2012 Collaborative Middle School Tournament
Round 7

Tossups

1. This city was named after the Pottawatomie (POT-ah-WAH-tah-mee) for either "smelly onion place" or "skunk." An early road in this city crossed the "Nine-Mile Swamp" and Des Plaines (day PLAINS) River. Its Statistical Metropolitan Area includes Kenosha and Gary. This seat of Cook County is on the southwestern shore of Lake Michigan. For 10 points, name this third largest city in the United States known as the "Windy City."
ANSWER: **Chicago**

2. Obsidian, olivine, and this mineral commonly exhibit conchoidal (con-COID-ahl) fracture. The interior of geodes almost always contains this mineral. Its crystals generate electricity when mechanically stressed. Herkimer diamonds do not contain diamonds but instead this mineral with Mohs hardness of 7. Citrine and amethyst are varieties of, for 10 points, what silicate mineral that is the most common on the Earth's surface?
ANSWER: **quartz**

3. This character listens to a Mice Men record and wears velvet to a party at Norman Fishbein's house. Her favorite place is the fountain at Lincoln Center. After moving to Farbrook, New Jersey, this student of Miles J. Benedict Jr. is recruited by Nancy Wheeler to join the four PTS's. For 10 points, name this twelve-year-old raised in a non-religious household, who calls out to God in a book by Judy Blume.
ANSWER: **Margaret** Ann Simon [prompt on *Are You There, God? It's Me, Margaret*]

4. Along with his accomplice David Herold, he was tracked down to the farm of Richard Garrett where he was shot and killed by Boston Corbett. He received medical attention from Dr. Samuel Mudd in the wake of his most famous action, and after jumping from a balcony onto the stage, he famously shouted "sic semper tyrannis" to the crowd at Ford's Theater. For 10 points, identify this assassin of Abraham Lincoln.
ANSWER: John Wilkes **Booth**

5. The "abstract" form of this branch of mathematics concerns rings and fields, while the "linear" form concerns matrices. The elementary form of it introduces variables to represent numbers in expressions and equations. For 10 points, identify this branch of mathematics concerned with finding solutions for various types of equations, including quadratics and systems of equations.
ANSWER: **algebra**

6. In one episode of this show, Parasprites invade the central location. Another episode sees a dragon threaten the health of the town with smoke from its snoring. In another episode, Spike mocks a certain purple unicorn's inability to assist during Winter Wrap-Up. For 10 points, name this show featuring equine characters like Princess Celestia and Twilight Sparkle, a fourth-generation reboot of a girls' show.
ANSWER: *My Little Pony: Friendship is Magic* [or *MLP: FiM*; prompt on **My Little Pony**; prompt on **Friendship is Magic**]

7. This poet commented on a literary assignment in "Theme for English B." Another of his poems asks if "a dream deferred" "dr[ies] up like a raisin in the sun." He wrote about the Euphrates, Congo, and Nile in "The Negro Speaks of Rivers." In his most famous poem, he mentions the "droning" of "a drowsy syncopated tune." For 10 points, name this African-American poet of the Harlem Renaissance who wrote "The Weary Blues."
ANSWER: James Langston **Hughes**

8. Three of these creatures named Brontes (BRAWN-teez), Steropes (stair-OH-peez), and Arges (AR-geez) forged Zeus's lightning bolts and, after their creation, were locked in Tartarus by Uranus. Poseidon conjured a storm in rage after one of these creatures was blinded by "nobody." That creature lived on an island with a flock of sheep and was called Polyphemus (pawl-ee-FEE-muss). For 10 points, name this race of one-eyed giants from Greek mythology.
ANSWER: **Cyclopes** [or **Cyclops**]

9. One of these organic compounds is required for proteins to form blood clots, and sunlight is necessary for the body to produce another. The lack of one fat-soluble type results in night blindness, while beriberi (BARE-ee-BARE-ee) is caused by a diet deficient in one called thiamine. The ascorbic acid one in citrus fruit brought an end to scurvy. For 10 points, name these organic nutrients like A, C, and B_1 (B-"ONE") that are only needed in small amounts.
ANSWER: **vitamin**s [accept more specific answers of **Vitamin K**, **Vitamin D**, or **Vitamin A** until "thiamine" is read]

10. One character in this work is demoted upon releasing his female prisoner; he later returns a gold coin to its owner. That character professes his love to his ex-prisoner in the "Flower Song, who is also serenaded in the bullfighter Escamillo's (ESS-kah-MEE-yo's) "Toreador Song." The singer of the "Habanera" (HAH-bahn-YAY-ruh) is stabbed by Don José in, for 10 points, what opera about a Spanish gypsy girl by Georges Bizet?
ANSWER: *Carmen*

11. This person was described as a "beloved physician" by a "coworker," and this man's feast day is October 18. He dedicated two books to Theophilus (thee-AH-fill-uss), including one that begins with the Ascension and describes the missionary journeys of that "coworker," Paul. For 10 points, name this author of Acts of the Apostles and the third Gospel of the New Testament.
ANSWER: St. **Luke**

12. In the Admirable Campaign, this man issued the Cartagena (CAR-tah-HAY-nuh) Manifesto and the Decree of War to the Death. This victor at the Battle of Boyaca (boy-YAH-cah) defeated the Spanish in the Battle of Carabobo, helping Venezuela achieve its independence. He met with José de San Martín at Guayaquil (GUY-ah-keel) and was the first president of Gran Colombia. For 10 points, name this South American leader known as "the Liberator."
ANSWER: Simón **Bolívar**

13. This state of matter is the initial and final phase in regelation, and it is to the left of the triple point on phase diagrams. This starting point for sublimation is the most common state for elements at room temperature and pressure. One type of it is amorphous, though it generally is characterized by an orderly pattern on molecules. For 10 points, name this state that includes crystals, the endpoint of freezing.
ANSWER: **solid**s

14. In January 2012, in this nation, a French TV reporter was killed while reporting from a pro-government rally in this nation's city of Homs. Unrest there was triggered by the arrest and torture of students in Dara'a, which was not quelled by offers of political reform by its president. For 10 points, name this nation where the government of Bashar Al-Assad is struggling with protests.
ANSWER: **Syria**n Arab Republic [or Al Jumhuriyah al Arabiyah as **Suriyah**]

15. In this novel, Lord Godalming courts Lucy, who eventually succumbs to the title character. Mina's visit to her friend Lucy is interrupted when a ship runs aground in this novel. Later in this novel, a Dutch doctor draws a circle in the snow with a crucifix for protection; that man is Abraham Van Helsing. For 10 points, identify this Bram Stoker novel about Jonathan Harker's fight against the undead Vlad the Impaler.
ANSWER: *__Dracula__*

16. This "autonomous region" southwest of Qinghai (CHING-high) province is bounded on the north by the Kunlun (KOON-LOON) mountains. Monasteries of the Yellow Hat sect are a sign of Buddhist religious practice in this region north of the Himalayas. In 1959 its spiritual leader, the fourteenth Dalai Lama, took refuge in India. For 10 points, what Asian plateau region is the target of calls to "free" it from Chinese rule?
ANSWER: __Tibet__

17. Creations of this type include Roland Barthes's (BART'S) "Death of the Author." Supporting details and examples are found in body paragraphs in this type of writing, genres of which include process, descriptive, argumentative, and compare-and-contrast. A five-paragraph type of these is frequently assigned in high schools. For 10 points, name this type of non-fiction writing that seeks to prove a thesis statement.
ANSWER: __essay__s [prompt on __paper__s; prompt on __prose__; prompt on __non-fiction__; do not accept or prompt on "article"; do not accept or prompt on "report"]

18. This style emerged in Great Britain in the mid-1950's and was started by the Independent Group. Some examples of this style include the "combines" of Robert Rauschenberg and Jasper Johns's work *Flag*. Its most famous practitioner founded a studio known as "The Factory" and produced reproductions of everyday objects such as *Campbell's Soup Cans*. For 10 points name this type of art practiced Andy Warhol.
ANSWER: __Pop Art__

19. This method of execution was used to kill both Charlotte Corday and Maximilian Robespierre. England's Henry VIII executed his wives Catherine Howard and Anne Boleyn using this method. During the French Revolution, Louis XVI and Marie Antoinette were both executed by this method. For 10 points, name this method of execution that separates someone from an essential body part.
ANSWER: death/execution by __behead__ing [accept __guillotine__ and its word forms; accept any other answer that suggests __decapitation__]

20. During one of these events, what is observed is based on the viewer's location relative to the path of totality. Viewers of them might see the annulus or corona, if they are standing in the antiumbra. Viewers standing in the penumbra will see a partial form, while during a total one, the corona may be seen. For 10 points, name this event in which the moon appears to block out the sun.
ANSWER: __solar eclipse__ [prompt on __eclipse__]

Extra. The number of positive real roots of a polynomial can be found by this man's Rule of Signs. His philosophical works include the *Discourse on Method* and *Meditations on First Philosophy*. He is the namesake of the standard x-y coordinate system. For 10 points, give this French philosopher and mathematician whose most famous attributed quote is "cogito ergo sum," or, "I think, therefore I am."
ANSWER: Rene __Descartes__ [accept __Descartes' Rule of Signs__ before "Rule"]

2012 CMST – Round 7

Bonuses

1. This book is about a landing in the sandpit at Horsell Common in Surrey, England. For 10 points each:
[10] Name this 1898 novel about a Martian invasion of Earth.
ANSWER: The *War of the Worlds*
[10] *The War of the Worlds* was written by this author of *The Island of Doctor Moreau*.
ANSWER: H(erbert) G(eorge) **Wells**
[10] Wells also wrote this novel about a man who encounters the Eloi (ELL-oh-ee) in the year 802,701 AD.
ANSWER: The *Time Machine*

2. This section of the U.S. Constitution contains the privileges and immunities clause. For 10 points each:
[10] What Article of the U.S. Constitution also contains the full faith and credit clause?
ANSWER: Article **IV** of the U.S. Constitution
[10] This more famous clause is found in Article VI of the U.S. Constitution. It effectively ensures that the U.S. Constitution overrules all other statutes, including state constitutions.
ANSWER: **supremacy** clause
[10] This clause is contained in the First Amendment. Thomas Jefferson claimed it required a "separation of church and state" and it should not be confused with the "free exercise" clause.
ANSWER: **establishment** clause

3. For 10 points each, answer the following about George Washington's portrayal in art.
[10] This man's most famous work was an unfinished portrait of George Washington, which was known as the *Athenaeum*.
ANSWER: Gilbert **Stuart**
[10] Emanuel Leutze painted George Washington in a popular work, in which he is in a boat crossing this body of water.
ANSWER: **Delaware** River
[10] *Washington Crossing the Delaware* is depicted on the quarter from this state.
ANSWER: **New Jersey**

4. You probably know more about Hawaiian mythology than you think you do. For 10 points each:
[10] The menehune (MEN-eh-HOO-neh) are the Hawaiian equivalents of these little people that, in Norse mythology, make excellent smiths.
ANSWER: **dwarves** [or **dwarf**]
[10] After complaining that the day was too short, the Hawaiian trickster Maui lassoed this celestial object, of which Helios was the Greek god.
ANSWER: the **sun**
[10] Hawaiian mythology is full of tales of these "expert" priests and sorcerers, though the term has become co-opted into surfer lingo.
ANSWER: **kahuna**s

5. It is the common name for a normal Gaussian (GOWSS-ee-uhn) distribution. For 10 points each:
[10] Name this curve that peaks at the expected value, used to represent a common distribution of random variables.
ANSWER: **bell** curve [prompt on **normal** distribution; prompt on **Gaussian** distribution]
[10] The amount of spread of a bell curve is measured by this quantity, the square root of variance.
ANSWER: **standard deviation**
[10] Though a bell curve is a continuous distribution, it often is approximated by this type of bar graph that uses rectangles to represent frequencies.
ANSWER: **histogram** [or **histograph**]

6. This city-state defeated Athens during the Peloponnesian (PELL-uh-puh-NEEZH-in) War. For 10 points each:
[10] Name this Greek city-state that was known for its fearless warriors and lunatic attacks.
ANSWER: **Sparta**
[10] This king of Sparta led his people against the invasion of Xerxes (ZERX-eez) in the 480's B.C. He died when he and his 300 bodyguards were betrayed by a Greek named Ephialtes (EFF-ee-ALL-teez).
ANSWER: **Leonidas**
[10] Leonidas' death came at this mountain pass, where he and his 300 bodyguards resisted the Persian advance for 3 days. This mountain pass's name translates into "Hot Gates."
ANSWER: **Thermopylae**

7. This bowl game usually pairs representatives of the Pac-12 and Big 10 conferences. For 10 points each:
[10] Name this college football bowl game, played in a namesake stadium in Pasadena, California.
ANSWER: **Rose Bowl**
[10] This team defeated Wisconsin in the 2012 Rose Bowl behind LaMichael James and Darron Thomas. Notable former players from this school include Kellen Clemens and Haloti Ngata.
ANSWER: University of **Oregon** [or Oregon **Ducks**]
[10] The Oregon Ducks are notable for wearing this company's Pro Combat line. In addition to football jerseys, this company also makes basketball shoes such as the Zoom Kobe and KD IV.
ANSWER: **Nike**

8. Monocot and dicots differ in the number leaves around this structure. For 10 points each:
[10] Beans and peas are edible examples of what structure that contains the plant embryo and its food supply?
ANSWER: **seed**s
[10] In angiosperms, the seed develops inside the ovary of this female part of the flower.
ANSWER: **carpel** [or **pistil**; or **gynoecium**]
[10] The anther of a flower produces these tiny grains that contain the plant's sperm cells.
ANSWER: **pollen**

9. For 10 points each, identify these African countries.
[10] This country, which moved its legislative capital from Dar Es Salaam inland to Dodoma, is home to Mount Kilimanjaro.
ANSWER: United Republic of **Tanzania** [or Jamhuri ya Mungano wa **Tanzania**]
[10] This country's only land borders are with Guinea and Liberia. It includes the Banana and Turtle Islands and was founded as a homeland for freed British slaves.
ANSWER: Republic of **Sierra Leone**
[10] This island at the eastern edge of the Mozambique Channel is the world's fourth-largest.
ANSWER: Republic of **Madagascar** [or Republique de **Madagascar**; or Repoblikan'i **Madagasikara**]

10. For 10 points each, name this Dr. Seuss characters.
[10] This elephant both Hatches The Egg and Hears A Who.
ANSWER: **Horton**
[10] This tiny son of the Mayor, who yells "YOPP!", saves Whoville with his voice.
ANSWER: **Jojo**
[10] The Once-ler is chided by this guy who "speaks for the trees"-- specifically the Truffula trees which are being chopped down.
ANSWER: The **Lorax**

11. Scientists now believe that the event described by this theory happened between 13 and 14 billion years ago. For 10 points each:
[10] Identify this theory which describes the rapid expansion of the early universe.
ANSWER: **Big Bang**
[10] One piece of evidence for the Big Bang was this man's discovery that redshifts, and thus receding speeds, are proportional to distance away. A space telescope launched in 1990 is named after him.
ANSWER: Edwin **Hubble**
[10] Another major piece of evidence for the Big Bang was the 1964 discovery by Penzias and Wilson of this kind of radiation that fills the universe.
ANSWER: **cosmic microwave background** radiation [or **cmb**r; prompt on partial answers; prompt on **relic** radiation]

12. The goal of this force was to sail to Gravelines (GRAH-vell-een) and transport an army led by the Duke of Parma to England. For 10 points each:
[10] Name this navy led by the Duke of Medina Sidonia that was sent by Spain to overthrow Queen Elizabeth I.
ANSWER: Spanish **Armada**
[10] The Spanish Armada was sent by this king of Spain who sent his half-brother Don Juan to fight in the Battle of Lepanto and lost his title as co-ruler of England after his wife Mary I died.
ANSWER: **Philip II** Hapsburg [prompt on **Philip**]
[10] Attacks led by this man drove the Armada away from picking up the Army of Flanders. Several years earlier, he was given a knighthood by Queen Elizabeth aboard his ship, the *Golden Hind*.
ANSWER: Sir Francis **Drake**

13. This position traditionally is held by the Senator in the majority party with the most experience. For 10 points each:
[10] Name this position that follows the Speaker of the House in the line of Presidential succession.
ANSWER: **President pro tem**pore of the Senate
[10] This Japanese American, who fought in World War II and currently represents Hawaii, is the current President pro tempore.
ANSWER: Daniel **Inouye** (IN-oo-yay)
[10] The President pro tempore should not be confused with the Senate Majority Leader; that position is currently held by this Nevada Democrat.
ANSWER: Harry **Reid**

14. The title character initially lives with her uncle's family in Gateshead. For 10 points each:
[10] Name this 1847 novel about a woman who attends Lowood and falls in love with Edward Rochester.
ANSWER: *Jane Eyre*
[10] *Jane Eyre* was written by Charlotte, one of three writing sisters from this family.
ANSWER: **Bronte**
[10] Charlotte's sister Emily wrote this novel about Catherine Earnshaw and Heathcliff, named after a house in the Moors.
ANSWER: *Wuthering Heights*

15. This is a computation bonus. For 10 points each, find the following areas.
[10] Find the area of a trapezoid that has a top of length 8, a bottom of length 12, and a height of length 6.
ANSWER: **60**
[10] Find the area of a rhombus if its sides are of length 2 and one of its interior angles is thirty degrees.
ANSWER: **2**
[10] Find the area of the shape formed on a graph by connecting the points (1,1), (4,1), and (0,7).
ANSWER: **9**

16. For 10 points each, give the following about music excerpted in *Fantasia*.
[10] This composer's five movement *Pastoral Symphony*, the sixth of his nine symphonies, is used for scenes showing cupids and fauns.
ANSWER: Ludwig van **Beethoven**
[10] The dinosaurs are killed off in a scene that uses music from an Igor Stravinsky ballet titled *The Rite of* this season. Benjamin Britten and Robert Schumann each composed symphonies nicknamed for it.
ANSWER: **spring** [accept *The **Rite of Spring***; accept ***Spring** Symphony*]
[10] The film's last piece is "Ave Maria," a song by this Austrian composer of over 600 lieder and a notable unfinished symphony.
ANSWER: Franz **Schubert**

17. For 10 points each, name these positions that can lead worship.
[10] This title is held by specially trained Muslims leading prayers at a mosque and, according to Sunni tradition, the successor of Muhammad that took over his administrative and political roles.
ANSWER: **imam** [prompt on English translations such as **leader**; do not accept "caliph"]
[10] This title is held by the person that oversees the production of kosher foods and assists at a Bar Mitzvah.
ANSWER: **rabbi** [prompt on English translations such as **teacher** or **master**]
[10] This title is held by an official that hears confessions and can celebrate the Eucharist. Persons with this title usually are one rank above deacons and one rank below bishops.
ANSWER: **priest** [do not accept "preacher"]

18. One of the first uses of this constant was to explain why the ultraviolet catastrophe did not occur with black-body radiation. For 10 points each:
[10] Name this constant associated with the quantization of energy and represented by a lower case h.
ANSWER: **Planck**'s (PLONK's) constant
[10] Albert Einstein won a Nobel Prize for explaining this effect by setting Planck's constant equal to the energy of a quantum divided by a quantity represented by the Greek letter nu.
ANSWER: **photoelectric** effect
[10] The Greek letter nu represents this quantity often measured in Hertz.
ANSWER: **frequency**

19. His real name was Francois-Marie Arouet (frahn-SWAH mah-REE ah-roo-ETT), and his best-known work is about a young man who is taught by Pangloss that he lives in the best of all possible worlds. For 10 points each:
[10] Name this author of *Candide*.
ANSWER: **Voltaire**
[10] This term is often used to describe Voltaire's works. It is the use of humor to criticize other people's stupidity, especially that widespread in society.
ANSWER: **satire** [prompt on **irony**; prompt on **sarcasm**; do not accept or prompt on "parody"]
[10] Voltaire also wrote a work about this mythical Greek king who kills his father Laius and marries his mother Jocasta.
ANSWER: **Oedipus** [or **Oedipe**]

20. Louis XIV had one of these devices installed at the Palace of Versailles in 1743. For 10 points each:
[10] Name this invention that allows people or cargo to travel between floors of a building without the use of stairs. Early ones were man-powered, while modern ones are usually electric-powered.
ANSWER: **elevator**s
[10] When this inventor demonstrated his elevator safety brake, it launched a successful elevator manufacturing company that still bears his name today.
ANSWER: Elisha **Otis**
[10] Elisha Otis demonstrated his safety brake at the 1854 World's Fair in this American city, now the home of many skyscrapers made practical by Otis's invention.
ANSWER: **New York** City

Extra. For 10 points each, name these dog breeds recognized by the American Kennel Club.
[10] This dog is the mascot of the United States Marine Corps and was initially bred for use in a certain kind of "baiting," although this medium-sized dog is now known as a gentle family pet.
ANSWER: English **bulldog**
[10] This large dog on short legs is well known for its uniquely long ears. Its name comes from the French word meaning "low set" and was a popular French hunting dog.
ANSWER: **basset hound** [prompt on **hound**]
[10] This smallest dog breed, first discovered in Mexico, cannot exceed 6 pounds and may have descended from the fennec fox.
ANSWER: **chihuahua** [prompt on **purse dog**]