is mentioned]

13. The conversion of permanganate to manganese dioxide is this type of reaction. When sodium metal is added to water, the water undergoes this type of reaction to form hydrogen gas. Standard cell potentials are measured for this type of reaction. Hydrogenations are a class of these reactions, which generally decrease the amount of oxygen in the starting material. For 10 points, name this type of reaction in which a compound gains electrons, the opposite of an oxidation.

ANSWER: **reduction**

14. This director debuted an image-stretching technique developed by cameraman Irmin Roberts that is commonly known as the "dolly zoom." His film which introduced that technique focuses on Gavin Elster's convoluted plot to murder his wife, which involves a Kim Novak-played character deceiving Scottie, a policeman with a fear of heights portrayed by Jimmy Stewart. For 10 points, name this director of *Vertigo* as well as *The Birds* and *Psycho.*

ANSWER: Alfred **Hitchcock**

15. This country’s northernmost point is at Raoul Island, which is one of the Kermadec Islands. Its not in Europe, but this country contains a range called the Southern Alps, which are west of the region of Canterbury, in which is found the city of Christchurch. The Cook Strait separates this country’s two biggest islands, North Island and South Island. For 10 points, name this country in the Pacific Ocean, found southeast of Australia.

ANSWER: **New Zealand** [or **Aotearoa**]

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| High School Academic Pyramid Questions | **VHSL Scholastic Bowl****Regular Season 2014****Round 8****Tiebreaker/replacement questions** |

1. Early merchant ships often docked at this country's Taboga Island, where a riot broke out between drunken passengers and fruit vendors in the Watermelon War. This country is home to the Azuero Peninsula and Chagres River, which was dammed to create Lake Gatun. This country's most notable feature is crossed by the Bridge of the Americas and runs from Colón to Balboa. For 10 points, name this Central American country where a namesake canal connects the Atlantic and Pacific Oceans.

ANSWER: **Panama**

2. This author created the sexually ambivalent woman Sue Bridehead, who has several children with the title stonemason of one of his novels. In another novel set in Egdon Heath, he wrote about Eustacia Vye and Clym Yeobright. He also created a woman of the Durbeyfield family who is abandoned by Angel Clare. For 10 points, name this English novelist who wrote *Jude the Obscure,* *The Return of the Native,* and *Tess of the D’Urbervilles.*

ANSWER: Thomas **Hardy**

3. The epsilon-delta definition formalizes this concept. L'Hopital's rule can be used to find them, and they are used in the derivative's definition. A superscript plus sign is used to describe a right-sided one, while a superscript minus describes a left-sided one; only if the two are equal does one exist. They do not exist at discontinuities or asymptotes. For 10 points, identify this term that is loosely defined as what value a function approaches as *x* approaches a particular value.

ANSWER: **limit**

4. The Padma Purana describes the “majesty” of this text, which discusses the importance of tamas, rajas, and sattva, the three gunas. This text is venerated in Vaishnavism, who see it as championing bhakti, or personal devotion to a single god. A figure in this work is told to hold true to his dharma as he contemplates battling his own relatives in the approaching Kurukshetra war. For 10 points, name this 700-verse Hindu text, a dialogue between Arjuna and Krishna during the Mahabharata.

ANSWER: The *Bhagavad* ***Gita*** [prompt on the ***Mahabharata*** until mentioned]

5. Shortly before this battle started, Joseph Rochefort confirmed intelligence by having the target base radio that it needed fresh water. The winning commander at this battle was provided the entire enemy order of battle after the JN-25 code was broken. An attack on the Hiryu during this battle led Admiral Isorogu Namaguchi to go down with his ship. For 10 points, name this June 1942 naval battle that is cited as the decisive naval battle of the Pacific Theater.

ANSWER: Battle of **Midway**

What leader of the Hudson River school painted *The Oxbow?*

ANSWER: Thomas **Cole**

The standard error of the mean is equal to the standard deviation of the distribution of sample means. Suppose that we compute the mean of 100 samples from a normal distribution whose mean is known to be 70 and whose standard deviation is known to be 30. What is the standard error of the mean?

ANSWER: **3**