

# 2012 Collaborative Middle School Tournament

## Round 9

### Tossups

1. This work was based on a real life location in Greenwich Village. It depicts a red-headed woman and two men in hats seated at a bar while being waited on by a man in a white hat. Above the well lit diner in this painting is a sign saying Phillies Cigars: Only 5 cents. For 10 points, name this iconic American painting by Edward Hopper.

ANSWER: Nighthawks

2. One character in this short story works at Maw and Meggins. Its title object is thrown into a fire by Sergeant-Major Morris and allegedly belonged to an Indian fakir who wished to demonstrate how fate ruled lives. In this story, Mr. White makes three wishes; the first kills his son Herbert and the second reanimates Herbert's mangled body. For 10 points, name this story by W.W. Jacobs about a primate's magical appendage.

ANSWER: "The Monkey's Paw"

3. This term describes a "zone" below the water table in which groundwater is found. This term describes compounds that contain only single bonds. It also describes solutions that have the maximum possible amount of dissolved solute. For 10 points, give this term generally describing things unable to hold more, which names a certain kind of "bad" fat.

ANSWER: saturated [or word forms, such as saturation]

4. This leader has a weekly talk show, *Aló Presidente* (ah-LO pre-zi-DEN-tay), which went on hiatus in June 2011 when he traveled to Cuba for cancer treatment. This leader called Barack Obama a "clown" and has suggested that the U.S. is responsible for numerous cases of cancer among various South American leaders. For 10 points, name this current President of Venezuela.

ANSWER: Hugo Chavez

5. While president of the Estates-General (es-TAHTS zhay-nay-RAHL), this man presented the Declaration of the Rights of Man and of the Citizen to Louis XVI. He refused to become dictator after the 1830 July Revolution. Earlier, he had helped to secure French aid to the American Revolution. For 10 points, name this "Hero of Two Worlds," a French general who was George Washington's aide-de-camp.

ANSWER: Marie-Joseph Paul Yves Roch Gilbert du Motier, Marquis de Lafayette

6. This nation's Bay of Plenty is the home of a sphenodont (SFEE-noh-dahnt) reptile called the tuatara. Its regions include Otago and Canterbury, whose chief city, Christchurch, was the site of a 2011 earthquake. The Cook Strait, which divides its North and South Islands, is the site of its capital, Wellington. For 10 points, the Maori people are the native inhabitants of what Pacific island nation east of Australia?

ANSWER: New Zealand

7. This figure was nearly killed by his own father when Medea tricked the father into giving this figure a poisoned cup of wine. That cup was knocked away when this figure revealed a sword his father had hidden under a boulder with a pair of sandals. When this hero returned home with black sails, his father, Aegeus, jumped into the sea. For 10 points, name this first king of Athens and slayer of the Minotaur.

ANSWER: Theseus

The 2012 Collaborative Middle School Tournament was written and edited by Joe Brosch, Kristin I. Burns, Michael Falk, Brad Fischer, Matt Hayes, Kathy Hempel, Jeff Hoppes, Mike Laudermith, Charles Martin Jr., Jacob O'Rourke, Mike Perovanovic, Jeffrey Price, David Reinstein, Donald Taylor, Tristan Willey, Mike Wong, Dwight Wynne, Ben Zhang, and possibly some other people.

## 2012 CMST – Round 9

8. These people recorded their rulers' accomplishments on tetun using the only complete written language of the pre-Columbian Americas. Leaders of these people include Pakal (pah-KAHL) the Great and Hunac Ceel (HOO-nahk KEEL) and their myths are collected in the Popol Vuh (POE-pohl VUH). For 10 points, identify this Mesoamerican civilization that created the Long Count calendar and had cities at Tikal (tee-KAHL) and Chichen Itza (CHEE-chen EET-zah).

ANSWER: Mayans

9. This man was the first to state that the color of light was determined by light's interaction with other objects. This man was the first to coin the term "Action at a Distance." His second law states that force is equal to the time derivative of momentum, or  $F$  equals  $m a$ . For 10 points, name this man who derived three laws of motion and apocryphally discovered gravity when an apple fell on his head.

ANSWER: Isaac Newton

10. This author of *After the Fall* and *All My Sons* wrote in another play about Willy Loman committing suicide to give insurance money to his family. In another play by this man, John Proctor and Giles Corey are executed after accusations are made by Abigail Williams and Mary Warren. For 10 points, name this American playwright of *Death of a Salesman* and *The Crucible*.

ANSWER: Arthur Asher Miller

11. One story in this book involves a man who marries a daughter of Jethro; that man's mother is Jochebed (JOE-keh-bed) and his sister is Miriam. This book begins with the death of Joseph and sees a ruler declare that all newborn Jewish babies must be drowned in the Nile. In this book, Aaron and Moses ask the pharaoh to "let my people go." For 10 points, the Jews' flight from Egypt is detailed in what second book of the Bible?

ANSWER: Book of Exodus [accept Shemot and Names]

12. This planet was mapped by the Magellan probe. This planet had a notable transition of the sun in 2004 and is scheduled to make another in 2012. When it appears, it is this brightest object in the night sky. Its dense, carbon dioxide dominated atmosphere results in a runaway greenhouse effect. For 10 points, name this planet named after the Roman goddess of love, the second planet from the sun.

ANSWER: Venus

13. In 1983 this character was given a purple and green battle suit. This cancer survivor was fictionally the forty-third U.S. President. John Byrne rewrote this character as a white-collar criminal who runs a prominent aerospace company. He has been portrayed by Gene Hackman and Kevin Spacey in movies, and Michael Rosenbaum in *Smallville*. For 10 points, name this bald supervillain known for his rivalry with Superman.

ANSWER: Alexander John "Lex" Luthor

14. A work possibly ghost-written for this man praised Edmund Ross, Thomas Hart Benton, and six other Senators for doing what they felt was right; that work was *Profiles in Courage*. This president ordered a failed invasion at the Bay of Pigs. He persisted in a naval blockade of Cuba and resolved the Cuban Missile Crisis. For 10 points, name this President who was assassinated by Lee Harvey Oswald in Dallas in 1963.

ANSWER: John F. Kennedy [or JFK; prompt on Kennedy]

15. Euler characteristic of platonic solids have this value. This integer times pi gives the number of radians in the unit circle. Truth tables can evaluate to this many outputs. This value expressed in binary is 10 (ONE ZERO). This is the highest degree of a quadratic function as is the number of congruent sides in an isosceles triangle. For 10 points, give this smallest prime number, which divides all even numbers.

ANSWER: 2

## 2012 CMST – Round 9

16. In *Major Barbara*, Andrew Undershaft became rich by manufacturing these objects. Both Hedda Gabler and Young Werther (VEHR-tuhr) commit suicide using these objects. One of these objects shown in the background early in a story will be important later, according to a literary device named for Anton Chekhov. For 10 points, Eugene Onegin agrees to a duel that uses what bullet-firing weapons?

ANSWER: guns [accept pistols; prompt on weapons; prompt on munitions]

17. This nation's cities include Pleiku in the Central Highlands and the port of Haiphong on the Gulf of Tonkin near the Red River delta. The Mekong River also has its delta in this country, south of Ho Chi Minh City, formerly known as Saigon. For 10 points, what Southeast Asian nation was divided between "North" and "South" governments during a war that saw the commitment of U.S. troops in 1965?

ANSWER: Socialist Republic of Vietnam (or Cong Hoa Xa Hoi Chu Nghia Viet Nam)

18. This instrument was played by Cannonball Adderley on *Kind of Blue*, as well as by a musician whose own albums include *Giant Steps* and *A Love Supreme*. Another player of this instrument released *Ornithology* and *Yardbird Suite*. It was played by John Coltrane and Charlie Parker. For 10 points, name this instrument whose alto and tenor varieties have a U-bend and tilted bell and are common in jazz ensembles.

ANSWER: saxophone [accept alto saxophone]

19. One novel by this man sees a recurring protagonist help to rescue his friend Chingachgook's betrothed Wah-ta!-wah from the Hurons. This man wrote another novel in which the angry Magua (MAHG-wah) tries to kill Cora Munro, and the title person is not the protagonist Hawkeye, but rather Uncas (UN-kass). For ten points, name this author whose *Leatherstocking Tales* include *The Deerslayer* and *The Last of the Mohicans*.

ANSWER: James Fenimore Cooper

20. Ilya Mechnikov first studied this body system by inserting thorns in starfish, and its longevity depends on memory cells. An inflammatory response attracts macrophages from this system, while another of its cells is targeted by HIV. T cells and B cells are the major white blood cells of this system, which produces antibodies. For 10 points, name this body system that defends an organism against bacterial and viral infections.

ANSWER: immune system

Extra. This man designed railway stations in Santiago, Chile and Budapest, Hungary. He was jailed after being implicated in a failed Panama Canal project, for which he designed the locks. He designed the steel framework for the Statue of Liberty and a thousand-foot-tall structure for the 1889 World's Fair. For 10 points, name this architect and engineer who built a namesake Parisian tower.

ANSWER: (Alexandre) Gustave Eiffel

## 2012 CMST – Round 9

### Bonuses

1. The Treaty of Verdun divided this man's lands between Lothair, Charles the Bald, and Louis the German. For 10 points each:

[10] Name this son of Pepin the Short, a Frankish king who conquered much of Western Europe.

ANSWER: **Charlemagne** [or **Charles I** or **Charles the Great**; or **Carolus Magnus**; prompt on **Charles**]

[10] Charlemagne conquered the Lombards, a group of people who lived in this modern-day country.

ANSWER: **Italy** [or **Italia**]

[10] On Christmas Day in 800, Charlemagne was given this title by Pope Leo III. Other rulers who held this position included Otto the Great, Frederick Barbarossa, and Charles V.

ANSWER: **Holy Roman Emperor** [do not accept or prompt on "Roman Emperor"]

2. This three dimensional object has sides of equal length and equal right angles. For 10 points each:

[10] Name this object with six square faces.

ANSWER: **cube**

[10] This geometric figure makes up the faces of icosahedrons, octahedrons and tetrahedrons. All the angles and sides of this two-dimensional shape are all congruent.

Answer: **equilateral triangle** [prompt on **triangle**]

[10] This other mathematical construct is a one sided surface that can be created by connecting the ends of a half-twisted strip of paper

ANSWER: **Möbius** strip or **Möbius** band

3. On May 2nd, 2011, Operation Neptune Spear was executed by the US Navy's Seal Team Six by order of President Obama. For 10 points each:

[10] That operation ended with the slaying of five adults, including this man, the head of Al-Qaeda, who had eluded US forces since 1998.

ANSWER: Osama **bin Laden**

[10] Bin Laden's compound was discovered in the city of Abbottabad, in this south Asian country, just west of India.

ANSWER: **Pakistan**

[10] After positive identification of bin Laden's body, the US Navy conducted a formal burial at sea, aboard the USS Carl Vinson, in this body of water, a part of the Indian Ocean.

ANSWER: North **Arabian Sea**

4. For 10 points each, name these musical instructions.

[10] Indicated by an angle opening to the right, this instruction is found below the staff and indicates for the music to get louder.

ANSWER: **crescendo**

[10] This opposite of accelerando means to slowly decrease the tempo of the piece over a short duration.

ANSWER: **ritardando** [or **ritardando**]

[10] This instruction, often found at the end of a piece, indicates to return to the beginning of the piece and play until a specified end point.

ANSWER: **D.C. al Fine** [or **Da Capo al Fine**; prompt on partial answer]

## 2012 CMST – Round 9

5. The protagonist of this novel calls the character Mr. Tweedy a “squeak-pig.” For 10 points each:

[10] Name this novel about the namesake silversmith, who interacts with historical figures like Paul Revere and Samuel Adams after injuring his hand making a tea set for John Hancock.

ANSWER: **Johnny Tremain**

[10] This character is the main love interest of Johnny. Her sister Izzy is taken to live with Lavinia Lyte, and she has a temporary romance with a British soldier called Pumpkin.

ANSWER: **Priscilla** Lapham [accept **Scilla**]

[10] *Johnny Tremain* was written by this author, who also won the Pulitzer Prize for History for *Paul Revere and the World He Lived In*.

ANSWER; Esther **Forbes**

6. For 10 points each, name these Russian cities.

[10] This current capital of Russia is home to the Kremlin.

ANSWER: **Moscow**

[10] This city was previously known as Leningrad during the Soviet Era. It lies on the Baltic Sea at the mouth of the Neva (NYAY-vah) River.

ANSWER: **Saint Petersburg**

[10] This third-most-populous city in Russia is located on the Ob River and is the most populous in Siberia.

ANSWER: **Novosibirsk**

7. For 10 points each, name these animals from Norse mythology.

[10] After being trapped at Gjoll (gee-OHL) by Gleipnir (GLYPE-neer), one of these creatures named Fenrir bit off Tyr’s hand.

ANSWER: **wolf**

[10] One of these creatures once bit on to an ox’s head that was used as bait. That creature, Jormungand (YOR-mun-gahnd), is large enough to surround the whole world and still bite its own tail.

ANSWER: **serpent** [accept **snake** and equivalents; do not accept “lizard” or “reptile”]

[10] Sleipnir (SLYPE-neer) was an eight-legged one of these creatures whose more common four-legged varieties include Greek mythology’s Pegasus.

ANSWER: **horse**

8. At the Battle of Charonea (KARE-uh-NAY-uh), this man broke through the lines of the Sacred Band of Thebes. For 10 points each:

[10] Name this son of Phillip II, a Macedonian king who conquered much of the Middle East.

ANSWER: **Alexander the Great** [or **Alexander III** of Macedonia, prompt on **Alexander**]

[10] Alexander was tutored by this man, a student of Plato who authored the *Politics* and *Nichomachean Ethics*.

ANSWER: **Aristotle**

[10] According to legend, Alexander cut the Gordian one of these objects in half with his sword after he became frustrated trying to untie it.

ANSWER: **knots**

## 2012 CMST – Round 9

9. Telescopes are often used to see objects invisible to the unaided eye. For 10 points each:

[10] Telescopes that use mirrors are called reflecting. Give the similar term used for telescopes that use lenses.

ANSWER: **refracting** [accept **catadioptric**]

[10] NASA is searching for extrasolar planets using a telescope on this spacecraft launched in 2009. It is named after the astronomer whose three laws describe planetary motion.

ANSWER: **Kepler**

[10] Some telescopes detect this radiation with wavelengths slightly longer than visible light also used for some night vision goggles.

ANSWER: **infrared** [or **IR**]

10. The winner of a contest featured in this work wins a free meal at the Tabard Inn. For 10 points each:

[10] Name this collection of stories told by a group of pilgrims, including the Knight and Wife of Bath, as they travel to the shrine of St. Thomas a Becket.

ANSWER: **Canterbury Tales**

[10] The Wife of Bath's Tale is about a knight sent on a mission to seek what these people want "more than anything else."

ANSWER: **women** [or **females**; or other obvious equivalents]

[10] The *Canterbury Tales* were written down by this English author of *The Parliament of Fowls*.

ANSWER: Geoffrey **Chaucer**

11. For 10 points each, answer the following about Realism.

[10] This man is considered the founder of realism, which is shown in such works as *The Burial at Ornans* and *The Artist's Studio*.

ANSWER: Gustave **Courbet**

[10] This other realist depicted his neighbor in Chadds Ford, Pennsylvania in many of his works including *Christina's World*.

ANSWER: Andrew **Wyeth**

[10] Edgar Degas (day-GAH) was known for depicting these students of performing arts in his works, including his most famous 1873 work.

ANSWER: **dancers**

12. This novel features a relationship between Marius and Cosette. For 10 points each:

[10] Name this work in which Inspector Javert pursues Jean Valjean.

ANSWER: *Les* **Miserables**

[10] *Les Miserables* was written by this 19th century Frenchman.

ANSWER: Victor **Hugo**

[10] Victor Hugo also wrote this novel about the bell-ringer Quasimodo.

ANSWER: *The* **Hunchback of Notre Dame** [or **Notre Dame de-Paris**]

13. For 10 points each, answer the following about waves.

[10] This distance is measured between two consecutive troughs or crests. It is inversely proportional to frequency in the speed of light and is signified by lambda.

ANSWER: **wavelength**

[10] This term refers to the points on a standing wave that have minimal amplitude.

ANSWER: **nodes**

[10] Two waves that combine to increase the magnitude of the displacement are said to display this type of interference.

ANSWER: **constructive** interference

## 2012 CMST – Round 9

14. It contains four sections, the first of which ends with the Equal Protection Clause. For 10 points each:  
[10] What Amendment also includes a Due Process clause and is the middle of the three Reconstruction Amendments?

ANSWER: **Fourteenth** Amendment [accept Amendment **XIV**]

[10] The Fourteenth Amendment grants this status to anybody born or naturalized within the United States.

ANSWER: **citizenship**

[10] The Fourteenth Amendment overruled the decision in this 1857 Supreme Court case in which a slave attempted to sue for his freedom.

ANSWER: **Scott v. Sandford** [or **Sandford v. Scott**; or **Dred Scott** Decision]

15. Species studied by this man include the Cactus, Warbler, and Woodpecker finches. For 10 points each:

[10] Name this scientist whose observations of finches and giant tortoises in the Galapagos Islands helped inspire his theory of natural selection.

ANSWER: Charles **Darwin**

[10] Darwin noted that the size and shape of the different finches' beaks were well-suited to their method of feeding, making the beaks this kind of feature that helps an organism survive in its environment.

ANSWER: **adaptation** [or word forms, such as **adaptive**]

[10] This term describes features like the human appendix and tailbone that no longer have a function in an organism.

ANSWER: **vestigial** organ

16. This 2011 film served as a prequel for a popular film franchise dating from 1968. For 10 points each;

[10] Identify this film in which a researcher's experiments to find a cure for Alzheimer's disease creates a super-intelligent chimpanzee who leads other chimps, orangutans, and gorillas to freedom.

ANSWER: **Rise of the Planet of the Apes** [do not accept or prompt on partial answers, such as "Planet of the Apes"]

[10] Caesar, the subject of *Rise of the Planet of the Apes*, was played by this actor, who won acclaim despite most of his features being created digitally.

ANSWER: Andy **Serkis**

[10] Andy Serkis had previously portrayed this digitally altered character in the *Lord of the Rings* film trilogy. This character talks to himself and lusts for the ring of power, which he calls "my precious."

ANSWER: **Gollum** [or **Smeagol**]

17. These men got the idea of flying from the bicycle shop they worked at. For 10 points each:

[10] Name these brothers, who invented the first airplane and successfully had a test flight near Kitty Hawk, North Carolina.

ANSWER: **Wright** Brothers [or Orville and Wilbur **Wright**]

[10] This other inventor invented the cotton gin, which allowed for the seeds to be picked out faster. He also popularized the idea of interchangeable parts while promoting muskets.

ANSWER: Eil **Whitney**

[10] This man's greatest invention was the telephone. He also invented a metal detector that he tried to use to find the bullet in James Garfield's back.

ANSWER: Alexander Graham **Bell**

## 2012 CMST – Round 9

18. This poem is set during the Battle of Balaclava during the Crimean War. For 10 points each:

[10] Name this poem that begins, “Half a league, half a league, half a league onward, all in the valley of death rode the six hundred.”

ANSWER: “The **Charge of the Light Brigade**”

[10] “The Charge of the Light Brigade was written by this poet who also wrote “Crossing the Bar” and “In Memoriam A.H.H.”

ANSWER: Alfred, Lord **Tennyson**

[10] In 1850, Tennyson was appointed to this position held by writers appointed by the United Kingdom monarch.

ANSWER: **Poet Laureate** [accept longer answers mentioning **Poet Laureate** of England, Britain, United Kingdom, etc.]

19. This is a computation bonus. For 10 points each, answer the following involving proportion and variation.

[10] Solve the proportion  $x$  divided by the quantity  $x+3$  equals three-fourths.

ANSWER:  $x = \underline{9}$

[10] If  $y$  varies directly with  $x$  and  $y=4$  when  $x=5$ , find the value of  $y$  when  $x=10$ .

ANSWER:  $y = \underline{8}$

[10] If  $y$  varies inversely with  $x$  and  $y=4$  when  $x=5$ , find the value of  $y$  when  $x=10$ .

ANSWER:  $y = \underline{2}$

20. The name of this religion is derived from the Sanskrit verb for “to conquer” and enlightened individuals in this religion are thus known as “Conquerors.” For 10 points each:

[10] Identify this Indian religion whose adherents follow the ethical standards set by the Three Jewels and which is not Buddhism nor Hinduism.

ANSWER: **Jainism**

[10] Jains follow the practice of ahimsa (ah-HIM-sah), which requires Jains not to engage in this practice with all living creatures. Examples of this practice include smashing a bug or hitting someone.

ANSWER: **violence**

[10] Like Buddhists and Hindus, Jains believe in this concept, which states that after death, a person’s soul will inhabit the body of another being.

ANSWER: **reincarnation**

Extra. Much of this city was destroyed by a fire in 1666. For 10 points each:

[10] Name this home of Westminster Abbey and Buckingham Palace.

ANSWER: **London**

[10] This river, the longest entirely in England, flows through London.

ANSWER: **Thames**

[10] After the Great Fire of 1666, this architect designed many of the churches that were rebuilt, including St. Paul’s.

ANSWER: Christopher **Wren**