Collaborative Middle School Tournament 2011
Round 8

Tossups

1. In November 2010, this state's voters rejected a proposition legalizing marijuana. The Ninth Circuit Court of Appeals will determine the constitutionality of "Proposition 8," which put a stop to gay marriages in this state. Former HP executive Carly Fiorina (fee-OH-ree-nuh) was defeated by this state's incumbent U.S. Senator, Barbara Boxer, and eBay executive Meg Whitman lost the governor's race to Jerry Brown. For 10 points, name this state formerly headed by Arnold Schwarzenegger.
ANSWER: **California**

2. This man's reign included an attempt by young officers to assassinate corrupt government officials; that event is known as the "February 26th Incident". He ordered the invasion of Manchuria and his general, Hideki Tojo, attempted suicide and was arrested for war crimes shortly after the bombings of Hiroshima and Nagasaki. For 10 points, name this Japanese Emperor who ruled throughout World War II.
ANSWER: Emperor **Hirohito** [accept Emperor **Showa**; accept the **Showa** Emperor; prompt on Prince **Michi**]

3. Cushion plants are found in the alpine form of this biome, which is also home to marmots, pikas, and chinchillas. The point at which this biome meets taiga is known as the treeline. Flora in this biome consists of lichens (LYE-kens) and mosses. Non-alpine forms of it have little vegetation due to permafrost. For 10 points, name this biome that lacks tree growth, which can be found in Alaska and is home to caribou and reindeer.
ANSWER: **tundra**

4. A 2003 restoration of Verrochio's depiction of this figure revealed the sculptor's fingerprint. Bernini depicted this figure in combat with his armor at his feet, while a Donatello statue of him was the first freestanding nude male sculpture since antiquity. For 10 points, Michelangelo unusually depicted what Biblical subject without the head of Goliath?
ANSWER: **David**

5. The highest point in this nation is Jebel Toubkal, and foreign enclaves surrounded by this nation include Melilla (meh-LEE-yah) and Ceuta (say-OO-tah). Its cities include Safi and Marrakech, and this country is home to the western terminus of the Atlas Mountains. It is north of the disputed Western Sahara and south of the Strait of Gibraltar. For 10 points, name this country that includes the cities of Casablanca and Rabat.
ANSWER: Kingdom of **Morocco** [or Al Mamlakah al **Maghrib**iyah]

6. This body contains an unusually reflective equatorial region known as Xanadu. It is in a 3:4 orbital resonance with Hyperion. In 2010, the Cassini-Huygens probe found evidence of a cryovolcano named Sotra Facula on this moon. This moon's surface contains methane lakes, and it has a dense, opaque atmosphere. For 10 points, name this largest moon of Saturn.
ANSWER: **Titan**

7. This novel begins as the main character and his mother Ellen plant potatoes. In this novel, the main character's family's farm is vandalized due to neighborhood outrage over his brother Bill's decision to fight against his brothers Tom and John. Jenny and Shadrach marry after Shadrach is wounded at Gettysburg in, for 10 points, what novel depicting the maturation of Jethro Creighton during the Civil War, by Irene Hunt?
ANSWER: *Across Five Aprils*

8. Most stories hold that this deity, not Athena, blinded the prophet Tiresias (TYE-ree-see-uhs). She cursed the nymph Echo to repeat only what others had said. This figure gave birth to Hephaestus (heh-FESS-tuss) and later threw him out of Olympus because of his ugliness. After her husband impregnated Leto (LEE-toh), she refused to let Leto give birth on land. For 10 points, name this Greek goddess and wife of Zeus.
ANSWER: **Hera**

9. At the beginning of this play, Prince Escalus declares that the next man to break the peace will be sentenced to death. One title character originally loves Rosaline, while the other is admired by Paris. The former character seeks assistance from the Apothecary and slays Tybalt. Featuring a pair of "star-cross'd lovers" is, for 10 points, which Shakespeare play about the children of the feuding Montagues and Capulets?
ANSWER: ***Romeo and Juliet***

10. The energy of electromagnetic waves is obtained by multiplying Planck's constant "h" by this quantity. When an object such as a bridge vibrates at the natural state of this quantity, resonance occurs. For rotating devices, it is symbolized by omega and expressed in revolutions per second. For 10 points, name this property referring to the number of occurrences of a repeating event per unit time, which is measured in Hertz.
ANSWER: **frequency** [prompt on **f**; prompt on **nu**; prompt on **omega** before it is mentioned]

11. One of this city's most famous attractions features Tritons leading hippocampi and the shell chariot of the central figure, Oceanus. Ostia was the ancient port of this city, which was built in part on the Palatine and Quirinal Hills. Attractions in this city include the Spanish Steps, the Trevi Fountain, and the Colosseum. For 10 points, name this city on the Tiber, the capital of Italy.
ANSWER: **Rome**, Italy [or **Roma**, Italia]

12. Observers of this holiday often eat jelly-filled doughnuts called *sufganiyot* (soof-GAH-nee-yoat) and potato pancakes called *latkes*. They may play a game with a spinning top whose sides are marked *nun*, *gimel*, *hey*, and *shin* on this holiday; that object is called a *dreidel* (DRAY-duhl). It commemorates the successful revolt against Antiochus (an-tee-OH-kuss) led by Judah Maccabee. For 10 points, name this wintertime Jewish holiday that includes the lighting of a *Menorah*.
ANSWER: **Chanuka**h [or **Hanukkah**]

13. The singer of this song states "Watergate does not bother me" before asking "does your conscience bother you?". This song, which had its guitar line sampled by Kid Rock in "All Summer Long", refers to the title location as a place "where the skies are so blue". For 10 points, name this Lynyrd Skynyrd song which describes a particular southern state and shares its title with a Reese Witherspoon movie.
ANSWER: "**Sweet Home Alabama**"

14. This person negotiated a treaty that ceded Florida to the United States with Luis de Onis (loo-EES day oh-"NIECE") while serving as James Monroe's Secretary of State. This man agreed to name Henry Clay Secretary of State in order to break a deadlock in the House of Representatives; that decision was the first "corrupt bargain." For 10 points, name this winner of the Election of 1824 over Andrew Jackson, the sixth U.S. President.
ANSWER: **J**ohn **Q**uincy **Adams** [prompt on **Adams**; do not prompt on or accept "John Adams"]

15. This musician dedicated his *Symphony No. 4 in F Minor* to his financial supporter Nadezhda (nah-DEZH-dah) von Meck, though they never met. His *Sixth Symphony*, nicknamed *Pathetique* (pah-theh-TEEK), premiered nine days before his death. In one of his ballets, the sorcerer Von Rothbart curses Odette; another includes the "Dance of the Sugar Plum Fairy". For 10 points, name this Russian composer of *Swan Lake*, *The Nutcracker*, and the *1812 Overture*.
ANSWER: Pytor Ilyich **Tchaikovsky**

16. This process's namesake constant is used in Fick's Law and an explanation of Brownian motion. This process is used during respiration to get oxygen into blood, and it then replaces that oxygen with carbon dioxide. It is synonymous with heat conduction, and this process in water is called osmosis. For 10 points, name this process in which the random motion of particles causes them to spread to areas of lower concentration.
ANSWER: **diffusion**

17. In one story by this author, General Lasalle's army saves the narrator from the Inquisition. Another narrator describes a sound like "a watch makes when enveloped in cotton." In a poem by this author, the title creature is perched on a "pallid bust of Pallas." For 10 points, name this author of "The Pit and the Pendulum" and "The Tell-Tale Heart" who told of a bird crying "Nevermore" in "The Raven."
ANSWER: Edgar Allen **Poe**

18. This man's reign began with the Streltsy (SHTRELT-zee) Revolt instigated by his half-sister, Sophia. He passed a law which required all men to either cut their beards or pay a tax. This leader created the Table of Ranks to organize the government and limit the power of the Boyars (boh-YAHRS). He defeated Charles XII of Sweden in the Great Northern War. For 10 points, name this tsar who established Russia as a dominant European power.
ANSWER: **Peter I** [accept **Peter the Great**; prompt on **Peter**]

19. This work begins with a word that means "what" and calls for attention. Its three battle scenes, including one against a dragon, are each followed by a funeral scene. While fighting without a weapon, the title character of this work tears an arm from an opponent in the dining hall Heorot (HAY-or-oht), which was built by the Danish king Hrothgar (ROTH-gar). For 10 points, name this Old English epic poem about a Geat (gate) warrior who defeats Grendel.
ANSWER: *__Beowulf__*

20. Apollonius' Theorem can be used to find the length of this construct given the side lengths of a triangle. Three of them divide a triangle into six triangles with equal areas, and they intersect at the centroid, or center of mass. For 10 points, identify this term that in geometry refers to a line drawn from a vertex to the midpoint of the opposite side and in statistics refers to the middle number in a list.
ANSWER: **median**s

Extra. Although he is not Sun Tzu, this man wrote a version of *The Art of War*. He wrote a critique of Roman history in his *Discourses on Livy*. This man used the term *virtu* to describe a leader's ability to adapt to different circumstances in a work that also discusses how it is better to be feared than loved. He wrote a history of his native Florence for Giulio de' Medici. For 10 points, name this author of *The Prince.*
ANSWER: Niccolo **Machiavelli**

Bonuses

1. This is a computation bonus. Consider the two points (-1,1) and (1,2). For 10 points each:
[10] What is the distance between those two points?
ANSWER: Square **Root** of **5** [or **Rad**ical **5**]
[10] What is the slope of a line that goes through both of those points?
ANSWER: **1/2** [or 0**.5**]
[10] What is the slope of a line that is perpendicular to the line that goes through both of those points?
ANSWER: **-2**

2. Wyoming was the first territory to become a state with this right guaranteed by its Constitution, leading to the nickname "Equality State". For 10 points each:
[10] People such as Elizabeth Cady Stanton campaigned for what right, which was guaranteed nationally by the Nineteenth Amendment?
ANSWER: **women**'s **suffrage** [accept right of **women** to **vote**; accept clear-knowledge equivalents of **women** and **voting**; prompt on **women** or **voting** if mentioned individually]
[10] This suffragette edited *The Revolution* with Stanton. She was fined $100 for voting illegally in the 1876 election.
ANSWER: Susan B(rownell) **Anthony**
[10] Stanton and Lucretia Mott organized this 1848 women's rights conference named for the New York town where it took place.
ANSWER: **Seneca Falls** Convention

3. Because they cannot reproduce by themselves, they are not considered true living things. For 10 points each:
[10] Name these infectious agents that cause, among other diseases, the flu and common cold.
ANSWER: **virus**es
[10] Viruses consist of genetic material surrounded by this icosahedral (ahy-koh-suh-HEE-druhl) protein coat.
ANSWER: **capsid**
[10] These viruses, which include HIV, contain RNA instead of DNA as their genetic material.
ANSWER: **retrovirus**es

4. In this poem, an Abyssinian maid sings of Mount Abora. For 10 points each:
[10] Identify this poem named after a Mongol leader who resided in Xanadu (ZAN-uh-doo).
ANSWER: "**Kubla Khan**"
[10] This poet of "Kubla Khan" wrote the collection *Lyrical Ballads* with William Wordsworth.
ANSWER: Samuel Taylor **Coleridge**
[10] This title figure of another Coleridge poem seizes a wedding guest. He proceeds to tell his tale, which is a punishment given to him for shooting an albatross.
ANSWER: **Ancient Mariner** [accept "**Rime of the Ancient Mariner**;" prompt on **Mariner**]

5. This dance is in three-four time with an emphasis on the first beat. For 10 points each:
[10] Name this dance, whose most typical style is the Viennese.
ANSWER: **waltz**
[10] This composer of the operetta *Die Fledermaus* (DEE FLAY-der-"mouse") was known as "The Waltz King."
ANSWER: Johann **Strauss**, **Jr.** [or Johann **Strauss II**; or Johann **Strauss the Younger**; prompt on **Strauss**; prompt on **Johann Strauss**; do not accept "Joseph Strauss"]
[10] The main theme of this Strauss waltz begins with a rising D-D-F sharp-A-A triad in the cellos and low horns. A poem about a certain river was set to it.
ANSWER: *On the Beautiful **Blue Danube*** [or *An der Schönen **Blauen Donau***; or ***Blue Danube** Waltz*]

6. For 10 points each, name these people who all formulated their own law codes.
[10] This Babylonian king created a namesake law code that demanded "an eye for an eye."
ANSWER: **Hammurabi**
[10] This Byzantine emperor created his namesake law code in the sixth century CE. This ruler built the Hagia Sophia, and his general, Belisarius, put down the Nika Riots.
ANSWER: Flavius Petrus Sabbatius **Justinian**us **I** [or **Justinian the Great**; prompt on **Justinian**]
[10] This Athenian created Athens' first constitution, whose harshness gave rise to a word meaning "marked by extreme severity or cruelty."
ANSWER: **Draco**

7. They include the "Unjust Judge", "Great Banquet", and "Prodigal Son". For 10 points each:
[10] Identify these Biblical stories told by Jesus to convey a message.
ANSWER: **parable**s of Jesus Christ
[10] This parable tells of a Jew who was beaten and left on the side of the road. The title character helps him, while a priest and a Levite merely pass him by.
ANSWER: parable of the **Good Samaritan** [prompt on **Samaritan**]
[10] This short parable describes a very small seed that grows into a tree with birds lodged in its branches.
ANSWER: parable of the **Mustard** Seed

8. The first round of elections in this country was contested by Mirlande Manigat, Jude Celestin, and Michel Martelly. For 10 points each:
[10] Identify this very poor country hit by a major earthquake in January 2010.
ANSWER: Republic of **Haiti**
[10] This man headed Haiti from 1971 to 1986 and returned in January 2011. He was quickly arrested and charged with corruption.
ANSWER: Jean-Claude "Baby Doc" **Duvalier** (doo-VAHL-YAY)
[10] This outgoing President of Haiti was criticized for his weak response to the earthquake.
ANSWER: Rene **Preval**

9. Because Yossarian is sane enough not to want to fly more missions, he must fly more missions. For 10 points each:
[10] That apparent paradox is an example of the title concept of what Joseph Heller novel?
ANSWER: *Catch-22*
[10] In this Kurt Vonnegut novel, Billy Pilgrim becomes "unstuck in time".
ANSWER: *Slaughterhouse-Five*
[10] Both *Catch-22* and *Slaughterhouse-Five* were set during this war.
ANSWER: **World War II**

10. The Potomac and James Rivers flow into this body of water. For 10 points each:
[10] Name this bay that separates the Delmarva Peninsula from the Virginia tidewater. It is famous for its blue crabs.
ANSWER: **Chesapeake** Bay
[10] This state contains the northern part of the Chesapeake Bay, including the harbors of Baltimore and Annapolis.
ANSWER: **Maryland**
[10] This river flows across central Pennsylvania passing the Three Mile Island nuclear plant on its way into Chesapeake Bay.
ANSWER: **Susquehanna** (suhs-kwuh-HAN-uh) River

11. The first part of this method can equal one but cannot equal ten. For 10 points each:
[10] Name this method of expressing any number as a number from one to ten multiplied by a power of ten.
ANSWER: **scientific notation** [accept **standard form**; accept **exponential notation**; do not accept "engineering notation"]
[10] In standard American notation, this is the name of ten to the fifteenth power, which is one thousand times one trillion.
ANSWER: one **quadrillion**
[10] This number is ten to the one hundredth power. Its name was coined by Milton Sirotta when he was nine-years-old.
ANSWER: one **googol** [do not accept "googolplex"]

12. Inhabitants of this land include the pig Hen Wen and the assistant pig-keeper Taran. For 10 points each:
[10] Name this setting for a series of children's novels loosely based on Welsh myth.
ANSWER: **Prydain** [or The **Chronicles of Prydain**]
[10] This author wrote the *Chronicles of Prydain* series. His last book of the series, *The High King*, won the Newbery Medal in 1969.
ANSWER: Lloyd Chudley **Alexander**
[10] The title object of this second book in the series is used to create an army of undead soldiers.
ANSWER: The ***Black Cauldron***

13. It is one astronomical unit from Earth. For 10 points each:
[10] Name this G-type main sequence star at the center of our solar system.
ANSWER: the **sun** [accept **Sol**]
[10] This visible surface of the sun is found above the convection zone.
ANSWER: **photosphere**
[10] Most easily seen during a solar eclipse, this outermost part of the sun's atmosphere is the source of the solar wind.
Answer: solar **corona**

14. He played a man who wakes up to the same day over and over again in *Groundhog Day* and also appeared in *Lost in Translation*. For 10 points each:
[10] Name this actor who provided the voice of Garfield in two movies. The animated part of the movie *Osmosis Jones* takes place inside the body of this actor's character.
ANSWER: Bill **Murray**
[10] Bill Murray recently played himself in this movie. Its main characters are named for the cities where they survive following the apocalypse which created the title place.
ANSWER: ***Zombieland***
[10] Bill Murray played Dr. Peter Venkman, who joined Harold Ramis's Egon Spengler and Dan Aykroyd's Raymond Stantz, to form the title supernatural-fighting agency of this movie.
ANSWER: ***Ghostbusters*** [or ***Ghostbusters II***]

15. This work includes a lengthy description of the Battle of Waterloo, in which Thénardier (tay-NAR-dee-ay) claims to save the life of Marius Pontmercy's father. For 10 points each:
[10] Name this novel, which includes a love triangle between Marius, Éponine (EP-oh-neen) and Cosette.
ANSWER: ***Les Misérables***
[10] *Les Misérables* was written by this French author of *The Hunchback of Notre Dame*.
ANSWER: Victor **Hugo**
[10] This main character of *Les Misérables* serves a prison sentence for stealing of loaf of bread and, after breaking his parole, is chased by Inspector Javert (zha-VAIR) for most of the novel.
ANSWER: **Jean** **Valjean** [accept either or both underlined parts]

16. This man's studio was known as "The Factory". For 10 points each:
[10] Name this artist whose silkscreen depictions of everyday objects include *Green Coca-Cola Bottles* and *Campbell's Soup Cans*.
ANSWER: Andy **Warhol** [or Andrew **Warhol**a]
[10] Warhol was a member of this 1950's and 1960's art movement that used objects of mass culture for its subjects and styles.
ANSWER: **Pop**ular **Art**
[10] Warhol produced a diptych (DIP-tik) based on the face of this actress, who starred in *Some Like it Hot* and *The Seven Year Itch*.
ANSWER: Marilyn **Monroe** [accept Norma Jeane **Baker**]

17. For 10 points each, name these forms of taxation.
[10] This tax is levied on the profit obtained from the sale of stocks and other investments. This tax rate is set at 15% in the United States for stocks held more than 12 months.
ANSWER: **capital gains** tax
[10] This tax was permanently enacted in the United States with the passage of the Sixteenth Amendment and is usually based on a person's earnings.
ANSWER: **income** tax [accept **personal income** tax]
[10] Some conservatives would prefer to replace the progressive income tax with this type of income tax, which taxes everyone at the same rate regardless of income.
ANSWER: **flat** rate tax

18. The power of these events can be measured on the moment magnitude and Mercalli scales. For 10 points each:
[10] Name these phenomena that were once commonly described by their Richter magnitude.
ANSWER: **earthquake**s [prompt on **quake**; prompt on **tremor**; prompt on **temblor**; prompt on **seismic** activity or event]
[10] This term refers to the point on the Earth's surface directly above an earthquake's focus.
ANSWER: **epicenter**
[10] These seismic waves are longitudinal and can travel through solids, liquids, and gasses.
ANSWER: **P**-waves [accept **primary** waves; accept **pressure** waves]

19. This disease struck the European continent in the early 14th century. For 10 points each:
[10] Name this disease transmitted by flea bites, which wiped out nearly one-third of Europe's population during that time period.
ANSWER: **Bubonic plague** [accept **Black Death**; prompt on **plague**]
[10] The Bubonic plague is thought to have spread from China or Central Asia on travelers along this famous trade route named for a valuable Chinese clothing material.
ANSWER: the **Silk Road** [accept **Silk Route**s]
[10] It is believed that this explorer hoped to find a new "Silk Route" to China when he sailed west in 1492. Instead, he was disappointed to find another continent blocking the way.
ANSWER: Christopher **Columbus** [accept Cristoforo **Colombo**; accept Cristoffa **Corombo**]

20. For 10 points each, identify these thunder gods.
[10] This deity was suckled by the goat Amaltheia (AH-mall-THEE-ah) in his youth and killed his father Cronus with a sickle upon reaching adulthood
ANSWER: **Zeus**
[10] This father of Magni and Modi wears the belt Megingjard (meg-ING-yard) to wield his hammer, Mjollnir (MYAWL-nir).
ANSWER: **Thor**
[10] The *Rig Veda* (RIG VEY-duh) describes how this Hindu thunder god defeated Vritra (VREE-trah) to give water back to the world.
ANSWER: **Indra**

Extra. Until the invention of boron carbide, a compound of this element and carbon was the hardest known synthetic substance. For 10 points each:
[10] Name this element found directly below carbon on the periodic table.
ANSWER: **silicon** [or **Si**]
[10] This second most common mineral in the Earth's crust is one of nine different minerals composed of silicon dioxide.
ANSWER: **quartz**
[10] Silicon is used in wafers forming the base of these circuits that make up microprocessors, such as those in computer chips.
ANSWER: **integrated** circuits [or **IC**s]