

2010 Collaborative Middle School Tournament

Round 2

Tossups

1. One piece of evidence that supports its existence is that the Caledonian mountains of Northern Europe are a continuation of the Appalachian Mountains. This entity broke up into Laurasia and Gondwanaland ("gon-DWON-uh-land"). Alfred Wegener ("VAY-guh-nuhr") coined its name during a lecture in which he discussed his theory of continental drift. For 10 points, identify this supercontinent theorized to have existed 250 million years ago.

ANSWER: **Pangaea**

2. This person declared we are "one people" during a run against Alan Keyes. A later campaign opponent of this person used Joe the Plumber to attack this person's policies and attempted to link this person to Bill Ayers. This person used the slogan "Yes We Can" and won the Nobel Peace Prize after less than a year in office. For 10 points, who is this successor of George W. Bush and current President of the United States?

ANSWER: Barack Hussein **Obama II**

3. The island of Bornholm is in this body of water, which is connected by the Kiel ("KEEL") Canal to the North Sea. One arm of this sea is the Gulf of Bothnia, and the large island of Saaremaa ("SAH-reh-MAH") guards its Gulf of Riga ("REE-guh"). Five national capitals lie on this body of water, including Tallinn, the capital of Estonia, and Stockholm. For 10 points, name this sea south of Scandinavia.

ANSWER: **Baltic** Sea

4. In this novel, a town is fooled by two men who pull off the Royal Nonesuch, and those men go on to steal the property of the late Peter Wilkes. The Widow Douglas wants to "sivilize" the title character, who misses a turn at Cairo ("KAY-row") and keeps floating south. For 10 points, name this novel that sees Jim and the title friend of Tom Sawyer travel down the Mississippi River, a work by Mark Twain.

ANSWER: *The Adventures of **Huckleberry Finn***

5. This party was founded by several ex-Whigs. Past leaders of this party include Newt Gingrich, the creator of the Contract with America, and Teddy Roosevelt. One member of this party made a campaign pledge of "no new taxes," and Libertarians traditionally run under this major party's banner. It is currently chaired by Michael Steele. For 10 points, name this major party also called the "Grand Old Party."

ANSWER: **Republican** Party [accept **GOP** or **Grand Old Party** before mentioned]

6. Two liquids are said to be immiscible if they cannot combine to form this type of mixture. In the most common form of this mixture, solid particles are small enough to completely dissolve in a liquid. For 10 points, name this type of mixture that is not a colloid or suspension, an example of which is sugar dissolved in water.

ANSWER: **solution** [prompt on **mixture**]

7. At one point in this musical, Dr. Dillamond sings "Something Bad." At another point, Madame Morrible announces that the main character is now an enemy of the town, and that character then sings "Defying Gravity." The two heroines in it were originally played by Kristin Chenoweth and Idina Menzel. For 10 points, the relationship between Elphaba and Glinda is documented in what musical based on *The Wizard of Oz*?

ANSWER: **Wicked**

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. One of this writer's stories follows Annemarie Johansen as she helps her friend Ellen escape from Nazi-occupied Denmark. A sequel to this author's most well-known book follows the weaver Kira, and that book ends with Jonah and Gabe fleeing the dystopian society they live in. For 10 points, identify this Newbery award winning author who wrote *Number the Stars*, *Gathering Blue*, and *The Giver*.

ANSWER: Lois **Lowry** [or Lois Ann **Hammersberg**]

9. This man's wife Jiang Qing ("JANG CHING") was a member of the Gang of Four. He escaped a Kuomintang ("KWO-min-TANG") offensive led by Chiang Kai-shek ("CHANG kye-SHECK") and went on the Long March in 1934. After he took power in 1949, his government adopted such policies as the Great Leap Forward and the Cultural Revolution. For 10 points, the Little Red Book was written by what Chairman of China's Communist Party?

ANSWER: **Mao** Zedong [or **Mao** Tse-tung; accept Chairman **Mao** before "Chairman"]

10. During his execution, this figure was pierced by the Lance of Longinus. In addition to yelling at a fig tree for not bearing fruit, this figure healed a pig-eating man from Gerasa possessed by a horde of devils named Legion. This man was put to death by Pontius Pilate, and drops of his blood fell into the Holy Grail. For 10 points, name this Messiah and only son of God according to Christianity.

ANSWER: **Jesus Christ** [accept either]

11. This constellation is often interpreted as fighting Taurus with his dogs Canis Minor and Canis Major. Stars within this constellation include the "amazon star" Bellatrix ("BELL-uh-tricks"), the red giant Betelgeuse ("beetle juice"), and Rigel ("RYE-gull"). It is most easily recognizable by the three stars making up the belt of the figure in this constellation. For 10 points, name this constellation also known as "the Hunter."

ANSWER: **Orion** [prompt on "the **Hunter** before mentioned]

12. This play's opening brawl is started by Gregory and Samson. Later in this play, Friar John fails to deliver a letter written by Friar Lawrence. Mercutio is killed by Tybalt in Act III of this play. This play features the feud between the Montagues ("MON-tay-gyooz") and the Capulets. For 10 points, name this Shakespeare tragedy, depicting a doomed romance between the two title "star-crossed lovers."

ANSWER: **Romeo and Juliet**

13. After having much of his legislation overturned by the Supreme Court, this leader proposed his court packing plan. The Tennessee Valley Authority was one piece of New Deal legislation that was not overturned by the Court. Although he led his country for most of World War II, he did not make the decision to drop the atomic bombs on Japan. He succeeded Herbert Hoover. For 10 points, who is the only President of the United States to be elected to more than two terms in office?

ANSWER: **Franklin Delano Roosevelt** [accept **FDR**; prompt on **Roosevelt**]

14. On the right side of this painting, a large gray rectangle is cut off by the edge of the canvas. In the back of the painting, a body of water is seen; to the right of that water, the Cliffs of Cadaques ("kuh-DACK") are yellow. Its center depicts a white "monster," and another object in this painting is upside down and covered in ants. For 10 points, name this painting that features melting clocks, a work by Salvador Dali.

ANSWER: *The **Persistence of Memory***

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15. The harmonic one of n numbers in a data set is n divided by the sum of the reciprocals of the numbers. The geometric one is the n th root of the product of the numbers. The geometric one is always less than or equal to the arithmetic ("air-ith-MET-ick") one. For 10 points, what is this term in mathematics—the arithmetic one being the sum of the numbers divided by n ?

ANSWER: **Mean** [do not accept "average"]

16. This man's dog Argus dies atop a refuse heap. He reveals himself to a foot-washing maid, Eurycleia ("your-ee-CLAY-uh"). The Laestrygonians ("LAY-strih-GOAN-ees") destroy many ships belonging to his fleet, and he also visits the land of the lotos ("lotus") -eaters. He kills his wife's suitors with the help of his son, Telemachus ("TELL-uh-MOCK-us"), then reunites with that wife, Penelope. For 10 points, an epic by Homer describes what man's twenty-year quest to get home after the Trojan War?

ANSWER: **Odysseus** [prompt on **Ulysses**]

17. One part of this process sees the formation of the 5-carbon sugar ribulose 1,5-bisphosphate ("RIB-you-lowss ONE FIVE biss-FOSS-fate"). In the light dependent reactions in this process, NADPH and ATP are produced by using energy harvested from light by chlorophyll. This process can be carried out by cyanobacteria ("sy-ANN-oh-back-TEER-ee-uh") and algae, though it is most associated with plants. For 10 points, name this process which converts carbon dioxide to sugars such as glucose.

ANSWER: **photosynthesis** [prompt on **Calvin-Benson cycle**; prompt on **carbon fixation**]

18. One leader of this country forcibly annexed the Sudetenland ("soo-DAY-ten-land"). During a movement to reunite this country, the leader of one half operated under the policy of *ostpolitik* ("OST-pol-it-ick"). Following World War I, the Weimar ("VIE-mar") Republic was established in this nation. It was united after an 1871 war and led by Kaiser Wilhelm I and chancellor Otto von Bismarck. For 10 points, name this European country formerly led by Adolf Hitler.

ANSWER: Federal Republic of **Germany** [or Bundesrepublik **Deutschland**]

19. This figure once tried to destroy mankind by tearing out an eye, which turned into Hathor. At night, he brings light to the darkness of the underworld. The disk above this deity's head is called Aton. Apep is depicted in an eternal struggle with this god, whose primary center of worship was at Heliopolis. In the form of Atum, he is the figure who gives light and warmth. For 10 points, name this Egyptian sun deity.

ANSWER: **Ra** [accept Amon-**Ra** or **Re** or Amon-**Re**; do not accept "Amon" by itself]

20. In one opera by this man, the soldiers Ferrando and Guglielmo ("gool-YELL-mo") test their wives by seducing them in the guise of Albanians. This man also wrote an opera in which the title seducer is dragged to hell by the statue of Il Commendatore ("EEL co-MEN-dah-TORR-ee"). For 10 points, name this Austrian composer of the operas *Così fan tutte* ("CO-see fan TOO-tee") and *Don Giovanni* as well as *A Little Night Music*, who allegedly feuded with Salieri.

ANSWER: Wolfgang Amadeus **Mozart**

Extra. Along with Josef Breuer ("YOH-sehf BROY-er"), this man published *Studies in Hysteria*. This man divided child development into oral, anal, and phallic stages. He also proposed the existence of defense mechanisms, which help resolve the conflict between the moral and rational super-ego and the pleasure-seeking id. For 10 points, name this Austrian psychologist who proposed the Oedipus complex.

ANSWER: Sigmund **Freud** [or Sigismund Schlomo **Freud**]

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Bonuses

1. He is generally credited with popularizing the modern detective story. For 10 points each:

[10] Name this American Gothic author who wrote short stories like “The Cask of Amontillado” and “The Fall of the House of Usher” and poems such as “Annabel Lee” before dying mysteriously in Baltimore.

ANSWER: Edgar Allen **Poe**

[10] This Poe poem features the title black bird sitting on a bust of Pallas Athena and begins with the line “Once upon a midnight dreary, while I pondered weak and weary.”

ANSWER: “The **Raven**”

[10] In the poem, the raven repeats this word over and over to the escalating distress of the narrator, driving him to despair over his lost love Lenore.

ANSWER: “**nevermore**”

2. This man was born near Lake Baikal with the name Temujin (“TEH-moo-jin”). For 10 points each:

[10] Name this man who was proclaimed "universal ruler" in a 1206 assembly.

ANSWER: **Genghis Khan**

[10] Genghis Khan was a leader of this steppe people, who, under his descendants, established an empire stretching from Korea to the Black Sea.

ANSWER: **Mongols**

[10] Mongol troops overwhelmed the Jin Dynasty despite the presence of this ancient defensive barrier.

ANSWER: **Great Wall** of China

3. For 10 points each, name these terms one might encounter while learning to read music.

[10] This is the set of five lines on which notes are written. Each line and space in between the lines represents a different note.

ANSWER: music **staff**

[10] Often marked using the notation “quarter note equals” and expressed in beats per minute, this term indicates how fast or slow a piece of music should be played.

ANSWER: **tempo**

[10] This symbol looks like a large comma with two dots to the right. The two dots are on the spaces above and below the fourth line of the staff, which represents an F. This clef is primarily used to write notes below middle C.

ANSWER: **bass** clef

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

[10] Earthworms are a member of class Oligochaeta (“OH-lig-oh-KAY-tuh”) in this phylum, which contains all segmented worms.

ANSWER: **Annelida** [or **annelids**]

[10] Earthworms grind up their food using this muscular part of their digestive system, which is located behind the crop.

ANSWER: **gizzard**

[10] Almost every segment of an earthworm’s body has eight of these bristles. These hair-like structures anchor the worm in the ground and help sense the environment.

ANSWER: **setae**

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5. While performing it, people kiss the black stone and throw other stones at three representations of Satan. For 10 points each:

[10] Identify this trip, a pilgrimage to Mecca that is required of members of a certain religion.

ANSWER: **hajj** (“HAHZH”)

[10] The hajj is required of members of this religion, whose two primary sects are Sunni (“SOO-nee”) and Shia (“SHEE-uh”).

ANSWER: **Islam**

[10] The hajj is one of these entities in Islam. The others include zakat (“zuh-COT”), sawm, salat, and shahadah (“shuh-HAH-duh”).

ANSWER: Five **Pillars** of Islam

6. For 10 points each, name these Articles of the U.S. Constitution:

[10] Section Three of this clause defines treason, and the standards required to meet it.

ANSWER: Article **III** [Three]

[10] This article bans tests of religion for officeholders, and establishes it as superior to any state law or constitution.

ANSWER: Article **VI** [Six]

[10] This article outlines the relationship the states have among each other, dictating that citizens from other states have the rights of the state they are in, not where they are from.

ANSWER: Article **IV** [Four]

7. The title event in this painting was caused by Charlotte Corday, and the artist neglected to include a skin condition that the central character suffered from. For 10 points each:

[10] Name this painting that sees the title character lying in a bath tub with his arm hanging over the edge.

ANSWER: *The **Death of Marat***

[10] This neoclassical painter painted the *Death of Marat*. He depicted three brothers making an oath to their father in the *Oath of the Horatii* (“hor-AY-shee-eye”) and painted Socrates drinking hemlock in the *Death of Socrates*.

ANSWER: Jacques Louis **David**

[10] David painted this the *Coronation of this man at the Cathedral of Notre Dame*. Nine years later, this leader would be banished to the island of Elba.

ANSWER: **Napoleon** Bonaparte I

8. For 10 points each, name these things about quadrilaterals:

[10] This is the name for a regular quadrilateral; that is, one that has equal lengths for all four sides and equal degree measurements for all four angles.

Answer: **square** [do not accept "rhombus"]

[10] This type of quadrilateral has two pairs of consecutive congruent sides.

Answer: **kite**

[10] The diagonals of both a kite and a square have this property, because they intersect at ninety-degree angles.

ANSWER: **perpendicularity**

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9. The protagonist of this novel becomes a pickpocket after meeting the Artful Dodger. For 10 points each:

[10] Name this novel about the London underworld in which Mr. Brownlow adopts the title orphan and saves him from Monks's machinations.

ANSWER: **Oliver Twist**

[10] *Oliver Twist* was written by this author of *David Copperfield* and *Great Expectations*.

ANSWER: Charles **Dickens**

[10] This man trains children like Oliver and the Artful Dodger to become pickpockets. He is hanged at the end of the novel.

ANSWER: **Fagin**

10. For 10 points each, answer the following about a dark point in American history:

[10] The forced relocation of Native Americans to the Indian Territory in modern-day Oklahoma is known by this alliterative term.

ANSWER: **Trail of Tears**

[10] The primary legal challenge to the Trail of Tears was given by this Indian tribe through their series of suits against the state of Georgia.

ANSWER: **Cherokee**

[10] Though the Supreme Court stated that the Cherokee people have their own sovereignty, this President planned their forced relocation anyway. He is also known as "Old Hickory."

ANSWER: Andrew **Jackson**

11. This diagram was conceived in 1910 and maps a star's luminosity versus effective temperature. For 10 points each:

[10] Identify this diagram named for two astronomers. Either the name or the common two letter abbreviation is acceptable.

ANSWER: **Hertzsprung-Russell** diagram or **HR** diagram

[10] This band of stars on the HR diagram consists of a large portion of the stars on the diagram. Most of a star's lifetime is spent in this region including our solar system's sun.

ANSWER: **main sequence**

[10] This type of star occupies the top region of the HR diagram. These stars are 10 to 70 times more massive than our sun and also up to hundreds of thousands times brighter.

ANSWER: **supergiant** [accept red or blue **supergiant**]

12. Watching a referee rotate his hands in front of his chest can mean different things depending on the sport one is watching. For 10 points each:

[10] In football, that hand signal can indicate a variety of illegal procedures, including this one in which a set offensive player, often an offensive lineman, moves out of his stance before the ball is snapped.

ANSWER: **false start**

[10] In basketball, that hand signal indicates this type of violation, which is called when a player illegally takes too many steps without dribbling. It can also be called if a player drags or changes his pivot foot.

ANSWER: **traveling**

[10] In hockey, that hand signal indicates this penalty, in which a player takes more than three steps in preparation for checking an opponent.

ANSWER: **charging**

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13. Beginning with the central character allegorically lost in a dark wood, this work explores the cosmos of the Christian afterlife in several stages. For 10 points each:

[10] Name this Italian epic consisting of the sections *Inferno*, *Purgatorio*, and *Paradiso*, or *Hell*, *Purgatory*, and *Heaven*. Despite its name, it is not actually written to be humorously entertaining.

ANSWER: *The **Divine Comedy*** [or *La **Divina Commedia***]

[10] This Florentine creator of the *Commedia* loved Beatrice Portinari, the subject of his *Vita Nuova* and his guide in *Paradiso*. His use of the Tuscan dialect in writing instead of Latin greatly influenced the modern Italian language.

ANSWER: **Dante Alighieri** [accept either; or Durante degli **Alighieri**]

[10] This Roman poet is Dante's guide through Hell and most of Purgatory. He created the foundation story of Rome, the *Aeneid* ("uh-NEE-id").

ANSWER: Publius **Vergilius** Maro

14. For 10 points each, answer these questions about the recent economic recession:

[10] The Federal Reserve spent over \$100 billion bailing out this insurance company, making it the recipient of the largest federal bailout for a private company ever. It then announced it was paying out \$1.2 billion in bonuses.

ANSWER: **American International Group**

[10] This chairman of the Federal Reserve was recently named TIME's Person of the Year.

ANSWER: Ben **Bernanke**

[10] Known for his calls for a mortgage foreclosure bailout, this openly gay Massachusetts Congressman is the head of the House Committee on Financial Services.

ANSWER: Barney **Frank**

15. For 10 points each, answer these questions about the geography of the Land of the Rising Sun, Japan.

[10] This capital city of Japan is the most populous city in the world with over 30 million people in its metropolitan area.

ANSWER: **Tokyo**

[10] Katsushika Hokusai produced *36 Views of* this volcano west of Tokyo, Japan's tallest mountain.

ANSWER: Mount **Fuji** [accept **Fuji-San** or **Fujiyama**]

[10] Both Tokyo and Mount Fuji are located on this main island of Japan.

ANSWER: **Honshu**

16. The 1906 San Francisco earthquake measured 8.0 on this scale. For 10 points each:

[10] Named for an American scientist, this scale measures the magnitude of an earthquake.

ANSWER: **Richter** scale

[10] This instrument is used to measure and record the primary, secondary, and surface waves generated by an earthquake.

ANSWER: **seismograph** [accept **seismometer**]

[10] The Richter scale is based on this mathematical scale of measurement. According to it, the energy released by an earthquake measuring 8.0 on the Richter scale is a hundred times greater than one with magnitude 6.0.

ANSWER: **logarithmic** scale [or **base ten** logarithmic scale]

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17. This man was taught by Chiron, and Hera did everything she could to make his life miserable. For 10 points each:

[10] Name this man who had to perform twelve labors in order to make up for killing his wife and children.

ANSWER: **Heracles** [accept **Hercules**]

[10] The first challenge was for Heracles to bring back the pelt of this animal; since its skin was invulnerable to all weapons, Heracles succeeded by strangling the life out of it.

ANSWER: **Nemean Lion**

[10] This is the Titan in charge of holding up the world. He retrieved the golden apples of his daughters, the Hesperides (“hess-PAIR-uh-dees”), while Heracles temporarily held up the world.

ANSWER: **Atlas**

18. Leaders of this movement included John Calvin and Ulrich Zwingli. For 10 points each:

[10] Name this 16th-century movement that split Protestant groups away from the Roman Catholic Church.

ANSWER: Protestant **Reformation**

[10] The Reformation’s first leader was this German theologian who spoke at the Diet of Worms (“vurms”).

ANSWER: Martin **Luther**

[10] In October 1517 Luther wrote this list of grievances, which denounced the wealth of the papacy.

ANSWER: **95 Theses**

19. This type of bond is found in hydrocarbons (“HIGH-dro-CAR-buns”). For 10 points each:

[10] Name this type of bond in which two atoms share electrons with each other.

ANSWER: **covalent** bond

[10] This term denotes a covalent bond, such as the one between hydrogen and oxygen, in which the two atoms do not share the electrons equally.

ANSWER: **polar** covalent bond

[10] In order to form atomic orbitals available for bonding, atoms may undergo this process, in which atomic orbitals overlap to give multiple atomic orbitals with the same energy.

ANSWER: **hybridization**

20. In his first appearance, this 14 year old British superspy attempts to stop a plague of computers from infecting the British population with smallpox. For 10 points each:

[10] Name this teenager who battles a Portuguese man'o'war in the book which he first appeared in, *Stormbreaker*.

ANSWER: **Alex Rider** [accept either]

[10] This is the author of the Alex Rider novels. In addition to *Mount Blanc* and *Skeleton Key*, he wrote about 5 children charged with saving the world from the monsters held captive by the Nazca lines in his "Power of Five" series.

ANSWER: Anthony **Horowitz**

[10] This organization is responsible for the death of Alex Rider's parents. In the fifth book, which is named after this organization, they try to kill thousands of British school children by releasing cyanide into their blood stream.

ANSWER: **Scorpia**

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Extra. It typically encompasses four or five steps, the first of which is observation. For 10 points each:

[10] Name this method in which one develops experiments that test predictions about a phenomenon.

ANSWER: **scientific** method

[10] The scientific method involves testing these educated guesses about what is actually happening.

ANSWER: **hypotheses** [or **hypothesis**]

[10] One way of forming a hypothesis is through this type of reasoning, which uses specific facts or observations to make inferences about generalities.

ANSWER: **induction** [or **inductive reasoning**]