

## 2010 Collaborative Middle School Tournament Round 5

### Tossups

1. This god tricked Ixion (“IX-ee-on”) into having relations with a cloud that looked like this deity's wife. He swallowed his first wife after getting her to change into a fly. This god was suckled by the she-goat Amalthea (“AM-all-THEE-uh”) while in hiding on Crete. This man was the victor in the Titanomachy (“TIE-tan-AHM-uh-kee”), and his children included Hermes and Athena. For 10 points, name this lightning god from Greek myth, the ruler of Mount Olympus.

ANSWER: **Zeus**

2. These astronomical objects are made of the interstellar medium, the gasses and particles between stars. Types of them include planetary, diffuse, supernova reflection, and dark. Famous examples include the Lagoon one in Sagittarius and the Horsehead one in Orion. For 10 points, what are these colorful clouds of gas and dust?

ANSWER: **Nebulae** [or **nebulas**]

3. During a speech in Fulton, Missouri, this leader claimed that an "iron curtain" had descended across Europe. His first speech to the House of Commons promised "blood, toil, tears, and sweat." He served as Chancellor of the Exchequer (“EX-checker”) under Stanley Baldwin, and became Prime Minister after his predecessor appeased Adolf Hitler. For 10 points, name this Prime Minister who led the British government during World War II.

ANSWER: Sir Winston (Leonard Spencer) **Churchill**

4. After a massacre at the end of this novel, the title character’s preaching causes his nephew to force him onto the shore of China. Earlier in this novel, a Portuguese captain rescues the titular character from the seaport of Sallee (“suh-LEE”). The title character of this novel also teaches English to Friday. For 10 points, name this novel, depicting a lost Englishman, written by Daniel Defoe.

ANSWER: **Robinson Crusoe**

5. In this type of plot, outliers may be represented using asterisks. The length of one part of this plot gives the interquartile (“IN-ter-QUART-ile”) range, and a line in the middle of that part represents the median. For 10 points, name this plot in which that rectangle contains the middle fifty percent of the data.

ANSWER: **box-and-whiskers** plot

6. Salvador was the capital of this country until it was replaced by an Oscar Niemeyer (“NEE-meyer”) planned city in 1956. Tourist sites in this country include Ipanema Beach, Sugarloaf Mountain, and the statue of Christ the Redeemer, and its ecotourist destination city Manaus is located in the world’s largest rainforest. For 10 points, Porto Alegre (“PORT-oh uh-LAY-gray”), Sao Paulo, and Rio de Janeiro are located in what largest country in South America?

ANSWER: **Brazil**

7. One character in this novel becomes an outlaw named Kissin' Kate Barlow. This book, set mostly in Camp Green Lake, also describes a curse by the ancient gypsy Madame Zeroni. It begins when a pair of shoes hit its main character, and he is sent to a camp to dig for treasure. For 10 points, name this book about Zero and Stanley Yelnats IV, which was written by Louis Sachar.

ANSWER: **Holes**

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.

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8. In retaliation for having been fired from Uptown Records, this man established his own record label and signed the artist Notorious B.I.G. In 2008, this man dedicated his new fragrance *I Am King* to Barack Obama, Muhammad Ali, and Martin Luther King. For 10 points, name this rapper and record producer who established Bad Boy Records and is variously known as “Puffy” or “Diddy.”

ANSWER: Sean John **Combs** [accept **Puff Daddy** or **Puffy** before “Puffy” and prompt afterwards; accept **P. Diddy** or **Diddy** before “Diddy” and prompt afterwards]

9. The heat of fusion is the amount of heat that must be added to a substance for this process to occur without a change in temperature. Salt is placed on roads to favor this process over its opposite. At atmospheric pressure, ice undergoes this process at zero degrees Celsius. For 10 points, name this conversion from solids into liquids, whose opposite is freezing.

ANSWER: **melting**

10. The “straw” form of this practice is unscientific and the “push” form of this is really just a campaign tactic designed to attack an opponent in disguise. Most important to politicians in the midst of a campaign are the “exit” form and “tracking” forms. They require some form of a random sample and carefully worded questions in order to be accurate. For 10 points, what is a survey used to measure public opinion called?

ANSWER: **polls** [or **polling**]

11. At one point in this novel the main character is told to jump off of a cliff, but is stopped. That character also joins the crew of Hal, Charles, and Mercedes. In this novel, John Thornton is a gold hunter who is killed by five Indians; the main character avenges that death at this novel’s end. For 10 points, name this Jack London novel that sees Buck leave his spoiled life and become a sled dog on the Yukon Trail.

ANSWER: *The **Call of the Wild***

12. According to the Koran, all angels, except Satan, prostrated themselves before this figure due to his knowledge. He was cursed to "eat bread until he returned to the ground." In the New Testament, he is seen as the source of death for all men. His transgression is revealed to God when he is seen wearing a fig leaf. His rib was used to make his wife, Eve. For 10 points, name this Biblical figure, the first man.

ANSWER: **Adam**

13. This author's book *The Descent of Man* was inspired by his encounter with natives of Tierra del Fuego (“tee-AIR-uh del FWAY-go”) when he voyaged with Robert Fitzroy on *HMS Beagle*. A group of finches with differing beaks were collected in the Galapagos by, for 10 points, what British scientist who proposed the theory of evolution in *The Origin of Species*?

ANSWER: Charles (Robert) **Darwin**

14. A series of descending examples of this scale opens Rimsky-Korsakov's famous *Flight of the Bumblebee*. On a guitar, one can play one of these by fingering every fret on a given string, and on the piano, one can play one of these by striking every black and white key in a row. Playing this scale involves moving only by half-steps. For 10 points, name this type of scale that includes every note on an instrument.

ANSWER: **chromatic** scale

15. This person’s visit to Fort Bragg caused a stir when the press was denied entry to a book tour for *Going Rogue*. This person resigned from the position of Governor of the state closest to Russia shortly after a campaign loss in the most recent general election. Tina Fey did a notable impression of, for 10 points, what unsuccessful vice presidential candidate who ran alongside John McCain in 2008?

ANSWER: Sarah **Palin**

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16. Amazonstone (“AM-uh-zon-STONE”) and cleavelandite (“Cleveland ite”) are members of this group of minerals. Samples of it which show a high opalescence (“OH-puh-LESS-ence”) are traded as moonstone, and some with a yellow or orange tint are sold as sunstone. The plagioclase (“PLAY-jee-oh-CLASE”) and alkali (“AL-kuh-lye”) forms of this mineral are prevalent in granite. Made of aluminum, silicon, and either calcium, sodium, or potassium, for 10 points, name this mineral, number 6 on the Mohs scale of hardness.

ANSWER: **feldspar**

17. This artist’s statues of a dying slave and a horned Moses were to adorn the tomb of Julius II. His only signed work is one in which Mary holds the dead body of Jesus, entitled *Pietà* (“pee-AY-tuh”). One of his works depicts a nude giant killer holding a sling. This man depicted several scenes from Genesis in *The Last Judgement*. For 10 points, name this Italian Renaissance painter of the Sistine Chapel ceiling.

ANSWER: **Michelangelo** di Lodovico **Buonarroti** Simoni [accept either]

18. This empire held together by the use of quipus (“KWEE-poops”) was expanded by Pachacuti (“PAH-chah-COO-tee”) but weakened by civil war between Huascar (“HWASS-car”) and Atahualpa (“AT-uh-WALL-puh”). Cities built in it included the capital, Cuzco (“KOOZ-ko”), and the city discovered by Hiram Bingham, Machu Picchu. For 10 points, what Native American empire of Peru was overthrown by Francisco Pizarro?

ANSWER: **Inca** empire [or **Inka** empire; or **Incan** civilization]

19. This writer depicts a one-legged ballerina falling in love with the title character in “The Steadfast Tin Soldier.” Gerda saves Kai from the title character in his short story entitled “The Snow Queen.” The Sea Witch gives a knife to one of this writer’s title characters, while another one eventually matures into a swan. For 10 points, name this Danish writer who wrote “Little Mermaid” and “The Ugly Duckling.”

ANSWER: Hans Christian **Andersen**

20. This man's secretary, Orville Babcock, and vice president, Schuyler (“SKOY-ler”) Colfax, were accused in the scandals of the Whiskey Ring and Credit Mobilier. He captured Fort Donelson and opened the Mississippi River at Vicksburg before he was promoted to command all the Union armies and accepted the surrender of Robert E. Lee at Appomattox. For 10 points, name this Union general and eighteenth President.

ANSWER: Ulysses Simpson **Grant**

Extra. In physics, this is the only element with a known solution to the Schrodinger (“SHRO-din-ger”) equation. In science history, this element forms a flammable gas that caused the Hindenburg explosion. In chemistry, Arrhenius (“ar-REN-ee-us”) acids release an ion of this element into water. In astronomy, the proton-proton chain converts two of this element into helium. For 10 points, name this lightest element, with atomic number 1.

ANSWER: **hydrogen** [or **H**]

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### Bonuses

1. For 10 points each, name these rights guaranteed by the First Amendment:

[10] *Schenck* ("SHANK") v. *United States* dealt with this right. It is perhaps the most important right granted as it governs what you can and cannot say.

ANSWER: freedom of **speech**

[10] *Near v. Minnesota* dealt with this right that creates the so-called "fourth branch" of government. The *Wall Street Journal* is particularly concerned with this right.

ANSWER: freedom of the **press**

[10] The Supreme Court case *Engel v. Vitale* was about this clause regarding the inability of the government to adopt an official one of these.

ANSWER: freedom from the establishment of **religion** [or **establishment** clause]

2. In one adventure this boy's adversary disguises himself as Po Nassi and he convinces Ty Manoo to create a fertilizer that turns crops to poison. For 10 points each:

[10] Identify this boy who thwarted Saint Dane on Cloral, and in a later adventure saves the Bantu from an apocalyptic flood.

ANSWER: Bobby **Pendragon**

[10] Containing works like *The Quillian Games* and *Raven Rise*, the Pendragon series was penned by this British author who also produced the T.V. series *Flight 29 Down*.

ANSWER: D.J. **MacHale** [or Donald James **MacHale**]

[10] This character from the series betrayed the travelers and joined Saint Dane. In *The Quillian Games* she betrays Bobby and helps destroy Mr. Pop.

ANSWER: **Nevva Winter** [accept either underlined name]

3. The service for this holiday is contained in the Haggadah ("huh-GAH-dah"), which surprisingly mentions Moses only once. For 10 points each:

[10] Name this Jewish holiday also known as the Festival of Spring that commemorates the Exodus from Egypt.

ANSWER: Feast of **Passover** [or Hag ha-**Pesach**; or Hag ha-**Aviv**; or Hag ha-**Matsot**; or **Zeman Heretenu**]

[10] The Haggadah is read at this meal on the first night or first two nights of Passover. Participants explain the meaning of bitter herbs, kharoset ("KAR-oh-set"), parsley, a shankbone, and an egg.

ANSWER: **Seder** ("SAY-dur")

[10] During the Seder, a special cup is set out for this prophet, who will answer all unresolved questions. During one part of the ceremony, the door is opened so he may enter. After giving up his mantle, a whirlwind took him to Heaven.

ANSWER: **Elijah** [accept **Elias**]

4. For 10 points each, answer the following about visible light:

[10] Visible light with the longest wavelength, about 700 nanometers, appears as this color. This color is prefixed by "infra-" to describe electromagnetic ("ee-LECK-tro-mag-NET-ick") waves with slightly higher wavelengths and thus lower frequencies.

ANSWER: **red**

[10] These devices, typically made of transparent glass, are used to separate white light into its constituent colors.

ANSWER: **prisms**

[10] Prisms work via this process, in which a light wave changes its velocity upon passing into a new medium. For this process, the change in direction at the boundary is governed by Snell's Law.

ANSWER: **refraction** [do not accept or prompt on "diffraction"]

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5. For 10 points each, answer the following about the geography of a Canadian province:

[10] This province, the third most populous in Canada, is directly north of Seattle.

ANSWER: **British Columbia**

[10] Known for landmarks such as Stanley Park and General Motors Place, this is the most populous city and economic center of British Columbia. It was the host of the 2010 Winter Olympics.

ANSWER: **Vancouver**

[10] The capital of British Columbia is this city, located on the southern tip of Vancouver Island.

ANSWER: **Victoria**

6. He was killed near the end of a June 1876 battle in the Montana territory. For 10 points each:

[10] Name that 7th Cavalry commander famous for his "last stand."

ANSWER: George Armstrong **Custer**

[10] Custer's Last Stand is the more famous name for this battle, named for a nearby river.

ANSWER: Battle of the **Little Bighorn**

[10] Most of the Native Americans who beat Custer belonged to this group, whose branches include the Lakota, Yankton, and Santee.

ANSWER: **Sioux** ("Sue")

7. For 10 points each, name these markings on sheet music:

[10] This marking is two expanding lines and directs musicians to get louder.

ANSWER: **crescendo**

[10] These marks above notes on sheet music can be dashes or carats and tell musicians which notes to emphasize.

ANSWER: **accents**

[10] This marking, a semi-circle above a dot, directs the musicians to hold the note until directed to stop.

ANSWER: **fermata**

8. At least one part of this bonus requires computation. Consider the equation  $y$  minus 2 equals negative one-third times quantity  $x$  plus 4. For 10 points each:

[10] Convert that equation to standard form.

ANSWER:  **$x + 3y = 2$**  [or " **$x$  plus three  $y$  equals two**"; or equivalents such as "**one-third  $x$  plus  $y$  equals two-thirds**"]

[10] One way to begin the conversion is to multiply the quantity  $x$  plus 4 by the negative one-third outside the parentheses. What property allows you to do this?

ANSWER: **distributive** property

[10] What is the area of the triangle formed by that line, the  $x$ -axis, and the  $y$ -axis? Express your answer as a common fraction.

ANSWER:  **$\frac{2}{3}$**

9. This novel sees Atticus Finch defend a black man from an unjust rape charge. For 10 points each:

[10] Name this novel featuring Scout and Jem Finch and their search to find out more about the reclusive and hermetic Boo Radley.

ANSWER: ***To Kill a Mockingbird***

[10] *To Kill a Mockingbird* is this writer's only published novel. She based it on her own life growing up in a small town in Alabama, and her childhood friend Truman Capote inspired the character Dill.

ANSWER: (Nelle) Harper **Lee**

[10] This is the man whom Atticus defends. He is accused of raping Mayella Ewell, but it was actually she that came on to him. He is shot while trying to escape from prison after being unreasonably convicted.

ANSWER: **Tom Robinson** [accept either underlined name]

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10. This nation was used by Britain as a place of settlement for convicts. For 10 points each:

[10] Name this country where settlers landed at Botany Bay and established sheep stations in the Outback.

ANSWER: **Australia**

[10] This term refers collectively to the indigenous inhabitants of Australia whose land was stolen by British settlers. Their mythology includes the Rainbow Serpent and the Dreamtime.

ANSWER: Australian **Aborigines**

[10] When British colonists arrived in New Zealand, they fought wars against these Polynesian people, known for their tattoos and a war dance called the haka.

ANSWER: **Maori** (“may-OR-ee”)

11. This song gave Howard Ashman a posthumous Academy Award for Best Original Song. For 10 points each:

[10] Name this song whose lines include, “Tale as old as time/Song as old as rhyme,” and which shares its title with the Disney movie in which it is featured.

ANSWER: “**Beauty and the Beast**”

[10] During the movie itself, this actress, who voiced Mrs. Potts, sang the song. She is also known for her roles in the original version of *The Manchurian Candidate* and the television show *Murder, She Wrote*.

ANSWER: Angela (Brigid) **Lansbury**

[10] The soundtrack version of “Beauty and the Beast” was the breakout English-language hit for this singer, who sang a duet with Peabo Bryson. She also sang the 1997 winner for Best Original Song, “My Heart Will Go On.”

ANSWER: Celine Marie Claudette **Dion**

12. In science fiction, planets often have two suns. For 10 points each:

[10] That would be caused by setting the story on a planet within one of these systems, in which two stars rotate around a common center of mass.

ANSWER: **binary** star systems

[10] The closest binary star system to Earth is this one, whose slightly larger A star is the closest star to the Sun that is of similar mass, color, and luminosity.

ANSWER: **Alpha Centauri** [do not accept “Proxima Centauri”]

[10] This red dwarf, sometimes called Alpha Centauri C, is the closest overall star to the Sun.

ANSWER: **Proxima Centauri**

13. This monster is the first antagonist encountered in an Anglo-Saxon epic. For 10 points each:

[10] Identify this monster, whose mother and a dragon are the other two antagonists. He attacks the hall of king Hrothgar (“ROTH-gahr”), possibly bothered by the noise within, before getting his arm ripped off.

ANSWER: **Grendel**

[10] Grendel is slain by this Geatish (“GATE-ish”) hero and namesake of the epic. This man’s other feats include defeating several sea monsters during a swimming match with his friend Breca (“BRECK-uh”) and wielding the sword Hrunting (“RUN-ting”).

ANSWER: **Beowulf**

[10] Grendel is referred to as a “son of” this Biblical figure who killed his brother Abel.

ANSWER: **Cain**

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14. Gustave Geoffroy (“GOOS-tov jeff-FWAH”) said that if this statue “were to stand up and walk, the ground under [its] feet would tremor.” For 10 points each:

[10] Name this bronze statue depicting a seated Dante, pondering his *Divine Comedy*. His head rests on his hand as he looks down, deep in contemplation.

ANSWER: *The **Thinker*** [or *Le **Penseur***; or *The **Poet***; or *Le **Poète***]

[10] *The Thinker* is a work of this French sculptor whose other famous works include *The Kiss*, *The Age of Bronze*, and *The Burghers of Calais*.

ANSWER: Auguste **Rodin**

[10] *The Thinker* and *The Kiss* are two parts of a larger sculpture depicting *The Gates of this place*. It was commissioned as a doorway for the Museum of Decorative Arts, which was never built.

ANSWER: **hell** [accept **Enfer**; accept reasonable equivalents]

15. For 10 points each, name these parts of a tree:

[10] Trees get nutrients from these structures, which are stuck in the ground and help anchor the tree as well.

ANSWER: **roots**

[10] The wood of the tree is made from the dried remnants of this vascular tissue, which transports water up the tree.

ANSWER: **xylem**

[10] This is the layer of protective covering on the outside of the tree. It typically contains dead cells combined with cork, and materials such as cinnamon and quinine are harvested from it.

ANSWER: **bark**

16. It was also known as the "Age of Reason." For 10 points each:

[10] Name this period, which saw the work of philosophers like Voltaire (“vol-TAIR”), Kant, and Rousseau (“roo-SO”).

ANSWER: (Age of) **Enlightenment**

[10] Another Enlightenment thinker was Denis Diderot (“DEE-dare-oh”), who published an influential edition of this type of reference work. Later examples include the *Britannica*.

ANSWER: **encyclopedia**

[10] Enlightenment philosophy was influential during this period, which saw the fall of the Bastille and Maximilien Robespierre's (“ROBE-spear's”) Reign of Terror.

ANSWER: **French Revolution**

17. For 10 points each, given a description of various figures in different myths, identify the type of animal being described:

[10] Loki gave birth to an eight-legged one of these named Sleipnir (“SLEEP-near”). For his eighth labor, Hercules was sent to capture the female ones belonging to Diomedes (“die-AHM-eh-dees”).

ANSWER: **horses** [accept equivalents]

[10] After being caught with her, Zeus turned Io into one of these animals, which made its way to Egypt. The Egyptian goddess Hathor is often depicted with the head of one of these animals.

ANSWER: **cow**

[10] A four-eyed one named Garm has a chest covered in blood and guards the entrance to Helheim (“HELL-hime”) in Norse myth. Hercules had to capture a three-headed one for his twelfth labor.

ANSWER: **dog** [accept **hound**]

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18. The story of the main character of this novel is also told in *Twenty Years After* and *The Vicomte* (“VY-comt”) of *Bragelonne* (“BRAG-el-own”). For 10 points each:

[10] Name this book about three characters who adopt the model "All for one and one for all."

ANSWER: *The Three Musketeers*

[10] This friend of Athos, Porthos, and Aramis is the main character of *The Three Musketeers*.

ANSWER: D'Artagnan

[10] In the novel, the musketeers try to save Anne of Austria from the machinations of this religious leader and advisor to King Louis.

ANSWER: Cardinal Richelieu

19. They are also named tropical cyclones. For 10 points each:

[10] Name these massive storms that are characterized by a low pressure center and lots of wind and rain. One named Katrina devastated the southern U.S. in 2005.

ANSWER: hurricanes

[10] This is the scale that measures the intensity of hurricanes. The most intense hurricanes get a 5, while the weakest get a 1.

ANSWER: Saffir-Simpson Hurricane Scale

[10] This effect is often cited as the reason for the counterclockwise rotation of hurricanes in the Northern Hemisphere and the clockwise rotation in the Southern Hemisphere.

ANSWER: Coriolis effect

20. Answer these questions about a recent political gaffe not committed by Joe Biden, for 10 points each:

[10] Name the current White House Chief of Staff who recently called a set of liberal activists "retarded."

ANSWER: Rahm Emanuel

[10] Emanuel apologized to Tim Shriver, the head of this charity which claims to “bring the best of sports to people with intellectual disabilities worldwide.”

ANSWER: Special Olympics

[10] Eunice Shriver, a founder of the precursor to Special Olympics, brought attention to the cause through her association to this family which she grew up in. Several prominent members endorsed Barack Obama.

ANSWER: Kennedy

Extra. As proof that even the ugly guy can occasionally get the girl, this lame god was alternately married to either Aphrodite or the Grace Aglaia (“uh-GLAY-uh”). For 10 points each:

[10] Name this smith god of the Greeks.

ANSWER: Hephaestus (“huh-FEST-us”)

[10] Being married didn't keep Aphrodite from cheating on Hephaestus with this other god, though Hephaestus had the last laugh when he caught them in a net and showed their infidelity for all the gods to see.

ANSWER: Ares

[10] This god of love was sometimes considered to be one of the children of the affair between Ares and Aphrodite. He fell in love with Psyche and was associated with the Roman Cupid.

ANSWER: Eros