

2010 Collaborative Middle School Tournament Round 7

Tossups

1. In one novel, this writer depicted Catherine as the lover of Frederic Henry. In another novel, this writer depicted Maria as the lover of Robert Jordan. In a third novel by this writer, Frances is replaced by Lady Brett Ashley as the mistress of Robert Cohn (“CONE”). For 10 points, name this American writer who wrote *A Farewell to Arms*, *For Whom the Bell Tolls*, and *The Sun Also Rises*.

ANSWER: Ernest **Hemingway**

2. One deity from this country’s myth system obtained the "grass-cutting sword" after defeating an eight-headed foe. Its sun deity hid in a cave after another deity made too much noise. Those deities, Susanowo (“SOO-sun-oh-woe”) and Amaterasu (“ah-MAH-ter-AH-soo”) respectively, are siblings from this country's myth system. For 10 points, these kami (“KAH-mee”) are from the Shinto religion practiced by citizens of what country?

ANSWER: **Japan** [or **Nippon-koku**; or **Nihon-koku**]

3. During the seventh of these events, King Louis IX of France was captured in the Nile Delta. The fourth one was diverted to Constantinople with the help of the Doge of Venice. At the Council of Clermont (“Claremont”), Pope Urban II called for the first one, which recaptured Jerusalem in 1099. For 10 points, what medieval military campaigns saw Christian knights try to conquer the Holy Land?

ANSWER: **Crusades**

4. One part of these structures is covered with cementum (“see-MEN-tum”). They are divided into a “crown” and a “root,” and are covered with enamel. “Wisdom” ones are often removed by an oral surgeon. They can be divided into incisors, canines, premolars, and molars. For 10 points, name these structures used to chew food.

ANSWER: **teeth**

5. In one novel, this writer depicts a character named Protopopov (“PRO-tow-POP-ahv”) who becomes the lover of Natasha, the selfish wife of Andrey Prozorov (“PRO-zor-ahv”). In another novel, this writer depicts the intellectual liberal named Anya who is the daughter of Madame Ranevskaya (“RAHN-ev-SKY-uh”). For 10 points, name this Russian author of *The Three Sisters* and *The Cherry Orchard*.

ANSWER: Anton Pavlovich **Chekhov**

6. In publishing, this six-letter term describes a set of journal issues published in the same year. It also describes the sound level output from a computer or television. Density equals mass divided by a quantity with this name. For 10 points, give this term for the amount of space an object occupies, which for a cube equals side length cubed.

ANSWER: **volume**

7. The Justice Department suggested using race as a basis for this practice in the 1990’s. The term for this practice was first used in 1812, and took its name from a former Governor of Massachusetts that used this practice and the animal that a district map resembled. For 10 points, identify this practice of drawing Congressional boundaries to the advantage of one party.

ANSWER: **gerrymandering**

The 2010 Collaborative Middle School Tournament was overseen by Andy Watkins and written by Nick Bergeon, Matt Bollinger, Matthew Dirks, Zach Foster, David Garb, Jeff Hoppes, Sandy Huang, Idris Kahloon, Tanay Kothari, Kay Li, Charles Martin, Trygve Meade, Aidan Mehigan, Charlie Rosenthal, Donald Taylor, and Dwight Wynne. Jeff Hoppes, Jeff Price, Donald Taylor, and Dwight Wynne served as the primary editors and proofreaders.

2010 CMST - Round 7

8. This element's allotropes include nanotubes and fullerenes. Another allotrope of this element consists of thin hexagonal sheets and is known as graphite. This element is bound to four hydrogen atoms in methane. For 10 points, name this element that makes up diamonds, which has atomic number six and symbol C.

ANSWER: **carbon** [or **C** before given]

9. A dog barks at a drummer in the lower left of this painting. One of the two central figures is dressed in bright yellow, matching the girl with the chicken in her belt. The other is in black with a white collar a red sash across his chest. After restoration, it was revealed that this painting did not actually depict an evening scene. For 10 points, name this work depicting a Dutch militia by Rembrandt.

ANSWER: *The **Nightwatch*** [or *De **Nachtwacht***; or *The Shooting **Company of Captain Franz Banning Cocq and Willem van Ruytenburch***]

10. The Atbarah ("ott-BAR-uh") is an arm of this river that starts at Lake Tana ("TAWN-uh"). The Aswan ("AHS-wahn") High Dam, an attempt to control this river's flow, resulted in the creation of Lake Nasser, a massive reservoir shared by two nations. This river splits into two different sections near Khartoum ("CAR-toom"), the Blue and the White. For 10 points, identify this river considered the lifeblood of civilizations in Sudan and Egypt, the longest river in the world.

ANSWER: **Nile** River

11. For any odd number greater than one, there exists one of these types of sets where that number is the smallest of the three elements. By definition, all numbers in these kinds of sets are integers. Common example of this type of set are (8, 15, 17); (5, 12, 13); and (3, 4, 5). For 10 points, name these sets of three integers a, b, and c which satisfy the equation a squared plus b squared equals c squared.

ANSWER: **Pythagorean triples** [accept clear-knowledge equivalents; prompt on **Pythagorean theorem**]

12. This document called for about 5 billion pounds in reparations from Germany and the return of the territories of Alsace and Lorraine to France. Woodrow Wilson's decision to pursue the League of Nations may have caused this document to not be ratified in the United States. For 10 points, what is this document ending World War I, named for the palace in which it was signed?

ANSWER: Treaty of **Versailles**

13. Edouard ("ED-oo-ard") Lalo wrote a violin concerto named after a symphony from this country. One composer from this country wrote a ballet that contains the *Fire Dance* and portrays Caramelo ("CAR-uh-MELL-oh"), called *Love, The Magician*. A dance from this country was the inspiration for Maurice Ravel's *Bolero*. For 10 points, name this European country that was written about in Albeniz's ("AL-ben-eez's") *Iberia* and whose toreadors are characters in *Carmen*.

ANSWER: **Spain**

14. This planet and Earth are the only ones whose atmospheres are mostly nitrogen. Pictures of it were taken during a search for the hypothetical Planet O. Percival Lowell predicted the presence of this planet discovered by Clyde Tombaugh ("TOM-baw"). Charon has long been considered its satellite, though that classification is now ambiguous. For 10 points, name this celestial object, recently relegated to the category of "dwarf planet."

ANSWER: 134340 **Pluto**

15. The trial in this novel is presided over by Lucas de Beaumanoir. One character in this novel, Brian de Bois-Gilbert, captures the daughter of Isaac of York named Rebecca. Athelstane disclaims the daughter of Cedric the Saxon named Lady Rowena, who marries the title character at the end of this novel. For 10 points, name this work of historical fiction depicting the chivalrous Wilfred, written by Walter Scott.

ANSWER: **Ivanhoe**

2010 CMST - Round 7

16. This state was the only one to vote against Richard Nixon in the 1972 general election. In 2010, its Attorney General, Martha Coakley, lost in the race to fill a vacant Senate seat. That seat was won by Scott Brown, who replaced long-time politician Ted Kennedy. For 10 points, 2004 presidential candidate John Kerry is a senator from what state whose capital is Boston?

ANSWER: Commonwealth of **Massachusetts**

17. “Wedge” and “rope” are informal terms used to denote large and small forms of these phenomena. Twenty-eight different damage indicators help measure their severity via the enhanced Fujita scale. These phenomena occur when a funnel cloud touches the ground. For 10 points, name these violently rotating windstorms that most often occur in their namesake “Alley” in the American Midwest.

ANSWER: **tornadoes** [or **twisters**; prompt on **cyclones**]

18. One character in this novel wins a ride in a biplane after her gooseberry pie beats that of Rupert Pennypacker. This book sees that same character throw a mouse into the Cowgill boys' milk because they blew up her outhouse. After a newsman tries to bring more people to her town, Grandma puts on a show with a corpse and a shotgun to make him leave. For 10 points, name this book about Joey and Mary Alice by Richard Peck.

ANSWER: *A **Long Way from Chicago***

19. One figure involved in this event is drunk with the blood of saints. During it, seven vials are poured by seven angels in order to wreak havoc. It is set to take place on the Hill of Megiddo. Death, Famine, War, and Pestilence are the “Four Horsemen” of this event. For 10 points, identify this Biblical event where the forces of good and evil will do battle one last time.

ANSWER: **Apocalypse** [accept **Armageddon**]

20. Lake Gatun (“GAH-tune”) is part of this waterway, whose construction was made possible by the Hay-Bunau-Varilla (“HAY boo-NOW vah-REE-uh”) Treaty and the secession of a province from Colombia. A 1977 agreement between Omar Torrijos (“torr-EE-hos”) and Jimmy Carter resulted in the return of the special zone associated with it. For 10 points, name this Central American waterway that connects the Atlantic and Pacific Oceans.

ANSWER: **Panama Canal**

Extra. This man wrote of Daniel Dravot and Peachey Carnehan’s adventures in Kafiristan (“kuh-FEAR-iss-tan”) in *The Man Who Would Be King*. He told of *How the Rhinoceros Got His Skin* and *How the Leopard Got His Spots* in *Just So Stories*. Another of his works depicts a character who is raised by Akela (“uh-KEE-lah”) the wolf, Bagheera (“buh-GHEE-ruh”) the panther, and Baloo the bear. For 10 points, name this author who wrote about the “man-cub” Mowgli (“MOE-gee”) in *The Jungle Book*.

ANSWER: (Joseph) Rudyard **Kipling**

2010 CMST - Round 7

Bonuses

1. Emma Lazarus's poem "The New Colossus" is inscribed on a plaque at its base. For 10 points each:
[10] Name this steel and copper statue of a woman in New York Harbor, a symbol of freedom to millions of immigrants to America.

ANSWER: The **Statue of Liberty** [or *Liberty Enlightening the World*; or *Le Liberté Éclairant le Monde*]

[10] The Statue of Liberty was sculpted by this man using the repoussé ("rep-poo-SAY") technique of hammering its shape from the inside out. The face is supposedly based on that of his mother.

ANSWER: Frédéric Auguste **Bartholdi** ("bar-TOLL-dee")

[10] The Statue of Liberty was a gift from this country, an early ally of America, in recognition of their cooperation during the American Revolution.

ANSWER: **France** [or the **French Republic**]

2. For 10 points each, name these parts of the human excretory system:

[10] These organs, made up of nephrons ("NEFF-rons"), filter waste from the blood and send urine to another structure via the ureters ("YOUR-et-urs").

ANSWER: **kidneys**

[10] This organ is at the other end of the ureters from the kidneys. Stretch receptors in this organ sense when it is full, leading to a feeling that one "has to go."

ANSWER: **bladder**

[10] This is the tube, leading out of the bladder, through which urine is excreted.

ANSWER: **urethra** ("your-EE-thruh")

3. GDP fell thirty percent during this period which was spurred by the 1929 stock market crash. For 10 points each:

[10] The world economy took a nosedive during what period that ended with a world war?

ANSWER: **Great Depression**

[10] One reason for the onset of the Great Depression in the U.S. was one of these taxes. These duties are aimed at goods produced in foreign countries, and are designed to boost the sales of goods made within the country.

ANSWER: **tariffs**

[10] During the Great Depression, many Americans were forced into homelessness. As a result, a great number of shanties were built, and were derisively nicknamed for this President who succeeded Calvin Coolidge.

ANSWER: Herbert Clark **Hoover**

4. The main character of this book has to spend all his time picking up trees, or his tiny planet will turn to dust. For 10 points each:

[10] Name this book about a young man who later visits six asteroids to see six foolish adults, and then Earth.

ANSWER: *The **Little Prince***

[10] Name the pilot who wrote *The Little Prince*.

ANSWER: Antoine du **Saint-Exupéry** ("SAUNT ex-oo-per-EE")

[10] The Little Prince leaves his home planet because he falls in love with one of these flowers, although she doesn't love him back.

ANSWER: a **rose**

2010 CMST - Round 7

5. At least one part of this bonus requires computation. Consider the very low temperature of negative two hundred degrees Celsius. For 10 points each:

[10] What is the study of the behavior of materials at these very low temperatures?

ANSWER: **cryogenics**

[10] Convert that temperature, negative two hundred degrees Celsius, to degrees Fahrenheit.

ANSWER: **-328** degrees Fahrenheit [or **negative three hundred twenty-eight** degrees Fahrenheit; or **minus three hundred twenty-eight** degrees Fahrenheit; do not accept or prompt on “three hundred twenty-eight degrees Fahrenheit”]

[10] To the nearest integer, what is that temperature in Kelvin?

ANSWER: **73** Kelvin

6. For 10 points each, answer the following about an actor-turned-politician:

[10] This Austrian who starred in *Kindergarten Cop* and the *Terminator* series defeated Gray Davis and Phil Angelides in a 2003 recall election, running as a Republican.

ANSWER: Arnold **Schwarzenegger**

[10] Schwarzenegger governs this state from Sacramento. It is known for its massive budget crisis and lead on environmental issues.

ANSWER: **California**

[10] In December of 2009, Schwarzenegger sent a letter in support of health care reform to this Congresswoman, who represents San Francisco as the current Speaker of the House.

ANSWER: Nancy **Pelosi**

7. For 10 points each, name these female groups from Greek myth that one should make great effort not to anger:

[10] Consisting of Clotho, Lachesis (“luh-KEE-sis”), and Atropos (“AT-row-pos”), these three control the threads that make up people's lives. Even Zeus knows to give this group a wide berth.

ANSWER: **Fates** [accept **Moirae**]

[10] This group went after Orestes for fratricide, but he was eventually found innocent of the charges. Made up of Megaera (“muh-GARE-uh”), Tisiphone (“tih-SIFF-uh-nee”), and Alecto (“uh-LECK-toe”), these three pursue sinners who are not punished.

ANSWER: **Furies** [or **Erinyes**; or **Eumenides**]

[10] This group consists of Aello (“AIL-oh”), Celaeno (“kuh-LANE-oh”), and Ocypete (“oh-KIE-pet-ee”). These winged females with sharp talons torment people, and their actions almost made Phineus starve to death, until they were driven off. Their name is now synonymous with a woman who is evil.

ANSWER: **Harpies**

8. This novel sees the Great Big Siege of Bologna conducted from the island of Pianosa. For 10 points each:

[10] Name this satirical novel chronicling the bombardier Yossarian's (“yo-SARE-ee-un's”) attempts to get out of having to fly missions, which are all foiled by the title rule simply because he is sane enough not to want to fly.

ANSWER: **Catch-22**

[10] *Catch-22* is a work by this American author. His other writings include *Good as Gold*, *Something Happened*, and *Closing Time*.

ANSWER: Joseph **Heller**

[10] This lieutenant is the squadron's mess officer, and he runs an improbably profitable “syndicate” in which each man has a share, apparently justifying his dubiously legal actions, including bombing his own men.

ANSWER: **Milo Minderbinder** [accept either]

2010 CMST - Round 7

9. Among this civilization's ruins is Copan ("co-PAN"), which is found in Guatemala. For 10 points each:
[10] Name this Mesoamerican ("MESS-oh-uh-MARE-ick-uhn") civilization which also left behind ruins at Chichen Itza ("CHEE-chen EET-zuh"), and whose calendar ends in 2012.

ANSWER: **Mayans**

[10] Those ruins at Chichen Itza are found on this peninsula, which also contains Mexico's border with Belize.

ANSWER: **Yucatan** ("YOO-cuh-tan") Peninsula

[10] A 1970 study by the Mexican government resulted in the construction of this resort city on an L-shaped island off the Yucatan's northeast coast.

ANSWER: **Cancun**

10. We live in the Milky Way one of these. For 10 points each:

[10] Name these clusters of stars and stellar remnants that are gravitationally bound to each other. They sometimes come in elliptical varieties.

ANSWER: **galaxies**

[10] The Milky Way is the barred type of this type of galaxy, typified by a rotating disc and a central bulge.

ANSWER: **spiral**

[10] This is the nearest galaxy to the Milky Way galaxy.

ANSWER: **Andromeda** Galaxy

11. Mrs. Reed sends the protagonist of this novel to Lowood ("LO-wood") school after Bessie Leaven saves that protagonist from an illness. For 10 points each:

[10] Name this novel in which the title character serves as a governess at Thornfield, the mansion of Edward Rochester. After Mr. Rochester's insane wife Bertha burns Thornfield down, Mr. Rochester marries the protagonist.

ANSWER: **Jane Eyre**

[10] *Jane Eyre* was written by this female British author of *Villette*, *The Professor*, and *Shirley*.

ANSWER: **Charlotte Bronte** [prompt on **Bronte**]

[10] In this novel, written by Charlotte's sister Emily Bronte, Heathcliff seeks revenge against Edgar Linton, the owner of Thrushcross Grange, for marrying Catherine Earnshaw.

ANSWER: **Wuthering Heights**

12. During this ruler's reign, his nation built the Trans-Siberian Railway and lost a war to Japan. for 10 points each:

[10] Name this tsar, the last of the Romanov ("ROW-man-ahv") dynasty.

ANSWER: **Nicholas II** [accept **Nikolay II** or **Nikolay Aleksandrovich** Romanov; prompt on **Nicholas** or **Nikolay**]

[10] Nicholas II's wife was unpopular in part due to the influence of this Siberian mystic who claimed to cure hemophilia ("HE-mow-FEEL-ee-uh").

ANSWER: Grigory (Yefimovich) **Rasputin**

[10] After Nicholas abdicated, he and his family were executed, paving the way for this Bolshevik ("BOWL-she-vick") leader to assume power.

ANSWER: Vladimir Ilyich **Lenin** [accept Vladimir Ilyich **Ulyanov**]

2010 CMST - Round 7

13. For 10 points each, name these things about a ballet:

[10] This ballet begins with Clara receiving the title toy from her grandfather at a Christmas Eve party and continues in the Land of Sweets, where the *Dance of the Clowns* occurs.

ANSWER: *The **Nutcracker***

[10] *The Nutcracker* was written by this Russian composer of the *1812 Overture*.

ANSWER: Peter Ilyich **Tchaikovsky**

[10] *The Nutcracker* also contains this dance, which features a celesta accompanying the small girls during the grand pas-de-deux ("PAH-de-DOO").

ANSWER: *The Dance of the **Sugar Plum Fairies***

14. For 10 points each, name these characters in Nintendo video games:

[10] This plumber runs around stomping on Goombas while trying to rescue Princess Peach from the clutches of Bowser. He normally wears red overalls, while his brother Luigi wears green.

ANSWER: **Mario** Mario

[10] This sword-wielding hero is the playable character in *Legend of Zelda* games.

ANSWER: **Link**

[10] Several Wii games require the user to create one of these personal profiles, which can be viewed in a namesake "parade."

ANSWER: **Mii**s ("MEEZ")

15. Foreign diplomats were besieged here during the Boxer Rebellion. For 10 points each:

[10] Name this city, which became China's capital under the Yuan Dynasty.

ANSWER: **Beijing** [accept **Peking**]

[10] The Yongle ("YONG-lee") emperor began construction of this Beijing palace complex, which was off-limits to most of his subjects.

ANSWER: **Forbidden City** [accept **zijincheng** ("ZEE-jin-CHANG")]

[10] At the south end of the Forbidden City is this square, whose name means "Gate of Heavenly Peace." It was the site of June 1989 pro-democracy protests repressed by the Chinese government.

ANSWER: **Tiananmen** ("tee-EN-en-men") Square [accept **Tiananmen** Guangchang]

16. For 10 points each, answer the following about one of the three main types of rock:

[10] One example of this type of rock is pumice. It is formed when either magma becomes trapped in small pockets underground or when lava cools down after an eruption.

ANSWER: **igneous** rock

[10] This variety of igneous rock is formed when felsic lava cools without crystallization. It was used on Easter Island as the eyes of the Moai statues, and Native Americans used it for spear points.

ANSWER: **obsidian**

[10] This class of igneous rock is the most common type on earth. It is found in large quantities in Hawaii and Ireland.

ANSWER: **basalt**

17. In one miniseries about these people, their father Fenton is presumed dead by the Phoenix Corporation. For 10 points each:

[10] Name these two characters, who date Callie Shaw and Iola Morton, and who first appeared in *The Tower Treasure*.

ANSWER: The **Hardy** Boys [or Frank and Joe **Hardy**; or The **Hardy** Brothers; accept equivalents]

[10] The Hardy Boys were written by a series of ghostwriters using this pseudonym.

ANSWER: Franklin W. **Dixon**

[10] Frequently "on the warpath," this spinster aunt of the Hardy Boys eventually moves in with them.

ANSWER: Aunt **Gertrude** Hardy

2010 CMST - Round 7

18. For 10 points each, name these compromises made in order to pass the Constitution:

[10] This compromise established the population used for representation, counting slaves as the indicated number of persons.

ANSWER: **Three-Fifths** compromise

[10] This compromise created the bicameral (“bye-CAM-er-uhl”) legislature and incorporated parts of both the Virginia and New Jersey plans.

ANSWER: **Great** Compromise [or **Connecticut** Compromise; or **Sherman's** Compromise]

[10] Following the Constitutional Convention, this compromise was made in order to obtain the necessary number of States to ratify the Constitution. The first ten amendments are known by this name.

ANSWER: **Bill of Rights**

19. For 10 points each, give these terms related to functions:

[10] This is the term for the set of x-values that are mapped onto the range of y-values.

ANSWER: **domain**

[10] All relations that pass this test are functions. If the namesake construct intersects the graph of the relation at more than one point, the relation is not a function.

ANSWER: **vertical line** test

[10] This is the term for the dotted line drawn on the graph of a function if the y-coordinate approaches a finite value as the x-coordinate heads off toward infinity or negative infinity.

ANSWER: horizontal **asymptote** [do not accept "vertical asymptote"]

20. For 10 points each, answer the following about belief systems based in China.

[10] The core tenet of this system is the idea of ren, or benevolence. It was founded by a Chinese philosopher during the fifth century BCE, and the I Ching (“ee CHING”) is one of its Five Classics.

ANSWER: **Confucianism**

[10] Confucius' doctrine can be found in this text, which contains Confucius' thoughts on parental respect.

ANSWER: **Analects** [accept **Lun Yu**]

[10] This dualistic belief system based in China stems from the teachings of Lao Tzu (“LAU t-ZOO”).

ANSWER: **Daoism** [or **Taoism**]

Extra. As a child, this man defeated a Philistine soldier in single combat using just a sling and some rocks.

For 10 points each:

[10] Name this slayer of Goliath.

ANSWER: **David**

[10] David was succeeded as King of the Israelites by this son of his, a wise ruler who built the first temple in Jerusalem and was visited by the Queen of Sheba.

ANSWER: **Solomon**

[10] David sent Uriah the Hittite to die in battle because he coveted Uriah’s wife, who was this mother of Solomon.

ANSWER: **Bathsheba**