# 2011 Collaborative Middle School Tournament Round 3

## **Tossups**

1. This structure is divided into Brodmann areas, and develops from the telencephalon ("TEAL"-en-SEFF-ah-"lawn"). The corpus callosum ("CORE"-puss kuh-LOE-sum) connects the two hemispheres of this structure, which is divided into temporal, parietal, occipital, and frontal lobes. For 10 points, name this largest area of the brain, which controls voluntary thoughts and actions.

ANSWER: **cerebrum** [accept cerebral **cortex**; accept **neocortex**; accept **forebrain**; prompt on **brain**]

2. This book's main character pays a debt to his landlord by rescuing the seamstress Constance. Earlier in this book, set in the time of Louis XIII (13), the same character challenges his friends to duels but later helps them fend off the troops of Cardinal Richelieu (REE-shee-loo). The motto "One for all and all for one," is spoken by Athos, Porthos, and Aramis in, for 10 points, what book about D'Artagnan (dar-TAN-yan)] written by Alexandre Dumas (doo-MAH)?

ANSWER: The **Three Musketeers** [or Les **Trois Mousquetaires**]

3. In one work, this man depicted five nude prostitutes, two of them in African masks. In another work, a light bulb shines in the shape of an eye and on the right a figure raises his arms in terror with fire above and below. This artist of *Les Demoiselles d'Avignon* (lay DAY-mwah-ZELL dha-veen-YOH) painted *The Old Guitarist* during his Blue Period. For 10 points, name this Spanish artist of *Guernica*, who cofounded cubism.

ANSWER: Pablo (Diego José Francisco de Paula Juan Nepomuceno María de los Remedios Cipriano de la Santísima Trinidad Ruiz y) **Picasso** 

- 4. The Bernoulli one approximates the powers of x plus 1 to a linear equation using the power for the slope. The "triangle" one sets a restriction for the possible lengths of the third side of a triangle given the other two. Dividing by a negative number results in a sign change in, for 10 points, what mathematical statement about relative size of two entities, characterized by use of greater-than and less-than signs? ANSWER: **inequality**
- 5. The head of the third largest bank in this country announced he had hidden 87 million Euros in loans from that bank. That announcement led to his arrest and the nationalization of that bank. In late November 2010, this country received an 85 billion Euro bailout from the EU. For 10 points, identify this nation that controls five-sixths of an island, the northern sixth of which is part of the United Kingdom. ANSWER: Republic of **Ireland**
- 6. This polity's army was defeated and its king, Cleombrotus (CLEE-ahm-BRO-tus), was killed at the battle of Leuctra by forces led by Epaminondas (eh-PAM-in-ON-das). Critias (CRITT-ee-us) was installed as one of the Thirty Tyrants by this city-state to rule a naval power that led the Delian League. While defending against Persia, this city-state lost King Leonidas and three hundred other soldiers at Thermopylae (ther-MOP-i-lee). For 10 points, identify this Greek city-state and rival of Athens. ANSWER: **Sparta** [accept **Lacedaemon**]
- 7. This musician says, after declaring "now I'm gonna make you dance," "girl you know you're my world" in his song "Just Lose It." His film debut came in 8 *Mile*, which included a song mentioning "vomit on his sweater already, mom's spaghetti." That song was "Lose Yourself." For 10 points, what rapper from Detroit recorded the songs "Without Me," "Not Afraid," and, with Rihanna, "Love the Way You Lie"?

ANSWER: **Eminem** [or Marshall Bruce **Mathers** III]

The 2011 Collaborative Middle School Tournament was written and edited by Ankit Aggarwal, Joe Brosch, Siddhant Dogra, Brad Fischer, Zach Foster, Jonah Greenthal, Jeff Hoppes, William Horton, Adil Khan, Kay Li, Charles Martin Jr., Brendan McKendy, Fred Morlan, Jeff Price, David Reinstein, Tristan Willey, and Dwight Wynne.

8. At one point in this book, two characters recite nursery rhymes and the Gettysburg Address to avoid being hypnotized by a man with red eyes. The main character of this book meets several tentacled creatures, including one called Aunt Beast, while rescuing her father from Camazotz. Its title concept is a tesseract through which Meg Murry visits the fifth dimension. For 10 points, name this novel by Madeleine L'Engle.

ANSWER: A Wrinkle in Time

9. This person won the Nobel Peace Prize for leading negotiations for the Treaty of Portsmouth, which ended the Russo-Japanese War. This leader coined the term "bully pulpit" and introduced the Square Deal. During the Spanish-American War, he led a charge up San Juan Hill with the Rough Riders, and he would later run for President on the Bull Moose ticket. For 10 points, name this President who succeeded William McKinley.

ANSWER: <u>Theodore</u> "Teddy" <u>Roosevelt</u> [prompt on <u>Roosevelt</u>; prompt on <u>T.R.</u>]

10. This deity led Perseus to the Gray Witches so he could kill Medusa. In *The Odyssey*, this god gave Odysseus the herb, moly, to protect him from Circe's (SIR-see's) magic, and was later asked by Zeus to order Calypso to let Odysseus go free. As an infant, this deity stole Apollo's cattle and gave Apollo the lyre he had invented. For 10 points, identify this Greek messenger god often depicted with his winged sandals.

ANSWER: Hermes

- 11. One character in this book deliberately pours syrup all over his lunch. At one point, the main characters are taken to a church by their cook, Calpurnia. Mayella Ewell accuses Tom Robinson of assaulting her; Tom is defended by the protagonist's father, the best lawyer in Maycomb, Alabama. For 10 points, name this book narrated by Scout, the daughter of Atticus Finch, and written by Harper Lee. ANSWER: *To Kill a Mockingbird*
- 12. One of these objects is named after Cocos Island and is next to one named after a region of Peru, Nazca. The spaces between them are usually classified as divergent or convergent transform faults. The theory of these objects has become connected to theories of mantle plumes, and the original theory came out of the continental drift ideas of Alfred Wegener. For 10 points, name these shifting sections of the Earth's surface.

ANSWER: tectonic **plates** [accept anything reasonable containing the word **tectonic**]

- 13. This state was the site of an indecisive battle between Henry Clinton and George Washington at Monmouth Courthouse. The Pine Barrens are found in the south-central part of this state, whose beach destinations include Cape May, Wildwood, and Atlantic City. The Delaware River forms this state's western border with Pennsylvania. For 10 points, what mid-Atlantic state has its capital at Trenton? ANSWER: New Jersey
- 14. This constellation contains the Trapezium Cluster and is the site of a late-October meteor shower. One of its stars, formerly known as the Amazon Star, is Bellatrix, and its brightest stars are Betelgeuse and Rigel. Its namesake nebula joins with Hatysa and other stars to form its sword, while Alnitak, Alnilam, and Mintaka form its belt. For 10 points, name this constellation nicknamed the Hunter.

ANSWER: **Orion** [prompt on **Hunter** before it is read]

15. Arias by this composer include *Va, penseiro* (VAH PENN-see-AIR-oh) and *La donna e mobile* (MOHbee-LAY), This composer of an opera about the Duke of Mantua's court jester included a "Drinking Song" in an opera about Violetta Valéry (VAL-ay-ree), *La Traviata*. He also depicted Radames's (RAH-dah-meez's) dilemma in choosing between the titular Ethiopian slave girl and his loyalty to Egypt. For 10 points, name this composer of *Rigoletto* and *Aida* ("eye"-EE-duh).

ANSWER: Giuseppe Fortunino Francesco Verdi

16. Parts of this continent named for 19th century sailors include Palmer Land and Wilkes Land. Vostok (VAH-stock) is a Russian station on this continent, parts of which are claimed by Norway, Argentina, and New Zealand. British naval officer Robert Scott died on this continent, which was more successfully explored by Roald Amundsen (AH-mund-son) using sled dogs. For 10 points, name this coldest continent, the site of penguin colonies and the South Pole.

ANSWER: Antarctica

17. This holiday commemorates the result of a trial before the Sanhedrin (san-HEE-drin), which was led by Caiaphas (KYE-uh-fuss). Some believe that trial took place the day before, leading them to begin observation of this holiday a day early. It commemorates the day that Pontius Pilate (PON-ti-US PYE-late) attempted to prevent rioting by permitting the execution of Jesus Christ. For 10 points, name this holiday that occurs two days before Easter.

ANSWER: Good Friday [or Great Friday; or Holy Friday]

18. This author wrote about a country at war with Blefuscu; he also created the land of Glubbdrubdrib and a flying island, Laputa. One of his characters goes to a land with 72-feet-tall men. This author also suggested that the rich should eat poor Irish children in "A Modest Proposal." For 10 points, identify this British author who wrote of the title character's journey to Lilliput in *Gulliver's Travels*. ANSWER: Jonathan **Swift** 

19. This empire arose when the Seljuk sultanate collapsed. It captured the capital of Hungary in 1526 during the Battle of Mohacs (mow-HOTCH). This nation's expansion to Greece and the Balkan Peninsula was followed by the capture of Constantinople in 1453. For 10 points, identify this empire which dissolved in the early 20th century because of the Young Turk revolution and its ill-fated alignment with Germany and Austria-Hungary.

ANSWER: **Ottoman** Empire [or **Osmanic** Empire; or **Osmanion** Empire]

20. This force is produced by moving charges, and its namesake field is measured in henrys. Its most common form breaks down at a point at which domains lose their alignment. This phenomenon's "electro" type may be caused by wrapping wire around a nail and running current through it. For 10 points, name this force whose "ferro" type is exhibited by cobalt, nickel, and iron and may be used to stick items to fridges.

ANSWER: <u>magnetism</u> [accept word forms such as <u>magnetic</u>; accept <u>electromagnetism</u> until "electro"]

Extra. The Darien Scheme was an attempt by Scotland to create another structure similar to this entity. The Hay-Bunau Varilla (HAY BOO-now vah-REE-yuh) Treaty allowed the United States to begin constructing this entity. A zone around it was returned from the U.S. to its namesake country by a treaty signed by Jimmy Carter. For 10 points, name this waterway that connects the Atlantic and Pacific Oceans through a Central American country.

ANSWER: Panama Canal [or Canal de Panama]

#### **Bonuses**

1. This novel's title character is raised by her aunt, Mrs. Reed, and attends the Lowood school for girls. For 10 points each:

[10] Name this novel, in which the title character becomes governess at Thornfield Hall and marries her employer, Edward Rochester.

ANSWER: Jane Eyre

[10] This author, the eldest of three sisters, wrote *Jane Eyre*.

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

[10] Emily Bronte, the middle sister, wrote this novel, in which Heathcliff loves Catherine Earnshaw, who marries Edgar Linton.

ANSWER: Wuthering Heights

2. He was the father of Pepin the Short, and his grandson became the namesake of the Carolingian dynasty. For 10 points each:

[10] Name this mayor of the palace who conquered the province of Aquitaine after defeating Muslim forces at the Battle of Tours.

ANSWER: Charles **Martel** [or **Charles the Hammer**; prompt on **Charles**]

[10] This grandson of Charles Martel was crowned as Roman Emperor by Pope Leo III on Christmas 800.

ANSWER: Charlemagne [or Charles the Great]

[10] This son of Henry the Fowler was crowned Holy Roman Emperor in 962. He defeated Magyar forces at Lechfeld.

ANSWER: Otto I [or Otto the Great; or Otto]

3. Relying heavily on drums and kettle drums, it was first created to regulate the movement of large groups of people. For 10 points each:

[10] Name this musical style often performed in parades or by military bands.

ANSWER: march

[10] This composer and "March King," a former U.S. Marine, is best known for writing marches like the "Liberty Bell" and the "Stars and Stripes Forever."

ANSWER: John Philip Sousa

[10] This Sousa march was composed for \$35, to be played at the prize ceremony at a children's essay contest. It is named after the newspaper that held the contest.

ANSWER: "Washington Post March"

4. The Atacama (AT-uh-CAHM-uh) Desert is found in the northern part of this country. For 10 points each:

[10] Name this narrow South American country found on the western slope of the Andes.

ANSWER: Chile

[10] This other South American nation governs most of the Gran Chaco from its capital of Asuncion (ah-SOON-see-ohn).

ANSWER: Paraguay

[10] Paraguay and its neighbor Bolivia are the only South American countries with this property of having no coastline on the ocean.

ANSWER: landlocked

5. The SI unit of measure for this quantity is the pascal. For 10 points each:

[10] Name this quantity which is a measure of force per area.

ANSWER: pressure

[10] According to Boyle's Law, an increase in this quantity causes a decrease in pressure. This quantity is often measured in liters.

ANSWER: volume

[10] As the temperature of a gas increases, the volume increases proportionally by this other gas law.

ANSWER: Charles's Law

6. In this novel, Carson kills Candy's decrepit dog, and Curley's wife lets a character stroke her hair, but he eventually kills her. For 10 points each:

[10] Identify this novel about the migrant workers George and Lennie.

ANSWER: Of Mice and Men

[10] Of Mice and Men was written by this American who depicted Kino and Juana finding the title unlucky object in *The Pearl*.

ANSWER: John Steinbeck

[10] Steinbeck also wrote this novel about the Joad family's journey from Oklahoma to California.

ANSWER: The **Grapes of Wrath** 

7. These wars included the Jameson Raid and the Siege of Mafeking. For 10 points each:

[10] Name this series of two wars fought between British settlers and the namesake Dutch-speaking settlers in South Africa.

ANSWER: Anglo-**Boer** Wars

[10] The Jameson Raid was an attempt to take over this largest city in South Africa.

ANSWER: Johannesburg

[10] One supporter of the Jameson Raid was this diamond magnate, who dreamed of a Cape-to-Cairo railway and established a scholarship for foreigners to study at Oxford.

ANSWER: Cecil John Rhodes

8. This is a computation bonus. For 10 points each, calculate the volumes of the following solids. You do not need to worry about units.

[10] If a cylinder has a volume of 36, what is the volume of a cone that has the same radius and height as that cylinder?

ANSWER: <u>12</u>

[10] If each side of a cube has an area of 4, what is the volume of that cube?

ANSWER: 8

[10] What is the volume of a sphere with a radius of 1?

ANSWER: **4 pi/3** [or **4/3 pi**]

9. He hung from the tree Yggdrasil (igg-DRAH-sill) for nine days and nights while being pierced by his own spear. For 10 points each:

[10] Identify this father of the Norse gods who sends the ravens Hugin ("WHO"-gen) and Munin (MOO-nen) to report to him what happens in the world.

ANSWER: **Odin** [or **Wotan**; or **Wodin**; or **Allfather**]

[10] Odin and the other major Norse gods will die during this event. During it, the giants will storm Asgard (AS-guard).

ANSWER: Ragnarok

[10] Odin will be killed by Fenrir, who is this type of animal. Geri (GAIR-ee) and Freki (FREK-ee), two other examples of this animal, always accompany Odin.

ANSWER: wolf

10. For 10 points each, identify these longtime Senators who died in 2009 or 2010.

[10] This man joined the Senate in 1962, taking over the seat that had been held by his brother, who had vacated the seat to become President the year before.

ANSWER: Edward Moore Kennedy [or Ted Kennedy; prompt on Kennedy]

[10] This longest-serving Senator in U.S. history represented West Virginia in the Senate from 1959 until his death in 2010.

ANSWER: Robert Carlyle **Byrd** [or Cornelius Calvin **Sale**, Jr.]

[10] This man represented Alaska until he lost a 2008 re-election bid, two years before his death. He once described the Internet as a series of tubes.

ANSWER: Theodore Fulton "Ted" Stevens

11. This person's best friend at Yancy Academy is Grover Underwood. For 10 points each:

[10] Name this character created by Rick Riordan, who is the protagonist of one series and also plays a major role in *The Heroes of Olympus*.

ANSWER: Perseus **Jackson** [or **Perseus**; or **Percy** Jackson]

[10] This book, in which Percy learns that he is the son of a Greek god, is the first in the *Percy Jackson & the Olympians* series.

ANSWER: The Lightning Thief

[10] This character, who appears in the *Percy Jackson* and *Heroes of Olympus* series, is a mortal who is able to see through the Mist and becomes the Oracle at Delphi.

ANSWER: Rachel Elizabeth <u>Dare</u> [or <u>Rachel</u> Dare; or <u>Elizabeth</u> Dare]

12. For 10 points each, answer these questions about phases of the Moon.

[10] This is the shape of the visible Moon when less than half of the entire Moon is illuminated. It is contrasted with the gibbous phase.

ANSWER: crescent

[10] This synonym of the phrase Dark Moon is used to describe the time when the Sun and Moon are in conjunction. It is not an eclipse, but the Moon is not visible.

ANSWER: new moon

[10] When the visible portion of the Moon is decreasing in size, it is classified as waning. What similar term is used when the visible portion of the Moon is increasing in size?

ANSWER: waxing

13. For 10 points each, identify these US government departments whose heads serve in the President's Cabinet.

[10] This first executive department established in the United States handles foreign relations. This department is currently headed by Hillary Clinton.

ANSWER: Department of **State** 

[10] This department includes the Bureau of Indian Affairs and the United States Geological Survey. It is currently headed by Ken Salazar.

ANSWER: Department of the **Interior** 

[10] This department includes the Occupational Safety and Health Administration. It was once headed by Frances Perkins, the first female cabinet secretary in US history.

ANSWER: Department of Labor

14. In humans the ABO blood type has three of them. For 10 points each:

[10] Give this term given to the different forms of a particular gene.

ANSWER: <u>allele</u> [accept <u>allelomorph</u>]

[10] This word describes a diploid organism that has two different alleles for the same trait, for example, one dominant and one recessive.

ANSWER: <u>heterozygous</u> [accept word forms such as <u>heterozygote</u>]

[10] This Austrian monk deduced many of the principles of heredity from his crosses of pea plants.

ANSWER: Gregor Johann Mendel

15. This game took the Nintendo Wii by storm in 2008 after its release in America. For 10 points each:

[10] This fighting game includes the addition of Snake, Sonic the Hedgehog and Mario. Giga Bowser and Tabuu were added as bosses in this game's single-player mode.

ANSWER: <u>Super Smash Brothers Brawl</u> [prompt on <u>Brawl</u>; prompt on Super <u>Smash Bros.</u>]

[10] Super Smash Brothers. Brawl retained this mouse-like Pokemon from previous incarnations. This character's down B move is "Thunder" and its other B moves also involve electricity.

ANSWER: Pikachu

[10] This new addition to the Smash Brothers series can glide, and his regular B attack is "Mach Tornado."

ANSWER: Meta Knight

16. He meets a strange black poodle on Easter Sunday, and he falls in love with Gretchen when he sees her leaving the church. For 10 points each:

[10] Name this character who sells his soul to the devil.

ANSWER: Faust [accept Doctor Faustus]

[10] The most influential Faust story was written by this poet of the Sturm und Drang movement.

ANSWER: Johann Wolfgang von **Goethe** [GERR-tah]

[10] Goethe came from this European country, whose other authors include his friend Friedrich Schiller and the Brothers Grimm.

ANSWER: **Germany** [prompt on **Holy Roman Empire**]

17. This sculpture was originally called *Le Poete* and was intended for the sculptor's Gates of Hell. For 10 points each:

[10] Name this sculpture that depicts a man pensively resting his chin on his knuckles.

ANSWER: *The Thinker* [or *Le Penseur*]

[10] This French sculptor created *The Thinker* as well as a monument to Victor Hugo.

ANSWER: (François) Auguste (Rene) Rodin

[10] Rodin also sculpted this work, which depicts Francesca da Rimini and Paolo Malatesta embracing in a scene from the *Inferno*.

ANSWER: The **Kiss** 

18. This naval base was attacked by forces under the command of Isoroku Yamamoto. For 10 points each:

[10] Name this base on Oahu, attacked on December 7, 1941, "a date which will live in infamy."

ANSWER: Pearl Harbor

[10] About six months after Pearl Harbor and one month after the Battle of Coral Sea, American forces under Chester Nimitz defeated Japanese forces under Yamamoto at this battle.

ANSWER: Battle of **Midway** 

[10] Much later in the war, American forces placed a flag on Mount Suribachi during a battle on this small Japanese island.

ANSWER: Iwo Jima

19. Variants of one branch of this religion include Pure Land and Zen. For 10 points each:

[10] Name this religion that began when Siddhartha Gautama (sid-HART-ah gow-TAH-mah) achieved nirvana.

ANSWER: **Buddhism** [accept word forms, such as **Buddhist**]

[10] Buddhists adhere to this set of four teachings, which include ones on suffering and on path that leads to the end of suffering.

**ANSWER: Four Noble Truths** 

[10] This branch and Mahayana are the two main branches of Buddhism. It is referred to as "the Lesser Vehicle" and is predominantly practiced in Sri Lanka (SHREE LONK - ah).

ANSWER: Theraveda

20. A recent survey discovered that five out of every four people are confused by fractions. For 10 points each, identify these terms related to fractions.

[10] This is the term for a fraction whose numerator and denominator have a greatest common factor of 1. ANSWER: **reduced** [or **irreducible**; or **simplest form**; or **lowest terms**]

[10] This type of relationship between two variables is often expressed using the equations y equals k x

for the direct type or y equals k over x for the inverse type. ANSWER: **variation** [accept word forms, such as **vary**ing]

[10] This term is applied to two shapes that have congruent angles but do not have congruent sides. In this case, the sides are proportional.

ANSWER: similar ity

Extra. Flashing a sequence of pictures in front of someone's eyes creates the illusion of movement. For 10 points each:

[10] Name this art form, simple versions of which are zoetropes (ZOE-uh-tropes) and flipbooks.

ANSWER: animation [accept word forms such as animating; prompt on cartoons; prompt on movies]

[10] This is the name for a set of sketches that are drawn early in the animation process. It gives a shot-by-shot outline of what the film should look like.

ANSWER: storyboard

[10] This 1937 Disney movie was one of the first animations to show realistic humans. It includes the songs "Whistle While You Work" and "Heigh-Ho."

ANSWER: **Snow White** and the Seven Dwarves