

2013 Collaborative Middle School Tournament

Round 6

Tossups

1. Examples of these in plants include gibberellins and cytokinins in addition to chemicals that cause tropisms by enlarging cells, auxins. Many human examples are classified as peptides, including gastrin, which aids digestion. Another example, which increases the heart rate, is (*) adrenaline, while other examples are steroids that promote sexual development. For 10 points, name these chemicals that transmit information between cells.

ANSWER: hormones

2. The Apostle Islands are in the northern part of this state, whose first European visitor was French trader Jean Nicolet in 1634. Lake Winnebago is located in this state near the cities of Fond du Lac and Oshkosh. This state's Door Peninsula separates (*) Green Bay from Lake Michigan. For 10 points, Madison and Milwaukee are found in what state nicknamed "America's Dairyland"?

ANSWER: Wisconsin

3. He wrote that "This is the way the world ends/Not with a bang but a whimper" in his poem "The Hollow Men." He also wrote the collection "Old Possum's Book of Practical Cats." The phrase "the women come and go/Talking of Michelangelo" appears in his "The (*) Love Song of J. Alfred Prufrock." His most famous work states that "April is the cruelest month." For 10 points, name this poet of "The Waste Land."

ANSWER: T(homas) S(terns) Eliot

4. This god hung himself from Yggdrasil for nine days and nights in order to obtain the knowledge of runes. This owner of the spear Gungnir gives all his food to his wolves Geri and Freki and receives information about the world through his ravens Hugin and Munin. This husband of Frigg was known as the "Allfather" and will be killed at (*) Ragnarok by the wolf Fenrir. For 10 points, name this chief god of Norse mythology.

ANSWER: Odin [accept Wodan, Wotan, or Wodinaz]

5. His opposition to harsh retaliation after the sinking of the Lusitania caused this politician to resign as Woodrow Wilson's Secretary of State. This man argued against Clarence Darrow in the Scopes Monkey Trial. He proclaimed that "you shall not press down upon the brow of labor this crown of thorns" in his (*) "Cross of Gold" speech. For 10 points, name this three-time Democratic presidential nominee, known as The Great Commoner.

ANSWER: William Jennings Bryan

6. One character in this book describes himself as the "shortest giant" and "tallest midget." The protagonist is instructed to follow a line forever and then turn left to find infinity. The protagonist is accompanied by Tock and the Humbug in a quest to rescue Rhyme and Reason from the Castle in the Air. (*) For 10 points, name this Norton Juster novel about Milo, who drives his toy car through the title object.

ANSWER: *The* Phantom Tollbooth

7. Scipione Borghese commissioned a contorted and muscular depiction of this figure, which was created by Lorenzo Bernini. A sculpture of this figure which exemplifies *contrapposto* shows his toes within the hair of his slain enemy; that bronze sculpture was created by Donatello. (*) For 10 points, identify this figure who is sometimes shown with a slingshot, after he has killed Goliath.

ANSWER: David [or Dawood]

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8. The only people allowed to touch this object are members of its awarding organization's executive committee, current heads of state and previous winners of it. The current version of it was first awarded in 1974 after its predecessor, the Jules Rimet Trophy, was permanently given in 1970 to the first team to win it three times, (*) Brazil. For 10 points, name this ten-pound solid gold trophy that will next be awarded in Rio de Janeiro on July 7, 2014, to an international soccer team.

ANSWER: FIFA World Cup [do not accept "Jules Rimet Trophy"]

9. Some of this empire's ruins were found in 1911 by Hiram Bingham. One ruler of this empire fought a civil war with his half-brother Huascar (whas-car). That ruler was captured at the battle of Cajamarca (ka-ha-mar-ka), and he was named Atahualpa (Ata·hual·pa). This empire had its capital at (*) Cuzco, and famous ruins from this empire can be found at Machu Picchu in Peru. For 10 points, name this South American empire that was conquered by Francisco Pizarro.

ANSWER: Inca Empire [or Tawantinsuyu]

10. A noted spike in ferns occurred after this event, which saw the collapse of ammonite food chains in the oceans, though 90% of bony fish survived it. Luis and Walter Alvarez found a worldwide layer of iridium that supports one theory of this event, which may have started at the Chicxulub [CHIK-shoo-lub] (*) crater in the Yucatán. Birds and mammals were spared by, for 10 points, what event in which a large groups of reptiles were wiped out 65 million years ago?

ANSWER: extinction of the dinosaurs [or asteroid killing the dinosaurs or Cretaceous-Tertiary event or K-T event or Cretaceous-Paleogene event or K-Pg event; accept logical equivalents]

11. This musician sang duets like "Let's Call the Whole Thing Off" with Ella Fitzgerald and recorded albums with his "Hot Five" and "Hot Seven" bands. He sang "It's so nice to have you back where you belong" in one song, and described "Bright blessed days" and "dark sacred nights" in another song. (*) For 10 points, what jazz trumpeter, nicknamed "Satchmo" sang "Hello, Dolly!" and "What a Wonderful World"?

ANSWER: Louis Armstrong

12. One law named for this scientist is due to the conservation of angular momentum, and states that a line drawn from a planet to the center of its orbit will sweep out equal areas in equal times. This writer of *Astronomia nova* and *Mysterium cosmographicum* analyzed data collected by (*)

Tycho Brahe [TEE-koh BRAH] to develop that statement as well as to determine that planets' orbits are ellipses. For 10 points, name this German astronomer who published three laws of planetary motion.

ANSWER: Johannes Kepler

13. A museum branch located in this city's Fort Tryon Park containing medieval art is known as The Cloisters. One of its straits, which includes Roosevelt Island and Rikers Island, is the East River. Some of its neighborhoods are Bensonhurst and Flatbush, and its Turtle Bay neighborhood includes the headquarters of the (*) United Nations. For 10 points, name this city whose boroughs include Queens, Staten Island, and Manhattan.

ANSWER: New York City

14. Solving an example of this mathematical concept is equivalent to finding the intersection of hyperplanes in n -dimensional space. They can be represented by matrices and then solved using Cramer's rule. These can be classified as dependent or independent, as well as consistent or inconsistent. They can be solved by (*) elimination or substitution. For 10 points, give this type of problem in which several equations are solved at once.

ANSWER: system of linear equations [or system of simultaneous linear equations; prompt on "system"]

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15. One work by this author, about a man who injures himself while hanging curtains, is *The Death of Ivan Ilyich*. One of his novels has a relationship between Levin and Kitty, while the title character has an affair with Count Vronsky and eventually commits suicide by jumping in front of a (*) train. For 10 points, name this author who wrote about the French invasion of Russia in *War and Peace* in addition to writing *Anna Karenina*.

ANSWER: Leo Tolstoy [or Lev (Nikolayvich) Tolstoy]

16. One figure in this religion wears three wedding bands to symbolize her marriages to Agwe, Dumballah, and Ogoun. In addition to Erzulie, one figure in this religion is represented by a cross over a tomb and is named Ghede. Gods in this religion are called "loa" and this religion's god of the Earth is named Papa Legba.(*) For 10 points, name this religion that originated in Haiti, famous for its namesake dolls.

ANSWER: Voodoo [accept Vodun or Vodou or Vodoun or Vaudou or Vaudoux]

17. At one battle in this war, John of Bohemia fought even though he was blind. A temporary peace during this war was the Treaty of Bretigny. This conflict saw a battle on St. Crispin's Day that was the subject of the speech about "ye band of brothers." (*) Joan of Arc was captured and burnt at the stake during this war. The Battles of Crecy and Agincourt were fought during, for 10 points, what war between the English and French from 1337 to 1453?

ANSWER: Hundred Years' War

18. Stomach acid consists mainly of a compound of hydrogen and this element. It is the second-lightest halogen, after fluorine, and at room temperature is a yellow-green gas. Compounds with it, carbon, hydrogen, and fluorine deplete the ozone layer and are called (*) CFCs. It is used in bleach as well as to disinfect swimming pools, and forms table salt along with sodium. For 10 points, name this element, number 17, symbolized Cl.

ANSWER: Chlorine or Cl

19. This bill placed an additional 3.8% tax on investment income for high earners, and it also capped Flexible Spending Accounts. In June 2012, the Supreme Court upheld the constitutionality of this law under Congress's power to levy (*) taxes and granted states the power to avoid its Medicaid expansions. For 10 points, name this law that is supposed to increase the number of people who are covered by health insurance.

ANSWER: Obamacare [or Patient Protection and Affordable Care Act or PPACA]

20. One character in this novel is asked by Mistress Hibbins to join her in a witches' sabbath. After being delayed from going to Boston by Native Americans, the protagonist's husband, Roger (*) Chillingworth, meets with the protagonist in jail. Pearl is rumored to be fathered by the devil in, for 10 points, what novel in which Hester Prynne wears the title piece of cloth, a work by Nathaniel Hawthorne?

ANSWER: *The Scarlet Letter*

Extra. One type of this weapon would have been defended against by President Reagan's Strategic Defense Initiative. Another type of these developed by the Soviet Union and used by Iraq was the Scud. Nazi Germany wanted to replace anti-aircraft guns with the (*) surface-to-air type of these weapons. For 10 points, what projected weapons that carry explosive devices name a 1962 crisis in Cuba?

ANSWER: missiles [prompt on "nuclear bomb" until "surface-to-air" is mentioned; do not accept or prompt on rocket(s)]

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Bonuses

1. Answer the following concerning Islam for 10 points each:

[10] This angel revealed the Quran to Muhammad over a period of 23 years, beginning in 609.

ANSWER: Gabriel

[10] Muslim are required to take a pilgrimage at least once in their life to this city in the Hejaz region of Saudi Arabia.

ANSWER: Mecca

[10] Between 75 and 90 percent of all Muslims are part of this branch of Islam, in which adherents follow the sayings and living habits of Muhammad.

ANSWER: Sunni Islam

2. The Van der Waals equation deals with this state of matter. For 10 points each:

[10] Name this one of the three main phases of matter. It has neither definite shape, nor definite volume.

ANSWER: gas

[10] Boyle's law states that at constant temperature, an ideal gas's volume is inversely proportional to this quantity. It is measured in pascals.

ANSWER: pressure

[10] A gas law named for this man states that the total pressure exerted by a gas mixture equals the sum of the pressures of the individual gases. His name is sometimes given to the atomic mass unit.

ANSWER: John Dalton

3. This symphony's second movement is titled "Scene by the Brook," its fourth movement is a thunderstorm, and its fifth and final movement is a shepherd's song following the storm.

[10] Name this 1808 symphony, the sixth of nine written by its composer.

ANSWER: Pastoral Symphony

[10] This composer of the *Pastoral Symphony* and "Für Elise" used a motif of three short notes followed by a long note in his fifth symphony.

ANSWER: Ludwig van Beethoven

[10] This is the nickname for Beethoven's ninth symphony, which includes a setting of Schiller's "Ode to Joy."

ANSWER: Choral Symphony

4. The title orphan in this novel is raised for a time by the Reed family. For 10 points each:

[10] Name this novel about a woman who attends Lowood School and eventually falls in love with Edward Rochester.

ANSWER: Jane Eyre

[10] Jane Eyre was written by a woman named Charlotte whose sisters Emily and Anne were also authors. Give the last name of these sisters.

ANSWER: Brontë [prompt on "Bell"]

[10] Emily Brontë wrote this novel about Catherine Earnshaw and Heathcliff.

ANSWER: Wuthering Heights

5. This leader edited the Ems Dispatch, helping to start a war with France. For 10 points each:

[10] Name this man whose use of *Realpolitik* earned him the nickname the "Iron Chancellor."

ANSWER: Otto von Bismarck

[10] In 1871 Bismarck and Kaiser Wilhelm I achieved the unification of this nation, which included the states of Bavaria and Saxony.

ANSWER: Germany

[10] Bismarck came from this German kingdom that was ruled by Frederick the Great in the 18th century.

ANSWER: Prussia

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6. In November 2011, this country's Prime Minister George Papandreou [pah-pan-DRAY-oo] resigned. For 10 points each:

[10] Name this Eurozone country now headed by Antonis Samaras that recently hosted talks on the future of Cyprus in this country's capital of Athens.

ANSWER: Greece [accept Hellenic Republic]

[10] This current chancellor of Germany has been one of the leading critics of Greek economic policy, saying that Greece should implement more austere polic.

ANSWER: Angela Merkel

[10] Merkel belongs to this German political party, which is mainly opposed by the Social Democratic Party.

ANSWER: Christian Democratic Union [or CDU]

7. For 10 points each, name these objects in the solar system that are not planets:

[10] Now termed a dwarf planet, this object discovered by Clyde Tombaugh used to be classified as the ninth planet.

ANSWER: Pluto

[10] This asteroid is the only dwarf planet within the asteroid belt.

ANSWER: Ceres ["series"]

[10] Many long-period comets originate from this area far beyond Pluto that is not to be confused with the Kuiper [KY-pur] Belt.

ANSWER: (Öpik-) Oort [rhymes with "wart"] cloud

8. Identify these punctuation or diacritical marks, for 10 points each.

[10] This is used instead of a period at the end of an interrogative sentence.

ANSWER: question mark

[10] This is used in lists when the individual items already have commas and is also used to separate two independent clauses within a sentence.

ANSWER: semicolon

[10] This diacritical mark similar to a diaeresis or trema is used to shift German vowels.

ANSWER: umlaut

9. For 10 points each, give the following about how computers represent numbers:

[10] At the lowest level, computers operate in this system, whose values are generally represented for humans using zeroes and ones.

ANSWER: binary (arithmetic) or base 2 (arithmetic)

[10] Instead of writing long strings of 1's and 0's, programmers often combine four binary values to create single digits of this more complex numbering system.

ANSWER: hexadecimal (arithmetic) or base 16 (arithmetic)

[10] In hexadecimal, a single digit must be able to represent a value from 0 to 15. To represent the number 10 as one digit, programmers use this character.

ANSWER: A

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10. Every US state other than Vermont requires one of these. For 10 points each:

[10] Identify this occurrence, when a government does not spend more than it earns.

ANSWER: **balanced budget**

[10] The idea of a federal balanced budget amendment has been proposed to limit this from increasing. It is the total amount of money the US government owes.

ANSWER: United States **national debt** [prompt on just "debt"; do not accept national "deficit"]

[10] National debt can decrease in years when the federal government operates at one of these. Contrasted with a deficit, it means that the government is taking in more money in revenue than it is spending.

ANSWER: **surplus**

11. For 10 points each, answer the following about sequels to *The Hunger Games*:

[10] In *Catching Fire*, Katniss is forced to endure a second Hunger Game, although this person escapes when Peeta volunteers to take his place.

ANSWER: **Haymitch Abernathy** [accept either underlined part]

[10] The final novel in the series is named after this bird, a symbol that Katniss wears on a pin in all three stories.

ANSWER: **Mockingjay**

[10] All three novels take place in this nation named after a derivation of the latin word for bread.

ANSWER: **Panem**

12. This state's island of Oahu saw James Dole found a noted company on it. For 10 points each:

[10] Identify this current state, where Dole ran a very successful pineapple company. It was the last of the 50 states to enter the US.

ANSWER: **Hawai'i**

[10] Hawai'i was annexed under this President, through the Newlands Resoulution, an act of Congress. He ran a Front Porch campaign to defeat William Jennings Bryan in a presidential election.

ANSWER: William **McKinley**

[10] This only queen and last monarch of Hawai'i was deposed by a group of American citizens. She was part of the Kalakaua [KAL-uh-COW-uh] Dynasty that succeeded the Kamehamehas [Kuh-MAY-uh-MAY-uhs] and wrote the song "Aloha 'Oe."

ANSWER: **Lili'uokalani** I [or Lydia K. **Dominis** or Lydia Kamaka'eha **Pāi**; be lenient on any pronunciation]

13. Pencil and paper ready. Point P is at the coordinates (2,6), and Point Q is at the coordinates (6,3). For 10 points each:

[10] Find the distance between Point P and Point Q.

ANSWER: **5**

[10] If a line is drawn through Points P and Q, where will the line intercept the x-axis?

ANSWER: **10** [or **(10,0)**]

[10] Find the midpoint halfway between P and Q.

ANSWER: **(4,4.5)** [accept **(4,4½)** or **(4,9/2)**]

14. Her sons tried to overthrow Zeus in the Gigantomachy. For 10 points each:

[10] Name this Greek personification of the Earth who gave birth to the Cyclopes and the Titans.

ANSWER: **Gaia** [or **Gaea**]

[10] This personification of the sky was Gaia's partner until he was castrated by his son Cronus. To Gaia's anger, he had hidden the Cyclopes and Hundred-Handed Ones under the earth.

ANSWER: **Ouranos** [or **Uranus**]

[10] This was the first deity to exist in the Greek world and was followed by Gaia. This entity traditionally represents the void that existed before creation.

ANSWER: **Chaos**

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15. Answer the following about a geographical feature in Africa, for 10 points each.

[10] This highest mountain in Africa is a stratovolcano with three cones: Kibo, Mawenzi, and Shira.

ANSWER: Mount **Kilimanjaro**

[10] Mount Kilimanjaro is found in this country, which has its capital at Dodoma. It is bordered by Rwanda and Burundi to the west.

ANSWER: **Tanzania**

[10] The Gregory one of these locations extends into Northern Tanzania. A Great one of these geographical features stretches from Syria to Mozambique and contains the Afar Triple Junction.

ANSWER: Great **Rift** Valley [or East African **Rift** Valley]

16. Name these science fiction works set mostly outside Earth's surface, for 10 points each:

[10] In this novel, a black slab is found on the moon and an intelligent computer named HAL leads a mission towards Saturn. This is by Arthur C. Clarke and was made at the same time as the movie version directed by Stanley Kubrick.

ANSWER: **2001: A Space Odyssey**

[10] In this vignette [VIN-yet] collection, Ray Bradbury documents the attempts of humans to escape the vices of Earth by traveling to the title celestial body.

ANSWER: *The* **Martian Chronicles**

[10] In this Frank Herbert novel, Paul Atreides usurps control of the Fremen, partially to stop a Harkonnen plot to annex the spice mines of Arrakis.

ANSWER: **Dune**

17. Name some card games that aren't poker, for 10 points each.

[10] Invented by CNN anchor Anderson Cooper's great-uncle, this card game's world championship is called the Bermuda Bowl. Lingo in it includes "dummy", "declarer", "ruff", and "no-trump".

ANSWER: Contract **Bridge** [do not accept "auction bridge"]

[10] In this game that uses a 48-card deck, the namesake meld consists of the queen of spades and jack of diamonds, with one such meld counting for 40 points, but two of them for 300.

ANSWER: **Pinochle**

[10] In this game, players collect sets of cards of the same rank by asking other players for cards they might have. If the person asked has no relevant cards, the response is this two-word phrase that names the game.

ANSWER: **Go Fish**

18. Because of the need for proper alignment of centromeres, this phase is the longest of mitosis. For 10 points each:

[10] Name this phase of mitosis that precedes anaphase and sees chromosomes line up along the cell's equator.

ANSWER: **metaphase**

[10] In metaphase, each chromosome is attached to two fibers of this structure that pulls the sister chromatids apart during anaphase.

ANSWER: mitotic **spindle** apparatus

[10] At the end of mitosis, the cytoplasm is divided by this process that includes the formation of a cleavage furrow in animal cells and a cell plate in plant cells.

ANSWER: **cytokinesis**

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19. This man is depicted wearing light blue pants and holding a small hatchet in *Parson Weems' Fable*. For 10 points each:

[10] Name this historical figure who was depicted standing in a boat "crossing the Delaware" in an Emanuel Leutze [LOY-tuh] painting.

ANSWER: George Washington

[10] This iconic painting of a farmer holding a pitchfork standing beside a woman was created by the man who painted *Parson Weems' Fable*. It shows Byron McKeeby and the artist's sister, Nan.

ANSWER: American Gothic

[10] The painter who created both *Parson Weems' Fable* and *American Gothic* is this regionalist artist.

ANSWER: Grant (DeVolson) Wood

20. Identify the African country based on the event from the 1990s. For 10 points each:

[10] In 1991, this West African country moved its capital from Lagos to Abuja.

ANSWER: Federal Republic of Nigeria

[10] After a period of racist policies called Apartheid, this country elected Nelson Mandela as its president in 1994.

ANSWER: Republic of South Africa

[10] In 1994, Hutus in this country killed hundreds of thousands of Tutsis.

ANSWER: Republic of Rwanda

Extra. John Williams has won five Academy Awards for this type of composition, which usually includes background music but not lyric-based songs.

[10] Name this type of incidental music written for the cinema.

ANSWER: film score [prompt on "movie music"]

[10] The English composer Ralph [RAFE] Vaughan Williams wrote a score for a film detailing Robert Scott's fatal expedition exploring this continent.

ANSWER: Antarctica [accept *Scott of the Antarctic*]

[10] The film adaptation of *West Side Story* won an Oscar for Best Score, though this composer of the original Broadway music was unhappy with the score's orchestration.

ANSWER: Leonard Bernstein