**VHSL Regular Season 2016-2017 - Round 15 - First Period, Fifteen Tossups**

1. This Asian city was the site of May 4th Movement protests against the Treaty of Versailles (VER-sigh). Other protests in this city were sparked by the 1976 death of Zhou (JOE) Enlai. A man carrying a shopping bag standing in front of a row of tanks was photographed here. The Tiananmen (TEE-ann-UH-men) Square protests took place in this city, demanding reform from the Communist government. For 10 points, what Chinese city was once known as Peking?
ANSWER: **Beijing** [or **Beiping**; or **Peking** until it is mentioned]

2. The Muppets' cover of this song features Animal repeating the word "mama." Years after its release, this song hit #2 on the Billboard charts after it was featured in the movie *Wayne's World*. High-pitched and low-pitched voices take turns singing "Galileo" in this song, which ends with the line "Any way the wind blows" and a gong strike. For 10 points, name this song by Queen that asks "Is this the real life? Is this just fantasy?"
ANSWER: "**Bohemian Rhapsody**"

3. When Erik Bloodaxe visited this location, he met a figure who had runes on his tongue and was the god of poetry, Bragi. Residents of this location eat a boar that is cooked whole every night and is subsequently revived the next morning. This location, which is occupied by the *Einherjar*, has 540 doors that men can walk through. Valkyries lead half of the men who died in combat to this location in Asgard. For 10 points, name this "hall of the slain" from Norse mythology.
ANSWER: **Valhalla**

4. This person's namesake "Mysteries" included the belief that the universe was born from a silver egg laid by Aion. This man's wife died after Aristaeus pursued her, causing a snake to bit her heel. Though he was able to convince the deities Hades and Persephone (PURR-seff-UH-nee) to revive his dead wife, he lost her a second time after he turned around too soon to gaze at her. For 10 points, Eurydice was the wife of what Greek musician who played the lyre?
ANSWER: **Orpheus**

5. A pope with this name wrote a document called the Syllabus of Errors that attacked the secularization of Europe. This was the name of a pope known as the "Prisoner of the Vatican" because of the conquest of the Papal States. The concept of papal infallibility was confirmed at the First Vatican Council convened by a pope with this name. For 10 points, the ninth pope to use what name reigned from 1846 to 1878, the longest reign of elected popes?
ANSWER: **Pius** [or **Pio**; or **Pius IX**]

6. This country is the only one divided into voivodships (VOY-vode-ships). It's not in Asia, but the second-largest group of immigrants in the United Kingdom is from this country. Pastries called paczki (PAWNCH-kee) originated here and are eaten before Lent. This homeland of Pope John Paul II does most of its trade through the port of Gdansk (guh-DANSK). Kielbasa sausage originates from, for 10 points, what central European country headed from Warsaw?
ANSWER: **Poland** [or Republic of **Poland**; or Rzeczpospolita **Polska**]

7. Cells in a type of this tissue are linked by intercalated (in-TURK-uh-lay-ted) discs containing gap junctions. Some types of this tissue are striated (STRY-ay-ted) due to their arrangement of sarcomeres (SAR-ko-meerz). Myocytes (MY-oh-sites) in this tissue generate force with sliding actin and myosin filaments. It includes "smooth" and "cardiac" types. For 10 points, name this contractile tissue that is attached to bones through tendons and includes the biceps.
ANSWER: **muscle** [or skeletal **muscle**; or cardiac **muscle** before it is read; or smooth **muscle** before it is read]

8. The size of these things can be estimated using the mark-recapture method and must be extremely large to permit Hardy-Weinberg equilibrium. A sudden decrease in them can cause the bottleneck effect. These things increase with immigration and births and decrease with deaths. For 10 points, name these systems consisting of individuals of the same species living in a given area, and which for humans is over 7 billion.
ANSWER: **population** [or **population** size]

9. This man's "giant ship," which carried an 800-man crew, was later found during the building of an Italian airport. He's not Persian, but he once used ships as pontoons to make a two mile long bridge he could ride his horse across. This ruler was known by a nickname meaning "little soldier's boot." The Praetorian (PRAY-tore-EE-un) Guard ultimately killed him, and the throne passed to Claudius. For 10 points, what Roman emperor wanted to make his horse a consul?
ANSWER: **Caligula** [or Gaius **Julius Caesar Germanicus**]

10. In 2007, this future politician played a soldier in the miniseries *The Great War*. When he took power, he proclaimed "government by cabinet is back" and was the youngest leader of his country since Joe Clark. This man led the Liberal Party to a gain of 150 seats, the largest such increase in his country's history, which also led to the resignation of Conservative Leader Stephen Harper. For 10 points, name this current Prime Minister of Canada.
ANSWER: **J**ustin **Trudeau** [prompt on Trudeau]

11. This film's director borrowed Alfred Hitchcock's dolly-zoom shot in a scene where the protagonist witnesses a fatal attack on a young boy. In this film, a man gets the attention of an out-of-control meeting by slowly scratching a chalkboard. This film's antagonist is killed when Police Chief Martin Brody perches on the mast of a sinking ship and shoots a scuba tank in the animal's mouth. For 10 points, name this Steven Spielberg film about a giant killer shark.
ANSWER: ***Jaws***

12. This novel's title character is disturbed by the psychiatrist Sir William Bradshaw, who treats the husband of the Italian immigrant Rezia. In this novel, Peter Walsh reflects on his rejection by the title character. The traumatized World War I veteran Septimus Smith commits suicide by jumping out a window in this novel. For 10 points, name this novel about the party host Clarissa written by Virginia Woolf.
ANSWER: ***Mrs. Dalloway***

13. In a novel by this author, the protagonist rises in the scholarly world of Castalia to the eventual rank of Magister Ludi. This author of *The Glass Bead Game* wrote about Emil Sinclair's interactions with the title character in *Demian* (DAY-mee-in). He also wrote a novel about a man who becomes an ascetic with Govinda (go-VIN-duh) and shares his name with the Buddha. For 10 points, name this German novelist who wrote *Siddhartha.*
ANSWER: Hermann **Hesse** (HESS-uh)

14. This number results when dividing the diagonal of a regular pentagon by one of its sides. This number is the positive root of x squared minus x minus one, as it is equal to one plus the square root of five, all divided by two. It's the limit of the ratio of successive terms in the Fibonacci (FIB-oh-NOTCH-ee) sequence. When *a* over *b* equals equals *a* plus *b*, over *a*, both expressions equal this constant. For 10 points, what number is equal to about 1.618?
ANSWER: **golden** ratio [or **phi**; or **golden** mean; or **golden** section; or **golden** proportion; or **golden** cut; or **golden** number; or **extreme and mean ratio**; or **medial section**; or **divine** in place of "golden"]

15. The "straight-line" form of this phenomenon causes events called derechos (duh-RAY-"shows"). The rain shadow effect creates the foehn (fun) example of this phenomenon, also known as a chinook. It is responsible for aeolian (ee-OH-lee-ihn) processes. The Beaufort scale classifies the speed of this phenomenon based on sea conditions, with a "gale" being a moderate example. For 10 points, name this bulk movement of air, whose gentler forms include a breeze.
ANSWER: **wind**s

 **VHSL Regular Season 2016-2017 - Round 15 - Directed Period**

1A. Raymond Chandler's character Philip Marlowe holds what occupation in various short stories and novels?
ANSWER: private **detective** [or **investigator**; or **P.I.**; or **private eye**]

1B. What female President of Brazil is currently facing impeachment charges related to accusations of corruption?
ANSWER: Dilma **Rousseff**

2A. What agreement consisted of the original unifying government for the thirteen states prior to the ratification of a new Constitution in 1788?
ANSWER: **Articles of Confederation** and Perpetual Union

2B. What Greek mathematician names the theorem that the square of the length of the hypotenuse of a right triangle equals the sum of the squares of the side lengths?
ANSWER: **Pythagoras** (pie-THAG-or-US) of Samos [or **Pythagorean** theorem]

3A. This is a 20-second calculation question. What is the cotangent of two hundred seventy degrees?
ANSWER: **0**

3B. This is a 20-second calculation question. A farm raises only ducks and goats. If there are 15 animals on the farm, and the total number of legs is 56, how many ducks are on the farm?
ANSWER: **2**

4A. What musical key has one flat in its signature, and is relative to D minor?
ANSWER: **F** major [do not accept "F minor"]

4B. What predecessor of Vladimir Putin became the first President of the Russian Federation after the collapse of the Soviet Union?
ANSWER: Boris **Yeltsin**

5A. What Scottish diarist wrote *The Life of Samuel Johnson*?
ANSWER: James **Boswell**

5B. What former player for the Bucks and Lakers holds the NBA record for all-time points scored, and was known for his trademark "skyhook"?
ANSWER: Kareem **Abdul-Jabbar** [or Lew **Alcindor**]

6A. What word for a seasonal reversal of wind patterns that brings heavy rains common to Southeast Asia takes its name from the Arabic for "season"?
ANSWER: **monsoon**

6B. What river, which forms the border between Washington and Oregon, was known for its heavy salmon production?
ANSWER: **Columbia** River

7A. The damage caused by a tremor is used to measure the intensity of an earthquake on the scale named for what Italian geologist?
ANSWER: Giuseppe **Mercalli**

7B. What Greek hero rode the horse Pegasus and killed the Chimera?
ANSWER: **Bellerophon**tes

8A. This is a 30-second calculation question. What is the difference between the median and the mean of the first ten positive integers?
ANSWER: **0**

8B. This is a 30-second calculation question. Two adjacent sides of a triangle measure 10 inches and 12 inches. If the area of the triangle is 30 square inches, find the measure, in degrees, of the angle between the 10-inch and 12-inch sides.
ANSWER: **30** degrees

9A. What Queen of England was reigning during the 1707 Acts of Union that combined England and Scotland to form Great Britain?
ANSWER: **Anne**

9B. What powerful oxidizing agent has the chemical formula O 3?
ANSWER: **ozone** [prompt on trioxygen]

10A. What contemporary Italian author wrote *Cosmicomics* and *If on a winter's night a traveler*?
ANSWER: Italo **Calvino**

10B. A reverend gives his name to what speech error, in which the initial sounds of words are swapped, as in "a lack of pies" instead of a "pack of spies"?
ANSWER: **spoonerism**

 **VHSL Regular Season 2016-2017 - Round 15 - Third Period, Fifteen Tossups**

1. This composer's three *Marches militaires* ("MARSH" mee-lee-"TARE") are often transcribed for full orchestra. During his time, he was best-known for art songs, or *lieder* ("leader"), such as "Der Erlkonig" ("dare" "EARL"-koh-neeg), and quoted many of them in pieces such as the *Trout* Quintet. Due to his early death, this composer only managed to write two movements of his eighth symphony. For 10 points, name this composer of the *Unfinished* Symphony.
ANSWER: Franz **Schubert** [or Franz Peter **Schubert**]

2. The speaker of this poem recalls how he has "paddled in the burn" and "run about the braes" with the addressee. The chorus of this poem states "we'll take a cup of kindness yet" for the title times. It begins by asking, "Should old acquaintance be forgot, and never brought to mind?" For 10 points, name this poem by Robert Burns traditionally sung to celebrate New Year's.
ANSWER: "**Auld Lang Syne**"

3. The most devoted members of this faith are part of the "Sea Org," which requires members to sign billion year contracts. David Miscavige (MISS-cah-VIHJ) leads this faith, whose attacks on the U.S. government were documented in the book *Going Clear*. The tenets of this faith were documented in the book *Dianetics*. For 10 points, what religion was founded by science fiction author L. Ron Hubbard and is popular among Hollywood celebrities?
ANSWER: **Scientology**

4. In a novella by this man, the protagonist visits the criminal Sally Tomato in Sing Sing. In that novella by him, the socialite protagonist calls the unnamed narrator "Fred" because he looks like her brother. This man created Holly Golightly and wrote about the murder of the Clutter family in a non-fiction novel. For 10 points, name this American author of *Breakfast at Tiffany's* and *In Cold Blood.*
ANSWER: Truman **Capote**

5. In a movie by this director, an android unnerves another man by performing an extremely fast five-finger fillet. A 1997 movie by this director won eleven Academy Awards, tying the record held by *Ben-Hur*. In 2009 this director released a mega-successful 3D science fiction movie set on the moon Pandora and featuring humanoid aliens called the Na'vi (NAH-vee). For 10 points, name this Canadian director of blockbusters such as *Titanic* and *Avatar.*
ANSWER: James **Cameron**

6. The "gas" type of this technique often follows mass spectroscopy. The results of this technique are plotted against retention time. Molecules adsorb at different rates to a silica gel plate in the thin-layer form of this technique. In this technique, components of the mobile phase are separated, based on polarity or size, by the stationary phase. For 10 points, the paper type of what technique can be used to separate the pigments that make up black ink?
ANSWER: **chromatography**

7. A book named for this city by John Hersey tells the story of six of its residents. An attack on it targeted the Aioi (ay-oy) Bridge. That attack on this city was alluded to in the Potsdam Declaration, which vaguely promised "utter devastation." On August 6, 1945, Paul Tibbets dropped "Little Boy" over this city while flying the plane *Enola Gay*. For 10 points, what Japanese city was targeted with the first dropping of an atomic bomb?
ANSWER: **Hiroshima**

8. A woman in this play tells her nephew that "health is the primary duty of life" and that his invalid friend Mr. Bunbury needs to make up his mind to live or die. A man in this play falls in love with his friend's ward Cecily Cardew and tries to escape the nagging of Lady Bracknell. For 10 points, name this comedy in which Algernon Moncrieff and Jack Worthing pretend to have the same name, a work of Oscar Wilde.
ANSWER: *The* ***Importance of Being Earnest***

9. An ancient entrance into a building in this city is called Warren's Gate. In this city, the Pierced Stone has a small hole that allows people to enter the Well of Souls. More than a million notes containing prayers are placed into the crevices of a structure in this city. A legislature called the Knesset (kuh-NESS-ett) is located here. Its Old City is home to the Western Wall and the Dome of the Rock. For 10 points, what city in Israel is considered holy by three major religions?
ANSWER: **Jerusalem**

10. During this period, many composers collected dances such as gavottes (gah-VAWTS) and bourrées (boo-"RAYS") into suites called "partitas." The harpsichord was the primary keyboard instrument in this period, whose name comes from a word for "misshapen pearl." The Renaissance was followed by this period, during which George Frideric Handel and J.S. Bach lived. For 10 points, name this period of music which came before the Classical era.
ANSWER: **Baroque** (buh-ROKE) period

11. A member of this family proposed a domestic program called the "New Frontier." This family included a New York Senator and Attorney General who was killed by Palestinian radical Sirhan Sirhan. The death of one of its members was investigated by the Warren Commission. That member of this family was killed on November 22, 1963, by Lee Harvey Oswald. For 10 points, what family's members include an assassinated U.S. President named John?
ANSWER: **Kennedy** [or John Fitzgerald **Kennedy**; or Robert **Kennedy**; prompt on JFK; prompt on RFK]

12. In this modern-day country, Pelagius won the Battle of Covadonga to form a new kingdom. A force *coming* from this modern-day country was stopped at the Battle of Tours by Charles Martel. It contained the majority of the land that made up the Muslim territory Al-Andalus, which faced rebellions by Christians in the Reconquista (ree-CONE-kees-ta). For 10 points, what modern-day country had such medieval kingdoms as Castile?
ANSWER: Kingdom of **Spain**

13. The "menu" type of this concept occurs when businesses must change their prices, usually as a result of inflation. A firm's production is often analyzed by using "fixed" and "variable" types of this concept for each item it has produced. The value of an alternative that is foregone defines the "opportunity" type of this concept. A type of analysis pairs this concept with "benefit." For 10 points, name this concept, which is the amount of value needed to produce something.
ANSWER: **cost**

14. This quantity decreases when a fluid flows through a constricted section of a pipe in the Venturi effect. An increase in it caused by fluid in a vertical tube inserted in a barrel can result in a burst barrel. Work can be defined as the product of change in volume and this quantity. For an object in a fluid, it's equal to the product of fluid density, gravity, and the depth of the object. For 10 points, what quantity defined as the force per unit area on an object is measured in Pascals?
ANSWER: **pressure** [or **p**]

15. The CCR5 delta-32 mutation confers resistance to infection with this disease. This disease is often treated with a HAART triple cocktail containing AZT. The agent that causes this disease destroys CD4-plus T cells, making patients more susceptible to opportunistic infections. For 10 points, name this pandemic concentrated in sub-Saharan Africa and caused by the human immunodeficiency virus, HIV.
ANSWER: **AIDS** [or **acquired immunodeficiency syndrome**; or HIV-**AIDS**; prompt on human immunodeficiency virus and HIV before they are read]

 **VHSL Regular Season 2016-2017 - Round 15 - Tiebreaker Questions**

1. This state's Mount Monadnock is the most frequently hiked mountain in the U.S. A World War II-era economic conference was held in this state's Bretton Woods. A wind speed of 231 miles per hour was recorded on this state's Mount Washington. This state, which only has eighteen miles of coastline, was once home to the Old Man of the Mountain. For 10 points, name this New England state located between Vermont and Maine.
ANSWER: **New Hampshire**

2. This organ's uvea (YU-vee-uh) includes the ciliary (SIL-ee-ary) body, which separates its posterior chamber and vitreous (VIH-tree-us) body. Part of the outer surface of this organ is coated by the sclera (SCLARE-uh), which is itself covered by the conjunctiva (con-junk-TYE-vuh). It is damaged by the increased pressure exerted by aqueous humor build-up in glaucoma. This organ contains rod and cone cells in its retina. For 10 points, what organ enables vision?
ANSWER: **eye** [anti-prompt on lens; anti-prompt on retina before it is read]

3. Sections titled "The Open Prairie" begin and end this composer's ballet about a Western outlaw. His clarinet concerto was written for the "king of swing," Benny Goodman. He wrote a ballet featuring variations on the hymn "Simple Gifts," and celebrated the rise of the middle class with his *Fanfare for the Common Man*. In one of his ballets, a group of pioneers settles in the title mountain range. For 10 points, name this composer of *Appalachian Spring*.
ANSWER: Aaron **Copland**

4. This author created a man who loses his taste for milk and disturbs three lodgers for whom his sister plays the violin. In a story by this author, prisoners in the title location have their sentences engraved into their backs. In another story, this author of "In the Penal Colony" wrote about Gregor Samsa's transformation into a giant insect. For 10 points, name this Czech-German author of "The Metamorphosis."
ANSWER: Franz **Kafka**

5. Near the end of this war, thousands of soldiers died in the Battle of Pork Chop Hill. 75,000 troops during it staged a successful amphibious invasion at Inchon. The armistice that ended this war created a Demilitarized Zone around the 38th parallel north. During it, Douglas MacArthur was relieved of command because of his aggressive stance towards China. For 10 points, what war began in 1950 when a Communist Asian country invaded its southern neighbor?
ANSWER: **Korean** War

Henry places ten slips of paper with the integers 1 through 10 in a hat. He draws out a slip of paper, replaces it, then draws out another. Find the probability that the number on the first slip of paper that Henry drew was greater than the number on the second.
ANSWER: **9/20** [or **0.45**]

What compound with chemical formula C 6 H 6 is a prototypical cyclic, aromatic hydrocarbon?
ANSWER: **benzene**