

# Collaborative Middle School Tournament 2011

## Round 7

### Tossups

1. One of this man's works depicts his self-portrait in a glass ball situated on his hand. Another features two hands drawing each other into existence. This artist of the lithographs *Hand with Reflecting Sphere* and *Drawing Hands* created an ever-increasing stairway in *Ascending and Descending*, along with several tessellations. For 10 points, name this Dutch artist known for his fascination with optical illusions.

ANSWER: M(aurits) C(ornelius) **Escher**

2. The U.S. Ambassador to this nation, Jon Huntsman, resigned effective April 2011. Human rights activists in this country, including the currently-jailed 2010 Nobel Peace Prize winner, have signed Charter 08. Starting in March 2010, Google refused to follow this nation's Internet censorship policies. For 10 points, identify this nation whose current leader, Hu Jintao (hoo jin-"TAO"), visited the U.S. in January 2011.

ANSWER: People's Republic of **China** [or **PRC**; or **Zhongguo**; or **Zhonghua** Renmin Gongheguo]

3. One of this man's works claims that "for destruction", the two title elements "would suffice." In addition to "Fire and Ice", he wrote a poem where the narrator has "miles to go before" he sleeps. In his most famous poem, the speaker leaves the title entity "for another day", and takes "the one less traveled by." For 10 points, name this poet who wrote "Stopping by Woods on a Snowy Evening" and "The Road Not Taken."

ANSWER: Robert Lee **Frost**

4. The first step in this process can be further broken down into leptotene, zygotene, and pachytene phases. A common problem during this process is nondisjunction, which leads to conditions such as Klinefelter's Syndrome and Down Syndrome. This process involves two instances of prophase, metaphase, anaphase, and telophase. For 10 points, name this process used to create haploid cells, such as sperm and eggs.

ANSWER: **meiosis** [do not accept or prompt on "mitosis"]

5. Richard Mentor Johnson's political career was helped by the belief that he personally killed this man at the Battle of the Thames (TEMS). This man helped co-found a settlement in the Indiana Territory where his brother was defeated by William Henry Harrison; that defeat occurred during the Battle of Tippecanoe. For 10 points, name this leader of the Shawnee that attempted to unite all of the Indian tribes in the early 1800's.

ANSWER: **Tecumseh** [accept **Tecumtha**; accept **Tekamthi**]

6. This constellation's alpha star is the brightest in the Hyades ("HIGH"-uh-deez) cluster. One object in this constellation is the remnant of a supernova observed in 1054 AD. In addition to the Crab Nebula, this constellation also contains the Pleiades (PLEE-uh-deez). Its beta star, Al Nath, is found next to Auriga, while its alpha star is Aldebaran (all-DEB-uh-ron). For 10 points, name this constellation that depicts a bull.

ANSWER: **Taurus**

7. One justification of this act is Paul's visit to Ephesus in the Acts of the Apostles. This act involves asking the Holy Ghost to "send forth upon them thy sevenfold Spirit the Holy Paraclete (PAIR-uh-CLEET)." This act is the imposition of hands and anointing with oil by a bishop. For 10 points, identify this sacrament grouped in the Catholic Church with Baptism and Eucharist.

ANSWER: **Confirmation** [accept word forms such as **Confirming**]

## 2011 CMST – Round 7

8. This franchise's 1934 World Series-winning team was known as the "Gas House Gang." It won the 1944 World Series over the Browns, with whom it used to share Sportsman's Park. Its 1968 championship team featured Lou Brock and Bob Gibson. In February 2011 this team signed former center fielder Jim Edmonds to a minor league deal. For 10 points, name this NL Central team whose lineup includes Matt Holliday and Albert Pujols.

ANSWER: St. Louis **Cardinals** [or **St. Louis** Cardinals]

9. In this work, Fedallah's three prophecies come true, including the main character's death by hemp rope. The protagonist uses a gold doubloon to gain his men's support, but in the end, the coffee-addicted Starbuck dies, as do Tashtego and Queequeg. The *Rachel* rescues the only survivor of the *Pequod*, Ishmael, who narrates this novel. For 10 points, name this novel featuring Captain Ahab, written by Herman Melville.

ANSWER: ***Moby Dick***, or *The Whale*

10. This state's ski resort of Lake Placid, the site of the 1980 Winter Olympics, and its highest point, Mount Marcy, are both located in the Adirondack Mountains. In the 19th century, its growth was aided by the Erie Canal, which brought settlers west from the Hudson River valley. This state's largest city is composed of five boroughs, including Staten Island, Queens, and the Bronx. For 10 points, name this Empire State.

ANSWER: **New York**

11. Two brothers of this surname discovered piezoelectricity and a namesake point at which ferromagnetic materials become paramagnetic. One of those brothers explored the properties of the ore pitchblende with his wife. That wife later won a second Nobel Prize for her work isolating radium, and named the element polonium after her native country. For 10 points, give the last name of physicist Pierre and his wife Marie.

ANSWER: **Curie** [accept Pierre **Curie**; accept Marie Skłodowska **Curie**; accept (Paul-) Jacques **Curie**]

12. This ruler was forced to wait eight months to begin a campaign for the throne he contested with the King of Norway, Harald Hardrada (hard-RAH-dah), whose own campaign ended unsuccessfully at Stamford Bridge. This man feigned his death in order to trick Harold Godwinson into defeat at the Battle of Hastings. For 10 points, name this Norman ruler whose achievements were chronicled on the Bayeux Tapestry.

ANSWER: **William I** of England [or **William the Conqueror**; or **William the Bastard**; or **William II** of Normandy; or **Guillaume le Conquérant**; prompt on **William** of Normandy]

13. This shape names a law for adding vectors. In a namesake illusion, diagonals of two of these figures appear to be different lengths, though they are not. Though not necessarily the same length, the diagonals of this quadrilateral bisect each other. If all four sides of this type of figure are of equal length, the figure is a rhombus. For 10 points, name this shape drawn from two intersecting sets of parallel lines.

ANSWER: **parallelogram** [do not accept or prompt on more specific answers such as "rhombus," "square," or "rectangle;" do not accept or prompt on less specific answers such as "quadrilateral"]

14. One author from this country wrote about Bam and Maureen Smales escaping civil war in *July's People*. Another author from this country wrote about the murder of Arthur Jarvis by Absalom Kumalo. It is the home of Nadine Gordimer and the author of *Cry the Beloved Country*, Alan Paton. For 10 points, what country's twentieth-century literature was shaped by its racial segregation policy of Apartheid?

ANSWER: Republic of **South Africa** [accept Union of **South Africa**; accept **RSA**]

## 2011 CMST – Round 7

15. This figure ordered the Goliad Massacre, and he was severely injured by French cannon fire at Veracruz during the Pastry War. The Treaties of Velasco were signed following this leader's capture after the Battle of San Jacinto, and he was responsible for the deaths of Jim Bowie and Davy Crockett. For 10 points, name this self-styled "Napoleon of the West," a Mexican general infamous for his attempt to seize the Alamo.

ANSWER: Antonio López de **Santa Anna** [prompt on **Napoleon of the West** before it is read]

16. When this figure was born, his mother Thetis (THEE-tiss) dipped him in the river Styx in an attempt to make him immortal. Agamemnon took Briseis (BRY-see-iss) from this figure, which caused him to refuse Agamemnon's commands to fight until his friend, Patroclus, died. As revenge for that death, this hero killed Hector. For 10 points, identify this Greek hero who was killed when a poisonous arrow pierced his heel.

ANSWER: **Achilles** [accept **Achilleus**]

17. In one work, this character is almost forced to marry Marcellina until it is revealed she is his long-lost mother. In another work, he advises a former employer to dress as a drunken soldier to get into Rosina's house. This former servant of Count Almaviva sings his name over and over again in "Largo al Factotum," an aria from a Rossini opera. For 10 points, name this Barber of Seville who gets married in a Mozart opera.

ANSWER: **Figaro** [prompt on *The Barber of Seville* before mentioned; accept *The Marriage of Figaro* until "employer"]

18. These objects contain columns called seracs and tubes called moulin. They create kame (CAME) and kettle topography as well as drumlins, which are land forms in the shape of whales, and kettles, which are generally shallow lakes. The debris they leave behind is often called a moraine. For 10 points, name these large long-lasting accumulations of snow and ice, found in places such as a namesake Montana national park.

ANSWER: **glaciers**

19. This novel's main character is falsely accused of stealing a baseball player's shoes from a charity auction. That character's ancestor Elya tried to marry Myra Menke, but in doing so wronged Madame Zeroni. Camp Green Lake is infested with yellow-spotted lizards and has employees including The Warden, Mr. Pendanski, and Mr. Sir in, for 10 points, what novel about Stanley Yelnats IV, written by Louis Sachar?

ANSWER: **Holes**

20. In this body of water are the Emperor Seamounts and the Chinook Trough. The Ryukyu Trench lies in it, and its islands include Pitcairn Island and Wake Island. Its deepest point is Challenger Deep, which is in the Marianas Trench. Melanesia and Micronesia are island groups in, for 10 points, what ocean that contains Tonga, Fiji, and Guam?

ANSWER: **Pacific** Ocean [do not accept or prompt on more specific answers]

21. This man elucidated Heron's formula before Heron proved it. He supposedly created a death ray out of mirrors in order to defeat an invading Roman army. A task given to him by Hiero ("HIGH"-er-oh) of Syracuse led to his discovery that the buoyancy of an object is equal to the fluid displaced. For 10 points, who supposedly ran into the streets shouting "Eureka!" after discovering how to test whether Hiero's crown was made of pure gold?

ANSWER: **Archimedes** of Syracuse

## 2011 CMST – Round 7

### Bonuses

1. This is the fifth pillar of Islam. For 10 points each:

[10] Name this annual pilgrimage that takes place during the last month of the Islamic year.

ANSWER: **Hajj** (HODGE) [or **hadj**; do not accept “haji” or other similar answers with extra syllables]

[10] Pilgrims on the Hajj travel to this city in Saudi Arabia, which is the birthplace of Muhammad and the city that he returned to after visiting Medina.

ANSWER: **Mecca** [or **Makkah**]

[10] While on the Hajj, pilgrims walk around this cube-shaped building containing the Black Stone seven times.

ANSWER: **Ka'aba** (KAH-bah)

2. For 10 points each, identify these rulers from the Eighteenth Dynasty of Egypt.

[10] While holding the Hittites at bay, this man changed the state religion of Egypt from worship of many gods to worship of Aten, the sun god.

ANSWER: **Akhenaten** [or **Amenhotep IV**; prompt on **Amenhotep**]

[10] This consort of Akhenaten assisted with the theological revolution during Akhenaten's reign. This woman's bust was discovered at Karnak.

ANSWER: **Nefertiti**

[10] This son of Akhenaten reintroduced polytheistic worship during his reign. The tomb of this “Child King” of Egypt was discovered in 1922 by Howard Carter.

ANSWER: **Tutankhamun** [or King **Tut**]

3. The most commonly used form of this system is the decimal one, which uses 10. For 10 points each:

[10] Name this system of representing numbers as a linear combination of a given constant raised to various positive and negative integer powers.

ANSWER: numerical **base** system [accept **positional notation**]

[10] Computers often use base two, which is given this name.

ANSWER: **binary** notation

[10] Binary digits, or bits, are often combined into groups of four, which leads to this system of base 16 notation that uses the numerals zero through nine as well as the letters A through F.

ANSWER: **hexadecimal** notation

4. After some original design problems with this group, it was modified by the Twelfth Amendment. For 10 points each:

[10] Identify this group of 538 people that chooses the President and Vice President of the United States every four years.

ANSWER: **Electoral College**

[10] The passage of the Twenty-Third Amendment granted this city the same number of votes in the Electoral College as the least populous state.

ANSWER: **District of Columbia** [or Washington, **D.C.**]

[10] This state, the second most populous, will obtain four more votes in the next Electoral College because of the results of the 2010 Census.

ANSWER: **Texas**

## 2011 CMST – Round 7

5. It is when Goldilocks gets caught in the middle bed, or when the wolf jumps down the chimney into boiling water. For 10 points each:

[10] Name this point in the plot of a story, at the peak of the action, where the conflict becomes most intense.

ANSWER: **climax** [prompt on **turning point**]

[10] In Shakespeare's plays, the climax comes in the third of these five sections. Most plays and movies written nowadays are told in three of these sections.

ANSWER: **acts**

[10] This part of a story comes after the climax. It is where conflicts are resolved and mysteries are explained.

ANSWER: **denouement** (DAY-noo-MAHN) [or **falling action**; or **resolution**; prompt on **conclusion** or **ending**]

6. This is a computation bonus. For 10 points each, given the first six terms in a well-known sequence, give the seventh term.

[10] 1, 4, 9, 16, 25, 36

ANSWER: **49**

[10] 1, 1, 2, 3, 5, 8

ANSWER: **13**

[10] 2, 3, 5, 7, 11, 13

ANSWER: **17**

7. This book features Akela the wolf and Baloo the bear. For 10 points each:

[10] Name this book, which in one story tells of a boy in India fighting the tiger Shere Khan.

ANSWER: *The **Jungle Book***

[10] *The Jungle Book*, which also features the story "Rikki-Tikki-Tavi," is by this author who told of a half-Irish orphan becoming a government agent in the book *Kim*.

ANSWER: (Joseph) Rudyard **Kipling**

[10] This is the boy who is raised by wolves in *The Jungle Book*; in a later story, he is adopted by a couple who mistake him for Nathoo.

ANSWER: **Mowgli**

8. Salvador Dali produced a "Sistine" one, and Parmigianino produced one "of the Long Neck." For 10 points each:

[10] Name these depictions of Mary with the Christ child.

ANSWER: **Madonnas** [or **Madonna and Child**]

[10] This artist's Madonnas include one "of the Carnation" and one sometimes called the *Virgin of the Rocks*.

ANSWER **Leonardo** da Vinci [or Leonardo da **Vinci**]

[10] This other Leonardo painting hangs in the Louvre and depicts a woman with an "enigmatic" smile.

ANSWER: **Mona Lisa** [or *La **Gioconda***; or *La **Joconde***]

## 2011 CMST – Round 7

9. During this event, Abbe Sieyes wrote the pamphlet *What is the Third Estate?* For 10 points each:

[10] Identify this event that began in 1789 with the Tennis Court Oath, the storming of the Bastille (bast-EEL), and the *Declaration of the Rights of Man*.

ANSWER: the **French Revolution**

[10] This man rose to power during the Reign of Terror as leader of the Committee of Public Safety. He was executed during the Thermidorean Reaction.

ANSWER: Maximilien **Robespierre**

[10] This French military leader took power in the Brumaire (brew - mare) coup and declared himself emperor in 1804.

ANSWER: **Napoleon I Bonaparte** [accept either underlined part]

10. This moon is closest to its planet of all known moons in our solar system. For 10 points each:

[10] Name this moon that along with Deimos orbits Mars.

ANSWER: **Phobos**

[10] Mars also contains this feature, the largest volcano and largest mountain in our solar system.

ANSWER: **Olympus Mons**

[10] This series of straight-line features on the surface of Mars were argued by Percival Lowell to be evidence of intelligent Martian life.

ANSWER: **canals** of Mars [or **canali**]

11. For 10 points each, answer the following about a series of science fiction books.

[10] This man told of the title kid's adventures in Battle School in *Ender's Game*, a prequel to two different series.

ANSWER: Orson Scott **Card**

[10] One of those series centered on this precocious Rotterdam orphan, the protagonist of *Ender's Shadow*.

ANSWER: **Bean** [or **Julian** Delphiki; or **Julian** **Delphiki**; prompt on **Delphiki**]

[10] This author of *Unwind* and *Everwind* was reportedly asked to write the parallel novels about Ender's Battle School friends before Card took the idea himself.

ANSWER: Neal **Shusterman**

12. She was the first to hit the Calydonian (CAL-ih-DOE-nee-uhn) Boar and was awarded its skin for that feat. For 10 points each:

[10] Identify this Greek woman who refused to marry until she was beaten in a foot race.

ANSWER: **Atalanta**

[10] Atalanta was finally defeated by Melanion when she stopped to pick up this fruit three times during their race.

ANSWER: **golden apples** [prompt on **apples**]

[10] This virgin goddess of the hunt, who saved Atalanta from dying as an infant in the wilderness, sent the Calydonian Boar to ravage its namesake region.

ANSWER: **Artemis**

13. This fantasy world contains Cruels who follow the White Witch. For 10 points each:

[10] Name this world visited by the Pevensie children in a series of C. S. Lewis books that includes *The Lion, the Witch, and the Wardrobe*.

ANSWER: **Narnia**

[10] The White Witch is opposed by this lion.

ANSWER: **Aslan**

[10] This is the title character in *The Magician's Nephew*. He lives with his Uncle Andrew.

ANSWER: **Digory Kirke** [accept either or both underlined parts]

## 2011 CMST – Round 7

14. In hemoglobin, an ion of this element surrounded by nitrogen binds with oxygen. For 10 points each:  
[10] Identify this metallic element making up much of the Earth's core, whose atomic symbol is Fe.

ANSWER: **iron**

[10] Iron is combined with carbon to make this metal often used to make cars, skyscrapers, railroads, and appliances.

ANSWER: **steel**

[10] The process of cheaply converting pig iron to steel is given this name, after the person who patented it in 1855.

ANSWER: **Bessemer** Process [or **Kelly-Bessemer** Process]

15. For 10 points each, answer the following about the geography of Russia.

[10] This city's main airport, Domodedovo, was the site of a January 2011 bombing. This site of the Kremlin is the capital of Russia.

ANSWER: **Moscow** [or **Moskva**]

[10] Novosibirsk is the largest city in this mostly-uninhabited region of central and eastern Russia, which is crossed by a namesake railway.

ANSWER: **Siberia** [prompt on "Asian Russia"]

[10] Travelers leaving Moscow on the Trans-Siberian Railway will eventually arrive in this port city on the Sea of Japan. Its name is Russian for "ruler of the East."

ANSWER: **Vladivostok**

16. Howard Florey and Ernst Chain discovered the therapeutic uses of this drug. For 10 points each:

[10] Name this Gram-positive antibiotic derived from a namesake fungus, to which many bacteria have built a resistance.

ANSWER: **penicillin** [accept ***Penicillium notatum***]

[10] This Scottish scientist discovered penicillin when he found that bacteria would not grow around the *Penicillium* mold.

ANSWER: Alexander **Fleming**

[10] Penicillin acts by inhibiting the production of peptidoglycans, which are found in this protective structure in Eubacteria.

ANSWER: **cell wall**

17. This piece includes the tune "Land of Hope and Glory." For 10 points each:

[10] Name this military march, most famous for its use as a processional march at graduation ceremonies.

ANSWER: **Pomp and Circumstance** March No. 1 in D

[10] This British composer of the *Enigma Variations* wrote *Pomp and Circumstance*.

ANSWER: Sir Edward William **Elgar**, 1st Baronet

[10] Edward Elgar transcribed the *Funeral March* of this Franco-Polish composer of the *Minute Waltz*.

ANSWER: Frederic François **Chopin** [accept Fryderyk Franciszek **Chopin**]

18. This man has been sued by, among others, Paul Seglia, Eduardo Saverin, and Cameron and Tyler Winklevoss. For 10 points each:

[10] Name this co-founder, CEO, and President of Facebook.

ANSWER: Mark Elliot **Zuckerberg**

[10] Zuckerberg donated one hundred million dollars of Facebook stock to the public schools in this city. Its current mayor is Cory Booker.

ANSWER: **Newark**, New Jersey

[10] Zuckerberg's generosity was praised by this politician. He replaced Jon Corzine as the Governor of New Jersey and declared the state to be in a state of fiscal emergency.

ANSWER: Christopher James "Chris" **Christie**

## 2011 CMST – Round 7

19. He was assassinated on April 4, 1968 by James Earl Ray. For 10 points each:

[10] Name this activist who won the 1964 Nobel Peace Prize shortly after his speech during the March on Washington.

ANSWER: Martin Luther **King**, Jr.

[10] In 1955, King started a bus boycott in this city following Rosa Parks' refusal to give up her seat.

ANSWER: **Montgomery**, Alabama

[10] King led Project C in this city, where "Bull" Connor opposed him. After being arrested, King wrote a letter from this city's jail.

ANSWER: **Birmingham**, Alabama

20. This character is shocked by the profanity written on the wall of his sister Phoebe's school. For 10 points each:

[10] Name this red-hunting-hat-wearing Pencey Prep student who can't stand "phonies."

ANSWER: **Holden Caulfield** [accept either or both underlined parts]

[10] Holden Caulfield is the protagonist of this novel, titled after Holden's incorrect recollection of a Burns poem.

ANSWER: *The **Catcher in the Rye***

[10] This reclusive author wrote *The Catcher in the Rye* as well as *A Perfect Day for Bananafish*.

ANSWER: J(erome) D(avid) **Salinger**

Extra. This man postulated that people behave the way they do because of repressed childhood feelings. For 10 points each:

[10] Name this founder of psychoanalysis who described wish fulfillment in *The Interpretation of Dreams*.

ANSWER: Sigmund (Sigismund Schlomo) **Freud**

[10] Freud's book *Beyond the Pleasure Principle* discusses this adaptive element of the human mind holding us back from primal urges. It is often grouped with the ego and id.

ANSWER: **superego**

[10] Freud wrote about this entity "and its discontents" in another work. He asserted that it formulates laws so that savage humans can get along with one another.

ANSWER: **civilization** [accept *Civilization and its Discontents*]