



National Academic Quiz Tournaments, LLC

2015-16 IHSA-Style Set A Packet 1

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naqt@naqt.com 11521 W 69th Street
http://www.naqt.com Shawnee, KS 66203
1.888.411.NAQT (1.888.411.6278)

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TOSSUP — Social Studies

- 1. Before this war, an article entitled "Worst Insult to the United States In Its History" appeared, denouncing the De Lôme ["loam"] Letter. This war was the subject of illustrations by Frederic Remington that were requested by William Randolph Hearst, whose "yellow journalism" was blamed for starting it. The explosion of the Maine precipitated—for 10 points—what war that ended with the U.S. in control of Puerto Rico?

answer: Spanish-American War

<382833>

BONUS — Fine Arts

- 1. This composer directed the Paris Conservatoire [kohn-seer-vah-twar] from 1905 to 1920 and wrote the Cantique de Jean Racine [kahn-teek durr zhahn rah-seen]. For 10 points each—

A. Name this French composer of Masques et bergamasques and a Pavane for piano, which he later orchestrated.

answer: Gabriel (Urbain) Fauré

B. Fauré wrote an "Elegie" for this large string instrument and piano, which was recorded by Jacqueline Du Pré.

answer: cello (or violoncello)

C. Fauré included a "Pie Jesu" [PEE-ay YAY-zoo] movement in his work of this type, a Roman Catholic mass for the dead.

answer: requiem

<385151>

TOSSUP — Math

- 2. The Riemann sphere can be envisioned as one of these shapes plus a point at infinity. That example of this shape, named for Jean-Robert Argand [zhahn roh-bair ar-gawn], is used to depict complex numbers. If two different ones of these shapes intersect, there are dihedral angles around the actual intersection, which will be a line.

Three non- collinear points define one of these shapes. For 10 points—name these flat, infinite surfaces.

answer: planes (accept complex plane)

<372978>

BONUS — Social Studies

2. The exposure of this document rallied American support to enter World War I against the Central Powers. For 10 points each—

A. Name this document in which the Germans offered an alliance to Venustiano Carranza [vee-"noose"-tee-AH-noh kar-RAHN-zah] in exchange for declaring war on the U.S.

answer: Zimmermann telegram (accept answers mentioning Zimmermann and the concept of a message or note)

B. The Zimmermann telegram was addressed to this North American country, which Germany offered to help reconquer Texas.

answer: Mexico (or United Mexican States or Estados Unidos Mexicanos)

C. A book titled *The Zimmermann Telegram* was written by this historian. She also wrote about World War I in *The Guns of August*.

answer: Barbara (Wertheim) Tuchman ["TUCK"-mun]

<376957>

TOSSUP — Fine Arts

3. Norman Foster added a glass one of these structures to the Reichstag [RYKE-shtag]. A Muslim shrine on Jerusalem's Temple Mount has a golden one of them. Michelangelo redesigned one of these structures for St. Peter's Basilica, based on a double-shelled design by Brunelleschi [broo-nuh-LESS-kee] for the Florence Cathedral. For 10 points—name these round structures, one of which was designed by Thomas Walter for the top of the U.S. Capitol.

answer: domes

<385309>

BONUS — Math

3. Pencil and paper ready. Consider the vectors $(3, 2, 4)$ ["three comma two comma four"] and $(2, -5, z)$ ["two comma negative five comma z"]. For 10 points each—

A. What is the sum of the vectors? Give your answer in terms of z .

answer: $(5, -3, 4 + z)$ ["five comma negative three comma four plus z"] (or $x = 5$, $y = -3$, and $z = 4 + z$; accept answers that specify x , y , and z in any order; do not accept or prompt on partial answers) [The components sum independently, so the x -component is $3 + 2 = 5$, the y -component is $2 + -5 = -3$, and the z -component is $4 + z$.]

B. What is the value of z if the dot product of the vectors is zero?

answer: $z = 1$ [$d = (3 \times 2) + (2 \times -5) + 4z = 0$, so $6 - 10 + 4z = 0$, so $-4 + 4z = 0$, so $4z = 4$, and $z = 1$]

C. What is the value of z if the vectors have the same length?

answer: $z = 0$ [$l_1 = l_2$, so $\sqrt{3^2 + 2^2 + 4^2} = \sqrt{2^2 + (-5)^2 + z^2}$, so $9 + 4 + 16 = 4 + 25 + z^2$, so $29 = 29 + z^2$, so $0 = z^2$, and $z = 0$]

<387136>

TOSSUP — Social Studies

4. In June 2015 auditor John Sopko wrote a letter demanding an explanation of "ghost schools" in this country, where technical institute director Sardar Roshan was accused of embezzling American education funding. In this country's 2014 presidential election, frequent runner-up Abdullah Abdullah lost to Ashraf Ghani [AHSHF-rahf GAH-nee] in the race to succeed Hamid Karzai [hah-MID "car"-ZYE]. For 10 points—name this country that the U.S. invaded in October 2001.

answer: (Islamic Republic of) Afghanistan (or Jomhuri-ye Eslami-ye Afghanistan)

<384064>

BONUS — Literature

4. Dr. John Seward, Quincey Morris, and Arthur Holmwood all propose marriage to this woman on the same day. For 10 points each—
- A. Name this friend of Mina Harker, who wastes away as she is preyed upon by a sinister count.
answer: Lucy Westenra (accept either underlined portion)
- B. Name that sinister count, the title character of a Bram Stoker novel.
answer: (Count) Dracula
- C. Bram Stoker did not invent the concept of the blood-sucking vampire; it was earlier featured in the poem “The Giaour” [JOH-ur] by this British Romantic poet of *Don Juan* [JOO-un] and “She Walks in Beauty.”
answer: Lord Byron (or George Gordon (Noel); accept any underlined portion)

<358191>

TOSSUP — Literature

5. In one novel, this author created a seller of astrological devices who has diamonds sewn into his coat, loves Clélia Conti, and escapes captivity thanks to Gina, the Countess Mosca. This creator of Fabrizio del Dongo [fah-BREED-zee-oh dell DOHN-goh] also wrote a novel about Julien Sorel's choice between the clergy and the army, represented by the title colors. For 10 points—name this author of *The Charterhouse of Parma* and *The Red and the Black*.
answer: Stendhal (or Marie-Henri Beyle [muh-ree ahn-ree bail])

<369687>

BONUS — Social Studies

5. For 10 points each—name these songs popular among Civil War troops:
- A. This song expresses wistfulness for the “land of cotton” and instructs listeners to “look away.” It is attributed to Daniel Decatur Emmett, one of the earliest practitioners of blackface.
answer: Dixie (accept I Wish I Was in Dixie or Dixie's Land)
- B. Julia Ward Howe wrote the words to this song, which was sung to the tune of “John Brown's Body.”
answer: The Battle Hymn of the Republic
- C. This song, sung by troops from the southwesternmost state of the Confederacy, originally claimed that “You may talk about your Dearest May, and sing of Rosa Lee,” but the title girl “beats the belles of Tennessee.”
answer: The Yellow Rose of Texas

<382817>

TOSSUP — Science

6. A radioisotope of this element is the most common radioisotope found in the human body. A form of radiometric dating is based upon its decay into argon. This element's nitrate [“NYE”-trate] salt, which historically was obtained from deposits of guano, is known as saltpeter. In the body, an enzyme pumps sodium ions out of cells as it pumps this element's ion into cells. For 10 points—name this alkali metal whose atomic symbol is K.
answer: potassium (accept K before “K”)

<387349>

BONUS — Fine Arts

6. This painter depicted a woman drinking a green alcoholic beverage at a table with a well-dressed Parisian in his *Absinthe Drinker*. For 10 points each—
- A. Name this French artist who also painted many ballerinas.
answer: Edgar Degas [day-gah] (or Hilaire-Germain-Edgar Degas)
- B. In one painting, Degas depicted people handling this agricultural product in a New Orleans office. A William Aiken Walker painting depicts this good atop a slave's head.
answer: cotton
- C. A topless girl in blue points to a group of naked boys in a Degas painting of young citizens of this ancient city exercising. Mount Taygetus appears in the background.
answer: Sparta (or Lacedaemon)

<364298>

TOSSUP — Social Studies

7. On Tu B'shvat, Jews may conduct a "seder" focused on eating this kind of food. Caleb and Joshua were tasked by Moses to bring back some of these objects from Canaan. Love and joy are metaphorically compared to two of these objects described as "of the spirit" in chapter five of Galatians. Adam and Eve covered themselves with leaves after eating—for 10 points—what objects from the Tree of Knowledge of Good and Evil?

answer: fruits (accept fruits of the Holy Spirit; accept fruits of the Tree of Knowledge of Good and Evil; accept specific fruits like figs or grapes or apples)

<386877>

BONUS — Math

7. The Pythagorean theorem is a generalization of the law named after this trigonometric function. For 10 points each—

A. Name this function calculated for an angle in a right triangle as the length of the adjacent side over the hypotenuse.

answer: cosine (accept law of cosines)

B. The hyperbolic cosine of x is equivalent to the cosine of this value times x .

answer: i (accept square root of negative one)

C. The graph of the hyperbolic cosine function take this shape, which is also created by a wire hanging from its two ends under the force of gravity.

answer: catenary ["CAT"-uh-nair-ee]

<376568>

TOSSUP — Fine Arts

8. A member of this family included an "Overture in the French Style" in his Clavier-Übung II [clah-VEE-"air"-bung]. Another member of this family wrote "La Caroline" as one of his "Berlin Portraits" and wrote a "Solfegietto" ["soul"-fej-YEH-toh] in which the hands cross over. A theme by Frederick the Great is used in *A Musical Offering*, by a member of this family. Carl Philip Emmanuel was a member of—for 10 points—what family, which also includes Johann Sebastian?

answer: Bach family or Bachs

<365488>

BONUS — Social Studies

8. The so-called *Black Notebooks*, which were published in 2014, include anti-Semitic remarks made by this philosopher. For 10 points each—

A. Name this German philosopher, who used the term "Dasein" [DAH-zein] to describe human existence in his 1927 book *Being and Time*.

answer: Martin Heidegger

B. Martin Heidegger was a major influence on this 20th-century philosophical movement. A French member of this movement delivered a 1946 lecture that declared that this "is a humanism."

answer: existentialism (accept existentialist or Existentialism Is a Humanism or L'existentialisme est un humanisme)

C. That lecture was delivered by this philosopher—who also wrote the treatise *Being and Nothingness*, as well as plays, including *No Exit*.

answer: Jean-Paul (Charles Aymard) Sartre [sahr-truh]

<385771>

TOSSUP — Literature

9. One character in this play is frequently observed "underneath the grove of sycamore," where his "tears augment the fresh morning dew." A girl in this play tells a suitor "you kiss by the book" during a feast that is also attended by her cousin Rosaline [RAHZ-uh-lin]. The male protagonist of this play is exiled to Mantua [MAN-too-uh] after he kills Tybalt [TIB-ult] to avenge Mercutio [mur-"CUE"-shee-oh]. For 10 points—name this Shakespeare tragedy about two "star-cross'd lovers."

answer: Romeo and Juliet (or The Tragedy of Romeo and Juliet)

<380603>

BONUS — Fine Arts

9. This ballet premiered at the Bolshoi [BOHL-shoy] theater in March 1877. For 10 points each—

A. Name this Russian ballet in which Odette [oh-DET] is turned into a waterfowl by the evil sorcerer Von Rothbart.

answer: Swan Lake (or Lebedinoye ozero)

B. This Russian composer of the “1812 Overture” wrote *Swan Lake*.

answer: Peter Ilich Tchaikovsky [chye-KAWFF-skee] (or Pyotr Ilyich Tchaikovsky)

C. Tchaikovsky replaced music by Ludwig Minkus that had been written for this type of section of *Swan Lake*. It is a duet in which a male and female dancer perform steps simultaneously.

answer: (grand) pas de deux [pah deh duh]

<389097>

TOSSUP — Science

10. A contact boundary of two different types of these materials is called a heterojunction. Their Fermi level can be populated even though it lies in a band gap. Their carrier type determines whether they are “p-type” or “n-type.” Impurities are added to them in a process called doping. For 10 points—name these materials whose electrical conductivity is more than that of an insulator, but less than a traditional conductor.

answer: semiconductors (do not accept or prompt on “conductor”)

<381040>

BONUS — Literature

10. This poem describes territory that was “unstoried, artless, unenhanced.” For 10 points each—

A. Name this poem that begins “The land was ours before we were the land's.”

answer: The Gift Outright

B. This poet recited “The Gift Outright” from memory at John F. Kennedy's inauguration.

answer: Robert (Lee) Frost

C. In a 1963 speech at Amherst College, Kennedy paid tribute to Frost by quoting this poem about two paths that “diverged in a yellow wood.”

answer: The Road Not Taken

<369334>

TOSSUP — Social Studies

11. During this conflict, the BBC accidentally announced the capture of Goose Green before it actually happened, and *The Sun* printed the headline “Gotcha!” to describe the sinking of the *General Belgrano* [bel-GRAH-noh]. The city of Stanley and the South Sandwich Islands were recaptured in this war, boosting the domestic popularity of Margaret Thatcher. For 10 points—name this 1982 war between Britain and Argentina.

answer: Falklands War (or Falkland Islands War or Guerra de las Malvinas)

<372222>

BONUS — Science

11. This term refers to the last of the four quantum numbers, which for an electron is positive or negative one-half. For 10 points each—

A. Give this value that represents a particle's intrinsic angular momentum.

answer: spin

B. This term refers to particles like electrons that do not have integer spins. These particles are often contrasted with bosons [BOH-zahnz].

answer: fermions [“FAIR”-mee-ahnz]

C. Fermions are governed by Fermi-Dirac statistics, which gives an energy distribution set by this type of function. This type of function also models population growth that is proportional to both the current population and the carrying capacity.

answer: logistic function

<381298>

TOSSUP — Literature

12. Pausanias [paw-SAY-nee-uss] claimed many cult objects known as *xoana* [ZOH-ah-nah] were created by this figure. The king for whom this man worked was killed with boiling water after this man earned a prize for Cocalus by using a drop of honey and an ant to thread a seashell. This inventor was forced to design a construct to hold Pasiphae's [puh-SIH-fuh-ee's] monstrous son on the isle of Crete. Minos [MEE-nohss] employed—for 10 points—what builder of the Labyrinth ["LAB"-uh-rinth]?

answer: Daedalus ["DEAD"-uh-luss]

<358884>

BONUS — Math

12. Pencil and paper ready. Sets *A* and *B* each have 3 elements. For 10 points each—

A. What is the *fewest* possible number of elements in the union of *A* and *B*?

answer: 3 elements [The union includes all elements found in either *A* or *B*, and thus cannot have fewer elements than *A* or *B*. It can have exactly 3 elements if *A* and *B* are identical.]

B. If the union of *A* and *B* has 4 elements, how many elements are in the *intersection* of *A* and *B*?

answer: 2 elements [The sum of the number of elements in *A* and *B* equals the number of elements in the union plus the number of elements in the intersection, so $3 + 3 = 4 + x$, so $6 = 4 + x$, and $x = 2$.]

C. How many elements are in the power set of *A*? This is equal to the total number of subsets of *A*, including the empty set and *A* itself.

answer: 8 elements (accept 8 subsets) [Since *A* has 3 elements, its power set has $2^3 = 8$ elements.]

<387129>

TOSSUP — Math

13. Pencil and paper ready. Frank lives in a state with a 6% sales tax and needs to know the total post-tax cost for a stereo. The stereo is on sale for 20% off the normal \$250 pre-tax price. Frank first figures out the discounted price of the stereo, then adds in the sales tax. Use this method, or any other, and compute—for 10 points—what total cost of the \$250 stereo given a 20% discount and a 6% sales tax?

answer: \$212.00 [$\$250 \times (1 - .20) = 250 \times .80 = \$200 \times 1.06 = \$212$]

<180266>

BONUS — Social Studies

13. In 1522, this religious reformer attacked the custom of fasting during Lent. For 10 points each—

A. Name this Swiss Reformation leader who died defending Zurich [ZOO-rik] in the 1531 Battle of Kappel.

answer: Huldrych (or Ulrich) Zwingli [HUL-drik ts'VEENG-lee]

B. The 1529 Marburg Colloquy [KOL-uh-kwee] attempted to reconcile the views of Zwingli with those of this German religious reformer, who wrote the Ninety-Five Theses and criticized the sale of indulgences.

answer: Martin Luther

C. Under Zwingli's leadership, Zurich banned the practice of this religious rite on adults, leading to the 1527 execution of Felix Manz for performing it.

answer: (re-)baptism (or baptizing or baptize; accept adult baptism or credobaptism or believer's baptism)

<381053>

TOSSUP — Social Studies

14. Franz Joseph Gall divided this body part's functions into 27 types, though it was later found that only two of those were correct. Seiji Ogawa [SAY-jee oh-GAH-wah] developed a technique that makes use of functional specialization to study this body part. Paul Broca [BROH-kuh] found that patients stricken with aphasia [uh-FAY-zhuh] had lesions on this organ. fMRI is used to image—for 10 points—what organ whose parts include the occipital [ahk-SIP-ih-tul] lobe and the cerebellum [sair-uh-BELL-um]?

answer: brain

<387023>

BONUS — Science

14. A summer 2015 outbreak of this disease in New York City has been linked to dirty water cooling towers. For 10 points each—

A. Name this disease, first reported after a 1976 meeting of the American Legion.

answer: Legionnaires' disease (or legionellosis or Legion fever; do not accept or prompt on “Legionnaire disease”)

B. Legionnaires' disease is a type of this general class of diseases in which the air sacs of the lungs become inflamed.

answer: pneumonia

C. The bacteria that cause Legionnaires' disease attacks these white blood cells, which engulf and destroy foreign microbes that enter the body.

answer: macrophages [“macro”-FAYJ] (accept monocytes; prompt on “leukocytes”)

<386446>

TOSSUP — Literature

15. In one play by this author, an ex-Pullman porter who claims that he can only be killed by a silver bullet faces a rebellion on a Caribbean island. This author of *The Emperor Jones* also wrote a play in which Mary appears holding her wedding gown, and becomes lost in morphine-induced memories as the rest of the Tyrone family looks on. For 10 points—name this author of *Long Day's Journey into Night*.

answer: Eugene (Gladstone) O'Neill

<387109>

BONUS — Math

15. If two shapes are congruent, they have this property, but it is possible for them to have this property without being congruent. For 10 points each—

A. Name this relationship indicated by a tilde-like symbol.

answer: similarity (accept similarness)

B. The so-called “AAA theorem” can establish similarity for this type of figure.

answer: triangle (or triangular figure)

C. Another way to describe similarity is that two figures are similar if they can be made congruent by a combination of rotation, reflection, and this type of transformation.

answer: scaling (or scale; or dilation or dilate or dilatation or dilatate or any answer referring to changing a shape's size)

<387201>

TOSSUP — Science

16. 51 Peg b was the first of these objects to be detected by Doppler spectroscopy. The CoRoT satellite used the transit method to find these objects, which are generally colder and less dense than brown dwarves. The *TESS* mission will build upon the *Kepler* satellite's detection of these objects, which include “hot Jupiters” and “super Earths.” For 10 points—name these objects found around stars outside the solar system.

answer: extrasolar planets or exoplanets (accept equivalents indicating a planet orbiting another star or a planet outside the solar system before “stars”; prompt on “planets”)

<386208>

BONUS — Social Studies

16. For 10 points each—name these former British colonies in the Caribbean:

A. This archipelagic nation southeast of Miami was described as “a third-class British colony” by Edward VIII, [“the eighth”] who governed it after he abdicated the British throne.

answer: (Commonwealth of) The Bahamas

B. During the 17th century, pirates flocked to Port Royal in this Caribbean island country, a former British colony whose capital is Kingston.

answer: Jamaica

C. After it became a British colony in the 1860s, this Central American country was known as British Honduras.

answer: Belize

<381626>

TOSSUP — Miscellaneous

17. In 2012 this website published an Adrian Chen article revealing the real name of the Reddit user Violentacrez. In 2015 Max Read and Tommy Craggs resigned from this website after it removed a story outing a Conde Nast executive. This website was accused of providing the National Enquirer with a racist rant by a former WWE star. Nick Denton founded—for 10 points—what gossip blog sued for \$100 million by Hulk Hogan?

answer: Gawker.com (accept Gawker Media)

<364368>

BONUS — Literature

17. For 10 points each—give these adjectives referring to human traits, each borrowed from the name of a Roman god:
- A. This word, derived from another name for Jupiter, refers to someone endowed with a hearty or good-humored spirit.

answer: jovial (prompt on “Jove”)

- B. This word, from a Roman messenger-god, describes someone who possesses a tendency for rapid, unpredictable mood changes.

answer: mercurial (prompt on “Mercury”)

- C. This adjective can be applied to one who has a surly or gloomy disposition.

answer: saturnine (prompt on “Saturn”)

<338832>

TOSSUP — Social Studies

18. In the 1670s and 1680s several nobles in this country were condemned in the Affair of the Poisons. In 1588 Catholics in this country's capital revolted in the Day of the Barricades, which occurred during its War of the Three Henrys. The Duke of Guise [ghee-z] led the Catholic faction in this country's 16th-century “Wars of Religion” against its future king Henry of Navarre [nah-VAR]. For 10 points—name this country home to the Huguenots [HYOO-guh-nots].

answer: (Kingdom of) France (or Royaume de France)

<374879>

BONUS — Science

18. Seven atoms of this element are found in Prussian blue. For 10 points each—

- A. Name this metal, also found in hemoglobin [HEE-moh-gloh-bin].

answer: iron (or Fe)

- B. Prussian blue contains one of these ions, consisting of a metal atom surrounded by one or more Lewis bases known as ligands [LIH-gunds]. They can react to form coordination compounds.

answer: complex ions or complexes

- C. The six bonds iron can form in hemoglobin, and the six bonds in the Prussian blue complex ion, both have this geometry.

answer: octahedral molecular geometry (accept octahedron)

<368986>

TOSSUP — Math

19. These mathematical things are called Hermitian [air-mee-shun] if they are equal to their conjugate-transpose. Gauss-Jordan [YOR-dahn] elimination puts them in reduced row-echelon form, which is one method of using these things to solve systems of equations—a task that can also be done by Cramer's rule, which involves dividing their determinants. For 10 points—name these mathematical objects in which numbers are arranged into rows and columns.

answer: matrices (or matrix)

<384375>

BONUS — Social Studies

19. In 1971 he asked “how do you ask a man to be the last man to die for a mistake?” while appearing before the Senate Foreign Relations Committee. For 10 points each—
- A. Name this politician who commanded a Swift Boat in Vietnam during the 1960s. He ran for president in 2004.
answer: John (Forbes) Kerry
- B. Kerry currently serves in this cabinet position; he was preceded by Hillary Clinton.
answer: Secretary of State
- C. Kerry represented this state in the Senate for nearly three decades.
answer: (Commonwealth of) Massachusetts

<340797>

TOSSUP — Science

20. Kenneth Thimann first isolated one of these compounds, spurring the creation of synthetic examples like 2,4,5-T, which was used as a herbicide [HUR-buh-“side”] and in Agent Orange. Frits Went discovered these compounds, which can inhibit the growth of axillary [“AXE”-ih-lair-ee] buds, thus inducing cell elongation and apical [AY-pih-kul] dominance. IAA is a major example of—for 10 points—what plant hormones that are responsible for phototropism [“photo”-TROH-pizm]?
- answer: auxins [AWK-sins]

<383288>

BONUS — Miscellaneous

20. The “Land of Lincoln” trophy is presented to the winner of an annual football match between Illinois and this school. For 10 points each—
- A. Name this school whose football team is coached by Pat Fitzgerald.
answer: Northwestern University
- B. In 2008 Northwest Airlines announced it planned to merge with this other airline, whose major hub cities include Atlanta and Detroit.
answer: Delta Air Lines (Inc.)
- C. Cary Grant and Eva Marie Saint perilously attempt to traverse Mount Rushmore in this director's film *North by Northwest*.
answer: Alfred (Joseph) Hitchcock

<343775>

TOSSUP — Fine Arts

21. The fourth movement of Beethoven's symphony of this number begins with low strings quoting themes from the previous movements and includes a Turkish march in 6/8 time. In a symphony of this number, a second-movement English horn solo introduces a theme used in the hymn “Goin' Home.” That symphony of this number is Antonin Dvorak's [d'VOR-zhahk's] *New World*. For 10 points—Beethoven's symphony of what number sets the poem “Ode to Joy”?
- answer: 9 or ninth symphony/ies

<373929>

BONUS — Literature

21. According to some myths, these creatures were the offspring of Ixion [ik-“SIGH”-un] and the cloud nymph Nephele [NEF-eh-lee]. For 10 points each—
- A. Name these half-man, half-horse creatures from Greek mythology.
answer: centaurs (or hippocentaurs)
- B. The centaurs were invited to one of these events by Pirithous [“pie”-RIH-thoh-uss], during which they decided to try and kidnap Hippodamia [HIH-poh-DAY-mee-uh].
answer: weddings (accept answers referring to a meal such as feasts)
- C. The centaurs' strong reaction to this substance prompted their kidnapping attempt. The Greek god of this substance married Ariadne [“air”-ee-AHD-nay] after Theseus abandoned her on Naxos [NAK-sohss].
answer: wine (accept alcohol or liquor)

<387014>

TOSSUP — Social Studies

22. Early leaders of this regime issued permits for trade carried in red-seal ships and were advised by the Englishman William Adams. This government's last ruler, Yoshinobu, resigned after the Boshin War. Its founder established it after defeating the Western Army at the Battle of Sekigahara; that founder, Ieyasu [ee-eh-yah-soo], later built Edo Castle. For 10 points—name this last shogunate, which preceded the Meiji Restoration.

answer: Tokugawa [toh-koo-gah-wah] Shogunate (or Tokugawa bakufu; accept Edo Shogunate or Edo bakufu)

<314934>

BONUS — Science

22. On a radar map, the three-body scatter spike indicates this event. For 10 points each—

A. Name this weather phenomenon in which approximately spherical chunks of ice fall.

answer: hailstorm (accept hailing)

B. Hail usually comes from this kind of cloud, whose name is from the Latin words for “heap” and “rainstorm.” These clouds can develop into supercells and generate tornadoes.

answer: cumulonimbus cloud (do not accept or prompt on “cumulus” or “nimbus”)

C. Hail damage may be reduced by this process, in which condensation nuclei like silver iodide are added to clouds, inducing precipitation.

answer: cloud seeding

<382706>

TOSSUP — Literature

23. This story describes a dog that “sneak[s] about with a gallows air” in response to the “terrors of a woman's tongue.” The “henpecked” title character of this story observes that a picture of George Washington has replaced one of King George III. This story's protagonist meets a man wearing “antique Dutch” clothing while hunting in the Catskills. For 10 points—name this Washington Irving story about a man who sleeps for 20 years.

answer: Rip Van Winkle

<386299>

BONUS — Social Studies

23. ProPublica and NPR investigated 500 million dollars this charity raised after a 2010 earthquake. For 10 points each—

A. Name this charity that could only document six new homes built after the quake, and admitted it “does not know” where most of the money went.

answer: American Red Cross (or ARC)

B. That 2010 earthquake took place in this Caribbean country that shares Hispaniola with the Dominican Republic.

answer: (Republic of) Haiti (or Republique d'Haïti or Repiblik d' Ayiti)

C. This Republican senator from Iowa issued a July 2015 ultimatum to the Red Cross to answer questions about the money. He attracted a large Twitter following for posts such as “pants burn leg wound.”

answer: Chuck Grassley (or Charles Ernest Grassley)

<385614>

TOSSUP — Math

24. Pencil and paper ready. Today is Emily's birthday, and her age's representation in base 25 is 1D [“one D”]. To compute Emily's age in base 10, realize that the '1' must represent 25, and that, in base 25, 'A' would represent 10. By converting 'D' into a base 10 number and adding that value to 25, compute —for 10 points—what age of Emily in base 10 given that her age in base 25 is 1D?

answer: 38 years old [$1D_{25} = (1 \times 25) + (13 \times 1) = 25 + 13 = 38$]

<380570>

BONUS — Literature

24. Hurons shout “La Longue Carabine” [“long” kaa-ruh-bin] after this character shoots a man struggling with Duncan Heyward. For 10 points each—

A. Name this scout, whose other aliases include “Hawkeye” and “Leatherstocking.”

answer: Natty Bumppo (or Nathaniel Bumppo; accept any underlined portion)

B. Bumppo is the protagonist of *The Last of the Mohicans* and four other *Leatherstocking Tales* written by this author.

answer: James Fenimore Cooper

C. The last of the *Leatherstocking Tales* to be published was this book, whose title refers to the young Bumppo's skill as a hunter.

answer: The Deerslayer(, or The First Warpath)

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