**VHSL Regular Season 2016-2017 - Round 23 - First Period, Fifteen Tossups**

1. Topoisomerase (toh-poh-eye-SAWM-uh-raze) temporarily breaks a molecule in this process in order to relieve tension downstream from a namesake "fork." The Meselson-Stahl experiment showed that this process was semi-conservative. Okazaki fragments form on the lagging strand during it, and helicase (HEEL-uh-kace) unwinds a namesake molecule for this process to begin. For 10 points, name this process of copying a cell's genetic material.
ANSWER: DNA **replication** [or **DNA synthesis**]

2. In this film, a conversation in a parlor features many low-angle shots framing the antagonist against his taxidermied birds. In this film, a detective named Arbogast (AR-buh-gast) pursues a woman who embezzled $40,000 entrusted to her by her employer. Marion Crane is murdered at a motel run by Norman Bates in this film. For 10 points, name this Alfred Hitchcock horror film with an iconic "shower scene."
ANSWER: ***Psycho***

3. This band sang the line "This is why we're biting the bullet, we know the kids are right," and took their name from a Police song that begins "Giant steps are what you take." This band, who described a "discotheque Juliet teenage dream," released the album *Talking Is Hard* and the song "Different Colors." This band's top-selling single begins "Oh, don't you dare look back, just keep your eyes on me." For 10 points, name this band who recorded "Shut Up and Dance."
ANSWER: **Walk the Moon**

4. This phenomenon is defined as that "which nothing greater can be conceived" by Anselm as part of his ontological argument for its existence. An argument for the belief of the existence of this concept states that the rewards for believing are the "infinity of an infinitely happy life to gain." That argument for this entity's existence, which is presented in the book *Pensees*, is a "wager" named for Blaise Pascal. For 10 points, name this all-powerful deity from Christianity.
ANSWER: **God**

5. William Wordsworth used this poetic meter to write his autobiographical epic *The Prelude.* Heroic couplets consist of two end-stopped, rhyming lines written in this poetic meter. When it is unrhymed, this poetic meter is called blank verse. For 10 points, name this poetic meter consisting of five two-syllable feet that was used by William Shakespeare to write his plays.
ANSWER: **iambic pentameter** [or **blank verse** before it is read; prompt on iambic; prompt on pentameter]

6. Males of a species in this paraphyletic (pare-uh-fuh-LET-ic) group attack anything red during mating season; that species of these animals is a type of stickleback. Sympatric (sim-PAT-rik) speciation occurred within a family in this clade called cichlids (SIK-lids) living in Lake Victoria. Coelacanths (SEE-luh-canths) are a lobe-finned member of, for 10 points, what general group of aquatic animals that includes eels and salmon?
ANSWER: **fish** [or **stickleback** before it is read]

7. The luminosity of these structures and their angular velocity are related by the empirical Tully-Fisher relation. The Hubble tuning fork diagram categorizes these objects based on their morphology. The Large and Small Magellanic Clouds are examples of the "dwarf" variety of these objects. There are "elliptical" and "spiral" types of these gravitationally bound objects. For 10 points, name these large collection of stars, which include the Milky Way.
ANSWER: **galaxy** [or **galaxies**; or spiral **galaxies**]

8. The fluoro-antimonic example of this type of compound is part of a class of them prefixed with "super-". The negative log of a dissociation constant, named for this type of compound, is used in the Henderson-Hasselbalch equation. Johannes Bronsted and Thomas Lowry defined this type of compound as a proton donor. They turn blue litmus paper red. For 10 points, what type of compound has a pH less than 7.0 and includes hydrogen chloride, found in the stomach?
ANSWER: **acid** [or super**acid**; or Lewis **acid**; or Bronsted-Lowry **acid**]

9. A man with this title witnessed Henry IV standing in the snow at Canossa (KUH-noe-SUH) to show humility. Another man with this title, Gregory, is the namesake of a type of plainchant. During the 1300's, the person holding this title resided in Avignon (AH-vee-ON), France. While holding this title, Leo IX began the Great Schism (SKIZ-em) against the Eastern Orthodox Church. For 10 points, what title is bestowed upon the head of the Catholic Church?
ANSWER: **pope** [or **pontiff**; or **Bishop of Rome**]

10. A leader in this movement was a Toledo mayor nicknamed "Golden Rule" Jones. Many of its ideas were implemented in the "Wisconsin Idea" of Robert La Follette. This movement led to the ratification of the Seventeenth Amendment, which changed how senators were elected. Activists in this movement promoted using initiatives and referendums to increase direct democracy. For 10 points, what early 20th century reform movement fought political corruption?
ANSWER: **Progressive** movement

11. This country's first president was the main European leader of the Non-Aligned Movement. In 1948, it was expelled from Cominform as part of its socialist leader's split with Joseph Stalin. During the 1980's, the territory of Kosovo was part of this now defunct country. Its longtime leader was former partisan leader Josip Broz Tito. For 10 points, what European country eventually broke up into such other countries as Croatia and Serbia?
ANSWER: Socialist Federal Republic of **Yugoslavia**

12. A city on this sea began the MOSE Project to prepare for potential floods. The walled city of Dubrovnik lies on the Dalmatian coast of this sea. The Strait of Otranto at the southern end of this sea was crossed by troops invading Albania in World War II. In 2006, Montenegro's independence caused Serbia to lose access to this sea. For 10 points, name this arm of the Mediterranean Sea that was once dominated by Venice.
ANSWER: **Adriatic** Sea [prompt on Mediterranean Sea until it is read]

13. This poem's speaker tells the addressee "for you the bugle trills" and asks him to "rise up and hear the bells." This poem's speaker laments "the bleeding drops of red" after telling the title man "our fearful trip is done." This poem, whose title figure lies "fallen cold and dead" on the deck of a ship, is an allegory for the death of Abraham Lincoln. For 10 points, name this poem by Walt Whitman.
ANSWER: "**O Captain! My Captain!**"

14. In a play by this author, the title character frantically plays the piano before shooting herself after she has been blackmailed by Judge Brack. In another play by this author, Christine Linde reunites with Nils Krogstad, who gives up his attempts to blackmail Torvald's wife Nora Helmer. For 10 points, name this Norwegian playwright who wrote *Hedda Gabler* (HED-uh GOB-ler) and *A Doll's House.*
ANSWER: Henrik **Ibsen**

15. Pausanias claimed that the masonry built nearby Mycenae was so large that only these mythical creatures could have constructed it. Three of these creatures named Sterope, Brontes, and Arges created thunderbolts for Zeus. Odysseus tells one of these creatures that his name is "Nemo" or "No one." Polyphemus (PAUL-lee-FEE-muss) was one of these creatures. For 10 points, name this race of mythical creatures with only one eye.
ANSWER: **Cyclops**es [prompt on one-eyed giants]

 **VHSL Regular Season 2016-2017 - Round 23 - Directed Period**

1A. What TV show character, played by Kristen Bell, investigates the murder of her friend Lilly while attending Neptune High School?
ANSWER: **Veronica** Mars [or **Mars**]

1B. The Greek words for "all" and "cure" give their name to what English word meaning a medicine that cures all ailments?
ANSWER: **panacea** (PAN-uh-SEE-uh)

2A. What term for popular lowbrow mass-produced art likely takes its name from a German verb meaning "to gather street mud"?
ANSWER: **kitsch**

2B. What Dominican-American novelist wrote *The Brief Wondrous Life of Oscar Wao*?
ANSWER: Junot (JUNO) **Diaz**

3A. This is a 20-second calculation question. There are 4 monks with an average age of 42; when a fifth monk joins the average of the new group is 40. What is the age of the fifth monk?
ANSWER: **32**

3B. This is a 20-second calculation question. Boris has a cube whose surface area measures to 54 square centimeters. What is the length of all of the edges of Boris's cube in centimeters?
ANSWER: **36** centimeters

4A. What city's Ataturk Airport was the target of a June 2016 terrorist attack that killed 44 civilians?
ANSWER: **Istanbul** [or **Constantinople**]

4B. What Central American country's socialist government was the target of revolutionaries known as the "contras"?
ANSWER: Republic of **Nicaragua**

5A. What friend of Charles Dickens wrote the mystery novel *The Moonstone*?
ANSWER: Wilkie **Collins**

5B. What term denotes a large, stable system of rotating ocean currents caused by the Coriolis effect, including the North Pacific example that contains the Great Pacific Garbage Patch?
ANSWER: **gyre**s (GIRE)

6A. What artist's large painting *The Wedding at Cana* lies across the *Mona Lisa* in the Louvre?
ANSWER: Paolo **Veronese**

6B. What sprawling construction project in the United States was completed in May 1869 at Promontory Summit, Utah?
ANSWER: transcontinental **railroad**

7A. Albert Einstein successfully explained what phenomenon, which was discovered by its namesake botanist while he was observing pollen grains in water?
ANSWER: **Brownian** motion

7B. What modernist poet and fascist pioneered Imagism and wrote *The Cantos*?
ANSWER: Ezra **Pound**

8A. This is a 30-second calculation question. A boat sails in the direction south thirty degrees west for forty miles and stops. How far is the boat west of its starting point?
ANSWER: **20** miles

8B. This is a 30-second calculation question. What are the solutions to the equation negative seven x equals the absolute value of the quantity x-squared plus ten?
ANSWER: x = **-2**, x = **-5**

9A. What powerful weapon with range of over 300 yards was used with devastating results by the English in early battles of the Hundred Years War?
ANSWER: English **longbow** [or Welsh **longbow**; prompt on bow]

9B. What former Mercury Seven astronaut hit two golf balls on the Moon while on the Apollo 14 mission?
ANSWER: Alan **Shepard** [or Alan Bartlet **Shepard** Jr.; or Al **Shepard**]

10A. What term is usually applied to the lowest order of people in the Hindu caste system, who are so low they are technically outside the four main castes?
ANSWER: **untouchable**s [or **dalit**]

10B. What Italian island south of Corsica (CORE-sick-ah) gives its name to a small fish?
ANSWER: **Sardinia** [or **Sardegna**]

 **VHSL Regular Season 2016-2017 - Round 23 - Third Period, Fifteen Tossups**

1. In a Lemony Snicket novel named for one of these things, Count Olaf disguises himself as an auctioneer who befriends Jerome and Esmé (ES-may) Squalor. The Bucket family is brought to Willy Wonka's factory in a "great glass" one of these objects. *The Fountains of Paradise* by Arthur C. Clarke describes the construction of one of these objects from the Earth to outer space. For 10 points, name this type of transport with buttons representing individual floors.
ANSWER: **elevator**s

2. The female lead in this opera sings the cavatina "Una voce poco fa" (OOH-nuh VOH-chay POH-ko FAH). The title character of this opera brags about his importance in the aria "Largo al factotum." At the end of this opera, Doctor Bartolo accepts the marriage between his ward Rosina and Count Almaviva (all-muh-VEE-vuh). For 10 points, name this opera by Gioachino Rossini (jaw-KEE-no roh-SEE-nee) about Figaro, who cuts hair for a living.
ANSWER: *The* ***Barber of Seville****, or The Futile Precaution* [or *Il* ***Barbiere di Siviglia****, ossia L'inutile precauzione*]

3. One of these passages describes five foolish maidens who went to meet a bridegroom with no oil in their lamps. Another of these stories features a shepherd who leaves a flock of ninety-nine to find one lost sheep. The narrator of these stories attacked religious prejudice in one about a member of a marginalized group who helps a wounded traveler. For 10 points, name these stories, including that of the Good Samaritan, told by the son of God in the New Testament.
ANSWER: **parable**s of Jesus Christ [or **parable**s of Jesus of Nazareth; prompt on Biblical verses or gospels of the New Testament]

4. The vegetative cells in this substance form a namesake tube that transports the products of generative cells. This substance arises from microspores and is accompanied by air sacs in gymnosperms (JIM-no-sperms). It is produced from the anther of the stamen and is then transferred to the pistil and the ovary in a namesake process often mediated by bees. For 10 points, what grainy substance contains plant sperm and is the trigger for a namesake allergy?
ANSWER: **pollen** [prompt on microspores before it is read; prompt on sperm before it is read]

5. This opera includes the duet "La ci darem la mano" (lah chee DAR-em lah MAH-no). This opera's title character is served by Leporello (leh-por-ELL-oh), who enumerates his master's conquests in the "Catalogue" aria. At the end of this opera, a statue of Donna Anna's father, the Commendatore (koh-MEN-duh-TOR-ay), shows up at dinner and sends the title character to Hell. For 10 points, name this opera by Wolfgang Amadeus Mozart about a Spanish seducer.
ANSWER: ***Don Giovanni*** [or *Il dissoluto punito, ossia il* ***Don Giovanni***]

6. During the response to this event, Michael Brown was told "Brownie, you're doing a heck of a job." Mayor Ray Nagin and Governor Kathleen Blanco were criticized for their lack of planning during it. The director of FEMA resigned because of this event, despite George W. Bush praising him. Over a thousand people died during this event because of the failure of a state's levee system. For 10 points, what storm caused massive flooding in New Orleans in 2005?
ANSWER: Hurricane **Katrina**

7. A woman in this play pretends to have been stabbed by a needle stuck into a poppet. A man in this play is pressed to death by stones for refusing to enter a plea. Reverend Parris questions the activities of the slave Tituba in this play. In this play, Giles Corey and John Proctor are executed as a result of accusations begun by Abigail Williams and the other village girls. For 10 points, name this play about the Salem witch trials written by Arthur Miller.
ANSWER: *The* ***Crucible***

8. In this country, a history student named Jan (YONN) Palach set himself on fire as a protest. Alexander Dubcek's failed attempts to reform this country were known as "socialism with a human face." Communist rule here ended with the peaceful Velvet Revolution, which led to the election of Vaclav Havel (HAH-vell) as president in 1989. For 10 points, the Prague Spring movement occurred in what European country that has since split into two separate states?
ANSWER: **Czechoslovakia** (CHECK-oh-slow-VAHK-ee-uh) [do not accept the "Czech Republic"; do not accept "Slovakia"]

9. The speaker of this poem recalls, "knowing how way leads on to way, I doubted if I should ever come back." In this poem's last stanza, the speaker says, "I shall be telling this with a sigh somewhere ages and ages hence." It concludes with the ironic lines, "I took the one less traveled by, and that has made all the difference." For 10 points, name this poem about a fork in the road written by Robert Frost.
ANSWER: "The **Road Not Taken**"

10. In early 2015, this city was where a sideways-flying plane nearly hit a taxicab and crashed into the Keelung River. A building in this city is home to the world's largest mass damper, stabilizing it during earthquakes. This city was made a capital in 1947 when the KMT escaped a nearby country. Before the Burj Khalifa was built, this city's namesake "101" building was the world's tallest building. For 10 points, name this capital city of Taiwan.
ANSWER: **Taipei**

11. It is not force, but this quantity can be defined as one-half k x squared for a spring, where x is the displacement from zero. In the general case, the gravitational form of this quantity is defined as minus big G times two masses over the distance from one mass to the other, but on Earth it can be defined as the product of mass, acceleration due to gravity, and height. For 10 points, what type of energy is stored in an object at rest?
ANSWER: **potential** energy [or **PE**]

12. This scientist's surname appears in the acronym "CAPTCHA," a challenge that uses a distorted image to see if a user is human. With Alonzo Church, this scientist names a thesis stating that all possible models of computation are equivalent in power to one of his namesake "machines." He killed himself after he was prosecuted for homosexuality. For 10 points, name this English computer scientist largely responsible for cracking the Enigma machine during World War II.
ANSWER: Alan **Turing**

13. In an earlier position, this politician announced the creation of the National Crime Agency, which is now under the control of Amber Rudd. In July 2016, Andrea Leadsom agreed to withdraw, allowing this person to become party leader. This politician appointed former London Mayor Boris Johnson to Foreign Secretary and is the successor to David Cameron. For 10 points, what female Conservative leader recently became the new UK Prime Minister?
ANSWER: Theresa **May** [or Theresa **Brasier**]

14. Ladino is a variety of this language spoken mostly by Jews. A word for a common food in this language can also mean "swear word" in a European country. Apocryphally, the fact that a king spoke with a lisp is the reason why there is a so-called "lisp" in this language's Castilian dialect, which also uses the second-person plural pronoun "vosotros" (VOHZ-oh-TROHZ). For 10 points, name this language spoken in most of Latin America.
ANSWER: **Spanish** [or **español**]

15. While speaking at Galesburg, this man said the government was "made by our fathers on the white basis." He proposed the Freeport Doctrine in saying that slavery could be blocked in territories. Southerners refused to support this man's presidential campaign and nominated John Breckinridge instead. Known as the "Little Giant," he was the failed nominee of the northern Democrats in 1860. For 10 points, what Illinois Senator debated Abraham Lincoln in 1858?
ANSWER: Stephen Arnold **Douglas**

 **VHSL Regular Season 2016-2017 - Round 23 - Tiebreaker Questions**

1. One of the most definitive books of this type published by Oxford University Press is called the OED. Almost nine years were spent by Samuel Johnson singlehandedly writing one of these books. An influential "American" one of these books was written by Noah Webster and expanded by George and Charles Merriam. For 10 points, name this type of book compiled by a lexicographer.
ANSWER: **dictionary**

2. A number of ants placed grains in this future king's mouth when he was an infant, foretelling his future success. This man's father gave his name to the Gordian knot. After this man found the satyr Silenus in his garden of roses, Dionysus granted him a gift. This man's food turned hard, and his drink turned frigid because of a gift that should have brought him eternal wealth. For 10 points, name this king of Phrygia (FRIDGE-ee-UH) whose touch turned objects to gold.
ANSWER: **Midas**

3. This scientist used an electrometer to show that the radioactivity of uranium is dependent only on the amount of uranium present. This scientist's most famous discovery occurred after repeatedly separating pitchblende until it could be classified into barium-like and bismuth-like portions. In 1911, this scientist won a second Nobel Prize for isolating polonium and radium. For 10 points,which French-Polish female scientist pioneered the study of radioactivity?
ANSWER: **M**arie **Curie** [or Marie **Skłodowska**; prompt on Curie]

4. In this film, the mime Daniel Richter choreographed the long, wordless opening sequence that climaxes with his character figuring out how to use a bone as a club. In this film, the hyper-intelligent computer HAL 9000 has a mental breakdown and murders all of the astronauts except Dave Bowman. For 10 points, name this science fiction film directed by Stanley Kubrick and co-written with Arthur C. Clarke.
ANSWER: ***2001****: A Space Odyssey*

5. This man became the 55th member of Anton Drexler's Workers' Party. This leader's chief architect and later Minister of War Production was Albert Speer. This man ordered the death of former ally Ernst Rohm (ROME) and other opponents in the Night of the Long Knives in 1934. After his failed Beer Hall Putsch (POOSH) in Bavaria, he wrote the book *Mein Kampf*. For 10 points, what Nazi led Germany during World War II?
ANSWER: Adolf **Hitler**

Jon's cube has a volume of 125 cubic meters. What is the total surface area of his cube?
ANSWER: **150** square meters

Estradiol (es-truh-DY-ol) is the most potent type of what female sex hormone?
ANSWER: **estrogen**