# 2013 Collaborative Middle School Tournament Round 8 

## Tossups

1. This man's ship was saved from destruction after Orpheus used his lyre to drown out the Sirens' singing. This man plowed a field with bronze, fire-breathing bulls and then sowed the teeth of a dragon into that field in order to retrieve an item that was made from the $\left(^{*}\right)$ ram that saved Phrixus and Helle. For 10 points, name this lover of Medea who led the Argonauts in the quest for the Golden Fleece.
ANSWER: Jason [or Iason]
2. The Antennae and The Mice are interacting examples of these objects, and Seyfert's Sextet are a group of them. Tidal tails form in these objects, when one or more of them merge. Edwin Hubble classified these on a 'tuning fork diagram'", which includes the elliptical and (*) spiral types. M31 is the Andromeda example of, and our own Milky way is another of, for 10 points, what large collections of stars?
ANSWER: galaxy/ies
3. This man's family was kicked out of the Borjigin clan after his father Yesugei was poisoned. After this leader came to power, he created the Yassa legal code, and this man and his son are credited for building up Karakorum and defeating the Khwarezmian Empire. Because one of his sons, Jochi, was poisoned, his successor was another son, Ogedei. (*) For 10 points, identify this founder of the Mongol Empire and grandfather of Kublai Khan.
ANSWER: Genghis Khan [accept Temujin; prompt on Khan]
4. In one poem by this writer, the speaker says that the title idea "perches in the soul." In addition to "Hope is the thing with feathers," this author wrote a poem that proclaims 'I'm Nobody! Who are you?' and a poem that describes a "blue, uncertain, stumbling $\left(^{*}\right)$ buzz". A poem about a carriage ride with Death and Immortality was written by, for 10 points, what poet of "Because I could not stop for death," and "I heard a fly buzz when I died"?
ANSWER: Emily Dickinson
5. The sum of the infinite sequence whose terms are the reciprocals of these numbers equals pi squared over 6. The sum of the first $n$ of these is $n$ times $n+1$ times $2 n+1$ over 6 , while the sum of the first $n$ positive odd numbers is the $\boldsymbol{n} \mathbf{t h}$ of these. The difference between two of these numbers can be factored as $\left(^{*}\right) a+b$ times $a-b$. For 10 points, name these numbers equal to the an integer times itself.
ANSWER: (perfect) square numbers or perfect squares [accept $n \underline{\text { squared }}$ or similar answers; accept $n \underline{\text { to the }}$ second power or $n$ to the power of $\underline{2}]$
6. In one of this artist's paintings, Mercury wears a red sash as he reaches up to an orange in an orange grove; that painting, whose central figure stands next to the Three Graces, is La Primavera. Zephyrus and Chloris [KLOR-iss] blow a goddess to land as a horae greets her at a shore in this artist's most famous work. ${ }^{*}$ ) For 10 points, name this Italian artist who featured a large seashell in his The Birth of Venus. ANSWER: Sandro Botticelli [or Alessandro (di Mariano di Vanni) Filipepi]
[^0]
## 2013 CMST - Round 8

7. Richard Dawkins described an "extended" form of this term, which becomes blended in incomplete dominance. The human skin color one is controlled by three genes, and crossing two heterozygous individuals usually results in a 3-to-1 ratio of this. In Mendel's pea plants, these included (*) dwarf, yellow, and wrinkled. For 10 points, name this term for an organism's physical traits that are determined by its genotype.
ANSWER: phenotypes [prompt on "trait(s)"]
8. He wrote his first novel, "This Can't Be Happening At Macdonald Hall" while still in seventh grade. Characters Bruno and Boots star in six of this author's other novels; since then, he has written four installments of the '39 Clues' series, including "One False Note" and 'The Emperor's Code". The (*) "Swindle" and "On The Run" series were written by, for 10 points, what author of "Ungifted"? ANSWER: Gordon Korman
9. The U.S. Naval Observatory is the official residence for holders of this office, which Spiro Agnew resigned when he was charged with tax fraud. This post was vacant during the administrations of John Tyler and Millard Fillmore, who both became (*) President after they held this post. Ties in the U.S. Senate are broken by, for 10 points, what executive branch post recently held by Dick Cheney?
ANSWER: Vice President of the United States [do not accept or prompt on "President"]
10. A December 2012 agreement between this country's National Action, Democratic Revolution, and Institutional Revolutionary Parties led to constitutional amendments in 2013. The last of those parties is headed by (*) Enrique Peña Nieto [en-REE-kay PAY-nya nee-AY-toe], who replaced Felipe [fay-LEE-pay] Calderon as president. For 10 points, name this country that recently experienced an increase in drug-related violence and that shares a long border with the United States.
ANSWER: Los Estados Unidos de México [or United Mexican States]
11. Notable writers in this form included Guy de Maupassant, and it also makes up the book Dubliners by James Joyce. "The Legend of Sleepy Hollow" and "Rip Van Winkle" are examples of this form by Washington Irving. Edgar Allen Poe said one of these should be able to be read in a (*) single sitting. "The Gift of the Magi" and "The Ransom of Red Chief" are examples by O. Henry of, for 10 points, what small form of fiction?
ANSWER: short story
12. In this film, a priest's rhotacism causes him to pronounce the word "marriage" incorrectly. One character lists two classic blunders, getting involved in a land war in Asia, and having a battle of wits with a Sicilian. The main character later reveals his identity while rolling down a hill by saying, (*) "As you wish." For 10 points, name this comedic fantasy film in which Westley rescues the title character, Buttercup.
ANSWER: The Princess Bride
13. This city is protected from floods by a dam centered on the island of Kotlin. A bronze equestrian statue of this city's namesake stands in Senate Square, the site of the Decembrist revolt. This city lies on the Gulf of Finland at the mouth of the Neva River, a few hundred miles northwest of (*) Moscow. For 10 points, name this Russian city, formerly known as Leningrad and Petrograd, considered the most Westernized Russian city. ANSWER: St. Petersburg [prompt on "Leningrad" or "Petrograd" before they are mentioned]

## 2013 CMST - Round 8

14. These animals can be harmed by the spread of Varroa mites, and their best known species is mellifera. A combination of the Nosema ceranae fungus and IIV6 virus may be responsible for their recent population decreases, called colony collapse disorder. Belonging to the genus (*) Apis, colonies of them have female workers, male drones, and queens. For 10 points, name these insects related to wasps that pollinate flowers and live in hives.
ANSWER: honey bees [accept "Apis" before it is mentioned; do not accept "wasp(s)" or "hornet(s)"]
15. The fourth chapter in this collection of adventures features a sensible Badger attempting to curb the reckless behavior of a fellow Wild Wood citizen. That effort fails, causing the Badger to put the citizen under house arrest. While the Water Rat stands guard, Mr. (*) Toad escapes his prison by feigning illness and stealing a car before setting off on a Wild Ride. For 10 points, name this book by Kenneth Grahame.
ANSWER: The Wind in the Willows
16. One copy of this document was sent to the Cinque [sink] ports. It notably banned the use of fish-weir traps, and Innocent III tried to make it void after one of its signers repented to him. This agreement created a council of 25 barons, who fought a war after the loser of the Battle of Bouvines failed to follow it. (*) For 10 points, name this document which established habeas corpus, a charter signed at Runnymede by John of England. ANSWER: Magna Carta Libertatum [or Great Charter of Liberties; prompt on Runnymede Charter]
17. Tritium [TRIH-tee-um] and deuterium [doo-TEER-ee-um] are examples of these for hydrogen.

Radioactive examples like carbon (*)-14 and uranium 239 are used for finding out how old some objects are and in nuclear reactors, respectively. For 10 points, name these forms of an element that differ in the number of neutrons. ANSWER: isotopes
18. Some of the most important teachings of this religion include the Four Noble Truths and the Middle Way. One of the main branches of this religion is also known as the "School of Elders," while another is known as the "Great Vehicle." Those are the Theravada and Mahayana branches of this religion. (*) Siddhartha Gautama founded, for 10 points, what religion that also comes in Zen and Tibetan forms?
ANSWER: Buddhism
19. This work includes a production of Don Juan Triumphant, a work written by the title character. The song "Think of Me" proves that one character can replace Carlotta as soprano; that character becomes engaged to Raoul, with whom he sings "All I Ask of You." "The (*) Music of the Night" is sung by the title character of, for 10 points, what Andrew Lloyd Webber musical about a deformed man who lives under an opera house? ANSWER: The Phantom of the Opera
20. A rebellion in this state for electoral rights was led by Thomas Dorr. The HMS Gaspee was burned off its coast. Metacomet's death and the Great Swamp Fight took place in this state, and Samuel Slater established the first American textile mill in its city of Pawtucket. Home to the Narragansett tribe and founded by Roger Williams at (*) Providence, for 10 points, name this state that first declared independence from Britain.
ANSWER: State of Rhode Island and Providence Plantations

Extra. These objects are often responsible for the formation of 'rock flour." When these objects retreat, they often create eskers and drumlins and leave moraines. They often create ' $\mathbf{v}$ " and ' $\mathbf{u}$ " shaped (*) valleys along with fjords. When these objects break apart, they form icebergs and can create large crevasses in their surface. For 10 points, name these large bodies of moving ice.
ANSWER: glaciers

## 2013 CMST - Round 8

## Bonuses

1. Name some lesser characters in the Mario world, for 10 points each:
[10] This green plumber is Mario's brother. He also owns a namesake "Mansion."
ANSWER: Luigi
[10] This princess's first appearance was in the 1989 game Super Mario Land. She is often contrasted with Princess Peach and is thought to be Luigi's romantic interest.
ANSWER: Princess Daisy
[10] Possibly the weakest enemy in any Mario game is this small, brown enemy that looks like a mushroom. It is the first enemy encountered in Super Mario Bros. World 1-1, and is defeated by being stomped on.
ANSWER: Goomba [accept Kuribo]
2. Thomas Nash depicted this politician as a rotund man. For 10 points each:
[10] Name this man, who ran the political machine known as Tammany Hall and was brought down by Samuel Tilden.
ANSWER: William Marcy Tweed [or "Boss" Tweed]
[10] Tweed's Tammany machine was based in this city, the most populous in the US. The current mayor of this city is Michael Bloomberg.
ANSWER: New York City
[10] This man had formerly served as the Collector of the Port of New York before being fired. This successor of James Garfield as president signed the Pendleton Civil Service Act into law.
ANSWER: Chester Alan Arthur
3. In this novel, Milady de Winter, spies for Cardinal Richelieu. For 10 points each:
[10] Name this work in which d'Artagnan becomes friends with Athos, Porthos, and Aramis.
ANSWER: The Three Musketeers [or Les Trois Mousquetaires]
[10] The Three Musketeers and its sequel Twenty Years After were written by this Frenchman.
ANSWER: Alexandre Dumas [doo-MAH], pere
[10] Dumas also wrote this novel about Edmond Dantes, who is tricked by Danglars.
ANSWER: The Count of Monte Cristo [or Le Comte de Monte-Cristo]
4. Name these Canadian provincial capitals, for 10 points each.
[10] This is the largest city in Canada and the provincial capital of Ontario.

## ANSWER: Toronto

[10] The Battle of the Plains of Abraham was fought outside this city on the St. Lawrence River.
ANSWER: Quebec City
[10] The Canadian Football League's Roughriders play in this capital of Saskatchewan.
ANSWER: Regina
5. Tachyons ["TACK"-ee-ahnz] are hypothetical particles that exceed this value. For 10 points each:
[10] Name this highest speed possible, symbolized $c$ and approximately equal to 3 times 10 to the 8 meters per second.
ANSWER: speed of light in a vacuum [accept phase velocity of light]
[10] The speed of light is assumed to be the same in all reference frames in this theory developed by Albert Einstein. ANSWER: theory of special relativity
[10] The theory of general relativity, on the other hand, is primarily concerned with explaining this fundamental force as it relates to special relativity.
ANSWER: gravity or gravitation

## 2013 CMST - Round 8

6. The title character of this novel is represented by the head of a pig on a stick. For 10 points each:
[10] Name this novel in which a group of boys, including Ralph, Piggy, Jack, and Simon, are stranded on a deserted island.

## ANSWER: Lord of the Flies

[10] This British author of Pincher Martin wrote Lord of the Flies.
ANSWER: Sir William Gerald Golding
[10] Jack's group attacked Ralph and Piggy in order to seize this object, which could be used to start a fire.
ANSWER: Piggy's Glasses
7. This man's sayings were collected in the Q source. For 10 points each:
[10] Name this man, the subject of many gospels, seen in Christianity as the son of God.
ANSWER: Jesus Christ
[10] A gospel not included in the New Testament is attributed to this red-haired woman, who some people believe to have had a romantic relationship with Jesus.
ANSWER: Mary Magdalene [prompt on "Mary"]
[10] Another gospel not included in the New Testament was attributed to this man, who witnessed the Assumption of Mary and later founded many missions in India.

## ANSWER: St. Thomas

8. This long work includes the operas Das Rheingold and Götterdämmerung. For 10 points each:
[10] Name this set of four operas, in which the realm of the gods burns while the Rhinemaidens reclaim the title golden object stolen by Albrecht.
ANSWER: The Ring Cycle [accept Der Ring des Nibelungen or The Ring of the Nibelung]
[10] This German composer wrote the Ring cycle, as well as The Flying Dutchman and Die Meistersinger von Nürnberg.
ANSWER: (Wilhelm) Richard Wagner
[10] This excerpt from the Ring Cycle describes the travels of Norse spirits like Brünnhilde, who accompany dead warriors to the halls of the gods.
ANSWER: Ride of the Valkyries [accept Walkürenritt or Ritt der Walküren]
9. Identify these governments of France, for 10 points each.
[10] This ruling house began with Henry IV in 1589 and lasted over two hundred years. It was restored after the downfall of Napoleon Bonaparte.
ANSWER: Bourbon
[10] This was the name of the government under the German occupation during World War II.
ANSWER: Vichy France
[10] This is the current government of France under President Francois Hollande.
ANSWER: Fifth Republic
10. Paper and pencil ready. Answer these questions about the metric system, for 10 points each.
[10] How many milligrams are in one gram?
ANSWER: $\mathbf{1 0 0 0} \mathrm{mg}$
[10] How many decameters are in 25 centimeters?
ANSWER: $0 . \underline{\mathbf{0 2 5}} \mathrm{dkm}$ [or $\underline{\mathbf{1 / 4 0}}$ ]
[10] How many degrees Fahrenheit is 50 degrees Celsius?
ANSWER: $\underline{\mathbf{1 2 2}}$ degrees

## 2013 CMST - Round 8

11. In this book, the title character meets the Duke and the Dauphin and helps them con Peter Wilkes's nieces. For 10 points each:
[10] Name this book in which the title character rafts down the Mississippi River with the runaway slave Jim. ANSWER: The Adventures of Huckleberry Finn
[10] Huckleberry Finn was one of this author's characters. Some of his other characters include Hank Morgan, Becky Thatcher, and Tom Sawyer.
ANSWER: Mark Twain [or Samuel Langhorne Clemens]
[10] This Twain short story is about a man who caused Jim Smiley to lose a bet by feeding quail shot to Dan'l Webster, the title amphibian.
ANSWER: "The Celebrated Jumping Frog of Calaveras County" [or "The Notorious Jumping Frog of Calaveras County" or "Jim Smiley and His Jumping Frog"]
12. Answer the following about Republican Presidential hopefuls in the 2012 primary season, for 10 points each.
[10] This former Speaker of the House from Georgia won the South Carolina primary. During the campaign, he proposed a moon colony that could petition to become a U.S. state.
ANSWER: Newton "Newt" Gingrich
[10] This politician lost his 2006 U.S. Senate re-election bid in Pennsylvania by 18 percent. In the 2012 Republican Presidential nomination race, he won the Iowa Caucus and actual elections in several states.
ANSWER: Rick Santorum
[10] After only being allowed to compete in a small number of debates, this former New Mexico governor ran for president with the backing of the Libertarian Party.
ANSWER: Gary Johnson
13. For 10 points each, name these artists from Spain:
[10] This artist created The Old Guitarist during his Blue Period and commemorated a bombing in his painting Guernica [gair-NEE-kah]. Along with Georges Braque, he pioneered cubism.
ANSWER: Pablo (Ruiz y) Picasso
[10] This other artist also depicted scenes of devastation in his series The Disasters of War. He showed French soldiers about to shoot a man on his knees in his The Third of May, 1808.
ANSWER: Francisco (José de) Goya (y Lucientes)
[10] This Mannerist painted View of Toledo [toh-LAY-doh] and The Burial of the Count of Orgaz. His nickname reflects his birthplace on Crete.
ANSWER: El Greco [or Domenikos Theotokopoulos]
14. Sometimes lots of people die. For 10 points each:
[10] During the 1970s in this country, bordering Thailand and Vietnam, the Khmer Rouge under Pol Pot headed a genocide now referred to as the Killing Fields.
ANSWER: Cambodia
[10] During the 1840 s, Ireland suffered through a terrible famine blamed on blight disease destroying this crop. The population of that island is now just recovering to its 1840 levels.
ANSWER: Irish Potato Famine
[10] This is the term given to the diffusion of livestock and crops that occurred following a certain explorer's arrival to the New World. Diseases brought from the Old World also resulted in millions of Native American deaths.
ANSWER: Columbian Exchange [accept Grand Exchange]

## 2013 CMST - Round 8

15. Insects like crickets experience this sense through tympanic membranes in their legs. For 10 points each: [10] Name this sense in which sound waves cause the inner ear to vibrate, sending signals to the auditory nerve. ANSWER: hearing [accept word forms]
[10] Hearing requires that the eardrum vibrate the three ossicles of the middle ear. Name any one of these three tiny bones, the smallest in the human body.
ANSWER: malleus or incus or stapes [or hammer or anvil or stirrup]
[10] This coiled part of the inner ear contains the organ of Corti, whose hair cells actually pick up sound.
ANSWER: cochlea [KOK-lee-uh]
16. For 10 points each, answer the following about the novel Ender's Game:
[10] This sister of Ender Wiggin was thought to be too kind to succeed at the Battle School Ender attends. Her name is coincidental with a February holiday.

## ANSWER: Valentine

[10] This brother of Ender Wiggin was thought to be too cruel to succeed at Battle school and he verges on becoming a sociopath. He shares his name with a Dutch shipyard worker who would rise to power in 1682 .
ANSWER: Peter
[10] Ender's Game is the first in a series of novels by this author.
ANSWER: Orson Scott Card
17. For 10 points each, give the following about the life cycle of the sun:
[10] It is currently in this stage, fusing hydrogen into helium. The stars of this type form the principal diagonal band of the Hertzsprung-Russell diagram.
ANSWER: main sequence star
[10] When the sun has used up most of its hydrogen, it will next become this much cooler type of star; it will also become so large it engulfs Earth.
ANSWER: red giant (branch stars) [prompt on giant]
[10] The sun will finally become one of these small, dense, relatively dim stars, and it will fade away.
ANSWER: white dwarf
18. The Huntington-Hill method assigns this body's 435 delegates to each state. For 10 points each:
[10] Name this body of Congress, where representation from each state is determined by its population.
ANSWER: House of Representatives [prompt on just "House"]
[10] Bills concerning these things must start in the House. Contrasted with subsidies, these raise revenue for the government.
ANSWER: taxes [accept word forms]
[10] The United States has an income tax system of this type, where the more money someone makes, the higher rate they have to pay for their taxes.
ANSWER: progressive tax code [accept anything with progressive in it]
19. Cadmus founded it at the spot where a cow lay down to rest. For 10 points each:
[10] Name this Greek city that was home to Oedipus and Tiresias.
ANSWER: Thebes
[10] Tiresias was made one of these people after he was blinded for seeing Athena bathing. The Trojan princess Cassandra was also one, although no one believed her predictions.
ANSWER: prophets (accept seers; accept oracles; prompt on "people who tell the future" or equivalents) [10] An Aeschylus play titled for this many people Against Thebes chronicles the death Oedipus's sons. After separating two snakes, Tiresias spent this many years as a woman.
ANSWER: seven

## 2013 CMST - Round 8

20. For 10 points each, identify these Microsoft products:
[10] This suite includes Word, Excel, PowerPoint, Outlook, and in some versions, other products. ANSWER: Microsoft Office
[10] Some versions of Office include this database software.
ANSWER: Microsoft Office Access
[10] This framework for writing dynamic internet applications provides similar functionality to Adobe Flash. Netflix uses it to stream video.
ANSWER: Microsoft Silverlight

Extra. The title character of this play has a stormy marriage to Desdemona and is tricked by Iago. For 10 points each:
[10] Name this Shakespearean play subtitled the Moor of Venice.
ANSWER: Othello
[10] This other play by Shakespeare is set in Padua and centers on Petruchio's courtship of Katherine, the title figure.
ANSWER: The Taming of the Shrew
[10] Tamora, Queen of the Goths, eats her two sons as baked meats in this Shakespearean tragedy about the title Roman general.
ANSWER: Titus Andronicus


[^0]:    The 2013 Collaborative Middle School Tournament was written and edited by Ankit Aggarwal, the Bainbridge Academic Team, Scott Blish, Kristin Burns, Ben Chametzky, Aaron Dos Remedios, Michael Falk, Brad Fischer, Jonah Greenthal, Abid Haseeb, Kathy Hempel, Matthew Hill, Jeff Hoppes, Mike Laudermith, Colin McNamara, Michael Menkhus, Jacob O'Rourke, Zach Pace, Aakash Patel, Jeff Price, David Reinstein, David Riley, Ryan Rosenberg, Ethan Russo, Ezra Serrins, David Shoemaker, Adam Sperber, Kristin Strey, Brittany Trang, Tristan Willey, Nolan Winkler, Ben Zhang, and possibly some other people.

