



1. Joseph Brant led a part of this group to settle Quebec. A series of treaties between this group and the English was called the Covenant Chain. This group ceded land in the Treaty of Fort Stanwix. The 1722 Treaty of Albany recognized this group as the Six Nations. Traditionally, this group claimed to have been created by an alliance between Dekanawidah and Hiawatha. For 10 points, name this confederation of tribes such as the Mohawks and Oneida, a Native American league in upstate New York.

ANSWER: Iroquois League [or Iroquois Confederacy; or Five Nations; or Six Nations before mentioned; or Mohawk before "Six Nations"]

121-12-71-03101

2. This poet wrote that "whatever a sun will always sing is you" in "i carry your heart with me." Though not Ernest Hemingway, he described being arrested as an ambulance driver in World War I in *The Enormous Room*. One of his poems consists of the words "a leaf falls" parenthetically inserted within the word "loneliness." He described a character who "sang his didn't" and "danced his did" in "anyone lived in a pretty how town." For 10 points, name this 20th-century American writer who often did not capitalize letters in his poems.

ANSWER: E. E. Cummings [or Edward Estlin Cummings]

080-12-71-03102

3. An object in this country named for Augustus Gregory is advertised as the "world's largest monolith." Its southern portion is home to an almost treeless region called the Nullarbor Plain. One island belonging to this country is where the Royal Penguin population goes to breed and is named "Macquarie Island." This country's central lowlands are home to its largest river systems, the Murray-Darling Basin and the Lake Eyre Basin. Off this country's eastern coast is the Great Barrier Reef. For 10 points, name this country which is also the world's smallest continent.

ANSWER: Australia

052-12-71-03103

4. This organelle is the site of pectin synthesis in plants. The GAAP protein is localized in this body, aiding the cell in apoptosis control. This organelle interacts with vesicles tagged with the COPII protein. It adds mannose-six-phosphate to items intended for the lysosome, and is made up of folds called cisternae. This organelle's primary function is packaging proteins and lipids for transport to other parts of the cell. For 10 points, name this organelle that is named for an Italian scientist.

ANSWER: Golgi body [or Golgi apparatus]

192-12-71-03104

5. In October 2012, Turkish fighter jets forced an Airbus flying from Moscow into this country to land in Ankara after being suspected of carrying "nonmilitary cargo." Riad Hijab is a former prime minister of this country, which has seen protests in Hama. Significant points of conflict within this country have been the cities of Aleppo and Homs. For 10 points, identify this Middle Eastern country which has witnessed violent conflicts between rebels and the regime of Bashar Al-Assad.

ANSWER: Syrian Arab Republic [or As-Surya; or al-Jumhuriyah Al-Arabiyyah As-Surya]

189-12-71-03105

6. In 1766, this composer became “Kapellmeister,” or music director, for the Esterhazy family. This man composed a work in which the last movement features each musician snuffing out a candle and leaving the stage. In another of this composer’s works, the second movement is interrupted by a fortissimo chord during a quiet piano theme. Several of his works were composed during a visit to England and were known as the “London symphonies.” For 10 points, name this Austrian composer of the “Farewell” and “Surprise” symphonies.

ANSWER: Franz Joseph **Haydn**

052-12-71-03106

7. One leader of this country had his church burned down in the St. Jean Bosco massacre. American forces removed a military regime in this country in 1991's Operation Uphold Democracy. A secret police force in this country was the Tonton Macoutes. This country was once led by the priest Jean-Bertrand Aristide and by the ruthless father and son dictators Papa Doc and Baby Doc Duvalier. For 10 points, name this Caribbean country that suffered a devastating earthquake in January 2010.

ANSWER: Republic of **Haiti** [or Republique d'**Haiti**; or Repiblik d'**Ayiti**]

052-12-71-03107

8. This quantity is equal to minus one third times the trace of the stress tensor. The Venturi effect describes the reduction of this quantity at a constriction. The internal energy resulting from this is called its namesake "head." The term one-half ρv^2 is added to this quantity and its gauge variety in an equation stating that this quantity decreases as speed increases. By multiplying ρ times g times the depth of a liquid, one can find the difference between the total amount of this and the atmospheric amount. For 10 points, name this scalar with units of pascals, defined as the force divided by the area.

ANSWER: **pressure**

020-12-71-03108

9. One member of this discipline, who championed explaining behaviors in context through “thick description,” was Clifford Geertz. At Barnard, Zora Neale Hurston was trained in this discipline by its American founder Franz Boas, who also taught Margaret Mead. This field pioneered the technique of participant observation, which can help practitioners write ethnography. For 10 points, name this social science which studies other cultures to learn more about man.

ANSWER: **anthropology** [or cultural **anthropology**; prompt “ethnography” before it is read]

104-12-71-03109

10. One character in this novel has cufflinks made out of human molars. The title character of this work attended St. Olaf's College and was mentored by Dan Cody. That man's funeral is attended only by Owl-Eyes. The narrator deals with Meyer Wolfsheim and dates a female golfer named Jordan Baker. In a pivotal scene in this novel, Myrtle Wilson is run over by a car driven by Daisy Buchanan. For 10 points, name this novel set in West Egg, narrated by Nick Carraway, and written by F. Scott Fitzgerald.

ANSWER: *The* **Great Gatsby**

192-12-71-03110

11. This company made a failed attempt at allying with the Pennsylvania Railroad in the South Improvement Scheme. Henry Demarest Lloyd exposed this company years before its practices were attacked in a series of articles published in *McClure's* in a "History" of this company written by Ida Tarbell. Founded in Cleveland, this company was broken up into 34 smaller companies in 1911 under the Sherman Antitrust Act. For 10 points, name this corporation founded by John D. Rockefeller from which Exxon and Mobil were split off.

ANSWER: **Standard Oil** Company and Trust

080-12-71-03111

12. A major form of this process, the contact form, can occur in an area called an aureole near a cooling pluton. This process is distinct from diagenesis, which occurs at lower temperatures. The other major type of this process is regional, which often results in the products of this process being foliated. For 10 points, identify this process that transform sedimentary or igneous rocks at high temperatures or pressures.

ANSWER: metamorphism

066-12-71-03112

13. At the end of this song's music video, a character played by Holden Nowell gives his number to the singer's band-mate, which reveals that he is actually gay. Its singer finished third on *Canadian Idol* and has also sung "This Kiss." Parodies of this song include one about sharing cookies by the Cookie Monster, and a cover lip-synched by the Harvard baseball team. It begins by saying "I threw a wish in the well." For 10 points, name this song by Carly Rae Jepsen, where she suggests the title action after saying "this is crazy, but here's my number."

ANSWER: "Call Me Maybe"

192-12-71-03113

14. One character in this novel, who owns a dog named Gray, is shot after collapsing while marching and is named Platon. Another character's marriage prospects are thwarted by her seduction by Anatole. Much of this novel is a series of digressions about the author's theories of history. This novel ends as Natasha Rostova marries the protagonist, Pierre Bezukhov, who had earlier participated in the Battle of Borodino. For 10 points, name this long novel that includes an account of Napoleon's invasion of Russia, by Leo Tolstoy.

ANSWER: War and Peace [or Voyna i Mir]

192-12-71-03114

15. In one poem by this author, the speaker wonders "was it a vision, or a waking dream?" after seeing a "light-winged Dryad of the trees" that "wast not born for death." That poem begins by describing how "a drowsy numbness pains" the speaker, and another of his poems describes a "still unravished bride of quietness" and concludes "beauty is truth, truth beauty, that is all ye need to know on earth, and all ye need to know." For 10 points, name this Romantic poet of "Ode to a Nightingale" and "Ode on a Grecian Urn."

ANSWER: John Keats

020-12-71-03115



1A. What collection, which was translated into English by Richard Burton, features characters such as Sinbad, Aladdin, and Ali Baba?

ANSWER: The *Arabian Nights* [or *One Thousand and One Nights*; or The *Arabian Nights'* *Entertainment*]

1B. What swamp is drained by the Suwanee and St. Mary's rivers and is located in southeastern Georgia and northern Florida?

ANSWER: Okefenokee Swamp

2A. John Quincy Adams and Henry Clay helped negotiate what treaty that came before the Battle of New Orleans and ended the War of 1812?

ANSWER: Treaty of Ghent

2B. Which chemist defined acids as electron acceptors, and is also the namesake of certain electron dot structures?

ANSWER: Gilbert Newton Lewis

3A. What Greek letter names the strongest type of covalent bond in atoms, represents the standard deviation of a population, and in its upper-case version, represents summation?

ANSWER: sigma

3B. What opera, which features the aria "Summertime," is set in Catfish Row and was written by George Gershwin?

ANSWER: *Porgy and Bess*

4A. In which comedy does Duke Orsino marry Sebastian's twin, Viola, who pretends to be a man named Cesario after being stranded on the coast of Illyria?

ANSWER: *Twelfth Night*

4B. Nearly 25 percent of a European country's population was culled by what agricultural disaster from 1845 to 1852?

ANSWER: Irish Potato Famine [or Great Famine; or Gorta Mor; or Drochshaol]

5A. What range of the electromagnetic spectrum, formerly used for long-distance phone calls and now used for television satellites, consists of waves with a wavelength from one millimeter to one meter long, or a frequency of three hundred millihertz to three hundred gigahertz?

ANSWER: microwave radiation

5B. What mythical creatures, which include Nessus and Chiron, are part human, part horse?

ANSWER: centaurs

6A. This is a 20-second calculation question. In a population with mean 64 and standard deviation 2, what is the z-score for a data point of 68?

ANSWER: 2

6B. This is a 20-second calculation question. The combined score of both teams in a football game was 41, and the home team won by 7 points. How many points did the losing team score?

ANSWER: 17

7A. What literary term is used to describe the repeated usage of sounds at the beginnings of successive words or phrases?

ANSWER: **alliteration**

7B. What longest European river flows into the Caspian Sea after meeting the Don River?

ANSWER: **Volga** River

8A. In what 2012 movie sequel does Liam Neeson play a retired CIA agent who rescues his wife from an Albanian crime syndicate?

ANSWER: **Taken 2**

8B. During which holy month of the Islamic calendar, whose end is marked by the celebration of Eid Al-Fitr, do Muslims engage in fasting every day?

ANSWER: **Ramadan**

9A. This is a 30-second calculation question. A second-quadrant angle has a sine equal to $\frac{2}{3}$. Find the cosine of that angle.

ANSWER: **negative** square **root** of **five**, all **over 3** [or mathematical equivalents]

9B. This is a 30-second calculation question. An isosceles triangle has base 6 and perimeter 30. Find the cosine of either base angle.

ANSWER: **1/4**

10A. The Spanish prepositions *por* and *para* can both be translated as what English word?

ANSWER: **for**

10B. What curve, defined as the locus of points equidistant from the directrix and focus, is the shape taken by a quadratic function?

ANSWER: **parabola**



VHSL Regular Season 2013 Part 2 of 2
Round 3
Third Period, Fifteen Tossups

1. This franchise has retired #12 as a tribute to its fans. One running back for this team broke a single-season touchdown record with twenty-eight before landing on the cover of Madden 07. This team defeated the Saints in the 2010-11 playoffs despite having a 7-9 regular season record. In one playoff game, this team's quarterback Matt Hasselbeck threw an interception after claiming "we're gonna score," while its current quarterback is a rookie out of Wisconsin. For 10 points, name this NFC West team that plays in Qwest Field, whose current stars include Marshawn Lynch and Russell Wilson.

ANSWER: Seattle Seahawks [or Seattle Seahawks]

192-12-71-03117

2. One's complement is a method of representation in this system. This type of coded decimal can be used to display digits on a digital clock. This system has the second-highest radix economy after the ternary system. This system names a tree in which each parent node has at most two child nodes. This system is easily converted to the octal and hexadecimal systems. The most basic unit of information in this system is a bit. For 10 points, identify this numeral system used by computers.

ANSWER: binary numeral system [or base-2 number system]

066-12-71-03118

3. This man's "April Theses" called for open opposition to the Provisional Government. This leader called for the formation of a "revolutionary vanguard" in his pamphlet *What Is To Be Done?* This man replaced a policy of War Communism with his New Economic Policy to save the Russian economy. This leader established the Cheka, a secret police force that became part of the NKVD under Joseph Stalin. For 10 points, name this leader of the Bolshevik Revolution.

ANSWER: Vladimir Ilich Lenin [or Vladimir Ilich Ulyanov]

186-12-71-03119

4. This character observes Mrs. Dilber taking his stolen possessions to sell to a fence named Old Joe. At the end of the work in which he appears, he visits his nephew Fred and orders a turkey to be delivered to his employee. Formerly apprenticed to Mr. Fezziwig, this man once partnered with the recently deceased Jacob Marley, and after a supernatural visit, this character is encouraged to treat Bob Cratchit and Tiny Tim better. For 10 points, name this miser, the protagonist of Charles Dickens's novella *A Christmas Carol*.

ANSWER: Ebenezer Scrooge [or Ebenezer Scrooge]

052-12-71-03120

5. One mathematical object named for this scientist is equal to the Ricci tensor minus one half times the curvature times the metric tensor. Along with Satyendra Bose, he theorized a state of matter occurring near absolute zero. One of his theories introduced the concepts of length contraction and time dilation as well as the mass-energy equivalence. For 10 points, name this German physicist who developed the theories of general and special relativity.

ANSWER: Albert Einstein

014-12-71-03121

6. In this poem, Apollo comes down from heaven to persuade a young hero to withdraw with the line, "Thus one goes to the stars." The antagonist of this poem declares, "Fortune favors the bold!" and takes the belt of Pallas after killing him. This work's pious hero slays Turnus, descends to the underworld to speak with Anchises, and has a lengthy dalliance with the Carthaginian queen Dido. It follows a Trojan prince who goes to Italy so that his descendants can found Rome. For 10 points, name this Latin epic written by Vergil.

ANSWER: the Aeneid [or Aeneis]

080-12-71-03122

7. St. Peter's Basilica holds this artist's sculpture of Mary holding the dead body of Jesus, one of the most well-known *Pietas*. This artist also sculpted into a naked man with a sling over his shoulder before a battle with Goliath. This creator of that marble *David* portrayed himself in skin held by St. Bartholomew in his painting *The Last Judgement*. For 10 points, name this Renaissance artist who painted two fingers nearly touching in *The Creation of Adam*, one of his frescoes on the ceiling of the Sistine Chapel.

ANSWER: Michelangelo

023-12-71-03123

8. Some treatments of this disease use drugs that inhibit monoamine oxidase-B. This condition is partly caused by the destruction of the substantia nigra due to the buildup of Lewy Bodies. Symptoms of this condition include dementia and a still facial expression. This disease is treated by L-Dopa because it often features a decrease in dopamine pathway action. For 10 points, name this neurological disease, sometimes called "shaking palsy," associated with the inhibition of motor skills.

ANSWER: Parkinson's disease

192-12-71-03124

9. The protagonist of this work disdains younger men who say "el mar" instead of "la mar" and attempts to deal with the pain in his hand by thinking of a day-long arm-wrestling match he won. In this story, "the boy," Manolin, is forbidden to accompany a man considered *salao* for his eighty-four-day streak of bad luck. Despite fending off many sharks, the protagonist of this work, Santiago, must give up the giant marlin he catches. For 10 points, name this novella about a Cuban fisherman by Ernest Hemingway.

ANSWER: *The* Old Man and the Sea

080-12-71-03125

10. An arch in this painting features tiles based on those in the ceiling of the Vatican Palace. Two giant statues of Apollo and Athena stand in the background of this painting, which features a sly self-portrait staring at the viewer on the far right. A man in blue reclines on a staircase in this painting, which features Plato and Aristotle arguing in its center. For 10 points, name this painting by Raphael that shows an array of philosophers, scientists, and artists from across history in the title Greek city.

ANSWER: *The* School of Athens

192-12-71-03126

11. These molecules release acetyl CoA through beta oxidation. The position of double bonds in these molecules can be described using either delta notation or omega notation. Although most of those double bonds are *cis* in nature, processed foods can contain a "kink" in these molecules due to *trans* double bonds. For 10 points, name this class of carboxylic acids that contain long hydrocarbon chains and are often found in oils.

ANSWER: fatty acids [or unsaturated fatty acids; prompt on fat; prompt on lipids]

003-12-71-03127

12. One portion of this document concerned the removal of fish-weirs from waterways, and another portion of this document concerns the levying of "scutage" money. This document was signed a year after the Battle of Bouvines, and one of its clauses led to the First Barons' War. This document codified the right of habeas corpus and limited the power of the English throne. For 10 points, identify this document signed by King John at Runnymede in 1215 that has a name in Latin meaning "Great Charter."

ANSWER: **Magna Carta** [or **Great Charter** before read]

189-12-71-03128

13. One thinker from this philosophical movement discussed Johannes de Silentio's complicated courtship of Cordelia in a section of his *Either/Or*. Another thinker from this movement discussed the deliberate actions of a waiter in explaining "bad" faith; that thinker from this movement wrote *Being and Nothingness*. For 10 points, identify this philosophical movement associated with Soren Kierkegaard and Jean-Paul Sartre, which deals in part with the nature of the individual's existence.

ANSWER: **existentialism** [accept word forms; accept an early buzz of **Christian existentialism**]

189-12-71-03129

14. This set is represented by a blackboard letter Z. Diophantine equations are those which allow only solutions from this set of numbers. The floor function gives the largest number from this set that is less than the function's input. The positive types of these are the natural numbers. Rational numbers are those which can be written as a finite ratio of these numbers. For 10 points, name this set of whole numbers and their negatives.

ANSWER: **integers**

121-12-71-03130

15. This country hired lobbyists to oppose the passage of the Magnitsky Bill. Hillary Clinton presented this country with a button marked "overcharge" that was meant to say "reset." In 2010, it signed the New START treaty with the US. In March 2012, Barack Obama was caught on an open mike telling its president he would "have more flexibility" after the election. This country has repeatedly vetoed Security Council resolutions to intervene in Syria. For 10 points, name this country where Dmitri Medvedev was succeeded as president by Vladimir Putin.

ANSWER: **Russia**

080-12-71-03131



1. The enzyme which produces this molecule includes a gamma subunit connecting its F0 and F1 complexes. This molecule is produced by a namesake synthase and is used up in processes such as active transport. Glycolysis results in the production of two of these molecules, whose energy is released by the breaking of a phosphate bond. For 10 points, identify this molecule which is known as the "energy currency" of cells.

ANSWER: ATP [or adenosine triphosphate]

189-12-71-03132

2. This group was reconstituted in 1915 from members of the Knights of Mary Phagan under the leadership of William Simmons. Some members of this group murdered Viola Liuzzo. Other members of this group killed 4 young girls by perpetrating the 16th Street Baptist Church bombing. This organization, whose first leader was Nathan Bedford Forrest, had ranks including "Grand Cyclops" and "Grand Wizard." For 10 points, name this Southern organization whose white-robed members terrorized blacks during Reconstruction.

ANSWER: Ku Klux Klan [or KKK]

080-12-71-03133

3. This scientist names a museum that is located at St. Mary's Hospital where he made his most notable discovery. This man modestly praised his partners Howard Florey and Ernest Boris Chain for their work in his most famous discovery. He himself dismissed the popular story that he saved the young Winston Churchill from death. This man's most famous discovery came after he grew a mould while studying staphylococci. For 10 points, name this Scottish biologist who discovered the antibiotic penicillin.

ANSWER: Sir Alexander Fleming

052-12-71-03134

4. One member of this family is calmed down by a reading of the "Mad Trist," a work of Sir Launcelot Canning. A member of this family sings the poem "The Haunted Palace" to his boyhood friend. That member of this family is hypersensitive to light and sound, while his twin falls into deathlike trances. One member of this family, Roderick, buries alive his twin sister, Madeline, and their home is last seen being broken in two as the narrator escapes. For 10 points, name this literary family created by Edgar Allan Poe in a story about the fall of their house.

ANSWER: Usher

052-12-71-03135

5. Malcolm McKenna and Susan Bell developed a scheme for organizing this class of organisms. It is divided into the subclasses Theria and Prototheria, and one of its largest orders, Chiroptera, uses echolocation to find food. Organisms in this class feature a structure primarily made of pyramidal neurons, the neocortex. This class includes monotremes and rodents, and most of them give birth to their young live. For 10 points, name this class of vertebrates whose members have a set of namesake milk-producing glands.

ANSWER: Mammalia [or mammals]

192-12-71-03136

Which leader, known as the "scourge of God," was the brother of Bleda and the most famous leader of the Huns?

ANSWER: Attila the Hun

This is a 20-second calculation question. If you roll two fair, six-sided die, what is the chance that the sum of those two die is less than four?

ANSWER: 1/12 [or 3/36]