**VHSL Regular Season 2016-2017 - Round 20 - First Period, Fifteen Tossups**

1. This poet wrote "let thy mouth be heir to those who are now exanimate" in her poem beginning, "Yes, call me by my pet-name!" The answers to the opening question of another poem by this woman include "freely, as men strive for right" and "purely, as they turn from praise." For 10 points, name this poet whose *Sonnets from the Portuguese* include one beginning, "How do I love thee?"
ANSWER: Elizabeth Barrett **Browning** [or Elizabeth **Barrett**]

2. A character in this play is taught about her African heritage by Joseph Asagai, with whom she moves to Nigeria. Karl Lindner tries to buy out the central family of this play. In this play, Lena is the matriarch of a black family including Beneatha and Walter Lee that moves to a wealthier all-white neighborhood. For 10 points, name this play about the Younger family written by Lorraine Hansberry.
ANSWER: *A* ***Raisin in the Sun***

3. The Aufbau principle predicts this element should have an ending electronic configuration of 5s2, 4d9, but instead it is 4d10, 5s1 and has a plus one oxidation state. For an aqueous solution of potassium or sodium chloride, the addition of this element's nitrate will result in the precipitation of this element. This transition metal has the highest electrical conductivity of any element. For 10 points, what transition metal has atomic symbol Ag?
ANSWER: **silver** [or **Ag** until it is read]

4. Acetyl (uh-SEE-tul)-Co-A, N-A-D-H, and this molecule are produced when co-enzyme A oxidizes pyruvate (py-RU-vate). A certain buffer is interconverted by carbonic anhydrase (an-HY-draze) into water and this molecule. Glucose and oxygen are generated by water and fixation of this molecule in photosynthesis. For 10 points, name this molecule that is exchanged for oxygen in red blood cells and then exhaled, symbolized C-O-2.
ANSWER: **carbon dioxide** [or **CO2** before it is read]

5. A king with this name lost his only true heir in the sinking of the *White Ship*, which eventually led to a civil war known as the Anarchy. The second English king with this name married Eleanor of Aquitaine and legendarily asked "who will rid me of this troublesome priest?" in reference to his nemesis, the Archbishop of Canterbury, Thomas a Becket. For 10 points, what royal name was held by exactly eight kings of England?
ANSWER: **Henry**

6. This artist designed a plaza with a colonnade resembling arms locking visitors in a symbolic embrace. A sculpture created by this man is located in the Piazza Navona (nuh-VOH-nuh) and depicts the Rio de la Plata, Danube, Ganges, and Nile Rivers. This artist also sculpted an angel aiming a golden arrow at a nun. For 10 points, name this Baroque sculptor of the *Fountain of the Four Rivers* and *Ecstasy of Saint Teresa*.
ANSWER: Gian Lorenzo **Bernini** [or Giovanni Lorenzo **Bernini**]

7. A coordinate system named for this surface uses the coordinates rho, theta, and phi and is a three-dimensional example of polar coordinates. A diametrically opposite point to another point on these surfaces is an antipodal point. The shortest length between two points on them once defined a geodesic, which is a great circle for these surfaces. Their surface areas are equal to 4 pi times the radius-squared. For 10 points, name this three-dimensional analog of a circle.
ANSWER: **sphere**

8. The sine function is multiplied by this number in De Moivre's (MAWV-ray's) formula. The sign of some multiple of this number is reversed when taking the conjugate. Euler's (OY-ler's) number raised to pi times this number equals negative one. Multiples of this number appear along the y-axis of the complex plane, as opposed to real numbers along the x-axis. For 10 points, what number is the square root of negative one?
ANSWER: **i** [or **imaginary** number; or **imaginary** unit]

9. Fighting in this city took place during "Bloody Week," when its namesake Commune was attacked. This city was the subject of extensive renovations masterminded by Baron Haussmann. When converting to Catholicism, Henry IV noted this city "is well worth a mass." July 14 is a holiday celebrating the assault on a notorious prison in this city during the reign of Louis XVI. For 10 points, the storming of the Bastille occurred in what French city?
ANSWER: **Paris**

10. In 2015, this man released a document subtitled "On Care For Our Common Home," which denounced consumerism and global warming. He gained one million followers in the first twelve hours after he created an Instagram account in March 2016. This man chooses to live in a guest house as opposed to the Apostolic Palace, which is similar to his previous way of living as a cardinal in Argentina. For 10 points, name the current Pope of the Roman Catholic Church.
ANSWER: Pope **Francis** [or Jorge Mario **Bergoglio**]

11. After this war, the Platt Amendment dealt with removing troops from conquered territory. Legendarily, artist Frederic Remington was told by "yellow journalism" publisher William Randolph Hearst that the latter would "furnish" this war. During it, the Rough Riders made charged up San Juan Hill. Calls for this war intensified after the sinking of the battleship *Maine* in Havana. For 10 points, a victory in what 1898 war gave the U.S. Cuba and the Philippines?
ANSWER: **Spanish-American** War

12. This man, whose show used to include a "Pinheads and Patriots" segment, once said "You can't explain why the tide goes in" in his proof that God exists. With Martin Dugard, this person has authored the bestselling *Killing Reagan*, *Killing Kennedy* and *Killing Jesus* books. The ideas of politicians are said to be presented without bias in this man's "No Spin Zone." For 10 points, name this Fox News pundit, whose show is called his "Factor."
ANSWER: Bill **O'Reilly** [or William James "Bill" **O'Reilly** Jr.]

13. In Arabic and Eastern European countries, this fruit is named for Portugal. Jewish immigration into the Middle East in the early 20th century boosted the production of this fruit's Jaffa variety. The Moro is an example of the reddish "blood" variety of this fruit. Modern varieties of this fruit originate from crossbreeding between the pomelo and the mandarin. For 10 points, name this fruit, a top export of Florida and the main ingredient in Tropicana juice.
ANSWER: **orange**s

14. At the end of this novel, the protagonist finds that a factory has replaced the chapel when he visits his old home, a religious community called Lantern Yard. In this novel, the draining of a quarry leads to the discovery of Dunstan Cass's skeleton clutching the title character's stolen gold. For 10 points, name this novel in which the title "weaver of Raveloe" raises the infant Eppie, a work of George Eliot.
ANSWER: ***Silas Marner***

15. This king's nurse, Eurycleia, cried out in joy after seeing the scar on his thigh. This man traveled to Scheria (SCARE-ee-UH), where he tells his stories to King Alcinuous. For many years, he lived on the island of Ogygia (oh-JEE-gee-UH) with a nymph named Calypso. This man finally returned to his son Telemachus and his wife Penelope, who waited for him as the queen of Ithaca. For 10 points, name this man whose travels were the subject of an epic poem by Homer.
ANSWER: **Odysseus** (OH-dih-SEE-uss) [or **Ulysses**]

 **VHSL Regular Season 2016-2017 - Round 20 - Directed Period**

1A. What author of the sentimental novel *The Vicar of Wakefield* created Kate Hardcastle in his comedy *She Stoops to Conquer*?
ANSWER: Oliver **Goldsmith**

1B. Greeks thought that the "navel" of the world was at what town, whose sanctuary included an oracle called the Pythia?
ANSWER: **Delphi**

2A. What kind of force reduces the motion of an oscillating system?
ANSWER: **damping** force

2B. Merrick Garland has been nominated to become a member of what institution but is unlikely to be the subject of a vote?
ANSWER: the **Supreme Court** of the United States

3A. This is a 20-second calculation question. If a normally distributed data set has a mean of 50 and a standard deviation of 12. What is the z-score of a value of 80?
ANSWER: **5/2** [accept **2.5**]

3B. This is a 20-second calculation question. At how many points does the parabola y = 4x^2 + 3x + 5 intersect the x-axis?
ANSWER: **0** [accept **none** or **it does not** intersect the x-axis]

4A. What band behind "Say It Ain't So" released "Thank God for Girls" in 2015 to promote their fourth self-titled album?
ANSWER: **Weezer**

4B. What property of a sound wave is the quotient of the power of the wave and the surface area intercepting the wave?
ANSWER: **intensity**

5A. What ancient Mexican civilization is best known for creating massive stone representations of human heads?
ANSWER: **Olmec**s

5B. A singing chorus called *jaleo* (HAH-lay-OH) and guitar-playing called *toque* (TOH-kay) are elements of what Spanish dance?
ANSWER: **flamenco**

6A. What Scottish inventor created a namesake steam engine that uses a separate condenser and rotary motion and which was widely used during the Industrial Revolution?
ANSWER: James **Watt**

6B. Give the English translation of the German verb "*sein*" ("zyne"), whose conjugations include "*bin*" ("bin"), "*bist*" (rhymes with "list"), and "*sind*" ("zint").
ANSWER: to **be** [or the **copula**]

7A. What capital of the Democratic Republic of the Congo is the second most-populous French-speaking city, following Paris?
ANSWER: **Kinshasa**

7B. During a funeral, it is common to give what kind of speech that praises its subject?
ANSWER: **eulogy**

8A. This is a 30-second calculation question. If tangent of theta equals the square root of three, and theta lies in the first quadrant, what is the value of theta in radians?
ANSWER: **pi/3** radians

8B. This is a 30-second calculation question. What is the perimeter of a trapezoid with vertices at the origin, zero comma four, four comma four, and one comma zero?
ANSWER: **14**

9A. The nonfiction book *The Dragons of Eden* and the novel *Cosmos* were written by what popular science author?
ANSWER: Carl **Sagan**

9B. In what Shakespeare history does the title character deliver the St. Crispin's Day speech?
ANSWER: ***Henry V***

10A. What city was hit with terrorist bombings of its transit system on July 7, 2005?
ANSWER: **London**

10B. What English novelist wrote *A Sentimental Journey Through France and Italy* and *Tristram Shandy*?
ANSWER: Laurence **Sterne**

 **VHSL Regular Season 2016-2017 - Round 20 - Third Period, Fifteen Tossups**

1. During this conflict, over one thousand Jews were killed in Mainz, and the mysterious Peter the Hermit unsuccessfully led forces in Anatolia. It resulted in the creation of mini-states at places like Edessa and Antioch. This event began in 1095 when Urban II encouraged a crowd to chant "God wills it!" It ended with a 1099 siege of Jerusalem in which many Jews and Muslims were massacred. For 10 points, name this earliest attempt by Europeans to recapture the Holy Lands.
ANSWER: **First Crusade** [or **People's Crusade**; prompt on Crusade]

2. A protein named for this quality has a beta barrel motif and an emission peak around 509 nano-meters. The bio-luminescent jellyfish *Aequorea* (ee-KWOR-ee-uh) *victoria* is the source of that protein named for this quality. Cyanobacteria (sy-AN-oh-"bacteria") are also incorrectly called blue-*this color* algae. For 10 points, name this color of chlorophyll (KLOR-uh-fill).
ANSWER: **green** [or other shades of **green**; prompt on color]

3. In a novel by this author, the supernatural investigator Dr. Montague rents the title residence and invites Eleanor Vance as his guest. This author of *The Haunting of Hill House* wrote a story in which Old Man Warner champions the title activity and Tessie Hutchinson loses the title event. For 10 points, name this American author who wrote about a ritual stoning in "The Lottery."
ANSWER: Shirley **Jackson**

4. The divine being in this religion is known as the "One Supreme Reality" and is represented by a symbol called the "Ik Onkar." This religion's "Five Ks," such as the use of a wooden comb and keeping uncut hair, apply to members who are part of the Khalsa (CALL-sah). This religion teaches that Gobind Singh was succeeded as leader by a scripture known as the Adi (AH-dee) Granth. For 10 points, what Punjabi religion was founded by Guru Nanak?
ANSWER: **Sikh**ism (SEEK-ism) [or **Sikhi**]

5. This war was interrupted with a six-year peace named for Nicias. A man who kept defecting during this war, Alcibiades (AL-suh-by-uh-DEES), proposed a disastrous expedition to attack Syracuse, a city on the island of Sicily. After this war, a city fell under the rule of the "Thirty Tyrants," who supported Lysander. Thucydides (THOO-sid-uh-DEES) wrote a history of this conflict. For 10 points, what ancient war ended with Sparta defeating Athens?
ANSWER: **Peloponnesian** (PELL-uh-po-NEES-ee-an) War

6. This is the most common instrument to make use of an endpin that extends from its bottom. Jacqueline du Pré (doo "PRAY") played this instrument, for which Antonín Dvořák wrote a B minor concerto. It has a solo in "The Swan" by Camille Saint-Saëns (seng-"SONGS"), and it is the lowest-pitched instrument in a string quartet. Its strings are tuned to the same notes as a viola, but an octave lower. For 10 points, name this instrument played by Yo-Yo Ma.
ANSWER: **cello** [or **violoncello**]

7. This author addressed an essay to his nephew on the hundredth anniversary of emancipation. That essay by this man, "My Dungeon Shook," opens his book *The Fire Next Time.* He used his experiences with his religious fanatic stepfather as inspiration for a novel that begins on the fourteenth birthday of John Grimes. For 10 points, name this African-American novelist who wrote *Go Tell It on the Mountain*.
ANSWER: James **Baldwin**

8. At non-standard-state conditions, the change in this quantity equals the change in its standard-state form plus R T times the natural log of the reaction quotient. Unlike a similar quantity named for Helmholtz, this quantity quantifies the maximum amount of work that can be performed by a system. This quantity is given by the formula enthalpy minus temperature times entropy. For 10 points, what quantity is negative for spontaneous reactions and is symbolized G?
ANSWER: **Gibbs** free **energy** [or **G** until it is read; or **Gibbs function**; or **free enthalphy**; prompt on free energy]

9. This woman posed as a governess during the ill-fated flight to Varennes (VAH-renz) with her husband. Her popularity decreased after a con artist tried to trick her in the Affair of the Diamond Necklace. The youngest child of Maria Theresa, she married at 14 years old. There is no evidence this woman actually said "Let them eat cake" in response to peasants. For 10 points, what wife of Louis XVI was executed during the French Revolution?
ANSWER: **Marie Antoinette** [or **Maria Antonia** Josepha Johanna von Habsburg-Lothringen]

10. The Kashi Vishwanath temple is one of the most holy sites sacred to this god. This god is sometimes called Nataraja (NOTT-uh-RAHJ-uh), meaning "Lord of the Dance," and he lives with his wife Parvati on Mount Kailasa. This god drank the *halahala* poison during the Churning of the Ocean, which is why he is often shown with a blue throat. This god, Brahma, and Vishnu comprised the *Trimurti*. For 10 points, name this Hindu god who is often called the "Destroyer."
ANSWER: **Shiva**

11. A carcass of this type of animal is preserved in Damien Hirst's artworks *The Kingdom* and *The Phyiscal Impossibility of Death in the Mind of Someone Living*. A man stabs this animal in an attempt to save Brook Watson in a John Singleton Copley painting. Several of these animals approach a man in a Winslow Homer painting. For 10 points, name these aquatic predators depicted in *The Gulf Stream*.
ANSWER: **shark**s [or **tiger shark** before "Brook"]

12. A controversial character on this show was the "hip" Roosevelt Franklin. In a sad episode of this show, adults explain that store owner Mr. Hooper has died. Recently, this show's producers announced the departure of several human characters like Bob and Gordon. In 2016, original episodes of this show moved to HBO, although they will eventually still air on PBS stations. For 10 points, what children's show features characters like Big Bird?
ANSWER: ***Sesame Street***

13. The southern half of this object was proposed by Eduard Suess based on the distribution of *Glossopteris* ferns. The break-up of this object created the Tethys Ocean. Alfred Wegener (VEY-guh-nuhr) coined the name for this entity, which was surrounded by a super ocean called Panthalassa. It was formed by the merger of Laurasia and Gondwana (gond-WAH-nuh). For 10 points, what supercontinent once contained all the landmasses on Earth?
ANSWER: **Pangaea** (Pan-GEE-uh)

14. In 1959, nine hikers mysteriously disappeared at this mountain range's Dyatlov Pass. The most powerful nuclear explosion occurred on Novaya Zemlya, an island extension of this mountain range. Cities in this mountain range include the steel-producing city of Magnitogorsk, as well as Perm and Yekaterinburg. This range extends into western Kazakhstan. For 10 points, name this mountain range that separates the European and Asian parts of Russia.
ANSWER: **Ural** Mountains

15. Alvin Hansen is often held to be the American version of this man, who advocated higher taxation to fund World War II in his 1940 text *How to Pay for the War*. This man called for increased deficit spending in times of economic distress in a book challenging neoclassical ideas published during the Great Depression. For 10 points, name this economist who wrote the *General Theory of Employment, Interest and Money*.
ANSWER: John Maynard **Keynes** (CAINS)

 **VHSL Regular Season 2016-2017 - Round 20 - Tiebreaker Questions**

1. In a story by this author, a girl has her feet amputated when she is unable to remove the title footwear, which never stops dancing. This author of "The Red Shoes" wrote about a one-legged toy who melts into a heart. In another of his stories, the title character trades her voice to the sea witch in exchange for human legs. For 10 points, name this Danish author of fairy tales including "The Steadfast Tin Soldier" and "The Little Mermaid."
ANSWER: Hans Christian **Andersen**

2. This man became the secretary of the Earl of Shaftesbury after curing his liver disease. This philosopher argued that ideas were acquired either by sensation or reflection, which corresponds to his distinction between complex and simple ideas. He believed that the mind was a blank slate at birth, which would be dubbed the tabula rasa. For 10 points, name this writer of *An Essay Concerning Human Understanding* and *Two Treatises of Government*.
ANSWER: John **Locke**

3. This location's opening date on July 17, 1955, was known as "Black Sunday" because of its many disasters. Doritos were first sold here, which Soviet leader Nikita Khrushchev (KROOSH-cheff) was famously not allowed to visit. This American location contains "Critter Country," a sub-location not found at this place's counterpart in Orlando, Florida. For 10 points, what theme park in Anaheim, California, is home to Sleeping Beauty Castle?
ANSWER: **Disneyland** Park

4. This man's decision to give the royalties from his book *A Journey* to a rehab center for wounded soldiers was called "blood money." George W. Bush once used the informal greeting "yo, what are you doing?" to greet this person. Gordon Brown replaced this man in his highest post amid public frustration over his support for the wars in Afghanistan and Iraq. For 10 points, who was the longest-serving British Prime Minister from the Labour Party?
ANSWER: Anthony "Tony" **Blair**

5. These things can undergo lytic (LIH-tic) and lysogenic (lye-suh-JEN-ik) cycles. Some types of these things use reverse transcriptases ("transcript"-azes). These things consist of a capsid surrounding RNA or DNA, which they insert into host cells. Phages are a type of them that infect bacteria. For 10 points, name these infectious agents that can cause diseases like influenza and ebola.
ANSWER: **virus**es [or bacterio**phage**s before "phage" is read]

Julius has a square whose diagonal is the square root of 2 units. What is the area of the square?
ANSWER: **1** units squared

What 20th-century British poet wrote "The Unknown Citizen," "Funeral Blues," and "September 1, 1939"?
ANSWER: W. H. **Auden** [or Wystan Hugh **Auden**]