

VHSL Regular Season 2013 Part 2 of 2 Round 9 First Period, Fifteen Tossups

1. This religion's founder used the term *dregyant* to denote those who opposed him as "followers of the Lie." This religion's sacred text includes seventeen hymns supposedly written by that founder called the Gathas. Adherents of this religion worship at fire temples. This dualistic religion posits an opposition between the evil Ahriman and the good Ahura Mazda. For 10 points, name this religion founded by a namesake Persian prophet also known as Zarathustra.

ANSWER: Zoroastrianism

014-12-71-09101

2. In a now debunked story, this politician allegedly delivered the "Not Yours to Give" speech denouncing public charity. Elected to the House of Representatives in 1826, he lost re-election in 1834 and said "you may all go to hell, and I will go to Texas," where he became a volunteer in a military force under William Travis. For 10 points, name this Tennessee folk hero commonly depicted with a coonskin cap who was killed during the Battle of the Alamo.

ANSWER: Davy <u>Crockett</u> [or David <u>Crockett</u>]

052-12-71-09102

3. In one novel by this author, seventeen half-brothers are all marked for death by permanent Ash Wednesday crosses. In another work by this author, Juvenal Urbino falls to his death trying to capture his parrot, and Florentino Ariza and Fermina Daza sail in a ship waving a yellow flag. This author wrote about Remedios the Beauty, Aureliano, and other descendants of the Buendias (bwen-DEE-uhs) in Macondo. For 10 points, name this Colombian author of Love in the Time of Cholera and One Hundred Years of Solitude.

ANSWER: Gabriel **Garcia Marquez** [prompt on **Marquez**]

186-12-71-09103

4. Many people with this also have the bacteria P. aeruginosa. Low oxygen levels in the tissues of patients of this can lead to clubbing of the fingers. Newborn screening for this checks for heightened concentrations of immunoreactive trypsinogen. This is most often caused by the delta-F508 mutation, which interferes with chloride transport across epithelial cells. Chest percussion is used to treat it, and a sweat test is a common method of diagnosis. For 10 points, name this autosomal recessive disease that causes mucus in the lungs.

ANSWER: cystic fibrosis

127-12-71-09104

5. This city is home to a symphony orchestra that plays at the stageless Abravanel Hall. This city is the origination point for the world's longest-running radio program, Music and the Spoken Word, which has aired weekly since 1929. The Seagull Monument is found in its Temple Square, which is also home to the Tabernacle building. This city on the Jordan River is at the feet of the Wasatch Range and was laid out by Brigham Young. For 10 points, name this city which overlooks a namesake body of water in Utah.

ANSWER: Salt Lake City

6. This director once hired five thousand extras for a battle sequence that was cut to ninety seconds of screen time in his film about a "shadow warrior" who impersonates a warlord. He adapted *King Lear* and *Macbeth* into the films *Ran* (RON) and *Throne of Blood*. In a 1954 film by this director, a village hires a group of *ronin* to protect crops from bandits. For 10 points, name this prolific Japanese director of *Yojimbo* and *The Seven Samurai*.

ANSWER: Akira Kurosawa

019-12-71-09106

7. Crystal field theory explains why many coordination complexes of transition metals have this property. Organic substances with this property include indoles. Spectrophotometry is usually applied to solutions which have this property. Solutions of zinc and aluminum almost never have this property, but chromium solutions do. Compounds with this property absorb electromagnetic radiation between four hundred and seven hundred nanometers. pH indicators change in this property to distinguish between acids and bases. For 10 points, name this property which water does not have because it is clear.

ANSWER: **color** [or clear equivalents]

190-12-71-09107

8. This artist painted a turbaned king gazing in horror at the writing on the wall in his *Belshazzar's Feast*. A man wearing a jeweled belt places his hand atop the head of a statue in another painting by this man. A dead chicken hanging from the belt of a girl symbolizes the soldiers depicted in another work by this painter of *Aristotle Contemplating a Bust of Homer*. He showed a blue and yellow flag being raised by one of Franz Banning Cocq's men in that painting. For 10 points, name this Dutch painter of *The Night Watch*. ANSWER: **Rembrandt** Harmenszoon van Rijn

020-12-71-09108

9. Scottish surgeon James Lind discovered a way to ward off this disease after performing controlled experiments that showed vinegar and seawater did not prevent it. By 1754, when Lind announced his findings, it was killing more naval men than combat during Britain's wars. The method of preventing this disease led to the nicknaming of British sailors as "limeys." For 10 points, name this disease, which is avoided by eating citrus fruits, and involves bleeding gums and other symptoms caused by a lack of Vitamin C.

ANSWER: scurvy

019-12-71-09109

10. One of this author's novels features the interfering dressmaker Prissy Diamond and a cameo by Aaron Burr. This author of *The Minister's Wooing* documented the sources for her most popular novel in a book entitled a "key." This author of *Dred: A Tale of the Great Dismal Swamp* wrote a bestseller in which George Harris reunites with Eliza in Canada after a daring escape across the frozen Ohio River, and Simon Legree beats the title character to death. For 10 points, name this author of the anti-slavery polemic *Uncle Tom's Cabin*.

ANSWER: Harriet Beecher Stowe

019-12-71-09110

11. A form of polymerization often contrasted with addition usually results in the loss of this compound from component monomers. This compound's auto-ionization has an equilibrium constant equal to one times ten to the negative fourteenth power. On a PT diagram, its melting point line's slope is negative, because the solid form of this substance is less dense than the liquid form. Combustion reactions result in the production of it and carbon dioxide. This compound's polarity makes it the "universal solvent." For 10 points, name this compound with formula H2O.

ANSWER: water [or H2O before mention]

12. Other than Russia, this mountain place is the only home for a long-nosed, mole-like animal called the desman. The waterfall-containing Cirque de Gavarnie can be found in this mountain range, whose peaks include Mont Perdu and Aneto. Shepherds around this mountain range may own a namesake white, fluffy breed of guard dog with double dew claws on their hind legs. This mountain range runs through the Principality of Andorra. For 10 points, name this mountain range that divides France from Spain. ANSWER: the **Pyrenees**

080-12-71-09112

13. After the death of Campe, these creatures were released along with their brothers the Hecatonchires. Some creations by these creatures include fortifications of Mycenae and the helm of Hades. Three of these creatures were killed by Apollo for making the thunderbolts that killed Asclepius. One of these creatures was blinded by a warrior who called himself "no man," Ulysses. For 10 points, name this mythological race of one-eyed giants that includes Polyphemus.

ANSWER: Cyclopes

186-12-71-09113

14. This type of star can violently explode in a namesake type of supernova, sometimes called Type Ia (one "a"). The formation of this type of star results in it being surrounded by a planetary nebula. Supported by electron degeneracy pressure, this type of star cannot exceed a mass of 1.4 solar masses, called the Chandrasekhar limit, since excessively massive stars collapse into neutron stars or black holes instead. For 10 points, name this hottest type of dwarf star.

ANSWER: white dwarf

014-12-71-09114

15. This theory was later expanded in the "ERG theory" by Clayton Alderfer. Its developer studied people like Ruth Benedict and Albert Einstein, who were driven by "metamotivation." First explained in the paper "A Theory of Human Motivation," the most successful in this theory are task-centered and autonomous and who report having "peak experiences." For 10 points, name this theory developed by Abraham Maslow which moves from food and water on the bottom to morality, creativity, and other traits of self-actualization on the top.

ANSWER: Maslow's <u>hierarchy of needs</u> [prompt on <u>self-actualization</u> until mentioned]



1A. What language originating from Dutch dialects is spoken in South Africa and was pushed as a main language during the apartheid-era government?

ANSWER: Afrikaans

1B. What 60s and 70s rock group recorded the songs "Fortunate Son," "Run Through the Jungle," and "Who'll Stop the Rain?"

ANSWER: Creedence Clearwater Revival or CCR

2A. What current president of Egypt has been called a "new pharaoh" for giving himself practically unlimited powers in November?

ANSWER: Mohamed Morsi

2B. What men's college basketball team won the 2012 NCAA championship with Michael Kidd-Gilchrist and Anthony Davis?

ANSWER: University of **Kentucky Wildcats** (accept either school name or team nickname)

3A. Name this symbol on a score that indicates the pitch, such as "treble" or "bass."

ANSWER: clef

3B. What argument by Plato describes a group of people chained to a wall that watch shadows projected on a wall from a fire?

ANSWER: the Allegory of the <u>Cave</u> [or the Analogy of the <u>Cave</u>; or Plato's <u>Cave</u>; or the Parable of the <u>Cave</u>]

4A. The Argand plane can be used to represent what class of numbers that have both a real part and an imaginary part?

ANSWER: complex numbers

4B. Which Japanese scientist is the namesake of a scale for tornado intensity along with Allen Pearson? ANSWER: Tetsuya **Fujita**

5A. This is a 20-second calculation question. x varies directly with the square of y. If x equals 27 when y equals 3, find x when y = 5.

ANSWER: 75

5B. This is a 20-second calculation question. A hotel charges \$75 for a room on Friday or Saturday night, and \$40 for a room every other night. If a room is rented for a full week, what is the average cost per night? ANSWER: 50 dollars

6A. What opera by Puccini featured the relationship between Lieutenant Pinkerton and Cio-Cio San?

ANSWER: Madama Butterfly or Madame Butterfly

6B. What dormant volcano in Tanzania is the tallest mountain in Africa?

ANSWER: Mount Kilimanjaro

7A. This is a 30-second calculation question. Find the area of a regular hexagon with perimeter 12.

ANSWER: 6 times square root 3 [or 6 times radical 3]

7B. This is a 30-second calculation question. If the tangent of x is equal to 1/3, what is the secant squared of x?

ANSWER: **1 and 1/9** [or **10/9**; or **1.11**]

8A. What Catholic author wrote about an architect who dies in a leper colony in *A Burnt-Out Case* and created the "whiskey priest" in *The Power and the Glory*?

ANSWER: Graham **Greene** [or Henry Graham **Greene**]

8B. Which disease, which is caused by a bacterium from the Vibrio genus, can be fatal when resulting in severe dehydration and can be contracted when drinking contaminated water?

ANSWER: cholera

9A. What "Iron Chancellor" advised Wilhelm I and II after helping to create the German Empire?

ANSWER: Otto Eduard Leopold von Bismarck

9B. Which Norwegian playwright wrote about Nora Helmer leaving her husband Torvald in *A Doll House*

ANSWER: Henrik Ibsen

10A. What value measured in ohms is added reciprocally for devices in parallel and normally for devices in series?

ANSWER: resistance

10B. What 2012 movie is named after the childhood estate of its protagonist, James Bond?

ANSWER: **Skyfall**



VHSL Regular Season 2013 Part 2 of 2 Round 9 Third Period, Fifteen Tossups

1. During this land battle, Lazun's Legion defeated a force under Banastre Tarleton, who was wounded and captured. As one side surrendered, a band played the tune "The World Turned Upside Down." After the Comte de Grasse won the earlier Battle of the Chesapeake, Lord Cornwallis lost means of escape and was forced to surrender here. For 10 points, name this October 1781 victory for George Washington that was the final major land battle of the American Revolution.

ANSWER: Battle of **Yorktown**

052-12-71-09117

2. During their life cycle, members of this phylum undergo a process known as strobilation. Green Fluorescent Protein was isolated from one member of this phylum. For self-defense and to ensnare prey, organisms in this phylum have nematocysts that discharge venom when triggered. This phylum contains a life cycle that includes a free-living medusa form that detaches from a sessile polyp. Members of this phylum include Cubozoans, and the Portuguese Man-o-War. For 10 points, name this phylum, which consists of sea anemones, corals, and jellyfish.

ANSWER: **Cnidaria** [accept **Cnidarians**]

140-12-71-09118

3. A collection of these types of works "for our time" were written by James Thurber and include one in which a man claims to see a unicorn in his garden. They're not myths, but one example features a character hungering for inaccessible food, only to dismiss it as sour. Many works of this type were supposedly collected by a slave in ancient Greece. Notable examples include "The Ant and the Grasshopper" and "The Fox and the Grapes." For 10 points, name this type of literature, a story with a moral, many of which were collected by Aesop.

ANSWER: fables

052-12-71-09119

4. In this election, the Republican candidate was supported by groups called the "Wide-Awakes." That candidate in this election was nominated over Salmon Chase and William Seward, as documented in the book *Team of Rivals*. A third party in this election was the Constitutional Union Party, which nominated John Bell. In this election, the Democrats nominated both John Breckinridge and Stephen A. Douglas. For 10 points, name this presidential election that led to the first term of Abraham Lincoln.

ANSWER: Election of **1860**

052-12-71-09120

5. This man sent writer Napoleon Hill off to observe high achievers, culminating in Hill's writing of the book *Think and Grow Rich*. He advocated social responsibility among the rich in his article known as "The Gospel of Wealth." This man let his associate Henry Clay Frick handle a bloody strike at the Homestead plant. He eventually sold his company to J.P. Morgan. For 10 points, name this Scottish-American founder of a namesake steel company.

ANSWER: Andrew Carnegie

6. This man spent three days in the pillory but was pelted with flowers instead of rotten vegetables after writing a satircal pamphlet advocating the extermination of religious noncomformists entitled *The Shortest Way with the Dissenters*. In a novel by this man, the title character owns a Brazilian plantation that is run by Mr. Wells. That character leaves at the "evil hour, the 1st of September, 1659" for a journey to Guinea, and ultimately befriends Friday after being shipwrecked. For 10 points, name this English author of *Robinson Crusoe*.

ANSWER: Daniel **Defoe**

030-12-71-09122

7. This man wrote about an artist who "strove to resuscitate the dead art of poetry" in his "Hugh Selwyn Mauberley." He created a narrator who recalls when "my hair was still cut straight across my forehead" in a loose translation of Li Bo's "The River-Merchant's Wife." He described "the apparition of these faces in the crowd, petals on a wet, black bough" in his "In a Station of the Metro." For 10 points, name this virulently anti-Semitic and fascist poet of the *The Cantos*.

ANSWER: Ezra **Pound** [or Ezra Loomis **Pound**]

149-12-71-09123

8. This object was named by an English schoolgirl, Venetia Burney, while related objects dubbed S/2011 and S/2012 have not been named yet. Discovered by Clyde Tombaugh, it ran afoul of the IAU for not having "cleared the neighborhood of its orbit." The discovery of the object named Eris led to a change in scientific perception of this object. The intended target of the New Horizons mission, this object has such moons as Nix, Hydra, and Charon (CAR-awn). For 10 points, name this object which in 2006 was downgraded to the status of "dwarf planet."

ANSWER: Pluto

052-12-71-09124

9. This poem may reflect conditions of the Panic of 1893 in its assertion that "we went without the meat and cursed the bread." This poem, which first appeared in the volume *The Children of the Night*, describes a man who "fluttered pulses when he said good-morning." That "gentleman from sole to crown" was "admirably schooled in every grace" and was "always human when he talked." For 10 points, name this poem by Edwin Arlington Robinson which ends with the wealthy title character putting "a bullet through his head."

ANSWER: "Richard Cory"

019-12-71-09125

10. The size of the minimal description of one of these objects is known as its Kolmogorov complexity. In C, these entities can be copied with a fixed size to prevent buffer overflow. They can be prefixed with their length, or stored with a special terminating character at the end in the "null-terminated" variety present in C. Operations on these data types include concatenation and checking whether they're empty. For 10 points, name this data type that represents a sequence of characters.

ANSWER: strings

201-12-71-09126

11. This man contributed an essay on Persius Flaccus and the poem "Sympathy" to the first issue of *The Dial*. Seven hundred unsold copies of his *A Week on the Concord and Merrimack Rivers* were abandoned on his doorstep by his publisher. Collector Sam Staples jailed this man for failing to pay his poll tax in protest of the Mexican War, which inspired his essay on civil disobedience. For 10 points, name this author who spent a year reflecting on a Massachusetts pond in his book *Walden*.

ANSWER: Henry David Thoreau

12. One leader of this civilization had his head thrown into the camp of his older brother after his defeat at Metaurus. This city was home to Hamilcar, a patriarch whose progeny included Mago and Hasdrubal Barca. Cato the Censor repeatedly advocated for the destruction of this city. This civilization's downfall was ensured when Scipio Africanus won the Battle of Zama against its general Hannibal. For 10 points, identify this Phoenician city that fought the Punic Wars with Rome.

ANSWER: Carthage [or Carthago; or Kart-hadasht]

195-12-71-09128

13. The Knights Templar and Zetas are two rival factions in this war. Submarines used in this war have been spotted more often since the Merida Initiative. One side in this war was the purported target of Operation Fast and Furious, the largest of several probes in which "gun walking" was used to track firearms purchases by the ATF. This war began late in the Vicente Fox-regime and has been waged against groups based in the Gulf and in Tijuana. For 10 points, name this war against several narcotics cartels south of the US border.

ANSWER: Mexican <u>drug war</u> [or the <u>drug war</u> in Mexico; or Mexican <u>cartel war</u> before "cartels"]

020-12-71-09129

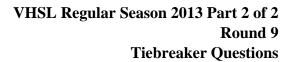
14. This term is base for the alternate name for a NOT gate. This term, of a function, is equivalent to a reflection about the line y equals x. This term applied to the chain rule denotes u substitution. A matrix only has one of these if it is row-equivalent to the identity matrix, which requires it to be square and have a non-zero determinant. For a number h, the additive one is negative h while the multiplicative one is one over h. For 10 points, identify this term that often designates the opposite of something.

ANSWER: inverse

066-12-71-09130

15. A representative from this state, Lloyd Doggett, is running in a neighboring congressional district in 2012 due to redistricting. The documentary *The Revisionaries* examines controveries regarding this state's board of education's battles over the content of textbooks used in this state's public schools. A mayor from this state, Julian Castro, gave the keynote address at the Democratic National Convention, and this state's governor's bid for the Republican nomination faded after he forgot one of the three cabinet agencies he planned to eliminate during a debate. For 10 points, name this state, whose governor is Rick Perry.

ANSWER: Texas





1. The first step in the chemical pathway named for this molecule is catalyzed by the enzyme carbamoyl phosphate synthase. That namesake biochemical process that takes place in the liver and begins with the combination of ammonia and bicarbonate ions. Friedrich Wohler's attempt to create ammonium cyanate led to this compound becoming the first organic compound to be synthesized in a laboratory. For 10 points, name this nitrogen-containing molecule which is excreted out of the body in urine.

ANSWER: <u>urea</u> [or <u>carbamide</u>]

140-12-71-09132

2. The protagonist of this story is a collegiate assessor who insists on being referred to by the equivalent military rank of major. After unexpectedly seeing the title character descend from a carriage, the protagonist confronts him in Kazan Cathedral. Once the protagonist's problem is resolved, he demands that his barber Ivan Yakovlevich shave him with extreme care. For 10 points, name this short story by Nikolai Gogol in which Kovaliov loses the title facial feature.

ANSWER: "The **Nose**" [or "**Nos**"]

014-12-71-09133

3. Gunter Guillaume was a spy for this country, which experienced unrest over imports of awful-tasting "mixed coffee" after its Main Task era. The 2+4 Agreement dissolved this country with Egon Krenz's approval. A secret police called the Stasi operated in this country, which was reached out to by Willy Brandt. Erich Honecker and Walter Ulbricht led this country with Soviet approval. For 10 points, name this country that was unified with its neighbor in 1990 after the Berlin Wall fell.

ANSWER: <u>East Germany</u> [or <u>German Democratic Republic</u>; or <u>GDR</u>; or <u>Ostdeutschland</u>; or <u>Deutsche</u> <u>Democratische Republik</u>; or <u>DDR</u>; do not accept or prompt on "Germany"]

104-12-71-09134

4. This poet's cultivation of archaic poetic language is evident in his pastoral work imitating Vergil's *Eclogues* called *The Shepheardes Calendar*. He wrote a famous "Epithalamion" concluding his sonnet sequence about his courtship of Elizabeth Boyle entitled *Amoretti*. His most famous work includes such characters as Britomart, the champion of chastity, and the Redcrosse Knight. For 10 points, name this Elizabethan poet of the allegorical epic *The Faerie Oueene*.

ANSWER: Edmund Spenser

014-12-71-09135

5. The constant used in this equation is equal to the inverse value of four pi times the permittivity of space. A negative value for this inverse square law shows that there is an attraction between the points being considered because of the unlike values of those points. This law is used to find the amount of electric interaction between two particles based on their distance. For 10 points, identify this law named for the man who also gives his name to the SI unit of electric charge.

ANSWER: Coulomb's Law

023-12-71-09136

If a patient has to take one 500 milligram dose of a medication daily for a week, how many 100 milligram tablets would the pharmacy need to be given to that patient?

ANSWER: <u>35</u>

What race of giants from Greek mythology included Polyphemus who tried to kill Odysseus but was blinded in his only eye? ANSWER: cyclops or cyclopes