# 2012 Collaborative Middle School Tournament <br> Round 8 

## Tossups

1. One composer from this country depicted a "March to the Scaffold" in a five movement symphony, while another used a snare drum ostinato in a Spanish-inspired piece. A third composer from this country used a Mallarmé (MAL-ar-MAY) poem for his Prelude to the Afternoon of a Faun. Symphonie Fantastique (fan-tah-STEEK), Bolero (boh-LAY-roh), and Clair de Lune were written in, for 10 points, what country, home to Hector Berlioz (BARE-lee-ohs), Maurice Ravel, and Claude Debussy? ANSWER: Republic of France
2. In one of this man's stories, Bill and Sam kidnap the title bratty son of Ebenezer Dorset. In addition to "The Ransom of Red Chief," he wrote a work in which Jim and Stella buy a comb set and a watch chain for one another but end up sacrificing the watch and the hair for which the gifts were meant. For 10 points, name this writer of the collection The Four Million, which contains his short story "The Gift of the Magi."
ANSWER: O. Henry [or William Sydney Porter]
3. Vast amounts of data concerning this body were gathered by the Clementine mission. Rilles are faults found on the surface of this body. The Tycho Crater and Montes Pyrenaeus (MON-tays pee-reh-NAYuss) are found here. Its movement is calculated using sidereal and synodic periods. This body's surface contains several maria (MAH-ree-ah), including the Sea of Tranquility. For 10 points, name this celestial body that revolves around Earth.
ANSWER: the moon
4. This man was traded by the Reds for Edinson Volquez after his rookie season. In July 2011, Shannon Stone fell to his death while reaching for a ball that this player threw into the stands of Rangers Ballpark. The 2010 American League MVP was for 10 points, what left-handed hitting outfielder for the Texas Rangers who hit a go-ahead homer in the top of the 10th inning of game 6 in the 2011 World Series? ANSWER: Josh Hamilton
5. A popular novel about this figure is T.H. White's The Once and Future King. In the Annales Cambriae (ah-NAH-less CAM-bree-ay), this figure was mortally wounded at the Battle of Camlann during a fight with his son Mordred. In that text, the wizard Merlin is mentioned only once, though in Thomas Malory's The Death of this figure, Merlin helps this man find Excalibur. For 10 points, name this legendary king of Britain.
ANSWER: King Arthur
6. This man sent the Great White Fleet on a tour of the world to impress Japan, and ended a conflict between Japan and Russia with the Treaty of Portsmouth. He recruited several college buddies to serve together as the Rough Riders unit during the Spanish-American War. He began "trustbusting" with the Standard Oil Case. For 10 points, name this president from 1901 to 1909, whose nickname provided the name for a toy bear.
ANSWER: Theodore Roosevelt [or Teddy Roosevelt; or T.R.; prompt on Roosevelt]
7. This term describes a type of friction whose coefficient is usually larger than that of kinetic friction. It describes a type of equilibrium in which the net torque and net force both equal zero, resulting in a motionless object. A buildup of charge on the surface of an object creates this type of electricity. For 10 points, give this six-letter term also denoting the noise emitted by a mistuned radio or television. ANSWER: static
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.

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8. After initiation into the Khalsa (KAHL-sah) in this religion, adherents must wear a wooden comb, known as the "kanga"(KAHN-gah), and a steel bracelet, known as the "kara" (KAH-rah), which are two of the five K's. Arjun (AR-joon) Dev compiled this religion's holy text, the Adi Granth, which contains many of the sayings of the first leader, or guru, of this religion. For 10 points, identify this religion founded by Nanak, whose adherents are mostly found in the Punjab region.
ANSWER: Sikhism
9. The Diprotodon was the largest member of this taxonomic group known to exist, while its last big carnivore, the thylacine, went extinct in the Hobart Zoo. Burrowers in this infraclass, such as wombats, have a namesake feature opening to the rear. Its only North American species is the opossum. For 10 points, name this mammal group that gives birth to tiny young and rears them in an external pouch, as seen in the kangaroo.
ANSWER: Marsupial [or Marsupialia]
10. This river was known in ancient times as the "Black" River due to the black silt it deposited during floods. Lake Tana is one source of this river; John Speke discovered that the other was Lake Victoria. It forms from the confluence of namesake Blue and White Rivers near Khartoum. For 10 points, Aswan High Dam is on what longest river in the world?
ANSWER: Nile River
11. In this novel, a widow seeks help moving her house out of the path of Farmer Fitzgibbon's plow. Jeremy takes her to visit a wise, old owl who suggests asking the title characters to move her house "to the lee of the stone." Those characters live in a rosebush and are technologically advanced rodents. For 10 points, identify this Robert O'Brien novel about the widow of Jonathan Frisby's efforts to save her family.
ANSWER: Mrs. Frisby and the Rats of NIMH
12. At the suggestion of a Serbian merchant, this artist began his career making toys. His works include the giant Flamingo in Chicago. As his popularity grew, he started to construct both wire sculpture and kinetic art as seen in Form Against Yellow and Lobster Trap and Fish Tail. For 10 points, name this American sculptor known for inventing the mobile sculpture.
ANSWER: Alexander Calder
13. The president of this nation, Kristina Fernandez de Kirchner, was diagnosed with thyroid cancer in December, 2011. This nation accused Great Britain of violating international rules when they allowed oil drilling about 300 miles east of the Strait of Magellan, off the coast of the Falkland Islands. For 10 points, name this South American nation where a 2011 law banned protest marches in the capital of Buenos Aires.
ANSWER: Republica Argentina [or Argentine Republic]
14. After the Autumn Harvest Uprising, this man retreated to the Jianggang (JAHNG-gahng) Mountains, where he joined forces with Zhu De (ZHOO DAY), creating the Red Army. He was succeeded by Hua Guofeng (WAH gwo-FANG) and went on the Long March after being surrounded by Kuomintang forces. Under his guidance, the Hundred Flowers Campaign and Great Leap Forward were launched. For 10 points, name this author of the Little Red Book, the first leader of Communist China.
ANSWER: Mao Zedong [or Mao Tse-tung; or Chairman Mao]
15. One of these entities "of variation" equals the standard deviation divided by the mean. Spearman and Pearson name two of these entities that measure correlation. "Binomial" ones give the number of ways $k$ unordered outcomes can be chosen from $n$ possible and are given by Pascal's Triangle. For 10 points,

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give this term for numbers that multiply a variable in a mathematical expression.

## ANSWER: coefficients

16. In this work, Maurice and another character are seen destroying a sand castle. A pig's head on a stick appears to Simon and is revered as the title figure. The holder of the conch is allowed to speak at the meeting within this book. A boulder is used by Roger to kill Piggy and Jack challenges Ralph for leadership of the tribe in, for 10 points, what novel by William Golding about a group of boys stranded on an island?
ANSWER: Lord of the Flies
17. This deity was forced to serve Admetus (add-MEE-tuss) after killing the Cyclops that killed his son. This deity killed the sons of a certain women who boasted to this god's mother about having 14 children; that woman is Niobe (nye-OH-bee). He pursued Daphne until she was turned into a laurel tree and played a lyre created for him by Hermes. For 10 points, name this Greek god of music and poetry, the twin brother of Artemis.
ANSWER: Apollo
18. One ruler of this historical country went on a "Grand Embassy" to the west to learn shipbuilding and military training. That same ruler instituted a beard tax on boyars. Another of its rulers created a parliament called the Duma and issued the October Manifesto. Peter the Great and Nicholas II were rulers of, for 10 points, what empire where a 1917 revolution toppled the government in Moscow?
ANSWER: Russian Empire [do not accept or prompt on "Soviet Union" or "U.S.S.R."]
19. In standard units, this force's namesake constant equals 6.67 times ten to the negative eleventh power. This force's magnitude is inversely proportional to the square of the distance between two objects. On earth it causes objects to accelerate at 9.81 meters per second squared. It acts more strongly on objects of greater mass. For 10 points, name this fundamental force that causes objects to fall to the ground. ANSWER: gravity [or (universal) gravitation and other word forms]
20. The Ebro (AY-bro) Valley is in this nation that owns the Balearic (BAH-lee-AH-rick) Islands and the Canary Islands. The southwest slope of the Pyrenees is in this country, which was unified by a 15thcentury marriage between rulers of Aragon and Castile. Tourists visit the Costa Brava in its region of Catalonia, which also contains Barcelona. For 10 points, the Iberian Peninsula is shared by Portugal and what nation whose capital is Madrid?
ANSWER: Kingdom of Spain [or Reino de Espana]
Extra. The winning side of this battle had its main position at Henry House Hill. The losing side was led by General Irvin McDowell. General Joseph Johnston rushed reinforcements to P. G.T Beauregard at this battle. General Bernard Bee was shot at this battle after proclaiming, "There stands Jackson like a stone wall!" For 10 points, name this first major battle of the Civil War.
ANSWER: First Battle of Bull Run [or First Battle of Manassas; prompt on Bull Run; prompt on Manassas]

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## Bonuses

1. This book ends with the death of Joseph. For 10 points each:
[10] What first book of the Old Testament opens with the words "in the beginning..."?
ANSWER: Book of Genesis [accept Bereshit]
[10] According to the Book of Genesis, this wife of Abraham gave birth to Isaac.
ANSWER: Sarah [accept Sarai]
[10] Isaac fathered this younger twin with Rebecca. This twin brother of Esau worked for his uncle Laban for 14 years before he was allowed to marry his cousin Rachel.
ANSWER: Jacob [accept Ya'aqov; accept Ya'qub]
2. The elevator in the apartment complex this sitcom is set in is always broken. For 10 points each:
[10] Name this CBS sitcom featuring Caltech physicists Leonard and Sheldon and their Cheesecake Factory waitress neighbor, Penny.
ANSWER: The Big Bang Theory
[10] This engineer on The Big Bang Theory still lives with his mother and is constantly made fun of for not possessing a $\mathrm{Ph} . \mathrm{D}$.
ANSWER Howard Wolowitz [accept either underlined name]
[10] This other CBS sitcom killed off its character Charlie Harper, who was played by Charlie Sheen, and replaced him with a character played by Ashton Kutcher.
ANSWER: Two and a Half Men
3. For 10 points each, name these North American lakes.
[10] If Lakes Michigan and Huron are considered two separate lakes, the largest North American lake is this Great Lake that borders the states of Minnesota, Wisconsin, and Michigan.
ANSWER: Lake Superior
[10] This is the largest lake entirely within a single U.S. state. It is fed by the Jordan and Bear Rivers and is a remnant of prehistoric Lake Bonneville.
ANSWER: Great Salt Lake
[10] The largest lake entirely within Canada is, like Great Slave Lake, drained by the Mackenzie River and found within the Northwest Territories.
ANSWER: Great Bear Lake
4. It is defined as a gravitationally bound system made up largely of stars and dust. For 10 points each: [10] Name this astronomical entity, an example of which is our Milky Way. ANSWER: galaxy [or galaxies]
[10] Fritz Zwicky developed this concept in 1933 to account for mass that galaxies seem to have but cannot be observed.
ANSWER: dark matter [prompt on dark; do not accept "dark energy"]
[10] Many galaxies, including the Milky Way, Andromeda, and Triangulum, exist in this region of the Virgo Supercluster.
ANSWER: Local Group

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5. For 10 points each, answer the following about art galleries.
[10] This museum in Bilbao, Spain was built by Frank Gehry (GEH-ree) and has been hailed as one of the greatest "Deconstructivist" buildings in the world.
ANSWER: Guggenheim Bilbao (GOO-gen-hyme BILL-bau)
[10] This gallery in Florence, Italy is one of the oldest in the modern world and home to works by Botticelli, Da Vinci, and Michelangelo.
ANSWER: Uffizi (oo-FEET-zee) Gallery
[10] Designed in Manhattan in the late 1920s and home to works by Van Gogh and Dali is the MoMA (MOH-mah). Expand the acronym MoMA.

## ANSWER: Museum of Modern Art

6. The main character in this book is chastised for incorrectly using the word "starving" in place of "hungry." For 10 points each:
[10] Name this Newbery Medal winning novel in which Jonah is assigned a life-time job by the Elders. Their society exists without poverty, strife or choice.
ANSWER: The Giver
[10] The Giver is by this American author who wrote the companions Giving Blue and The Messenger. ANSWER: Lois Lowry
[10] Lois Lowry also won the Newbery Medal in 1990 for this historical novel concerning the Holocaust. ANSWER: Number the Stars
7. This is a computation bonus. Consider the following set of numbers: (MODERATOR NOTE: Please read slowly so they have time to write all the numbers down) $4,4,5,7,10$. For 10 points each:
[10] Find the median of that set of numbers.
ANSWER: $\underline{\mathbf{5}}$
[10] Find the mode of that set of numbers.
ANSWER: 4
C. Find the mean of that set of numbers.

ANSWER: $\underline{6}$
8. Thomas Jefferson called it a "fire bell in the night." For 10 points each:
[10] Name this 1820 compromise, which took its name from the provision that only one slave state would be located north of the 36-30 line of latitude.
ANSWER: Missouri Compromise
[10] The Missouri Compromise kept the number of slave and free states equal by admitting this state, formerly a part of Massachusetts but separated from the rest of the state by New Hampshire.
ANSWER: Maine
[10] The Missouri Compromise was the brainchild of this Senator, a perennial losing presidential candidate for the Whig Party known as the "Great Compromiser."
ANSWER: Henry Clay
9. He is visited by the ghost of his former business partner Jacob Marley. For 10 points each:
[10] Name this cold-hearted, greedy character who expresses his disgust with the phrase "bah, humbug."
ANSWER: Ebenezer Scrooge [accept either or both underlined names]
[10] This character from A Christmas Carol is Scrooge's underpaid clerk. Scrooge becomes like a second father to his son "Tiny Tim."
ANSWER: Robert "Bob" Cratchit [accept any underlined part or any combination of underlined parts] [10] A Christmas Carol was written by this Victorian author who also wrote Oliver Twist and David Copperfield.
ANSWER: Charles Dickens

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10. This decision may be overturned by a two-thirds vote in both branches of Congress. For 10 points each:
[10] The President can use what power to overturn legislation adopted by Congress? Andrew Jackson once used this power to prevent the re-charter of the Second Bank of the United States.
ANSWER: veto
[10] This type of veto is exercised if the President does not sign a bill and Congress adjourns within 10 calendar days of passing that bill.
ANSWER: pocket veto
[10] The President's veto power is established in this passage of the Constitution dealing with the Executive Branch.
ANSWER: Article II of the U.S. Constitution
11. Types of this property include glide, translational, rotational, and reflection. For 10 points each:
[10] Name this property of objects that are not changed when they are flipped over a line.
ANSWER: symmetry [or symmetric]
[10] On the graph of a function, if $f$ of $x$ equals $f$ of the opposite of $x$, then the graph is symmetric about this line. If the point $(x, y)$ is on the graph, then the point $(-x, y)$ is also on the graph.
ANSWER: $\mathbf{y}$-axis [or $\mathbf{x}=\mathbf{0}$ ]
[10] Functions symmetric about the y-axis are given this name because polynomial functions which have that type of symmetry must have all of their exponents be this type of number.
ANSWER: even
12. Songs in this work include "America," "Maria," and "I Feel Pretty." For 10 points each:
[10] Name this musical, turned into a 1961 film, about the Jets and Sharks street gangs. It was adapted from Shakespeare's Romeo and Juliet.
ANSWER: West Side Story
[10] This composer of On the Town and longtime conductor of the New York Philharmonic wrote the music for West Side Story.
ANSWER: Leonard Bernstein
[10] This member of the Jets falls in love with Maria and sings the duet "Tonight" with her. He kills her brother, Bernardo, at the end of Act 1.
ANSWER: Tony
13. In this novel, the main character's wife Mildred wants to install a fourth wall-length television screen. For 10 points each:
[10] Name this work which starts with Guy Montag thinking that it is "a pleasure to burn," but ends with him becoming the backup copy of Ecclesiastes.
ANSWER: Fahrenheit 451
[10] This author of Fahrenheit 451 also wrote the frame novel The Illustrated Man and a short story about the effects of time travel, "A Sound of Thunder."
ANSWER: Ray Bradbury
[10] This Bradbury work includes the story "There Will Come Soft Rains", which is set in California after a nuclear war, though much of it is set on a different planet.
ANSWER: The Martian Chronicles

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14. A scandal in the British media erupted in July 2011. For 10 points each;
[10] This British newspaper ceased operations after several of its journalists were accused of hacking into voicemail accounts of a murder victim and relatives of soldiers killed in Iraq and Afghanistan.
ANSWER: The News of the World [prompt on News International; prompt on News Corporation] [10] In response to the scandal, this British Prime Minister, the leader of the Conservative Party, ordered investigations into the allegations.
ANSWER: David Cameron
[10] The News of the World was owned by News Corporation, a multimedia conglomerate that operates this cable news channel in the U.S. Its slogan is, "Fair and Balanced."
ANSWER: Fox News
15. Before this battle, English forces had defeated Harald Hardrada ("HAROLD" hard-RAH-dah) at the Battle of Stamford Bridge. For 10 points each:
[10] Name this 1066 British battle where Harold Godwinson was defeated by the forces of Norman invaders.
ANSWER: Battle of Hastings
[10] The Normans were led at Hastings by this man, who became King of England afterwards and commissioned the Domesday Book.
ANSWER: William the Conqueror [or William I; or William the Bastard; or William II of
Normandy; accept Guillaume in place of William; prompt on William]
[10] The Battle of Hastings was depicted on this cloth. It includes an image of Harold Godwinson being struck in the eye with an arrow and a depiction of Halley's Comet.
ANSWER: Bayeux Tapestry
16. Individuals with this condition cannot produce melanin. For 10 points each:
[10] Name this genetic disorder in which organisms lack pigmentation, giving their skin and hair a whitish appearance.
ANSWER: albinism [or albino; or achromia; or achromasia; or achromatosis]
[10] Because a person must inherit the albinism gene from both parents to have the disorder, albinism is this type of genetic trait.
ANSWER: recessive
[10] One of these diagrams, which show the possible allele combinations of two parents, can be used to find the chance of two carriers having an albino child.
ANSWER: Punnett square
17. 108 of these poems are collected in Philip Sidney's Astrophel and Stella. For 10 points each: [10] William Shakespeare wrote 154 of what 14 -line poems often written in iambic pentameter?
ANSWER: sonnets
[10] This 17th century English poet wrote the sonnet On His Blindness as well as the epic poem Paradise Lost.
ANSWER: John Milton
[10] This 14th century Italian poet wrote sonnets about his unattainable love for Laura. A type of sonnet named after him contains a break between its first eight lines and last six.
ANSWER: Petrarch [or Francesco Petrarca]

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18. This deity is alternately known as Narayana (NAH-rah-YAH-nah), Hari, or Vasudeva (VAH-soo-DEH-vah). For 10 points each:
[10] Name this Hindu "preserver" deity said to appear in some form anytime the dharma needs protecting. He rides Garuda and his consort is Lakshmi (LAHK-shmee).
ANSWER: Vishnu
[10] Vishnu once took the form of this figure. In this form, his flute playing prompted the gopis to leave their homes and come dance with him. He also served as Arjuna's charioteer in this form.
ANSWER: Krishna
[10] Krishna is one of these earthly manifestations of Vishnu. Other examples are Matsya (MAHT-seeah), Kalki (KALL-kee), and Rama.
ANSWER: avatars
19. For 10 points each, name these Roman emperors.
[10] The first Roman emperor was this man born with the name Octavius, who defeated Mark Antony after the breakup of the Second Triumvirate.
ANSWER: Augustus Caesar [prompt on Octavian]
[10] According to legend, this emperor played the fiddle during the Great Fire of Rome. In real life, he persecuted the Christians.
ANSWER: Nero Claudius Caesar Augustus Germanicus [do not accept any of the non-underlined names by themselves]
[10] The third of the "Five Good Emperors" was this Spanish-born ruler who ordered the construction of a wall across northern Britain.
ANSWER: Hadrian [or Publius Aelius Trajanus Hadrianus Augustus; accept Hadrian's Wall; do not accept any of the non-underlined names by themselves]
20. For 10 points each, answer the following about thermodynamics.
[10] In the First Law of Thermodynamics, energy is in a system is transferred as work and this quantity symbolized q.
ANSWER: heat
[10] This measure of disorder within a system is always increasing in a closed system by the Second Law of Thermodynamics.
ANSWER: entropy [or $\underline{\mathbf{S}}$ ]
[10] This thermodynamic potential is equal to enthalpy minus temperature times entropy. If it is negative, a reaction will be spontaneous.
Answer: Gibbs free energy [or $\underline{\mathbf{G}}$; prompt on free energy]
Extra. For 10 points each, identify these features of your circulatory system.
[10] This is the largest artery in the human body, ascending from the heart and descending to the abdomen.
ANSWER: aorta
[10] This common name is used for the only vein that carries oxygenated blood and the only artery that carries deoxygenated blood.
ANSWER: pulmonary
[10] Examples of these features in the heart that only allow blood flow in one direction are the mitral and tricuspid.
ANSWER: valves
