**VHSL Regionals 2016-2017 - Round 07 - First Period, Fifteen Tossups**

1. The speaker of a poem by this author remarks, "White as an angel is the English child" while bemoaning, "I am black, but O! my soul is white." This poet of "The Little Black Boy" wondered, "What the hammer? What the chain?" in a poem about divine creation. This author wrote pairs of poems whose themes conflicted with each other in his double collection *Songs of Innocence and of Experience*. For 10 points, name this English poet who described a creature "burning bright" in "The Tyger."
ANSWER: William **Blake**

2. In Acts of the Apostles, a king of this name is struck down by an angel after the people claim he has the "voice of a god." This is the name of the ruler who makes a foolish promise to the dancing girl Salome (SAL-oh-MAY), who requests the head of John the Baptist on a platter. A ruler with this name becomes friends with Pilate after putting a robe on the accused Jesus and mocking him. For 10 points, give the name of the king of Judea who ordered the Massacre of the Innocents in an attempt to kill the baby Jesus.
ANSWER: **Herod** [or **Herod** the Great; or **Herod** Antipas; or **Herod** Agrippa; prompt on Antipas; prompt on Agrippa]

3. In 1884, this man refused to run for President by saying "I will not accept if nominated and will not serve if elected." Railway rails that were heated and tied around trees were called his "neckties." The brother of a Secretary of the Treasury named John, this general offered Savannah as a "Christmas present" to Abraham Lincoln after going there from Atlanta. For 10 points, name this Union general who said "war is hell" and who carried out the destructive March to the Sea.
ANSWER: William Tecumseh **Sherman**

4. Horatio Nelson's victory against Napoleon in the Battle of the Nile coincided with the premiere of this composer's *Nelson* Mass. While employed by the Esterhazy (EST-err-hah-zee) family, this composer wrote the *Emperor* Quartet - the origin of the melody to Germany's national anthem - as well as many of his 104 symphonies. This composer incorporated gimmicks and practical jokes into pieces such as the *Surprise* Symphony. For 10 points, what Austrian composer was called the "father of the symphony"?
ANSWER: Joseph **Haydn** [or Franz Joseph **Haydn**]

5. During the reign of this empire, the *Arthashastra* (ARF-uh-SHOSH-tra), a book sometimes compared to Machiavelli's (MOCK-ee-uh-VELL-eez) *The Prince*, was written. A ruler of this empire ordered the building of the "Lion Capital," a sculpture of four lions standing back to back. After the extremely bloody Kalinga War, this empire's leader converted to Buddhism and renounced war. Once led by Ashoka, this was the largest ever empire on the Indian subcontinent. For 10 points, what empire was founded by Chandragupta?
ANSWER: **Maurya**n Empire

6. A location used for this activity appears in a David Hockney painting that shows the outside of a house and two palm trees. Trees form almost a pyramid overlooking a clump of men and women in the largest painting by Paul Cezanne (say-ZAHN), which depicts this activity. Georges (GEORGE) Seurat painted people doing this "at Asnieres" (oss-NEE-ay). Thomas Eakins depicted six nude men engaging in this activity at a "hole." For 10 points, what activity is the subject of the Hockney painting *A Bigger Splash*, which prominently features a diving board?
ANSWER: **swim**ming [or **bath**ing; or **diving** until it is read]

7. The cover of System of a Down's album *Toxicity* features a parody of this location. Alice Cooper sponsored part of this location in honor of Groucho Marx, as part of a 1970s campaign to restore it led by Hugh Hefner. In *Sharknado*, a bus driver is killed when he collides with part of this location. This location, which is part of Griffith Park in the Santa Monica Mountains, once included the letters "L-A-N-D." For 10 points, identify this landmark that spells out the name of a filmmaking neighborhood of Los Angeles.
ANSWER: the **Hollywood sign** [or **Hollywood**land sign]

8. Near the end of a novel by this author, Millie sets fire to a house that kills a resident who had not left the premises during four years of suicidal insanity. This writer included *The Hamlet*, *The Town*, and *The Mansion* in a trilogy about the Snopes family. He wrote a novel in which Charles Bon is stabbed to death by his half-brother Henry near the gates of Sutpen's Hundred, a plantation in Yoknapatawpha (YAWK-nuh-puh-TAW-fuh) County. For 10 points, name this Southern author of *Absalom, Absalom!* and *The Sound and the Fury.*
ANSWER: William **Faulkner**

9. This character marries his wife at a place called Barri after using his page Skirnir as a messenger. This being kills a giant named Beli while only wielding an antler as a weapon. He gives up his sword, which can fight on its own, in order to marry a jotunn (YO-tun), which will eventually result in Surtr (SUR-tur) slaying him at Ragnarok. This god rides the boar Gullinbursti and possesses a ship that he folds together and carries in a pouch. For 10 points, name this Norse god, the twin brother of Freya.
ANSWER: **Frey** [or **Freyr**; do not accept "Freya"]

10. While working for this company, former Senator Scott Brown was accused of wrongdoing by Andrea Tantaros. Another employee of this company once asked Karl Rove "is this just math you do as a Republican to make yourself feel better?" Because of sexual harassment charges brought by women like Gretchen Carlson, Roger Ailes was forced to resign from this company in 2016. For 10 points, what Rupert Murdoch owned company features Megyn Kelly on a conservative news channel?
ANSWER: **Fox** Entertainment Group [or **Fox** News Channel; or **FNC**; or 21st Century **Fox**]

11. Matsuo Basho named himself after a type of these objects, which are supposedly inhabited by *kodama* in Japanese folklore. The tallest structure in Japan and the second-tallest in the world is named for a "sky" one of these objects. A springtime Washington, D.C. festival commemorates a Japanese gift of these things, which eventually generate several pink *sakura*. Small examples of these objects are made in the art of *bonsai*. For 10 points, name these plants which the Japanese harvested to build many wooden buildings.
ANSWER: **tree**s [or specific types, such as **banana tree**s or **cherry tree**s]

12. The point at which this quantity does not change for a mixture is the iso-sbestic point. On a graph of UV/Vis (U V Viz) results, the value of this quantity is usually restricted to be from zero to two, in its namesake units. According to one law, this quantity is equal to the product of path length, the concentration of a compound, and the compound's molar extinction coefficient. This quantity is studied in spectrophotometry and can be calculated by using the Beer-Lambert law. For 10 points, what quantity for a material is defined as the negative logarithm of the material's transmittance?
ANSWER: decadic **absorbance**

13. A term known as "rapidity" can be introduced when working with Lorentz boosts in this theory. This theory was unified with quantum mechanics by quantum electrodynamics. An amusing thought experiment in this theory involves a pole undergoing length contraction and fitting into a barn that would normally be too small to contain the pole. This theory introduced the mass-energy equivalence, commonly known as E equals m c squared. For 10 points, what theory was developed by Einstein about ten years before a similarly named "general".
ANSWER: **special relativity** [or **SR**]

14. When this city was destroyed, only the temples and the house of the poet Pindar were supposedly spared. Its brief era of power ended after the Battle of Mantinea, where its brilliant leader, Epaminondas (EPP-uh-MUH-non-DUSS), died. This city temporarily lost the presidency of the Boeotian (BO-ee-THEE-un) League after supporting the Persian invasions. It employed a troop of 150 pairs of male lovers that won the Battle of Leuctra against Sparta. For 10 points, name this Greek city-state which employed the elite Sacred Band.
ANSWER: **Thebes**

15. A catalytic cycle starting with this element is the main method by which stars greater than about 1.3 times as massive as our Sun undergo hydrogen fusion. Fred Hoyle predicted a 7.65 mega-electron-volt resonance for an isotope of this element, based on its necessity for life. In the triple alpha process, three helium-4 nuclei are combined and form one atom of this element. This element is the fourth most abundant in the universe, after hydrogen, helium, and oxygen. For 10 points, life on Earth is often described as being "based" on what sixth element?
ANSWER: **carbon** [or **C**]

 **VHSL Regionals 2016-2017 - Round 07 - Directed Period**

1A. In October 2016, Rama IX, the king of what country died, ending a 70-year reign?
ANSWER: Kingdom of **Thailand**

1B. What period contains elements that fill the four f shell, undergo a namesake contraction, and are exemplified by neodymium and promethium?
ANSWER: **lanthanide**s

2A. What horrific practice was investigated by Ida B. Wells, who found that, contrary to popular belief, most victims were not actually accused of rape?
ANSWER: **lynch**ing [prompt on murder; prompt on vigilante murder]

2B. Which offshoot of realism sought to accurately portray the gritty nature of everyday life and was the literary style employed by Emile Zola and Frank Norris?
ANSWER: **naturalism** [or **naturalist**]

3A. This is a 20-second calculation question. Let ABCDE be a regular pentagon. What is the degree measure of angle BAC?
ANSWER: **36** degrees [angle ABC is 108 degrees, and since triangle ABC is isosceles, the measure of BAC is (180-108)/2=36]

3B. This is a 20-second calculation question. In terms of pi, what is the phase shift of the sinusoidal function two times the sine of quantity, four x minus three pi, end quantity?
ANSWER: **three pi over 4** [set the argument of the sine function equal to zero, and solve for x.]

4A. What potentially lethal reaction can occur from exposure to an allergen and may result in a dramatic drop in blood pressure?
ANSWER: **anaphylaxis** [or **anaphylactic** shock; prompt on shock]

4B. A 2016 animated film is named for what Japanese boy with magical powers and "the two strings"?
ANSWER: **Kubo** [or ***Kubo*** *and the Two Strings*]

5A. What President of Uganda during the 1970's expelled 60,000 Asians from his country?
ANSWER: Idi **Amin** [or Idi **Amin** Dada]

5B. What philosopher wrote the foundational texts *Pragmatism* and *The Principles of Psychology*?
ANSWER: William **James**

6A. A dream of escaping from Union soldiers ends in the hanging of a Confederate spy in what author's story "An Occurrence at Owl Creek Bridge"?
ANSWER: Ambrose **Bierce**

6B. What Victorian novelist wrote the six-novel series known as the "Chronicles of Barsetshire"?
ANSWER: Anthony **Trollope**

7A. On June 20, 1789, members of the French Third Estate took an oath at what sporting location, having been locked out of an assembly hall?
ANSWER: **tennis court** [or ***Jeu de paume* court**]

7B. What conjecture in number theory claims that every even integer greater than or equal to four can be written as the sum of two primes?
ANSWER: **Goldbach** conjecture

8A. This is a 30-second calculation question. Mike flips a fair coin six times. What is the probability that he flips two *more* tails than he flips heads?
ANSWER: **15/64** [There are C(6,4)=15 patterns of 4 tails and 2 heads, each with a (1/2)^6=1/64 chance of coming up.]

8B. This is a 30-second calculation question. Find the nearest point on the line y equals two x, to the point three, comma one.
ANSWER: **(1,2)** [The line through (3,1) perpendicular to y=2x has equation y=-(x-5)/2. Those two lines intersect when 2x=-(x-5)/2, so x=1 and y=2.]

9A. Australian Aboriginal languages do not contain any of what type of sound, produced by forcing air through a constricted space, and which in English includes the 'sh,' 'th,' and 'j' sounds?
ANSWER: **fricative**s [prompt on sibilants]

9B. Pianist Clara Wieck (VIKE) married what German composer of the *Rhenish* Symphony and the piano pieces "Traumerei" (TROY-muh-RYE) and "The Merry Farmer"?
ANSWER: Robert **Schumann**

10A. What seasonal occurrences, caused by the reversal of winds, generate rainstorms that make Cherrapunji, India the wettest city on Earth?
ANSWER: **monsoon**s

10B. The collection *The Labyrinth of Solitude* concerns the culture and history of what country that is also the country of origin of its author, Octavio Paz?
ANSWER: **Mexico**

 **VHSL Regionals 2016-2017 - Round 07 - Third Period, Fifteen Tossups**

1. Any member of this country's legislature could nullify a session's results by using the *liberum veto*. The conflict known as the Deluge took place in this country, which created a 1791 reforming constitution, the first in modern European history. It was created by the Union of Lublin. This country was partitioned three times in the 1700's, each time by Prussia, Austria, and Russia, the powerful empires that surrounded it. For 10 points, what commonwealth merged two states and had a capital at cities such as Krakow and Warsaw?
ANSWER: **Polish-Lithuanian** Commonwealth [or Kingdom of **Poland** and the Grand Duchy of **Lithuania**; or Commonwealth of **Poland**; do not accept "Republic of Poland"]

2. In a novel set in this country, the central couple realize they love each other when a woman sees that a man has written her name into a poem. A man who immigrates to America from this country names his son Gogol because of a haunting memory about a man killed by a train derailment. This is the country of origin of the families profiled in the novels *A Suitable Boy* and *The Namesake*. For 10 points, name this country of origin of many characters created by Jhumpa Lahiri and Vikram Seth.
ANSWER: **India**

3. An island at the mouth of this river completely avoided the 1918 Spanish flu epidemic. This river's basin is known for its soil mixed with charcoal, known as *terra preta*. At the so-called Meeting of Waters, the muddy water of this river's upper section, the Solimões, contrasts with the dark water of the Rio Negro. This river is the primary habitat of the incredibly thin candiru (kan-dee-ROO) and the aggressive piranha. For 10 points, name this world's largest river by volume, which runs through South America.
ANSWER: **Amazon** River

4. In a letter, this person wrote the sentence "Catch me when you Can Mishter Lusk." This person was once known as "Leather Apron." He wrote the "Dear Boss" and "From Hell" letters, the latter of which was sent with half a kidney. Outlandish theories about this person claim he was Queen Victoria's physician. This person apparently killed women such as Mary Jane Kelly in the Whitechapel district. For 10 points, what mysterious serial killer plagued London in 1888?
ANSWER: **Jack the Ripper** [or **Leather Apron** until it is read; prompt on Jack; prompt on the Ripper]

5. Square-free numbers with an odd number of prime factors return this value for the Mobius function. Euler's number raised to the power of pi times i equals this number, which is also the result when taking the cosine of pi. Raising a number to this power is equivalent to taking the reciprocal. The imaginary unit is defined as the square root of this number. For 10 points, what number is the additive inverse of one, meaning its sum with one is zero?
ANSWER: **minus one**

6. This non-Egyptian person's death was blamed on the drunken state of Henri Paul. In a controversial 1995 interview, this person talked about her husband's affair with Camilla Parker Bowles. She died in an accident with her lover Dodi Fayed. This woman died in an August 1997 car crash in Paris that was originally blamed on the paparazzi chasing her vehicle. She is the mother of Princes William and Harry. For 10 points, name this first wife of Prince Charles.
ANSWER: Princess **Diana** [or Diana **Spencer**; prompt on the Princess of Wales]

7. Heterochromatin ("hetero"-KRO-muh-tin) may form in response to the "piwi (pee-wee) interacting" type of this molecule. RISC binds micro and s-i types of this molecule in a namesake interference. A five-prime cap and poly-A tail are added to it before splicing. In it, thymine ("THIGH"-meen) is replaced with uracil (YUR-uh-sil). For 10 points, name this molecule whose "messenger" type is transcribed from DNA.
ANSWER: **RNA** [or **ribonucleic acid**; or m**RNA**; or pi**RNA**; or mi**RNA**; or si**RNA**; or double-stranded **RNA**; or ds**RNA**]

8. This man was denied a teaching appointment at City College of New York, partly due to his book *Marriage and Morals*. In 1955, he teamed with Einstein to produce a manifesto calling for nuclear disarmament. This man used the image of a teapot orbiting in space as part of an analogy demanding proof that God exists. This author of "Why I Am Not a Christian" worked with Alfred North Whitehead to create a text on the foundations of mathematics. For 10 points, name this co-author of *Principia Mathematica*.
ANSWER: Bertrand **Russell**

9. This man coined the phrase "collective consciousness" to refer a society's shared beliefs. In another work, he described a discipline as "the science of social facts." In an 1897 book, this thinker traced the title phenomenon, noting it was higher among Protestants, men, and during peacetime. This man founded the first European department of sociology. For 10 points, what Frenchman wrote the texts *Suicide* and *The Rules of Sociological Method*?
ANSWER: Emile **Durkheim** [or David Emile **Durkheim**]

10. A Jay Leno segment named after these things was parodied by Conan O'Brien's segment *Actual Items*. Questions asked in these texts can usually be answered with the word "no," according to Betteridge's Law. A spinoff site of *The Onion* parodies the tendency of these texts to include phrases like "What Happens Next Will Shock You," a practice known as clickbait. For 10 points, identify these things, famous examples of which include "Dewey Defeats Truman."
ANSWER: **headline**s [or **article title**s or equivalents; prompt on partial answers; prompt on clickbait until it is read]

11. The "father" of this discipline is sometimes said to be the Scottish thinker James Hutton. Rear Admiral Harry Hess' research in this field helped support the earlier mocked theory of Alfred Wegener (WAYG-ner). The principal of uniformitarianism is important to this scientific field. An important proposal in this field claimed that there had once been a location named Pangaea (PAN-gee-UH) that was broken apart by continental drift. For 10 points, what scientific discipline is the study of the structure and origin of the Earth?
ANSWER: **geology** [prompt on Earth science]

12. Near the beginning of this film, a youngster prevents a drunken pharmacist from poisoning a prescription. Its protagonist is delighted to find he is carrying "Zuzu's petals." At the end of this film, a ringing bell signifies that a character has "gotten his wings." Its villain is a wheelchair-bound banker named Mr. Potter. The protagonist of this movie tries to kill himself, but is interrupted by his guardian angel, Clarence. For 10 points, name this Christmas movie in which George Bailey wishes he was never born.
ANSWER: ***It's a Wonderful Life***

13. In a play by this author, the owner of a tobacco shop creates a male alter ego in order to better manage her business affairs, but the scheme falls apart when she becomes pregnant and wants to marry. This playwright employed the "distancing effect" in many of his dramas exemplifying "Epic Theater." This author of *The Good Person of Setzuan* wrote a play set during the Thirty Years War in which a woman who sells goods to soldiers weathers the deaths of all three of her children. For 10 points, name this German playwright of *Mother Courage and Her Children*.
ANSWER: Bertolt **Brecht** (BAIR-tolt BRESHT)

14. All known numbers of this type are Ore numbers and yield an integer result when the harmonic mean is taken of their divisors. If a number two to the n, minus one is a Mersenne prime, then this type of number is given by two to the n, minus one, all times two to the n minus first power. These numbers are equal to their aliquot (AH-lee-kwat) sum. A major unsolved problem in mathematics is whether there exist any odd numbers of this type. For 10 points, what numbers are equal to the sum of all of their factors except themselves and include 496, 28, and 6?
ANSWER: **perfect** numbers

15. In a story from this collection, a woman's eyes give "no sign of love or farewell or recognition" as she changes her mind about going to Buenos Aires with her lover Frank. "Eveline" is a story from this collection, whose final story shows Gretta reminiscing about her childhood friend Michael Furey, who "died for her." Gabriel Conroy fails to connect with his wife in this collection's story "The Dead." For 10 points, name this short story collection by James Joyce about the residents of an Irish city.
ANSWER: ***Dubliners***

 **VHSL Regionals 2016-2017 - Round 07 - Tiebreaker Questions**

1. This man's "seal" was a mole about the size of an apple between his two shoulders. The phrase "the moon is cleft asunder" is sometimes interpreted to mean this man "split" the moon. He used a human-faced creature known as "Buraq" to take the Night Journey, eventually reaching the Seventh Heaven. A 2010 event referenced concerns over censorship and religious oppression by urging that "everybody draw" this man. For 10 points, many Muslims are deeply offended by artistic depictions of what prophet?
ANSWER: **Muhammad** [prompt on the Prophet]

2. This city was secured by Europeans after the Battle of Ascalon. A kingdom named for this city was ruled by such men as Baldwin I and Godfrey of Bouillon (BOO-yown), the latter of whom massacred many Jews and Muslims in this city in 1099. Saladin and Richard I worked out a treaty allowing pilgrims to peacefully enter here. This city was captured by Europeans after an expedition called for by Pope Urban II. For 10 points, what city in the Holy Land was the prime target of various early Crusades?
ANSWER: **Jerusalem**

3. A poem by this author claims "there died a myriad and of the best, among them…for a botched civilization." That poem's title character is a minor poet possibly based on this man. This author of *Hugh Selwyn Mauberley* wrote an experimental, unfinished 120-section epic poem that includes many Chinese characters. This man was arrested in Italy in 1945 on charges of treason for his support of fascism. For 10 points, name this modernist poet, the author of *The Cantos*.
ANSWER: Ezra **Pound**

4. Successive terms in these numbers are related by the Cassini and Catalan identities. The sums of the shallow diagonals to Pascal's triangle are equal to these number and they are given in closed-form by Binet's formula. These numbers are defined by the recurrence relation F sub n equals F sub n minus one plus F sub n minus two. The limiting ratio of these numbers is the golden ratio. For 10 points, name these numbers that begin 1, 1, 2, 3, 5, 8, 13, 21.
ANSWER: **Fibonacci** numbers [or **Fibonacci** sequence]

5. This city's historic Euclid Avenue was once nicknamed "Millionaires' Row" because of residents like John D. Rockefeller. Many federal environment laws were passed after the Cuyahoga (kah-ya-HO-guh) River flowing through this city caught on fire. A museum in this city is meant to look like a record player from above and includes several giant guitars at its entrance. Akron is located just south of this city. The Rock and Roll Hall of Fame is found in, for 10 points, what city in Ohio on the shores of Lake Erie?
ANSWER: **Cleveland**, Ohio

In a data set with a mean of sixty-two and a standard deviation of eight, what value corresponds to a z-score of 1.15?
ANSWER: **71.2** [We need to be 1.15 standard deviations above the mean, so x=62+8\*1.15.]

What artist, showed a brown and white dog at the feet of a reclining nude woman in his *Venus of Urbino*?
ANSWER: **Titian** (TEE-shun) [or Tiziano **Vecellio**]