

2011 Collaborative Middle School Tournament

Round 6

Tossups

1. The Neptunbrunnen is a fountain in this city, and its Museum Island is a World Heritage Site. The Charlottenburg Palace can be found in it, and Karl-Marx-Allee is a major boulevard. The Reichstag and the Brandenburg Gate are landmarks in this city that was divided by a wall until 1989. For 10 points, name this capital of Germany.

ANSWER: Berlin, Germany

2. One work by this composer opens with a flute solo descending and ascending chromatically, followed by a prolonged pause. This composer's most famous composition is the third movement of his *Suite Bergamasque* (bair-gah-"MASK"). He also depicted "Golliwog's Cakewalk" in the *Children's Corner* suite and composed *Prelude to the Afternoon of a Faun*. For 10 points, name this impressionist French composer of "Clair de Lune."

ANSWER: Claude-Achille Debussy

3. This dynasty inherited portions of the Netherlands after the death of the Burgundian monarch Charles the Bold at the Battle of Nancy. One ruler of this family won the Battle of Pavia and captured Francis I of France in the process; that ruler was Charles V. Another ruler from this family lost Silesia to Frederick the Great; that ruler was Maria Theresa. For 10 points, identify this dynasty with Austrian and Spanish branches.

ANSWER: House of Hapsburg [or Habsburgs]

4. This novel's main character expresses lament that his dad says everything is "fine." It depicts a ritual in which a boy must draw from a box containing five white marbles and one black one. Emile Janza calls this book's main character "a fairy" and "a queer" in response to that character's attempted defiance of the Vigils. For 10 points, name this Robert Cormier book about Jerry Renault's refusal to sell the title sweet.

ANSWER: *The Chocolate War*

5. Ribosome subunits pass through pores in this structure's namesake envelope and are produced in one part of it. In one kind of cloning, this organelle is transferred into an egg that lacks one. The presence of this organelle distinguishes eukaryotes from prokaryotes. This organelle divides in two during mitosis because DNA is found here. For 10 points, name this information processing area of the cell.

ANSWER: nucleus

6. In one of this author's stories, Harry fights with his wife Helen over a gangrene infection on his leg; that story takes place on a safari. He also wrote a novella about a friend of Manolin and admirer of Joe DiMaggio who fights with sharks on his way back to Havana. For 10 points, name this author of "The Snows of Kilimanjaro," who also wrote about Santiago catching an enormous fish in *The Old Man and the Sea*.

ANSWER: Ernest Miller Hemingway

7. The god of war worshipped by these people was born from the union of a ball of feathers and Coatlicue (co-AHT-lee-KWAY). This people settled down in the place where they found an eagle, on a cactus, eating a snake. This people's main god threw himself on a funeral pyre after his chief rival, Tezcatlipoca (TEZ-cot-lee-POKE-AH), deceived him. For 10 points, identify this Mesoamerican civilization that worshipped the "Feathered Serpent," Quetzalcoatl (KWET-zahl- koh-AHT-ill).

ANSWER: Aztecs [prompt on Mexicans]

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8. The name for the physical state of the universe during this event was explained and named by Stephen Hawking. Cosmic Microwave Background Radiation is left over from just after this event, which was hypothesized by Georges Lemaître. Hubble's use of the Doppler Effect helped to prove that this event occurred. For 10 points, name this event in cosmological history during which the universe started to expand rapidly.

ANSWER: **Big Bang**

9. This leader constructed a causeway in order to break the Siege of Tyre. He first gained fame for breaking through Theban lines at the Battle of Chaeronea (KAI-rone-EE-ah). This owner of Bucephalus (boo-SEF-AH-lus) ensured the fall of his main enemy at the battles of Issus and Gaugamela (GOW-gah-MELL-ah). For 10 points, name this son of Philip II, a Macedonian king who was tutored by Aristotle and who defeated Darius III and conquered the Persian Empire.

ANSWER: **Alexander the Great** [or **Alexander III** of Macedon/Macedonia; prompt on **Alexander**]

10. Judge Maria Lourdes Afiuni (lord-AYS ah-FEE-oon-EE) was arrested in this country on graft charges because she ordered the release of banker Luis Cedeno (loo-EE SEH-dane-YO). In the past twelve years, this country nationalized major companies like the steel corporation SIDOR. It has always owned PDVSA, which is one of the five largest oil companies in the world. For 10 points, identify this South American country, which is currently led by Hugo Chavez.

ANSWER: Bolivarian Republic of **Venezuela**

11. When this substance is used, it often leaves behind a liquid with naphthalene and various phenols. The lowest rank of this type of substance, formed from peat, is lignite, while higher grades are classified as anthracite or the bituminous type. Plant remains over a long period of time transform into this sedimentary rock. For 10 points, name this substance which is used to generate electricity after it is mined out of the ground.

ANSWER: **coal**

12. The main characters of this book are allowed passage into Fort William Henry after Duncan Heyward tricks a sentinel by speaking French. This book's hero tries to rescue the two "females," Alice and Cora Munro, after they are kidnapped by Magua (MAH-gwa). For 10 points, name this novel set during the French and Indian War in which Natty Bumppo befriends Chingachgook (CHIN-gach-gook) and Uncas, and written by James Fenimore Cooper.

ANSWER: *The **Last of the Mohicans***

13. A hyperbolic form of this function is defined for a variable x as one-half times quantity e to the x plus e to the minus x . The law of this function states that, for a triangle ABC, c^2 equals a^2 plus b^2 minus $2ab$ times this function of the angle C. One over this function of x is the secant of x . For 10 points, name this function equal to the length of the adjacent side over that of the hypotenuse.

ANSWER: **cosine**

14. One member of this band narrowly survived a plane crash along with DJ AM. In one song they sang "say it ain't so, I will not go, turn the lights off, carry me home" and in another they sang about how "your smile fades in the summer." For 10 points, name this punk band, who in addition to "All the Small Things" and "Feeling This" recorded "Stay Together for the Kids" and "I Miss You."

ANSWER: **Blink-182**

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15. This text was written down by Sahabas (sah-HAH-bahs) after the death of the leader that received it. The clarification of the meaning and significance of this document is the practice of *tafsir* (TAHF-SEER). Its hundred and fourteen chapters are called *suras* (soor-AHS). It literally means “the recitation” and is said to have been revealed by Gabriel to Muhammad. For 10 points, what “divinely ordained” religious text is sacred to Muslims?

ANSWER: Our'an [or Koran]

16. During this event, Attorney General Elliot Richardson and Deputy Attorney General William Ruckelshaus (RUCK-als-HOUSE) resigned in the Saturday Night Massacre. It attempted to cover up C.R.E.E.P.'s (CREEP's) attempt to bug the Democratic Party headquarters. It was uncovered by Bob Woodward and Carl Bernstein with the help of Deep Throat. For 10 points, what scandal caused President Nixon to resign following his reelection?

ANSWER: Watergate scandal

17. The top left corner of this painting shows partially closed windows, while the right side shows a door with a square window. In the center, a man with a hat sits on a stool with his back facing the viewer. Another man with a hat stares at a man in all white who is leaning down, and a woman with red hair and a red blouse stares at her mug. For 10 points, name this painting showing the Phillies diner, by Edward Hopper.

ANSWER: Nighthawks

18. In one of this author's novels, Andrew Bolkonski is wounded at Austerlitz and Helene Kuragina's lover is nearly killed in a duel by her husband, Pierre Bezukhov (bezh-oo-KOV). In Another of his works ends with the title lover of Count Vronsky (VRON-skee) throwing herself under a train. For 10 points, name this Russian author who depicted Napoleon's invasion of Russia in *War and Peace* and wrote *Anna Karenina* (care-IN-in-ah).

ANSWER: Leo Tolstoy

19. The Tibesti Mountains are a prominent feature of this desert that also contains sand seas called ergs. The Tuareg people are nomadic inhabitants of this desert, which was crossed in medieval times by a caravan route to Timbuktu. The Sahel is the southern border of this desert that covers much of Mauritania, Niger, and Libya. For 10 points, name this desert that covers most of North Africa.

ANSWER: Sahara Desert

20. Metallic bonds can be modeled as “seas” of these particles. In another model, the repulsion between pairs of them leads to molecular shapes like trigonal planar and octahedral. The fundamental charge is the charge of one of these particles, which can be found in *s*, *p*, *d*, and *f* orbitals. J.J. Thomson discovered, for 10 points, which negatively-charged components of the atom that orbit the nucleus?

ANSWER: electrons

21. This present-day nation was the center of Axum, and its church claims to hold the Ark of the Covenant. It defeated Italy at the Battle of Adowa under Emperor Menilek (MEN-ee-lek) II. Rastafarians (RAHSS-tah-FAR-ee-ins) hold that another emperor, Haile Selassie (HAY-lee seh-LAH-see), was the second coming of Jesus. Its first emperor was supposedly the son of the Queen of Sheba. For 10 points, name this African nation currently led by Girma Wolde-Giorgis (JER-mah WOLD-uh JOR-jiss) from Addis Ababa.

ANSWER: Federal Democratic Republic of Ethiopia [or Ityop'iya Federalawi Demokrasiyawi Ripeblik; prompt on Abyssinia]

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Bonuses

1. During this conflict, John II was captured and put up for ransom. For 10 points each:

[10] Identify this war whose battles included ones at Poitiers, Crecy, and Sluys. England and France fought this war that actually took longer than its name suggests.

ANSWER: **Hundred Years' War**

[10] This most famous battle of the Hundred Years' War was fought on St. Crispin's Day 1415 between forces under Charles d'Albret and forces under Henry V.

ANSWER: Battle of **Agincourt** (AH-zhin-"court")

[10] Welsh and English soldiers used this ranged weapon during the Battle of Agincourt to systematically eradicate the French army.

ANSWER: **longbow** [prompt on **bow**]

2. This element forms azides and combines with carbon to form cyanide. For 10 points each:

[10] Name the most common element in the Earth's atmosphere.

ANSWER: **nitrogen** [or **N**]

[10] This other element is the lightest and the most common element in the universe.

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

[10] This compound, a combination of nitrogen and hydrogen, is produced through nitrogen fixation and the Haber Process.

ANSWER: **ammonia** [or **NH₃**]

3. This deity's brother, Seth, chopped him up into fourteen pieces after killing him, but his wife, Isis ("EYE"-sis), found all but one of those pieces. For 10 points each:

[10] Identify this Egyptian god of vegetation and the underworld.

ANSWER: **Osiris**

[10] Isis used Osiris' body parts and a golden phallus to give birth to this deity. He later avenged his father by killing Seth.

ANSWER: **Horus**

[10] Horus' battle with Seth was arbitrated by this ibis-headed god of knowledge who supposedly invented writing.

ANSWER: **Thoth** [or **Djeheuty**]

4. This set of four operas includes *Siegfried* and ends with the six-hour-long *Götterdämmerung* (GO-ter-DAHR-mer-oong). For 10 points each:

[10] Name this massive operatic work, whose title object is forged from the Rhinegold and de-cursed when Brunnhilde carries it into a funeral pyre.

ANSWER: The **Ring of the Nibelung** Cycle [or Der **Ring des Nibelungen**; or The **Ring Cycle**, prompt on **Ring**]

[10] This German composer of *Tannhauser* (TAHN-how-zer) and *Lohengrin* ("LOW"-en-grin) supervised construction of the Bayreuth ("by"-ROYT) Opera House to stage the Ring Cycle.

ANSWER: Richard **Wagner** (be generous in accepting pronunciations; it should be pronounced VAHG-ner.)

[10] This other Wagner opera sees the title character cursed to spend seven years at a time at sea until a wife will swear to be true to him.

ANSWER: The **Flying Dutchman** [or Der **Fliegende Holländer**]

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5. This man is saved by a Portuguese captain after he is enslaved by Moorish pirates. For 10 points each:
[10] Name this protagonist who plants barley and builds a “fortress” in order to survive for 28 years on a desert island.

ANSWER: Robinson **Crusoe**

[10] This author of *Moll Flanders* and *A Journal of the Plague Year* wrote *Robinson Crusoe*.

ANSWER: Daniel **Defoe** [or Daniel **Foe**]

[10] This native is saved from cannibals by Robinson Crusoe and converts to Protestantism under his tutelage.

ANSWER: **Friday**

6. Section One of Article Two of the United States Constitution limits who can become President of the United States. For 10 points each:

[10] What is the minimum age that somebody must reach to become President?

ANSWER: **35** years old

[10] In addition to being a natural born citizen, for how many years must a person reside in the United States before becoming President?

ANSWER: **14** years

[10] This amendment, passed in 1951, states that nobody can be elected President more than twice.

ANSWER: **Twenty-Second** Amendment [or **22**]

7. For 10 points each, name these baseball players inducted into the Hall of Fame in 1936, the first year the Hall opened.

[10] This “Sultan of Swat” slugged 714 home runs, mostly for the Yankees, after starting his career as a pitcher for the Red Sox.

ANSWER: George Herman “Babe” **Ruth**

[10] This outfielder was known for sharpening his cleats so fielders would get out of his way when he stole bases. He still holds the career record for highest career batting average.

ANSWER: Tyrus Raymond “Ty” **Cobb**

[10] This Pittsburgh Pirates shortstop appears on the most legendarily valuable baseball card in the world.

ANSWER: Johannes Peter “Honus” **Wagner**

8. Some works in this language include *One Hundred Years of Solitude* and “Just Lather, That’s All.” For 10 points each:

[10] Name this native language of Gabriel Garcia Marquez and Hernando Tellez.

ANSWER: **Spanish**

[10] This Spanish-language book by Miguel de Cervantes sees a wannabe knight get in fights with sheep and windmills.

ANSWER: Don **Quixote** (kee-HO-tay) [accept *The Ingenious Hidalgo* **Don Quixote** of La Mancha; accept *El Ingenioso Hidalgo* **Don Quijote** de la Mancha]

[10] This squire follows Don Quixote around and recites a lot of proverbs. He looks forward to someday ruling his own island.

ANSWER: **Sancho Panza** [accept either underlined part]

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9. The rights gained in this U.S. Supreme Court case may have been weakened by the decision in *Berghuis v. Thompkins*. For 10 points each:

[10] Name this 1966 case, whose decision requires that defendants be read their legal rights before being interrogated.

ANSWER: **Miranda** v. Arizona [or Arizona v. **Miranda**]

[10] *Berghuis v. Thompkins* was decided under this current Chief Justice of the Supreme Court, who replaced William Rehnquist in 2005.

ANSWER: John Glover **Roberts**, Jr.

[10] Another Roberts Court case concerned this man's Westboro Baptist Church, which often makes anti-gay protests at military funerals, including one for Albert Snyder's son.

ANSWER: Fred Waldron **Phelps**, Sr.

10. This is a computation bonus. For 10 points, given an expression, state *all* values that x is not allowed to equal in that expression.

[10] Two divided by the quantity x minus three

ANSWER: **3**

[10] Five divided by the quantity x squared minus one

ANSWER: **-1** and **1** [accept answers in either order; accept **plus or minus one** or equivalents; do not accept or prompt on one answer by itself]

[10] Six divided by the quantity x squared plus four x

ANSWER: **-4** and **0** [accept answers in either order; do not accept or prompt on one answer by itself]

11. For 10 points each, identify these Union generals that at one point commanded the Army of the Potomac.

[10] This man's hesitation to go on the offensive led to the repulsion of the Peninsula Campaign. He drove Robert E. Lee out of Maryland at Antietam.

ANSWER: George Brinton **McClellan** [prompt on **Old Mac**]

[10] This man bragged to his wife about futilely advancing his troops at Cold Harbor. He had earlier won a decisive victory over Lee at Gettysburg.

ANSWER: George Gordon **Meade**

[10] This general captured Vicksburg in July of 1863. He later engaged Lee in multiple confrontations, including one at Appomattox.

ANSWER: (Hiram) Ulysses S(impson) **Grant**

12. The focused light in this artist's work is sometimes called his "spotlight effect." For 10 points each:

[10] Name this prolific portrait-painter who also painted *Aristotle Contemplating a Bust of Homer* and *The Night Watch*.

ANSWER: **Rembrandt** van Rijn [or Rembrandt **van Rijn**]

[10] This other artist made several paintings of girls reading letters and receiving music lessons, but is best known for *Girl with a Pearl Earring*.

ANSWER: Jan **Vermeer** [or Johannes **Vermeer**]

[10] Rembrandt and Vermeer both came from this country, where their paintings are on display in the Rijksmuseum in Amsterdam.

ANSWER: Kingdom of the **Netherlands** [or Koninkrijk der **Nederlanden**; prompt on **Holland**; prompt on **Dutch**]

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13. This poet wrote “I Like to See It Lap the Miles”. For 10 points each:

[10] Name this writer who spent almost her entire life in Amherst, Massachusetts.

ANSWER: Emily **Dickinson**

[10] In one Dickinson poem, this character “kindly stopped for” the speaker because she “could not stop for” him.

ANSWER: **Death**

[10] One Dickinson poem ends with the line “I could not see to see.” In that work, the speaker claims to hear what animal when she dies?

ANSWER: a **fly**

14. The geometric version of this quantity is calculated by multiplying n values, then taking the n th root. For 10 points each:

[10] Identify this statistical measure that is calculated by adding a number of data points, then dividing by the number of data points.

ANSWER: arithmetic **mean** [accept **expected value**; accept **expectation** value; prompt on **average**]

[10] How closely a set of data gathers around its mean can be measured by this quantity, the square root of the average squared distance from the mean.

ANSWER: **standard deviation** [prompt on lowercase **sigma**]

[10] This bell-shaped probability distribution is often used to approximate random variables, and is often used for grading tests “on a curve”.

ANSWER: **normal** distribution [or **Gaussian** distribution]

15. He wrote the *Little Red Book* and took his country on a failed Great Leap Forward. For 10 points each:

[10] Name this leader who led China from 1949 until 1959 and led the Chinese Communist Party until his death in 1976.

ANSWER: **Mao** Zedong [or **Mao** Tse-tung, prompt on **Zedong** or **Tse-tung**]

[10] Mao succeeded this nationalist Chinese leader in power throughout World War II. This successor of Sun Yat-sen became president of Taiwan after Mao’s rebellion succeeded.

ANSWER: **Chiang** Kai-Shek [or **Jiang** Jieshi; or **Jiang** Zhongzheng; prompt on **Kai-Shek**; prompt on **Jieshi** or **Zhongzheng**]

[10] China, under Mao, supported this communist Vietnamese leader. Until his death in 1969, he led the Viet Minh.

ANSWER: **Ho** Chi Minh [or **Nguyen** Sinh Cung; or **Nguyen** Ai Quoc; prompt on Chi **Minh**; prompt on Sinh **Cung**; prompt on Ai **Quoc**]

16. For 10 points each, identify these books of the New Testament.

[10] This Gospel begins with the line, “in the beginning was the Word, and the Word was with God, and the Word was God.”

ANSWER: Gospel According to **John**

[10] This Gospel contains the Sermon on the Mount and usually is the first book in the New Testament.

ANSWER: Gospel According to **Matthew**

[10] Chapter 3, Verse 28 of this longest epistle of Paul is often cited as evidence for salvation by faith alone.

ANSWER: Epistle of Paul to the **Romans**

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17. The main character leaves behind her offspring Joy, Aranea, and Nellie. For 10 points each:

[10] Name this story in which an animal is praised as some pig, terrific, and radiant.

ANSWER: Charlotte's Web

[10] This author of *Stuart Little* wrote *Charlotte's Web*.

ANSWER: E(lwyn) B(rooks) White

[10] Name the girl whose father sells the pig to his brother-in-law Homer Zuckerman.

ANSWER: Fern Arable [accept either or both underlined parts]

18. For 10 points each, answer the following about the nervous system.

[10] Cells in the nervous system are either glial (GLEE-uhl) cells or these cells that transmit signals throughout the nervous system.

ANSWER: neurons [prompt on nerve cell]

[10] This heavily branched part of a neuron receives signals from axons of other neurons.

ANSWER: dendrites

[10] Axons transmit information in the form of these large, all-or-nothing changes in voltage caused by a rapid influx of sodium ions.

ANSWER: action potentials [or impulses; prompt on potentials; do not accept “graded potentials”]

19. For 10 points each, name these cities in Texas.

[10] The Riverwalk is a landmark in the downtown of this city where one might also visit the Alamo.

ANSWER: San Antonio

[10] This third-most populous city in Texas shares a “metroplex” with nearby Fort Worth.

ANSWER: Dallas

[10] This city is the site of Baylor University. In 1993 it saw a standoff between FBI agents and the residents of a Branch Davidian (duh-VID-ee-uhn) compound.

ANSWER: Waco

20. Some of the largest examples of these objects are Pallas, Juno, and Vesta. For 10 points each:

[10] Name these objects, millions of which are in orbit about 400 million kilometers from the Sun.

ANSWER: asteroids

[10] This object was classified as the largest asteroid, but it is now classified as the smallest dwarf planet.

ANSWER: Ceres

[10] All or nothing, between which two planets is the main asteroid belt located?

ANSWER: Mars and Jupiter [accept in either order; do not accept or prompt on just one answer]

Extra. The title question of this work is asked of a cow, a kitten, and a steamboat. For 10 points each:

[10] Name this book by P.D. Eastman about a baby bird searching for a certain relative.

ANSWER: Are You My Mother?

[10] The last object encountered by the bird, a steam shovel, is instead given this name due to the sound it makes.

ANSWER: snort

[10] The snort is an example of this technique of giving an object or action a name imitating the sound it makes.

ANSWER: onomatopoeia (ON-oh-MAH-toh-PEE-uh)