hsapq

1. This character claims that when the wind is southerly, he knows "a hawk from a handsaw." This character delivers a monologue declaring, "What a piece of work is a man." In one of his soliloquies (suh-LIL-uh-kwee), this character imagines taking "arms against a sea of troubles." This character tells Ophelia (Oh-fill-ee-uh) to "get thee to a nunnery" and forces Claudius (CLAW-dee-us) to drink poison at the end of his namesake play. For 10 points, identify this tragic prince of Denmark created by William Shakespeare.
ANSWER: **Hamlet**

126-12-54-04101

2. The isolationist (EYE-so-lay-shun-ist) Sentinelese (sen-tin-ul-eez) people live in this country. The majority of the population of Mauritius (Mo-ri-shus) consists of people originally from this country, which is home to the Cochin (Co-shin) Jews and the St. Thomas Christians. Another religious group in this country is known as the Parsis (Par-sees). This country historically has persecuted the Dalits (Da-leets), some of whom live in the state of Karnataka (CARN-na-tak-uh). The software revolution in this country predominantly affected the cities of Bangalore (BAN-guh-lore) and Mumbai (MOOM-bye). For 10 points, name this central country of an Asian subcontinent.
ANSWER: Republic of **India** [or **Bharat** Ganarajya]

020-12-54-04102

3. In *Papilio dardanus* (puh-PILL-ee-oh dar-DAN-us), only females exhibit the polymorphic form of this trait. The Mertensian (MURR-ten-see-an) hypothesis predicts that this trait stems from an intermediate model. This process is dynamic if the model is motion. Aposematic (ay-pah-seh-MAH-tick) coloring is an example of the Mullerian (MEW-lair-ee-an) form of this action, the Batesian (Bait-see-an) form of which occurs when a harmless species resembles a harmful species. For 10 points, name this process of organisms resembling each other, such as viceroys and monarch butterflies.
ANSWER: **mimicry** [accept word forms]

124-12-54-04103

4. In one work by this author, a man receives help from Frederick and Pilkington (Pill-king-ton) but loses in a fight that becomes known as the Battle of the Cowshed. In another novel by this writer, the protagonist is tricked by Mr. Charrington (Chair-ing-ton) and ends up being tortured in Room 101 by O'Brien. This author created that protagonist, Winston Smith, along with the hard-working horse Boxer and scheming pig Napoleon. For 10 points, name this British author of *Nineteen Eighty-Four* and *Animal Farm*.
ANSWER: George **Orwell** [or Eric Arthur **Blair**]

023-12-54-04104

5. Some symptoms of this disease can be treated with drugs like tetrabenazine (teh-truh-BEN-uh-zeen). Long stretches of glutamine contribute to the destruction of the basal ganglia (gang-LEE-uh) by this disorder, which is inherited with a dominant gene. The age of onset of this disease is affected by the severity of a defect on chromosome (chrome-uh-some) four that causes the abnormally high 36 to 120 repeats of the DNA sequence CAG. For 10 points, name this fatal neurodegenerative (new-row-dee-gen-er-a-tive) genetic disorder that does not typically manifest until middle age.
ANSWER: **Huntington**'s disease [or **Huntington**'s chorea]

105-12-54-04105

6. One ruler of this name married Zoe Palaeologus (pay-lee-OH-log-us) and was known as "the Great" for freeing his lands from the Tatars. Another ruler with this name fought Poland and Sweden in the Livonian (Luh-vo-nee-un) War and established a bodyguard called the oprichniki (oh-pritch-NEE-kee). That ruler of this name killed his eldest son, leading to the dark period in Russian history called the "Time of Troubles." For 10 points, give this name shared by an early father of Russia and a czar known as "the Terrible."
ANSWER: **Ivan** [or **Ivan** III; or **Ivan** Vasilyevich; or **Ivan** the Great; or **Ivan** Veliky; or **Ivan** IV; or **Ivan** the Terrible; or **Ivan** Grozny]

7. In one poem, this man asked, "What sphinx (sphincks) of cement and aluminum bashed open their skulls and ate up their brains and imagination?" He described Walt Whitman "poking among the meats" and "eyeing the grocery boys" in his poem "A Supermarket in California." In another poem, this poet described the "angelheaded hipsters burning" and declares, "Carl Solomon! I'm with you in Rockland." For 10 points, name this poet who "saw the best minds of my generation destroyed by madness" in "Howl."
ANSWER: Allen **Ginsberg**

8. These people first appeared in Rome after the death of Junius Brutus. These people were managed by a lanista (luh-nees-tuh) and given a wooden sword upon discharge from service. Types of these people included the murmillones (moor-mill-OH-nays), the retiarii (ret-ee-AR-ee-ee), and the secutors (sek-yew-tors). Thousands of these people were crucified along the Appian Way by Crassus after the failure of Spartacus' revolt. For 10 points, name these armed combatants who competed in amphitheaters such as the Colosseum for public amusement in ancient Rome.
ANSWER: **gladiator**s

9. This poet described a singer who "slept like a rock or a man that's dead" in a poem about a "drowsy syncopated (Sin-cuh-pay-ted) tune." Another of his poems states, "They send me to eat in the kitchen" and begins by declaring, "I, too, sing America." He also wrote a poem stating, "My soul has grown deep" like the title entities, and in another he asked, "Does it dry up like a raisin in the sun?" For 10 points, name this poet of "The Negro Speaks of Rivers" and a poem about "a dream deferred," a major figure of the Harlem Renaissance.
ANSWER: Langston **Hughes**

10. This composer included themes from another composer's *Clock Symphony* in his *Variations on a Theme of Haydn*. One of his choral works is set to texts from Luther's bible. He used student drinking songs for a piece he wrote as a thank-you present to the University of Breslau (BRES-low). This composer mourned his mother's death in *A German Requiem* and used the words "good evening, good night" to begin a piece also called the "Cradle Song." For 10 points, name this composer of the *Academic Festival Overture* and a *Lullaby*.
ANSWER: Johannes **Brahms**

11. One of this poet's works notes that "success is counted sweetest by those who ne'er succeed." Another poem by this writer begins, "Hope is the thing with feathers that perches in the soul." This poet wrote about the "stillness round my form" in a work which begins, "I heard a fly buzz when I died." Another of her poems opens with the lines "Because I could not stop for Death, he kindly stopped for me." For 10 points, name this reclusive poet known as the Belle of Amherst.
ANSWER: Emily **Dickinson**

12. Twelve compounds useful in the creation of these systems were identified by Norman Good. Biologists often use the phosphate saline type of these systems or tris (trys). They are most effective when their components are equal in concentration, as predicted by the Henderson-Hasselbalch (Hend-ur-son Hassle-back) equation. They are composed of a weak acid and its conjugate base, which interconvert in accordance with Le Chatelier's (shah-tuh-lee-AIRS) principle. For 10 points, name these chemical systems that resist changes in pH.
ANSWER: **buffer**s [or **buffer** solutions or **buffer**ing agents]

13. One story tells how a pair of giant twins traps this god in a bronze jar until he was rescued by Hermes. This god gives a girdle to his daughter, the Amazonian queen Hippolyta (Hipp-PAUL-i-tuh). He is caught in the midst of an adulterous act by an invisible net constructed by Hephaestus (huh-FESS-tus). This god is injured by the spear of Diomedes (die-OH-med-eez) during the Trojan War, and his children Phobos and Deimos (DIE-mos) pull his chariot. For 10 points, name this Greek equivalent of Mars, the god of war.
ANSWER: **Ares** [or **Mars** until mentioned]

14. A coordination compound with this element in the center is produced by Fehling's (Fye-lings) test, used to test for different sugars. This is the lightest element with one s orbital electron above a filled d shell. Organisms like horseshoe crabs have blue blood because they have a blood protein that contains this metal instead of iron. Additionally, aqueous solutions of this element are blue in color. This element alloys with zinc in brass and with tin in bronze. For 10 points, name this transition metal with symbol Cu.
ANSWER: **copper** [or **cuprum**; or **Cu** prior to mention]

15. This man was chairman of the Federal Reserve Bank of Kansas City and publicly opposed Bill Clinton's health care plan during a 1993 town hall meeting. In 2004, he unsuccessfully ran for nomination to the Senate seat now held by Johnny Isakson (eye-zack-son). Starting in October 2011, he was rocked by allegations regarding his conduct at the National Restaurant Association. For 10 points, name this Georgia resident and former CEO of Godfather's Pizza, who developed the "9-9-9" tax plan as part of his failed bid for the 2012 GOP nomination.
ANSWER: Herman **Cain**

1A. This is a 10-second calculation question. Given that 20^2 is equal to 400, what is 21^2?
ANSWER: **441**

1B. This is a 10-second calculation question. If you roll two fair dice, what is the probability that the sum of the two dice will be one?
ANSWER: **0**

2A. Name the dubstep and house producer signed to the mau5trap ("mousetrap") label, known for songs like "Scary Monsters and Nice Sprites," who released his *Bangarang EP* in December 2011.
ANSWER: **Skrillex** [or Sonny **Moore**]

2B. Name the sixth most-spoken language in the world, whose speakers mostly live in Eastern India and an adjacent country.
ANSWER: **Bengali** [or **Bangla**]

3A. Antoine Lavoisier (luh-vwah-see-AIR) disproved the existence of what hypothetical substance, believed by chemists to exist well into the 18th century and said to be found in every flammable substance?
ANSWER: **phlogiston**

3B. What composer created the character Rodolfo in his opera *La Boheme,* and Cio-Cio (TCHO-TCHO) San in *Madama Butterfly?*
ANSWER: Giacomo Antonio Domenico Michele Secondo Maria **Puccini**

4A. The cities of Nanjing and Shanghai lie along the delta of what longest river in Asia?
ANSWER: **Yangtze** [or **Chang Jiang**]

4B. Colin Firth played the lead in what 2010 Best Picture winner about George VI's battle with stuttering?
ANSWER: *The **King's Speech***

5A. What tissue, consisting of sieve tubes and companion cells, transports nutrients such as sucrose through vascular plants?
ANSWER: **phloem** (FLOW-em)

5B. This is a 20-second calculation question. In simplest form, what is the mean of the data set {6, 8, 102, 35, 67}?
ANSWER: **43.6** [or **43 3/5**]

6A. This is a 20-second calculation question. How many square feet of metal are required to build a cylindrical silo that is capable of holding 942 cubic feet of grain and has a diameter of 10 feet? Use pi is equal to 3.14 and express your answer in simplest form.
ANSWER: **533.8**

6B. What painting by Theodore Gericault (jer-i-COH) shows the plight of people who are shipwrecked?
ANSWER: *The **Raft of the Medusa*** [or *Le **Radeau de la Meduse***]

7A. In what Robert Browning poem does the speaker show a guest a painting by Fra Pandolf of a woman whose heart was "too soon made glad"?
ANSWER: "**My Last Duchess**"

7B. Identify the second-most-abundant mineral in the Earth's crust, which exhibits piezoelectricity and has chemical formula SiO_2.
ANSWER: **quartz**

8A. This is a 30-second calculation question. What are the roots of the equation $2x^3 + 13x^2 + 16x + 5$?
ANSWER: x = **-5**, x = **-1**, x= **-1/2**

8B. This is a 30-second calculation question. What is the cosine of the quantity pi over 4 minus pi over 3? Express your answer in simplest form.
ANSWER: square **root** of **2 +** square **root** of **6** all **divided by 4** [or square **root** of **6 plus** square **root** of **2** all **divided by 4**; or **quantity square root of 2 plus square root of 6 over 4**]

9A. Who is the female American anthropologist who studied adolescents on the island of Ta'u in her work *Coming of Age in Samoa*?
ANSWER: Margaret **Mead**

9B. A famous philosophical problem asks how what thing can exist in the presence of a benevolent, omnipotent God?
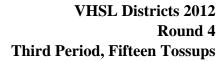ANSWER: problem of **evil**

10A. What Soviet leader delivered the Secret Speech a few years after the death of Stalin and engaged in the Kitchen Debate with then-Vice President Richard Nixon?
ANSWER: Nikita Sergeyevich **Khrushchev**

10B. What postmodern American novelist wrote *The Crying of Lot 49* and *Gravity's Rainbow*?
ANSWER: Thomas **Pynchon**

1. In one model, relative values for this property can be found by calculating the difference between the expected and actual bond energy of two elements. This property decreases as more electron shells are added, but increases with more protons: thus, on the periodic table the trend is to increase moving across the periods and decrease descending the groups. Elements with similar values for this property will form covalent bonds. For 10 points, name this ability of an atom to attract electrons.
ANSWER: **electronegativity**

121-12-54-04117

2. Functional languages like Scheme use tail recursion to approximate these elements. Several languages have a foreach (for-EECH) type of this element, which goes through all elements of a collection. Another type is the "while" one of these, which stops once a given condition is reached. Using as a stop condition a statement that is never true can lead to an "infinite" example of these. For 10 points, name this code element that repeats a sequence of instructions.
ANSWER: **loop**s

121-12-54-04118

3. One character in this novel learns faith from the peasant Fyodor (FIE-o-door), who contrasts the search for fulfillment in God with a local innkeeper's material lusts. At the beginning of this novel, the title character helps mend the marriage between her brother Stiva and his wife Dolly. This novel's two parallel plots follow Kitty's marriage to Konstantin Levin and the title character's torrid affair with the soldier Count Vronsky. For 10 points, name this novel about a woman who throws herself in front of a train, a work of Leo Tolstoy.
ANSWER: *Anna Karenina*

080-12-54-04119

4. This character founds the city of Lavinium, which he names for his wife. His son with his first wife Creusa (cray-OO-sah) founds the city of Alba Longa. He acquires a golden bough which he uses to gain admittance to the underworld. This character starts a relationship with the Carthaginian queen Dido, who immolates herself when he sails away. He takes his son Ascanias (uh-SCAY-nee-us) and his father Anchises (an-KY-sees) with him when he flees Troy. For 10 points, name this protagonist of an epic by Virgil.
ANSWER: **Aeneas**

015-12-54-04120

5. In chaos theory, the logistic map exhibits doubling of this property. In AC currents, capacitive (kuh-pa-sit-ive) reactance is proportional to this, while inductive reactance (re-act-unce) is inversely proportional to it. According to Kepler's third law, the square of this quantity is proportional to the cube of the semi-major axis of the orbit. For a spring, this is given by the formula two pi times the square root of m over k. For 10 points, give this term for the time it takes an oscillator to complete a cycle, the inverse of frequency.
ANSWER: **period**

127-12-54-04121

6. This author wrote about the dishonor of Angela leading to her brothers Pedro and Pablo Vicario (vee-CAR-ee-oh) murdering Santiago Nasar (NASS-ur), in his novel *Chronicle of a Death Foretold.* This author created Fermina Daza in another novel. Remedios (ruh-meh-dee-os) the Beauty floats into the sky in a novel, which this author set in Macondo. That novel sees Aureliano (or-el-ee-an-oh) Segundo Buendia translate a manuscript foretelling his death. For 10 points, name this Colombian magical realist author of *Love in the Time of Cholera* and *One Hundred Years of Solitude.*
ANSWER: Gabriel **Garcia Marquez**

088-12-54-04122

7. An entity described by this adjective is related to the integral of the current times dl crossed with r-hat over r to the third by the Biot-Savart (bee-OH sah-VAR) Law. EMF is equal to the negative time derivative of a flux described by this adjective according to Faraday's law. Another law states that the loop integral of this type of field is equal to the permeability of free space times the enclosed current. For 10 points, name this type of field that is integrated in Ampere's law and is related to the electric field.
ANSWER: **magnetic** field

149-12-54-04123

8. In one of these works, Wordsworth advised, "Scorn not" this form, which is sometimes written with an overlapping rhyme scheme named for Spenser. Another type of this form is structured as an octave and a sestet separated by a volta, and is named for a poet who addressed some of them to Laura. The speaker of one poem of this form states that it "gives life to thee" and begins, "Shall I compare thee to a summer's day?" For 10 points, name this fourteen-line poetic form favored by Petrarch and Shakespeare.
ANSWER: **sonnet**

142-12-54-04124

9. This man's U.S. citizenship was posthumously restored in 1976. Clarence Darrow defended this man after an injunction by Richard Olney caused the arrest of this President of the American Railway Union for his role in organizing the Pullman Strike. This man helped found the IWW and was jailed in 1918 for violating the Espionage Act. For 10 points, name this labor leader who ran for the presidency of the United States five times from 1900 to 1920, including once for the Socialist Party from prison.
ANSWER: Eugene Victor **Debs**

105-12-54-04125

10. One painting by this artist is a portrait of a woman with a beaded necklace and a dress with a blue left shoulder who holds the title white animal in her arms. In addition to *Lady with an Ermine,* (UR-mine) this artist produced another painting which an effeminate man sits to the right of the central figure, whose arms are spread with his palms out, and this artist produced a famous portrait of a woman whose right hand crosses her left as she sits with a slightly upturned smile. For 10 points, name this Renaissance painter of *The Last Supper* and *Mona Lisa.*
ANSWER: Leonardo **da Vinci**

141-12-54-04126

11. This president helped moderate the Dayton Accords, which ended conflict in Bosnia. This man implemented the Don't Ask, Don't Tell policy banning gays from openly serving in the military. During this man's presidency, two American helicopters were shot down over Mogadishu. After serving as governor of Arkansas, this man became President by defeating George H.W. Bush. For 10 points, name this Democratic president who served from 1992 to 2000.
ANSWER: Bill **Clinton** [or William Jefferson **Clinton**; or William Jefferson **Blythe** III]

015-12-54-04127

12. Members of this religion say the Afringan (AFF-rin-gahn) and Baj prayers on its new year's day, Noruz (nor-OOZ). In this religion, the newly dead cross the Chinvat bridge, which tips over into hell for evil souls. This religion believes in such figures as the indifferent god Zurvan and the evil Angra Mainyu (aang-RUH My-new) or Ahriman (Ah-ree-mahn), who is in constant conflict with the good god Ahura Mazda. For 10 points, identify this dualistic religion which preceded Islam in Iran and is still practiced at "towers of silence" and "fire temples."
ANSWER: **Zoroastrian**ism

13. One equation for this quantity states that it is proportional to the natural log of the possible number of microstates of a system. Subtracting the product of this quantity and temperature from enthalpy yields Gibbs free energy. Clausius (CLAW-see-us) defined the change in this quantity as heat over temperature, and heat only flows if this quantity is positive. For 10 points, name this subject of the Second Law of Thermodynamics that is symbolized S, the measure of the ever-increasing disorder of a closed system.
ANSWER: **entropy**

14. After drinking with John Forney, this politician showed up drunk to his inauguration as Vice President. This man was the target of a planned assassination attempt from George Atzerodt (AT-zer-ot), but the attempt was not made. His term in office saw the passing of the Homestead Act and the start of the Reconstruction Era. This President's attempt to replace Edwin Stanton as Secretary of War led to his impeachment. For 10 points, name this President who succeeded Abraham Lincoln.
ANSWER: Andrew **Johnson**

15. A former Marine won the 2000 Offensive Rookie of the Year award while playing for this team. That player, Mike Anderson, rushed for twelve touchdowns in 2005, the year in which this team went to the AFC Championship game behind quarterback Jake Plummer. In recent years, this franchise has seen the trading of Jay Cutler and Brandon Marshall. Its glory days saw Mike Shanahan coach players such as Terrell Davis and Shannon Sharpe. For 10 points, name this John Fox-coached team, once led by John Elway and now quarterbacked by Tim Tebow.
ANSWER: Denver **Broncos** [or **Denver** Broncos]

1. Before this battle, one side moved from Fort Moultrie to the location of this battle. The *Star of the West* was turned away in this event by the attacking side's Parrot guns. The losing side in this battle was commanded by Robert Anderson, who ended it by surrendering his garrison to P.G.T. Beauregard. For 10 points, name this battle that took place off the coast of Charleston, South Carolina and served as the opening engagement of the American Civil War.
ANSWER: Battle of **Fort Sumter** [accept any answer making clear that **Fort Sumter** was being attacked or bombed]

141-12-54-04132

2. In this civilization's language, it was called the Land of the Four Quarters. This empire's last ruler was captured at Cajamarca (kah-huh-MAR-kuh). This empire absorbed the Colla, Lupaca, and Chimu peoples, and its greatest expansion came under Pachacuti (pah-chuh-KOO-tee). Running messengers called chasqui (CHAHS-kee) and knotted ropes called quipu (KEE-poo) were used by this empire, which had its capital at Cuzco. For 10 points, name this empire conquered by Francisco Pizarro and last ruled by Atahualpa that was centered in Peru.
ANSWER: **Inca** Empire [or **Tawantinsuyu**]

131-12-54-04133

3. One city in this state, Lake Charles, is home to McNeese State University. This state's capital city is the home of One American Place. This state is where the Red River flows between Bossier City and Shreveport. Landmarks in this state's largest city includes the French Quarter. For 10 points, name this state with capital at Baton Rouge.
ANSWER: **Louisiana**

088-12-54-04134

4. In December of 2011, Mitt Romney called this man "a real threat to the stability and peace of the world." One of this man's former prime ministers claimed he "would lose an honest presidential election" in considering this man's run on March 4th, 2012. His system of "sovereign democracy" has been overseen by the "grey cardinal," Vladislav Surkov, who was dismissed after tainted legislative elections in December 2011. For 10 points, name this current prime minister who will, in 2012, seek his third term as President of Russia.
ANSWER: Vladimir Vladimirovich **Putin**

023-12-54-04135

5. A set of these objects is the input to the Gram-Schmidt process. A set of these objects can be a "basis" if all elements of the set are linearly independent. In Cartesian (car-TEE-shun) space, i, j, and k are used to represent the "unit" variety of these objects. They can be thought of as one-dimensional matrices (MAY-truh-sees), and the dot product and cross product are defined over these objects. For 10 points, name these mathematical objects that consist of a magnitude and a direction and are contrasted with scalars.
ANSWER: **vector**s [or linearly-independent **vectors**; prompt on **matrices** before it is read]

080-12-54-04136

This is a calculation question. If the value of "sine of theta" is 0.6 and theta is in the first quadrant, what is the value of "cosine of theta?"
ANSWER: **0.8** [or **4/5**]

080-12-54-04137

In what Guy de Maupassant (GEE duh MOE-puh-sawnt) story does Madame Loisel (lwah-ZELL) work for years to pay for the title jewelry?
ANSWER: "The **Necklace**" [or "La **Parure**"]