## VHSL Regular Season 2010-2011 Round 20 First Period, Fifteen Tossups

1. This astronomical body was visited and orbited by the Clementine spacecraft. This object features a large crater called the South Pole - Aitken basin. One hypothesis of its creation is the Giant Impact Hypothesis. It has basaltic plains called maria such as the Sea of Tranquility. The gravitational interaction between this and the Earth is responsible for tides. For 10 points, name this object that orbits the Earth.

ANSWER: moon

001-10-20-12101

2. One short story by this author involves the befouling of Major de Spain's rug by the arsonist Abner, who later appears in *The Hamlet*, *The Town*, and *The Mansion*. He wrote about a lady's murder of Homer Barron in "A Rose for Emily." In one of his novels, Vardaman calls his mother a fish, and in another, the brother of the retarded Benji commits suicide while at Harvard. The creator of the Bundrens and the Compsons, for 10 points, identify this Southern author of *As I Lay Dying* and *The Sound and the Fury*.

ANSWER: William Cuthbert Faulkner

020-10-20-12102

3. This group was defeated at Ulundi and Rorke's Drift following their surprise victory at Isandlwana (ISS-ond-ul-WAH-nuh) in a war with Britain. That war followed an ultimatum to their king Cetshwayo (sesh-WHY-oh). Earlier, they prompted the "mfecane," (MM-feh-CAH-nay) or "the crushing," under the leadership of a man who killed Dingiswayo (DING-gis-WHY-oh) and introduced the "buffalo horns" tactic during their rise to prominence in the 1820s. Shaka was the powerful leader of, for 10 points, what largest ethnic group in South Africa?

ANSWER: Zulus

019-10-20-12103

4. In first trimester fetuses, this organ is the primary producer of red blood cells. As blood flows into this organ through the portal vein, sugars are converted into glycogen which is stored until needed. These organs in polar bears contain toxic amounts of retinol. It secretes about a quart of bile, and a yellowness of the skin called jaundice can occur when it malfunctions. Excessive alcohol consumption can cause cirrhosis of this organ. For 10 points, name this largest gland in the body, which removes toxins from the blood.

ANSWER: liver

015-10-20-12104

5. This political entity was disastrously defeated by the Cimbri and the Teutoni at the Battle of Arausio. It fought against a group of cities including Marsi in a war sometimes called the Marsic, or Social, War. One defeat for this government came at a battle in which Varro was outsmarted by the use of a double envelopment tactic; that was the Battle of Cannae. However, this republic eventually defeated Carthage over the course of the Punic Wars. For 10 points, name this republic that later became an empire under the rule of Augustus.

ANSWER: **Rome** [or **Roman** Republic]

040-10-20-12105

6. This poet wrote of a light that has been magnetized by an Angel in a poem in which he claims that "They walk in front of me, those eyes aglow with light." This author of "The Living Torch" compared the poet to an albatross in another poem. That poem and a poem addressing the reader as "hypocrite reader, my likeness, my brother" appear in his best known collection, which contains sections titled Wine, Parisian Scenes, and, most notably, Spleen and Ideal. For 10 points, name this French poet of *The Flowers of Evil*.

ANSWER: Charles Baudelaire

7. This character selects going to a go-kart track as an activity for a double date with disastrous consequences, and he was antagonized by a detective named Tritter, who successively attempted to get his friends to turn against him. He was once in a relationship with Stacy Warner, who he is stuck for a period of time in an airport with, leading to their elopement. His current girlfriend, also his boss, dumped her boyfriend Lucas to be with him. Lisa Cuddy and James Wilson are two friends of, for 10 points, which television character, a doctor portrayed by Hugh Laurie?

ANSWER: Gregory **House** 

040-10-20-12107

8. This procedure was performed with a living organ in 2006 at Bad Oeynhausen. It comes in orthotopic and heterotopic varieties, and typically involves injecting a certain organ with potassium chloride. It was first successfully performed in the United States in 1967 at Maimonides Medical Center, and it was first successfully performed in the same year by Christiaan Barnard. For 10 points, name this surgical procedure which may be performed on patients with heart failure.

ANSWER: heart transplant

024-10-20-12108

9. In German, this group includes nearly all "n"s found between initial "i" and "m," as well as leading "p"s followed by another consonant. This group also includes the Hebrew "aleph," one member of any double-letter pair in French, and almost all occurrences of "h" in Spanish. For 10 points, identify this type of letter which is similar to the "k" in English "knight" or "knife."

ANSWER: silent letters

019-10-20-12109

10. This god owned the Stymphallian Birds and had his son Cycnus killed by Heracles. Heracles managed to injure this god with an arrow in the thigh, and he was held captive in a jar by the Aloadae. This god was caught in a sturdy but invisible net after his affair with Aprhodite was uncovered by Hephaestus. This son of Zeus rode into battle with his sons Phobos and Deimos. For 10 points, name this analogue of Mars, the Greekgod of warfare.

ANSWER: **Ares** [or **Mars** before mentioned]

015-10-20-12110

11. Three objects known by this term are collectively used to represent spin operators are named after Wolfgang Pauli. Calcium is deposited in an area of bone tissue known by this term, which generally describes any part of tissue that does not contain cells and also describes a part of the mitochondrion where the Krebs Cycle occurs. In mathematics, objects denoted by this term can only be multiplied if the number of columns in the first equals the number of rows in the second. For 10 points, name these rectangular arrays of numbers.

ANSWER: matrix [or matrices]

003-10-20-12111

12. One novel by this author sees Hoyt Thorpe witness a sexual encounter involving the governor of California before he enters a relationship with the title character, Charlotte Simmons. Another of his novels, set in Atlanta, tells the story of a real estate dealer named Charles Croker and his wife Martha against the backdrop of racial violence. Race relations also factor into his best known work, in which Sherman McCoy and Maria Ruskin run over a black man in the Bronx. For 10 points, name this author of *A Man in Full* and *The Bonfire of the Vanities*.

ANSWER: Tom Wolfe

13. This man argued for the legality of a carriage tax in the Supreme Court case *Hylton v. U.S.* This man's reputation was tarnished when his affair with Maria Reynolds became public. The economic research of this man included reports "on Public Credit" and "on Manufactures." He worked to found the predecessor of the Coast Guard, the U.S. Mint, and the First Bank of the United States. For 10 points, name this man who was killed in a duel with Aaron Burr and served as the first Secretary of the Treasury.

ANSWER: Alexander Hamilton

040-10-20-12113

14. This musician's fist gold album contains the song "Pharaoh's Dance." He began to experiment with electronic music with his album *In a Silent Way*, while earlier he collaborated with Gil Evans on an album sampling the music of Joaquin Rodrigo and Manuel de Falla. This musician behind *Bitches Brew* and *Sketches of Spain* also participated in a nonet that launched the cool jazz movement, but he is better known for recording the songs "Freddie Freeloader" and "So What." For 10 points, name this American jazz trumpeter who recorded the album *Kind of Blue*.

ANSWER: Miles **Davis** [or Miles Dewey **Davis** III]

083-10-20-12114

15. Sallie Chisholm discovered one species in this clade that is responsible for 20% of all atmospheric oxygen. Species of these that are acid fast can contain mycolic acid. The firmicutes phylum of these make endospores. They can be classified as gram-positive or negative depending on their type of cell wall. Their shape can be coccus or bacillus. They are infected by phages. They do not have nuclei and often contain plasmids. For 10 points, name this domain of life that contains species like *E. coli*.

ANSWER: bacteria



1A. What is the number of molecules of a gas in a volume of 22.4 liters, which is also equal to 6.02 times ten to the twenty-third?

ANSWER: **Avogadro**'s number

1B. Name the American writer who wrote a short story about Jabez Stone, who goes to trial to keep his soul in the short story "The Devil and Daniel Webster."

ANSWER: Stephen Vincent Benét

2A. Name the African country where Goodluck Jonathan became president in May 2010.

ANSWER: Federal Republic of Nigeria

2B. What female artist sings "I'm gonna show him what little girls are made of" in "Gunpowder and Lead," and also sings "White Liar"?

ANSWER: Miranda Lambert

3A. This is a 10-second calculation question. Chris needs to pick 2 socks from his drawer. If the drawer contains 2 blue socks, 2 red socks, and 2 yellow socks, what is the probability that Chris will pick both blue socks?

ANSWER: 1/15

3B. This is a 10-second calculation question. What is the volume of a cube whose sides measure 4 centimeters?

ANSWER: 64 centimeters cubed

4A. American painter George Caleb Bingham is best known for depicting a black animal and two fur traders in boat floating down what river?

ANSWER: Missouri River

4B. What city contains the Bridgestone Arena and the Country Music Hall of Fame and is the capital of Tennessee?

**ANSWER: Nashville** 

5A. This is a 20-second calculation question. Solve for x; the absolute value of the quantity x - 3 end quantity y = 10.

ANSWER: x = 13; x = -7

5B. This is a 20-second calculation question. Solve the system of equations: x = 2

ANSWER: (2,0) or x = 2, y = 0

6A. What British sport is similar to billiards but involves one white cue ball and fifteen red balls?

ANSWER: snooker

6B. The "dynamic" type of this computer component can put more information onto a smaller surface area, at the cost of a reduction in speed. Name this hardware that holds in-use programs and data for rapid access by the CPU.

ANSWER: **RAM** [or **Random-Access Memory**; prompt on **memory**]

7A. This is a 30-second calculation question. What is the peak amplitude of sin(x) + 3cos(x)? Express your answer in simplest radical form.

ANSWER: square root of 10

7B. This is a 30-second calculation question. Find the mean of the possible solutions to the equation  $2x^2 - 9x + 20 = 0$ .

**ANSWER: 13/4** 

8A. This Biblical person's name is attached to a "song" of symbolic love poems. Identify this legendarily wise son of David, who constructed the first Temple in Jerusalem during his time as the third King of Israel.

ANSWER: **Solomon** [or **Shlomo**]

8B. What term is applied to functions that are both injective and surjective?

ANSWER: bijective

9A. Name the work by Sergei Prokofiev that depicts a boy who captures a dangerous animal.

ANSWER: **Peter and the Wolf** [or **Petya i Volk**]

9B. What country saw the Cristero War fought due to actions taken by its government against the Catholic Church in the wake of its 1917 Constitution?

ANSWER: Mexico [or United Mexican States; or Estados Unidos Mexicanos]

10A. What American photographer took the pictures *White Angel Breadline* and *Migrant Mother*, which showed the harsh effects of the Great Depression?

ANSWER: Dorothea Lange

10B. W and Z bosons are the mediating particles of what physical force, which mediates spontaneous nuclear decay and was theoretically unified with the electromagnetic force in the early 1970s?

ANSWER: weak nuclear force



## VHSL Regular Season 2010-2011 Round 20 Third Period, Fifteen Tossups

1. This author's time in Honduras after fleeing an embezzlement conviction provided material for his collection *Cabbages and Kings*, and Ward McAllister's assertion that there were only four hundred people in New York City who were worth noticing prompted this man to write the collection *The Four Million*. This man wrote about Della Young's selling of her hair to buy a watch chain for her husband and James Young's selling his watch to buy combs for his wife. For 10 points, name this short story writer of "The Gift of the Magi."

ANSWER: O. **Henry** [or William Sydney **Porter**]

030-10-20-12117

2. In one story, Pirathous and Theseus are trapped in this location by a snakes that tie them to a chair. One part of this location is ruled by the Cretan Rhadamanthus and another is called the Asphodel Meadows. Rivers in this location include Phlegethon, Cocytus, Acheron and Lethe. Residents of this place include the wheel-bound Ixion and Sisyphus, who must roll a boulder up a hill for eternity. For 10 points, name this place bounded by the river Styx and ruled by Persephone and its namesake god, the underworld in Greek mythology.

ANSWER: <u>Hades</u> [or Greek <u>underworld</u> until mentioned]

015-10-20-12118

3. One of this author's protagonists, George Bowling, tires of his associations with the classically oriented Old Porteus. He also wrote an essay in which the title action is performed by a police officer in Burma. In addition to writing *Coming Up For Air* and "Shooting an Elephant," he wrote a novel that includes the state of Oceania, whose residents include Winston Smith and that is ruled by the regime of Big Brother. For 10 points, name this British author of *Nineteen Eighty-Four*.

ANSWER: George Orwell

040-10-20-12119

4. The human disease causing virus is found in genus Orthomyxoviridae. Like some forms of smallpox, virulent forms of this virus can trigger a cytokine storm. This virus is combated by amantadine and oseltamivir. Variants in this virus's Hemagglutinin and Neuraminidase components leads the the HN classification of it. An example of such a classification would be H1N1 which can be of avian or swine origin. For 10 points, name this virus that causes the flu.

ANSWER: **influenza**virus [prompt on **flu**]

001-10-20-12120

5. This city is located near Sugarloaf Mountain and its attractions include the Roman style aqueduct Arcos da Lapa and the Tijuca rainforest. Residents of this city are often called Cariocas, and it houses the Estadio do Maracana, the largest arena on its continent. Beaches near this city include Ipanema and Copaccabana. The Christ the Redeemer statue can be found in this city, which was the capital of its country until the creation of the planned city of Brasilia. For 10 points, name this tourist hotspot in Brazil.

ANSWER: Rio de Janeiro

6. This territory's Eurypontid dynasty included Agesilaus II, who was one of the commanders at the second Battle of Mantinea. That dynasty included several rulers named Archidamus. This city-state practically ceased to exist following the loss of its ruler Cleomenes III at the Battle of Sellasia to the forces of an Achaean League. The law-giver of this city-state was Lycurgus. Another ruler of this city-state was Leonidas, who died at the Battle of Thermopylae. For 10 points, name this Greek city-state that fought Athens in the Peloponnesian War.

ANSWER: Sparta

040-10-20-12122

7. One of this author's characters asks the reader, "Grow old along with me! / The best is yet to be." This author of "Rabbi Ben Ezra" described a statue of Neptune cast by Claus of Innsbruck at the end of another poem. In one of this writer's dramatic monologues, the narrator describes a painting by Fra Pandolf of his wife, whom he killed for having a "heart too soon made glad." For 10 points, name this Victorian poet of "My Last Duchess."

ANSWER: Robert Browning

080-10-20-12123

8. One of the pioneers of this practice was a Ghanaian marmalade vendor, Esther Afua Ocloo. Like others who engage in this practice, Ocloo largely targeted women, who benefit disproportionately in areas where this activity is available. This activity is arranged by the website Kiva, as well as by the Grameen Bank, which was founded by the man who has become the face of this practice, Bangladesh's Muhammad Yunus. For 10 points, identify this practice of providing very small, low-interest loans to new business owners in the third world.

ANSWER: microlending [or microloans; or microcredit; or microfinance; or word forms of any answer]

9. One member of this family described a scandal involving Mary Jo Kopechne in the memoir *True Compass*. Another was the SEC chairman under Franklin Roosevelt, where he restricted the same practices by which he had gained his legitimate fortune in the 1920s along with a liquor bootlegging business. Another member of this family was shot at the Ambassador Hotel by Sirhan Sirhan, four years after ending a lengthy term as Attorney General. For 10 points, identify this family whose leading member defeated Richard Nixon to become President in 1960 and was assassinated in 1963.

ANSWER: **Kennedy** family [or the **Kennedys**, etc]

019-10-20-12125

10. One passage in this work exhorts the reader to "Drink! For you know not whence you came, nor why." An extended passage near the end of this work describes "loquacious vessels" of clay, one of whom wonders "Who is the potter...and who the pot?" An oft-quoted verse in this poem warns that "The bird is on the wing." Famously translated by Edward Fitzgerald, this work describes "A Book of verses underneath the bough / A jug of wine, a loaf of bread - and thou." For 10 points, name this work of 101 quatrains, written by the Farsi poet Omar Khayyam.

ANSWER: The Rubaiyat of Omar Khayyam

11. This state's Lieutenant Governor, Bill Halter, failed in a bid to run for his state's senate seat that was up for re-election in 2010 when he lost in the Democratic primary, while its other senate seat is currently held by Mark Pryor. That election saw a person who had introduced a House resolution to implement tax credits to teachers in low income districts, the Republican John Boozman, defeat the Democratic candidate Blanche Lincoln. In 2008, its governor put up a run for the Republican presidential nomination. For 10 points, name this home state of Mike Huckabee and Bill Clinton.

ANSWER: Arkansas

040-10-20-12127

12. This genre is associated with Eliza Parsons, who wrote a novel in which Matilda Weimar ends up marrying a count. It is also associated with Charles Maturin, who wrote about a man who sells his soul to obtain longevity but is unable to find someone else willing to make the same deal to redeem himself in his novel *Melmoth the Wanderer*. Jane Austen satirized this genre in *Northanger Abbey*, while it is associated with the works of Horace Walpole and Ann Radcliffe. For 10 points, name this genre exemplified by *The Castle of Otranto* and *The Mysteries of Udolpho*.

ANSWER: Gothic literature

040-10-20-12128

13. Slavery was ended in this U.S. state via the court case of *Polly v. Laselle*. The only fighting in this state during the Civil War occurred at the Battle of Corydon during an event known as Morgan's Raid. Vice-Presidents Charles Fairbanks and Dan Quayle both came from this state. The first governor of the territory that shared the name this state won the Battle of Tippecanoe against Tecumseh's brother and was William Henry Harrison. For 10 points, name this Midwestern state located east of Illinois.

ANSWER: Indiana

040-10-20-12129

14. One type of these entities appear like spokes on a wheel and are "actiniform." The "arcus" or "shelf" type of these entities indicates an approaching temperature change. These entities, which may be stratifom, ciriform, or cumuliform, always form in the stratosphere. For 10 points, name these masses of water droplets that are suspended in the earth's atmosphere, which come in varieties like cumulus and stratus.

ANSWER: clouds

026-10-20-12130

15. Naval battles in this conflict included the Battles of Winchelsea and Sluys (SLOICE). Pedro the Cruel assisted one side's forces at the Battle of Najera. One of the victorious commanders at that battle, Edward, the Black Prince, was also victorious during this war at the Battle of Poitiers. Other English monarchs who fought during this conflict included Edward III and Henry V; their victories included such battles as Crecy and Agincourt. For 10 points, name this medieval conflict that did not actually last a century.

ANSWER: **Hundred Years'** War



VHSL Regular Season 2010-2011 Round 20 Tiebreaker Questions

1. This action passed the Senate 37-2, thanks in part to a speech in support of it by Charles Sumner. The funds for this action ended up totaling 7.2 million dollars even though a foreign minister to the U.S. named Eduard de Stoeckl would probably have accepted considerably less. De Stoeckl's boss, Czar Alexander II, was eager to get rid of the territory purchased. Known as "Seward's Folly" after the Secretary of State who negotiated it, for 10 points, name this territorial acquisition made by the U.S. that eventually became a northern state.

ANSWER: **purchase of Alaska** [accept equivalents]

040-10-20-12132

2. According to one source, this man becomes immortal after he is bathed in the river Numicus. This character kills the leader of the Rutulians named Turnus. He courts a daughter of king Latinus named Lavinia after using a golden bough to descend to the underworld. His embarkation from Carthage causes Dido to throw herself on a funeral pyre. This character escapes from the ruins of Troy with his father Anchises. For 10 points, name this protagonist of an epic by Vergil.

ANSWER: Aeneas

015-10-20-12133

3. This thinker characterized the development of beliefs of the supernatural by analyzing the relations to outside objects that became totemism in one work, while in another he analyzed a phenomenon that he showed was higher in peacetime than in wartime; that work split a certain action into fatalistic, anomic, altruistic, and egoistic types. This author of *The Elementary Forms of Religious Life* and *Suicide* also wrote a work in which he attempted to legitimize the field of sociology by moving it towards a scientific study. For 10 points, name this Frenchman who wrote *Rules of the Sociological Method*.

ANSWER: Emile **Durkheim** 

040-10-20-12134

4. One example of this literary device occurs in *Troilus and Cressida* when Nestor and Diomedes carry on a conversation making fun of Ajax during Ajax's own speech. In another example, Romeo asks in the middle of Juliet's balcony speech whether he should "hear more" or "speak at this." This device is used in *Othello* to allow Iago to explain his plan without letting any other character know his intentions. For 10 points, name this device that allows characters to speak to the audience without any other on-stage characters appearing to hear them.

ANSWER: aside

003-10-20-12135

5. Response reactions clear up several supposed contradictions to this law, which was independently discovered by Karl Ferdinand Braun. This principle explains why ionization is halted in the presence of a common-ion in solution. Applied to economics by Paul Samuelson, this principle says that adding an inert gas and adding a catalyst both don't favor one reaction over another, in contrast to changing temperature or removing either product or reactant. For 10 points, identify this principle that governs chemical equilibrium in terms of forward and reverse reactions, named for a Frenchman.

ANSWER: **Le Chatelier's** Principle

020-10-20-12136

This is a 10-second calculation question. What is the solution for x in 8x = 91 - 2x?

ANSWER: 9.1

Name the river of northeastern Asia that serves as the boundary between North Korea and the Chinese provinces of Jilin (GEE-lin) and Liaoning (LEE-ow-ning).  ANSWER: Yalu River [or Amnok River]	
	020-10-20-12137