

2013 Collaborative Middle School Tournament

Round 7

Tossups

1. **The main character of this work dislikes sharing a room with Mr. Dussel, a dentist. That character misses her own cat but befriends Mouschi and his owner Peter. In this work, the main character's family and the van Daans (*) hide from in the "secret annex."** For 10 points, name this nonfiction book about Jewish families hiding in an attic from the Nazis, a book written by a fourteen year-old girl.

ANSWER: The Diary of a Young Girl [or The Diary of Anne Frank or Het Achterhuis; accept any answer mentioning Anne Frank and a journal or diary]

2. **This world leader ordered that people who hide cell phones should be shot, and in February 2013 it was discovered that he uses a Taiwanese HTC phone. A speech he recorded in early 2013 surprised listeners by not calling for US troop withdrawals, though in 2012 he claimed his (*) nuclear missiles could reach the US mainland.** For 10 points, name this son of the recently deceased Kim Jong-il, the current Supreme Leader of North Korea.

ANSWER: Kim Jong-un [prompt on partial answer]

3. **Rheumatic fever can damage the mitral region of this organ, which uses Purkinje fibers to coordinate activity with the SA node. A murmur results from valves leaking in this organ that is served by the (*) coronary arteries and surrounded by the pericardium. This organ directly connects to the aorta and has two atria and two ventricles.** For 10 points, name this organ of the circulatory system that pumps blood through the body.

ANSWER: heart

4. **The late Senator Robert Byrd once held the rank of Exalted Cyclops in this organization, whose first major leader was Nathan Bedford Forrest. The Civil Rights Act of 1871 was also named for this group. D.W. Griffith's film *The Birth of a Nation* glorifies this group, which was sued for (*) lynching Michael Donald.** For 10 points, name this white supremacist group that burns crosses and wears white clothing.

ANSWER: Ku Klux Klan

5. **Other than James and John, this is the only man to witness the Transfiguration of Jesus. He cut off the guard Malchus's ear during a showdown in the Garden of Gethsemane. His symbol is a pair of crossed (*) keys, and this man is said to have been crucified upside down.** For 10 points, name this apostle of Jesus and brother of Andrew, who denied Jesus three times and was the first pope.

ANSWER: Simon Peter [accept Saint Peter the Apostle; do not accept just Simon]

6. **RAID arrays are combinations of these objects that often connect via IDE or Serial ATA. They are sometimes replaced by SSDs and can be structured using NTFS or FAT. These objects contain spinning platters that use magnetism to (*) store data, so the data is retained even when they are powered off.** For 10 points, name these devices with capacities often in the terabytes, used to store computer data.

ANSWER: hard disk drives [prompt on (hard) "disk(s)"]

7. **In one of this composer's ballets, a castle is hidden by vines for 100 years until Prince Desire kisses Princess Aurora. This composer of *Sleeping Beauty* included the Waltz of the Flowers and the Russian Trepak in another ballet, while his third ballet sees Von Rothbart turn Odette into the title (*) bird.** For 10 points, name this Russian composer of the ballets *Swan Lake* and *The Nutcracker*.

ANSWER: Pyotr Ilyich Tchaikovsky [or Peter Ilyich Tchaikovsky]

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 Laudermitth, 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.

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8. This island was home to the settlement of Brattahlid beginning in the 10th century. In 2005, an island now called "Warming Island" was found off the coast of this island. Off the west coast of this island are Davis Strait and Baffin Bay. Its largest cities are Sisimiut and Nuuk, and it is an autonomous country within (*) Denmark. For 10 points, name this huge island that lies between Iceland and Canada.

ANSWER: Greenland [or Kalaallit Nunaat]

9. One story in this work tells of the rooster Chauntecleer outsmarting a fox. Another story is about three rogues killing each other under an oak tree in a quest to find Death. In another story, a knight is forced to find out what women most desire; that story is told by the Wife of Bath. (*) Pilgrims on their way to visit an English cathedral city swap stories in, for 10 points, what collection by Geoffrey Chaucer?

ANSWER: *The Canterbury Tales*

10. This planet's 700 kilometer-wide impact crater Rembrandt was discovered by the MESSENGER spacecraft orbiting it. Like the Moon, part of its surface is known as Weird Terrain; that part is opposite its largest crater, the Caloris Basin. It is the (*) smallest planet in our solar system, and this planet and Venus are the only two without moons. For 10 points, name this planet whose year is only 88 days long, the innermost planet.

ANSWER: Mercury

11. This author created a fictional author who wrote the equally fictional book, *Venus on the Half-Shell*. That fictional author, Kilgore Trout, appears in many of this man's works, including *Breakfast of Champions* and *God Bless You, Mr. Rosewater*. He also wrote about a man who is abducted by (*) Trafaladorians after surviving the firebombing of Dresden. For 10 points, identify this author who wrote about Billy Pilgrim in *Slaughterhouse-Five*.

ANSWER: Kurt Vonnegut

12. Factors of 1 plus this value all to the n th power appear in both the numerator and denominator of the amortization formula. Dividing a final value by the n th power of one plus this quantity yields present value. Factors of one plus this quantity to the n th power and one plus n times this quantity, when multiplied by a (*) principal value, represent its compound and simple types. For 10 points, name this quantity that represents the cost of borrowing money.

ANSWER: interest rate [accept simple interest rate or compound interest rate]

13. This actor appeared with his best-known co-star as Topper Harley in *Hot Shots*. Kathy Bates won an Emmy in 2012 for her role as the ghost of one of this actor's characters. That character played by this actor died after getting hit by a train and was replaced by (*) Walden Schmidt. This actor stated that he was a "rock star from Mars" with "tiger blood" on a *Today Show* interview. For 10 points, name this troubled actor who played Charlie Harper on *Two And A Half Men*.

ANSWER: Charlie Sheen [or Carlos Irwin Estevez; prompt on "Sheen" or "Estevez"]

14. While in Auvers [oh-vair], this man painted his physician holding a foxglove plant. In another painting by him, a woman pours coffee as a destitute family sits at a table for a meal. His best-known work shows Saint-Rémy [sahn-ray-mee], and this artist painted the *Portrait of Dr. Gachet* [gah-shay] and *The Potato Eaters*. (*) For 10 points, name this artist who showed a swirling sky in his *Starry Night* and also painted a *Self-Portrait with Bandaged Ear*.

ANSWER: Vincent (Willem) Van Gogh

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15. This man fought alongside Hirtius and Pansa at one battle, and he founded Nicopolis near where his friend Marcus Agrippa won a battle at the mouth of the Ambracian Gulf. In those battles, Mutina and Actium, this man fought a man who had joined him and Lepidus in the Second Triumvirate. Victorious over Mark Antony in a civil war, he was the adopted son of (*) Julius Caesar. For 10 points, name this first Roman Emperor.

ANSWER: Gaius Julius Caesar Augustus [or Gaius Octavius Thurinus or Octavian]

16. A cleaning technique often used on jewelry uses this type of wave to produce bubbles. This type of sound wave has a frequency of 20 kilohertz or (*) higher, just above the range of human hearing. For 10 points, name this frequency range used by bats for echolocation, and by humans to check the health of unborn babies.

ANSWER: ultrasonic frequencies [or ultrasound; prompt on "sound" waves or "longitudinal" waves before "sound wave" is mentioned]

17. This work features a story in which a fisherman finds a world without money. Another character in this work mistakes a fish for a large island. Another story from this collection concerns a character who sees forty (*) thieves going into a cave of treasures. For 10 points, name this work that features characters such as Sinbad the Sailor and Ali Baba, a collection of folk tales narrated by Scheherezade.

ANSWER: 1001 Nights or *The Arabian Nights Entertainment*

18. In this city, Wissahickon Creek goes through Fairmount Park. This city can be entered by crossing the Delaware River on the Betsy Ross Bridge. One of its buildings, where the Second Continental Congress adopted the (*) Declaration of Independence, is Independence Hall. The Liberty Bell is found in, for 10 points, what city in Pennsylvania?

ANSWER: Philadelphia, Pennsylvania

19. For boasting of an affair with this goddess, Anchises was struck lame by Zeus. She and Persephone were forced to each spend a third of the year with Adonis. This goddess arrived on the island of Cythera after being born from (*) sea foam, and she was trapped under a golden net with her lover Ares while she was married to Hephaestus. For 10 points, name this Greek goddess of love and beauty.

ANSWER: Aphrodite [accept Venus until "Hephaestus" is mentioned]

20. One leader of this country organized the Blue Division, and this was led by Miguel Primo de Rivera and Juan Negrin. The Abraham Lincoln Brigades and the Condor Legion fought in this country. A civil war in this country saw the Carlists side the with the Phalange, and one leader of this country suppressed minority languages like Galician and (*) Basque. For 10 points, name this Iberian country long led by Francisco Franco.

ANSWER: Kingdom of Spain [or Republic of Spain or España]

Extra. Synthetic division can be used to divide these mathematical concepts. The fundamental theorem of algebra says that non-constant examples of these have a zero, and some of their zeroes may have (*) multiplicity. For 10 points, name these types of equations in which the exponents of the variable are natural numbers, and which are called quadratics if they have degree two.

ANSWER: polynomials (of one variable)

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Bonuses

1. On the right side of this painting, a young boy puts his foot on a dog. For 10 points each:

[10] The Infanta Margarita and her nearby servants are the focus of this painting by Diego Velázquez.

ANSWER: *Las Meninas* [or *The Maids of Honor*]

[10] In *Las Meninas*, Velázquez created one of these things on the left side of the painting. These specific types of artwork are so named because the painter creates an image of himself or herself through some artistic medium.

ANSWER: self-portrait [prompt on "portrait"; prompt on something like "a painting of themselves"]

[10] Velázquez held this title, serving as the official painter for Philip IV of Spain.

ANSWER: court painter

2. These two countries' troops that fought in World War I made up an army corps that suffered heavy losses at Gallipoli. For 10 points each:

[10] Identify these two countries in the South Pacific. James Cook famously sailed along the east coast of one of them, which has an island named for Abel Tasman, and circumnavigated the other.

ANSWER: Australia and New Zealand [accept in either order; prompt on partial answer]

[10] These natives of Australia consider Uluru a sacred site and believe the world was created in a period known as Dreamtime. Their name literally means "from the origin" of Australia.

ANSWER Australian Aborigines [or Australian Aboriginals, prompt on "Indigenous" Australians]

[10] The Musket Wars were a series of conflicts fought between the *iwi*, or tribes, of these Polynesian natives of New Zealand.

ANSWER: Maori

3. This novel opens with the description of Fyodor, the father of the title characters. For 10 points each:

[10] Name this novel that features Dmitri, Ivan, and Alyosha, who share a common surname. They are all related to the illegitimate child Smerdyakov.

ANSWER: *The Brothers Karamazov*

[10] *The Brothers Karamzov* is a novel by this Russian novelist who also penned a work about Raskolnikov.

ANSWER: Fyodor Dostoyevsky

[10] This is that work about Raskolnikov, an ex-law student who kills a pawnbroker with an axe and confesses his crimes to Sonia the prostitute.

ANSWER: *Crime and Punishment*

4. For 10 points each, give the following related to probability:

[10] This is the probability of getting "heads" when tossing a fair coin.

ANSWER: one half [or 0.5 or 50% or 1 in 2]

[10] If the probability of an event happening is one fourth, then what is the probability of the same event *not* happening?

ANSWER: three fourths or three quarters [or 0.75 or 75% or 3 in 4]

[10] Suppose event *A* has a one third chance of happening, event *B* has a one half chance of happening, and events *A* and *B* are independent. What is the probability that events *A* and *B* both happen?

ANSWER: one sixth [or 0.1666... or 16.6 repeating % or 1 in 6; accept reduced equivalents]

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5. Answer some questions about the highest position in the executive branch, for 10 points each.

[10] This is the highest position in the executive branch. Past holders include George Washington and Calvin Coolidge.

ANSWER: **President** of the United States

[10] This is the procedure for removing a President while he or she is in office. It requires the House to initiate the process, and a two-thirds majority of the Senate to convict.

ANSWER: **impeachment** [accept word forms]

[10] This President was the first to be impeached. He avoided conviction by just one vote.

ANSWER: **Andrew Johnson** [prompt on "Johnson"]

6. This novel begins with the line, "Call me Ishmael." For 10 points each:

[10] Name this novel about Captain Ahab's attempt to kill a whale.

ANSWER: **Moby-Dick**

[10] *Moby-Dick* was written by this author who also wrote "Benito Cereno" and *Billy Budd*.

ANSWER: Herman **Melville**

[10] This is the name of the ship commanded by Captain Ahab in *Moby-Dick*.

ANSWER: **Pequod**

7. For 10 points each, give the following about lab equipment and procedures:

[10] This item is useful for heating compounds by producing an open gas flame. Its German namesake also discovered cesium and rubidium with Gustav Kirchhoff [KEER-kawff].

ANSWER: **Bunsen burner**

[10] A Bunsen burner can be used to conduct a flame test, in which one can determine what metal ion a compound contains based on this property of the flame.

ANSWER: **color** [prompt on answers like "appearance"]

[10] A burning splint placed into a tube of gas is sometimes used in a test for oxygen and this other element, in whose presence there will be a popping sound.

ANSWER: **hydrogen**

8. He voiced Aslan in the *Chronicles of Narnia* films and a Catholic missionary on *The Simpsons*. For 10 points each:

[10] Name this Northern Irish actor who played Zeus in the most recent *Clash of the Titans*, in addition to Qui-Gon Jinn in *Star Wars Episode I* and a truck driver in *The Grey*.

ANSWER: Liam **Neeson**

[10] Neeson's recent successes include the role of Agent Brian Mills in this film, in which he rescues his daughter after the title action happens to her on vacation in Paris. Its sequel was released in November 2012.

ANSWER: **Taken** [accept **Taken 2**]

[10] Neeson also played an amnesiac assassin who attends a biotechnology summit in Berlin in this 2011 thriller film.

ANSWER: **Unknown**

9. He is traditionally depicted with a crook and a flail. For 10 points each:

[10] Name this Egyptian god of the Underworld who was also the father of Horus.

ANSWER: **Osiris** [accept **Usiris**, **Aser**, **Usire**, or similar pronunciations]

[10] Osiris was killed by this brother of his, who then proceeded to cut Osiris's body into fourteen pieces. This god of the desert later lost a war against Osiris's son Horus for control of Egypt.

ANSWER: **Seth** [or **Sutekh** or **Seteh**]

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[10] Set's plans to control Egypt were ruined after this wife of Osiris gave birth to Horus and resurrected her husband after recovering all but one of the pieces of his body.

ANSWER: **Isis** [or **Aset**]

10. Answer these questions about English monarchs, for 10 points each.

[10] George V and Elizabeth II are of this ruling house.

ANSWER: **Windsor**

[10] This house, originally from Scotland, included Charles II and Queen Anne.

ANSWER: **Stuart**

[10] This ruler, a member of the House of Hanover, was king during the American Revolution.

ANSWER: **George III**

11. Pencil and paper ready. Find the areas of these triangles, for 10 points each:

[10] Find the area of an equilateral triangle with each side of length 2.

ANSWER: **square root of 3** [accept **root 3** or **radical 3**]

[10] Find the area of a right triangle with a leg of length 12 and a hypotenuse of length 13.

ANSWER: **30**

[10] Find the area of a thirty sixty ninety right triangle with a hypotenuse of length 4.

ANSWER: **2 times the square root of 3** [accept **2 root 3** or **2 radical 3** or equivalents]

12. Name these Jewish holidays, for 10 points each:

[10] This holiday is celebrated with items such as dreidels and menorahs. Its eight days celebrate the rededication of the Second Temple.

ANSWER: **Hanukkah** [accept **Festival of Lights**; accept **Feast of Dedication**; accept **Chanukah**]

[10] This holiday is celebrated on the 15th of Tishrei. During this holiday, observers walk around a synagogue holding the Four Species.

ANSWER: **Sukkot** [accept **Feast of Booths** or **Feast of Tabernacles**]

[10] This holiday celebrates the deliverance of the Jews from Haman and includes the practice of "blotting out" Haman's name when it is read. On this holiday, some Jews drink to the point where the names "Mordecai" and "Haman" are indistinguishable.

ANSWER: **Purim** [accept Feast of **Lots**]

13. It asserted that the "nation shall under God have a new birth of freedom." For 10 points each:

[10] Identify this Abraham Lincoln speech delivered on a battlefield. It resolved that "government by the people, for the people, and of the people shall not perish from this Earth."

ANSWER: **Gettysburg Address**

[10] This speech by the winner of the 1960 election stressed that we should not "negotiate out of fear" or "fear to negotiate." It also instructed "ask not what your country can do for you -ask what you can do for your country."

ANSWER: The **Inaugural Address** of John Fitzgerald **Kennedy** [accept variants like "**John Fitzgerald Kennedy's Inaugural Speech**" or logical equivalents including "Kennedy" and "inauguration"]

[10] This speech by FDR on the day following the attack on Pearl Harbor asked Congress for a declaration of war against Japan. It made particular note of the date on which the attack occurred through a famous phrase.

ANSWER: **Presidential Address to Congress of December 8, 1941** [accept "**day which will live in infamy**" **speech**; accept **Day of Infamy speech** or **Infamy speech**; accept "date" in place of "day" in any of the above answers]

14. The protagonist of this novel is first employed by the undertaker Mr. Sowerberry. For 10 points each:

[10] Name this novel about the title orphan boy. Its other characters include Fagin, Bill Sikes, and the Artful Dodger.

ANSWER: **Oliver Twist**

[10] This Victorian author wrote *Oliver Twist*. He also wrote *David Copperfield* and *Great Expectations*.

ANSWER: Charles (John Huffam) **Dickens**

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[10] This novel by Dickens takes place in the period leading up to the French Revolution and follows, among others, the characters Charles Darnay, Sydney Carton and Lucie Manette.

ANSWER: A *Tale of Two Cities*

15. Bedrich Smetana's *From My Life* is played by this type of ensemble. For 10 points each:

[10] Name this common chamber music ensemble, whose deepest instrument is the cello.

ANSWER: String quartet [prompt on partial answer]

[10] The traditional string quartet includes the cello, two violins, and one of this instrument, slightly larger in size and deeper in sound than a violin.

ANSWER: viola

[10] This Classical-era Austrian composer for the Esterhazy family wrote 68 string quartets, including "The Lark," six "Russian" and six "Prussian" string quartets.

ANSWER: (Franz) Joseph Haydn

<Riley>

16. Louis Pasteur saved a 9-year-old boy with rabies by administering one of these. For 10 points each:

[10] Name this preventative treatment in which a dead or weakened germ is used to stimulate the immune system, giving protection against more harmful strains.

ANSWER: vaccine [or vaccination or inoculation; prompt on injection or shot]

[10] Since 1995, a vaccine has been available for this common childhood illness. It causes red, itchy blisters to form on the skin, and the same virus causes shingles in adults.

ANSWER: chickenpox [prompt on varicella zoster]

[10] Another childhood disease, polio, was stopped in the 1950s with the vaccine first developed by this scientist.

ANSWER: Jonas Salk

17. Name these Caribbean islands, for 10 points each..

[10] This country consists of more than 3,000 islands and was the site of Columbus' first landfall in the New World.

ANSWER: The Bahamas

[10] This three-island chain is a British Overseas Territory. It is also the wealthiest territory in the Caribbean and is home to the cities of George Town, West Bay, and Broddon Town.

ANSWER: The Cayman Islands

[10] This country was once the Spanish possession known as Santiago and is the 5th largest island in the Caribbean. Its capital is Kingston.

ANSWER: Jamaica

18. She wrote a February 2013 editorial praising companies that sell healthy food. For 10 points each:

[10] Name this First Lady of the United States.

ANSWER: Michelle Obama [prompt on "Obama"]

[10] One of the retailers she praised was this one headquartered in Arkansas. Soon after the editorial appeared, President Obama nominated its philanthropic chair Sylvia Burwell to direct his Office of Management and Budget.

ANSWER: Wal-Mart

[10] This is the name of Michelle Obama's initiative to solve the problem of obesity.

ANSWER: Let's Move

19. For 10 points each, give the following about lunar exploration:

[10] The first space probe to crash-land on the moon was Luna 2, launched by this country in 1959.

ANSWER: Soviet Union [or U.S.S.R. or Union of Soviet Socialist Republics or Sovietsky Soyuz or S.S.S.R. or Soyuz Sovetskikh Sotsialisticheskikh Respublik; prompt on Russia or Rossiya]

[10] Every mission which put people on the moon was part of this NASA program; the 11th, 12th, and 14th through 17th missions of this name were successful at that goal

ANSWER: Apollo program [accept Apollo missions or equivalents]

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[10] This Apollo 14 astronaut who walked—and golfed—on the moon had earlier become the first American in space.

ANSWER: Alan (Bartlett) **Shepard** (Jr.)

20. In this novel, Nick Allen is determined to defeat Mrs. Granger and get a word he invented into the dictionary. For 10 points each:

[10] Name this book whose title is also a word for "pen."

ANSWER: ***Frindle***

[10] This author of *Frindle* also wrote about middle school students in books like *Lunch Money* and *The Report Card*.

ANSWER: Andrew **Clements**

[10] In this other book by Andrew Clements, Cara's class has a "teacher but no teaching" until Cara begins a journalism project in Mr. Larson's class.

ANSWER: *The **Landry News***

Extra. Dinosaurs reached their peak in a geologic time period named for a range of mountains in Switzerland. For 10 points each:

[10] Identify this time period that preceded the Cretaceous Period. In a best-selling Michael Crichton novel, a dinosaur park is named for this time period.

ANSWER: **Jurassic** Period [accept **Jurassic Park**]

[10] The Jurassic period was the middle one of three periods occurring within this geological era. The name of this era means "middle life."

ANSWER: **Mesozoic** Era

[10] Early in the Jurassic Period, the continent Pangaea broke up into Gondwana and this northern supercontinent.

ANSWER: **Laurasia**