

1. **Shu and Tefnut were created from this god’s saliva. According to one legend, this deity emerged out of chaos from a lotus flower. Every night, this god’s barque was attacked by the snake Apep. This deity colored 7,000 jars of beer red in order to calm Sekhmet, who is known as this god’s “eye.” This god was unified with (*) Atem and Amun. Like Horus, this deity was depicted with the head of a falcon, and he was also depicted with a golden disk. Pharaohs were titled the “Son of” this god. For 10 points, name this Egyptian sun deity.**

ANSWER: **Ra**

080-10-19-05102

2. **This country's city of Garissa lies on the Tana River. Its capital is home to a large slum named Kibera. Its western border is the site of Mount Elgon, and its namesake mountain is the second-highest mountain in Africa. It contains the coastal cities of Malindi and (*) Mombasa. It shares Lake Turkana with its neighbor to the north, Ethiopia, and also borders Tanzania and Somalia. For 10 points, name this country whose capital is Nairobi.**

ANSWER: Republic of **Kenya**

024-10-19-05103

3. **One parameter for bodies whose motion is characterized by these statements is the mean anomaly, which is one of the three angular parameters along with the true anomaly and the eccentric anomaly. The second of these statements states that areal velocity is constant. The (*) third of them relates the square of the period to the cube of the semi-major axis, while the first of them states that orbits are ellipses with the sun at one focus. For 10 points, name these three laws of planetary motion, named for a German astronomer.**

ANSWER: **Kepler's** Laws of Planetary Motion

026-10-19-05104

4. **This country’s president Gustavo Rojas was ousted during a civil war sparked by the assassination of Jorge Eliecer Gaitan. A Marxist guerrilla group in this country is known as the National Liberation Army, or ELN. One citizen of this nation was murdered in 1994 after committing an own goal at the World Cup. This country’s militant M-19 group may have been funded by (*) Pablo Escobar, the leader of its Medellin drug cartel. For 10 points, name this South American country at war with FARC, which is a leader in the production of coffee and cocaine.**

ANSWER: Republic of **Colombia** [or Republica de **Colombia**]

015-10-19-05105

5. **He wrote about an immigrant to America who teaches Russian at Waindell College in Pnin. Wordsmith College in New Wye, Appalachia, is the setting for another of his works, which opens with “I was the shadow of the waxwing slain” and mostly consists of Charles (*) Kinbote’s unreliable commentary on the titular 999-line poem. For 10 points, name this author of *Pale Fire* who depicted the “nymphet” Dolores Haze and Humbert Humbert in *Lolita*.**

ANSWER: Vladimir **Nabokov**

082-10-19-05106

6. **The Tartaglia-Cardano method is used to solve one type of these equations. Abel's Impossibility Theorem states that no algebraic solutions exist to other types of these equations. One specific type of these equations is solved by a namesake (*) formula that includes the discriminant, which is equal to b squared minus four a c. Finding the solutions to these equations is equivalent to finding the roots of their namesake functions. For 10 points, name this family of equations in which a function consisting of only coefficients and powers of a variable is set equal to zero, examples of which include cubic and quadratic equations.**

ANSWER: **polynomial** equations [accept **cubic** equations before "Abel"; accept **quartic** equations before "Abel"]

003-10-19-05107

7. **After the breakdown of the Gastein Convention, this man went to war with Austria in the Seven Weeks' War. His minister of education, Adalbert Falk, enacted the May Laws, which closed a large number of seminaries in his country. Those laws were part of this man's anti-Catholic Kulturkampf. This man edited a telegram from France called the (*) Ems Dispatch, which resulted in the Franco-Prussian War. For 10 points, name this practitioner of *realpolitik* who was known as the "Iron Chancellor" and founded the German Empire under Wilhelm I in 1871.**

ANSWER: Otto Eduard Leopold von **Bismarck**

079-10-19-05108

8. **Members of this school include George Inness and an artist who depicted an active volcano in *Cotopaxi*. Another member of it depicted the rise and fall of civilizations in the series *The Course of Empire*. One painting produced by a member of this school shows that member standing with William Cullen Bryant on an outcropping overlooking the Kaaterskill Falls; that painting is (*) *Kindred Spirits*. Asher Durand and Thomas Cole were members of, for 10 points, what American school of naturalist painting that was concentrated in New York?**

ANSWER: **Hudson River** School

003-10-19-05109

9. **Saposins are proteins localized to this organelle. Gaucher's disease result from the dysfunction of this organelle and when Hexosaminidase A, a protein found in this organelle, is non-functioning, (*) gangliosides build up in neurons. Proteins bound for it are targeted using mannose-6-phosphate and in it, acid hydrolases process and breakdown items imported from endocytosis. For 10 points, name this acidic organelles that degrade unwanted cellular components and materials.**

ANSWER: **lysosome**

001-10-19-05110

10. **This thinker divided the passions into "irascible" and "concupiscible" categories. This author of *Contra Errores Graecorum* wrote one of his works to convert non-Christians by philosophical argument. Another work by this author of the *Summa Contra Gentiles* contains five arguments for the existence of God and unites Christian theology with an (*) Aristotelian worldview. For 10 points, name this Italian theologian who wrote the *Summa Theologiae*.**

ANSWER: Thomas **Aquinas**

080-10-19-05111

11. A grave that is only six feet long ultimately turns out to answer the title question in this author's short story "How Much Land Does a Man Need?" A man named Olenin leaves for the Caucasus in his novel *The Cossacks*. In another work by this author, the title civil servant reflects back on his life after suffering a fatal fall installing curtains in his apartment. This author of *The Death of Ivan* (*) Ilyich wrote a work in which the lover of Count Vronsky commits suicide on a railway. For 10 points, name this author of *Anna Karenina* and *War and Peace*.

ANSWER: Leo Nikolayevich Tolstoy

064-10-19-05112

12. One composer from this country was inspired by Isak Dinesin's *Seven Gothic Tales* to write an opera in which Erika sings "Must the Winter Come so Soon?" That opera, *Vanessa*, had a libretto written by a man who lived most of his life in this nation; that composer is known for such operas as *The Medium* and one in which the titular boy offers his crutch to the Three Magi, (*) *Amahl and the Night Visitors*. For 10 points, name this country that is home to operatic composers like Gian Carlo Menotti and Samuel Barber.

ANSWER: the United States of America [or USA; prompt on America]

026-10-19-05113

13. This poem's speaker imagines the title entity waking him from the "coil of his crystalline dreams" on the shores of a "pumice isle." Its speaker exhorts the title entity to scatter, like ashes and sparks, his "words among mankind!" This poem employs the image of "ghosts from an enchanter fleeing" to describe the motion of dead leaves. This poem, whose title entity is the "breath of Autumn's being," ends with the line "if Winter (*) comes, can Spring be far behind?" For 10 points, name this poem dedicated to a blustery phenomenon, by Percy Shelley.

ANSWER: "Ode to the West Wind"

026-10-19-05114

14. A nominal cause of this war was one participant's claim to be the protector of all Orthodox Christians within another combatant's borders. During this war, a woman was sent to the Scutari hospital and became known as the "lady with the lamp" for her efforts to care for the wounded. In addition to giving fame to (*) Florence Nightingale, this war saw the Battle of Balaclava, which included the "charge of the light brigade." Britain, France, and the Ottoman Empire defeated Russia in, for 10 points, what 1853 to 1856 war fought mostly on the namesake peninsula?

ANSWER: Crimean War

019-10-19-05115

15. This country is home to the French-born journalist and author Elena Poniatowska. Another author from this country wrote a novel about Juan Preciado's return to Comala entitled *Pedro Páramo*. This country is the setting of Laura Esquivel's *Like Water for Chocolate*. One writer from this country wrote a novel about the death of Ambrose (*) Bierce and another about the death of Artemio Cruz. For 10 point, name this country which is home to Carlos Fuentes and Octavio Paz.

ANSWER: Mexico [or United Mexican States; or Estados Unidos Mexicanos]

024-10-19-05116

16. In *Golden Sun 2*, an object with this name can be forged from an Orihalcon and unleash “Legend.” In *Final Fantasy V*, Gilgamesh wields an item believed to be this weapon. An object sometimes conflated with this one titles a movie featuring a notable “magic duel” against Madame Mim. This weapon is sometimes called “Caledfwlch,” and its (*) scabbard provides invulnerability to its bearer. Sir Ruper replaces his arm with this weapon in *Quest for Camelot*. For 10 points, name this sword which King Arthur received from the Lady of the Lake.

ANSWER: Excalibur

080-10-19-05117

17. The Welsh engineer John Plumbé held the first convention advocating for completing this type of structure. A bill was submitted to Congress with the goal of creating one of these by Asa Whitney. The first of these structures was completed by Thomas C. Durant and Leland Stanford, the latter of whom drove in the (*) golden "last spike" in 1869 in Promontory Point, Utah. That spike joined the Central and Union Pacific to create this type of structure. For 10 points, name this project that, when first completed, connected Omaha to Sacramento by one set of tracks.

ANSWER: transcontinental railroads [or equivalent answers; prompt on partial answer]

082-10-19-05118

18. A major idea of this work is the concept of bioaccumulation, in which fat-soluble molecules concentrate in living tissue as it moves up the food chain. Its opening chapter, “A Fable For Tomorrow”, described the devastation wrought by a certain “white granular powder” which was responsible for (*) eggshell thinning and was eventually banned in 1972. For 10 points, name this book which focused on the dangers of the pesticide DDT and founded the environmentalist movement, written by Rachel Carson.

ANSWER: Silent Spring

082-10-19-05119

19. The opening of this piece’s third movement mimics the scherzo from Beethoven’s Ninth Symphony, while the english horn solo of its second movement was later adapted into the hymn “Going Home.” Composed around the same time as its composer’s “American” String Quartet, this symphony's second movement Largo was inspired by a scene from Longfellow’s *The Song of Hiawatha*. It was completed during a stay at a Bohemian colony in (*) Iowa, and was heavily influenced by the melodies of African-American spirituals. For 10 points, name this ninth symphony by Antonin Dvorak.

ANSWER: “From the New World” Symphony [or Dvorak’s Symphony No. 9 in E Minor; or Symphony No. 9 until mentioned]

083-10-19-05120

20. John von Neumann invented one of these that has a two-way variant. One of these has "rabbits" and "turtles" that lead to variability in performance. Another of these uses pivots and a divide-and-conquer strategy and is named for its (*) speed. One approach is to go through the array and if any element is less than the element one index lower than it, swap them. This procedure is repeated until no more swapping is needed. Common ones include merge, quick, and bubble. For 10 points, name these algorithms which order the elements of a list.

ANSWER: sorting algorithms

024-10-19-05121

21. **This man received a doctorate from the University of Ferrara despite never having studied there. One of the only pupils of this scientist, Georg Rheticus (RET-ick-us), published an abstract of this man's most important theory in the *Narratio Prima*. The seven basic assumptions of this man's theory are laid out in his *Little Commentary*, and his namesake (*) revolution is seen as a model for future scientific advancement. For 10 points, name this Renaissance Polish astronomer whose work *On the Revolutions of the Celestial Spheres* advanced the heliocentric model of the solar system.**

ANSWER: Nicolaus Copernicus [or Mikolaj Kopernik; or Nikolaus Kopernikus; or Nicolas Copernico]

084-10-19-05122

22. **This musical form consists of an exposition, a development, and a recapitulation; it was the dominant form for the first movements of symphonies in the Classical era. As a type of piece, it also identifies a violin work by Guiseppe Tartini known as the *Devil's Trill*, and a piece for piano by Charles Ives nicknamed "Concord." Beethoven composed thirty-two piano works in this form, including the (*) "Waldstein," "Hammerklavier," and "Appassionata". For 10 points, identify this type of piece for a solo instrument, whose name comes from the Italian word for "to sound."**

ANSWER: sonatas

004-10-19-05123

23. **One character created by this writer visits Mademoiselle Diana after he loses an important document on his return from a bachelor party. Another character throws that document into a fire and avoids blackmail from Judge Brack by committing suicide. In another work by this writer, the protagonist borrows money from Krogstad and eventually decides she must leave her husband (*) Torvald. For 10 points, name this playwright who created the title character of *Hedda Gabler* and Nora Helmer in *A Doll's House*, both set in his native Norway.**

ANSWER: Henrik Johan Ibsen

023-10-19-05124

1. Answer some questions about the exploits of Alexander the Great, for 10 points each.

[10] After sacking this city, Alexander dragged its leader Batis behind his chariot. It is the namesake of a strip that was disputed between Israel and Palestine until 2005.

ANSWER: **Gaza**

[10] Alexander won at Granicus and Issus before finally finishing off the third Persian emperor of this name at the battle of Gaugamela.

ANSWER: **Darius III**

[10] Alexander besieged this Syrian island city by building a massive causeway to it. This Phoenician city is often paired with Sidon.

ANSWER: **Tyre**

015-10-19-05201

2. Among this writer's works are the semi-autobiographical *Confessions of a Mask* and *The Temple of Dawn*, which is part of his *Sea of Fertility* tetralogy.

[10] Name this 20th century Japanese writer who committed suicide via seppuku (sep-POO-koo) in 1970.

ANSWER: Yukio **Mishima** [or Kimitake **Hiraoka**]

[10] The *Sea of Fertility* includes a novel titled after the spring type of this substance, which also describes a type of evening of a Robert Frost poem where the narrator stops in the woods.

ANSWER: **snow** [accept **snowy**]

[10] This Japanese writer also wrote about snow in his *Snow Country* and won the Nobel Prize in Literature for such novels as *The Master of Go* and *Thousand Cranes*.

ANSWER: Yasunari **Kawabata**

083-10-19-05202

3. This star system is orbited by the similarly named Proxima star that is the closest to our Sun. For 10 points each:

[10] Name this nearby star system whose core is a binary star.

ANSWER: **Alpha Centauri**

[10] This star named after an American astronomer is about six light years away. It has the highest proper motion of any star relative to the sun.

ANSWER: **Barnard's** Star

[10] This binary star about 8.6 light years away is the brightest star in the sky, not counting the Sun.

ANSWER: **Sirius**

001-10-19-05203

4. This man helped form the Quadruple Alliance and developed the Concert of Europe at the Congress of Vienna. For 10 points each:

[10] Name this Austrian statesman.

ANSWER: Klemens Wenzel Nepomuk Lothar, Fürst von **Metternich**-Winneburg-Beilstein

[10] Metternich was driven from power by the revolutions of this year that included the February Revolution in France and the Frankfurt Parliament in Germany.

ANSWER: **1848**

[10] Once imprisoned by Metternich, this man eventually led the Hungarian Revolution of 1848 and became president of a short-lived Hungarian republic. He later opposed the creation of the Dual Monarchy.

ANSWER: Lajos **Kossuth**

030-10-19-05204

5. These phonemes form “voiced” and “voiceless” pairs. For 10 points each:

[10] Name these letters, contrasted with vowels.

ANSWER: **consonants**

[10] To produce this type of consonant, the tongue temporarily blocks airflow to a region, then suddenly releases it. Alveolar ones include “t” and “d,” while bilabial ones include “p” and “b.”

ANSWER: **stops** [or **plosives**]

[10] This law describes the evolution of Proto Indo-European stops into corresponding sounds in Germanic languages. It is named for a man who also collected stories such as "Cinderella" and "Rapunzel" with his brother.

ANSWER: **Grimm's Law**

080-10-19-05205

6. Name these male-oriented magazines, for 10 points each.

[10] This fashion-oriented magazine is officially known only by its abbreviated title, as it is now published monthly. An exhibition it organized inspired Mark Simpson to coin the term "metrosexual."

ANSWER: **GQ**

[10] This British-based title is the leader in the "men's magazine" market, featuring provocative but never nude photo shoots of female celebrities. Until 2009, it was published in tandem with the similar, more music-oriented *Blender*.

ANSWER: **Maxim**

[10] Aiming to be a middlebrow alternative between GQ and Maxim, this magazine usually features a cover interview with a male celebrity, a "Perfect Wardrobe" section, and a column by Michael Chabon.

ANSWER: **Details**

019-10-19-05206

7. This work was written in ottava rima, and its fifth canto features the evil Adamastor. For 10 points each:

[10] Name this Luis Vaz de Camoes (CA-MOISH) poem, a fantastical account of Vasco de Gama's voyage around the Cape of Good Hope to India.

ANSWER: *The **Lusiads*** [or *Os **Lusiadas***]

[10] The *Lusiads* is considered to be the national epic of this European nation. It shares a border with Spain and a language with Brazil.

ANSWER: **Portugal**

[10] The *Lusiads* were modeled on this earlier epic by Virgil, which features a Trojan who escapes the doomed city and eventually founds Rome.

ANSWER: **Aeneid**

082-10-19-05207

8. For 10 points each, answer the following about philosophers and their views on government and politics.

[10] This man advocated absolute rule and declared life is “nasty, brutish, and short” in *Leviathan*.

ANSWER: Thomas **Hobbes**

[10] In contrast to Hobbes, this American thinker argued that minimal governmental rule would lead to a better state in his *Anarchy, State, and Utopia*.

ANSWER: Robert **Nozick**

[10] The more moderate Edmund Burke, who was a champion of conservatism, wrote *Reflections* condemning this historical event, which included the Thermidorean Reaction and the issuing of the Declaration of the Rights of Man.

ANSWER: **French** Revolution

079-10-19-05208

9. Alexander Glazunov composed a concerto in E flat major for the alto form of this instrument. For 10 points each:

[10] Name this single-reed brass woodwind instrument. Its jazz practitioners include Charlie Parker and John Coltrane.

ANSWER: **saxophone**

[10] This minimalist American composer wrote a concerto for saxophone quartet and orchestra, as well as the opera *Satyagraha* (sat-yuh-GRAW-huh) and film scores such as *Koyaanisqatsi* and *The Hours*.

ANSWER: Philip **Glass**

[10] This French composer wrote an article praising the newly-invented saxophone and used it in his choral work *Chant Sacre*. He also included an *idée fixe* in his *Symphony Fantastique*.

ANSWER: Hector **Berlioz**

004-10-19-05209

10. In this ballet, Uncle Drosselmeyer puts on a puppet show before giving Clara the title toy as a gift. For 10 points each:

[10] Name this ballet which includes a battle with the Mouse King in its fantasy scene and is set on Christmas Eve.

ANSWER: *The **Nutcracker***

[10] *The Nutcracker* was composed by this Russian composer, who was not actually part of the Mighty Five.

ANSWER: Pyotr Ilyich **Tchaikovsky**

[10] One of the most excerpted passages from *The Nutcracker* is the dance of this fairy, who rules the Kingdom of Sweets in Clara's fantasy.

ANSWER: **sugar plum** fairy

015-10-19-05210

11. A set of four electromagnetic relations are known as Maxwell's Equations. For 10 points:

[10] One of Maxwell's equations relates the electric flux to the enclosed electric charge, and was developed and named for this German mathematician and scientist.

ANSWER: Carl Friedrich **Gauss** (rhymes with "house") [accept **Gauss's** Law of Electricity; do not accept "Gauss's Law of Magnetism"]

[10] There are two different Gauss's Laws in Maxwell's Equations. The other Gauss's Law prohibits the existence of these objects, the magnetic analogue of a point charge.

ANSWER: magnetic **monopole**

[10] Ampere's Law, another of the Maxwell's Equations, relates the magnetic field around a wire to the current times this constant equal to four pi times ten the negative seventh power.

ANSWER: **vacuum permeability** [or **permeability of free space**; or **mu naught**; or **mu** sub **zero**; prompt on **magnetic constant**; prompt on **permeability**; prompt on **mu**; do not accept anything including the word "permittivity"]

064-10-19-05211

12. Damien Hirst exhibited one of these animals preserved in formaldehyde as *The Physical Impossibility of Death in The Mind of Someone Living*. For 10 points each:

[10] Name this animal which bites off a young boy's leg in the 1778 painting "Watson and" one of these animals.

ANSWER: **sharks**

[10] This American artist painted the aforementioned *Watson And The Shark*. He also created notable portraits of Samuel Adams and Paul Revere.

ANSWER: John Singleton **Copley**

[10] In this painting by Winslow Homer, a man stranded on the remains of a boat looks off to the right as he is surrounded by sharks.

ANSWER: **The Gulf Stream**

082-10-19-05212

13. He tells Ophelia to "get thee to a nunnery." For 10 points each:

[10] Name this Shakespearean prince of Denmark who kills Claudius in a fencing match after Laertes stabs him with a poisoned sword.

ANSWER: Prince **Hamlet**

[10] Like Hamlet, this prince of Norway shares his name with his father, the king of Norway, whom King Hamlet killed. This character is named king of Denmark after Prince Hamlet's death.

ANSWER: Prince **Fortinbras**

[10] This courier is sent by Claudius to invite Hamlet to a fencing match with Laertes.

ANSWER: **Osric**

038-10-19-05213

14. One person who attempted this action, Squeaky Fromme, was a member of Charles Manson's cult and used a gun without bullets in the firing chamber. For 10 points each:

[10] Name this action only successfully completed four times. Failed attempts to do this action include Fromme's attempt on Gerald Ford and Samuel Byck's on Richard Nixon.

ANSWER: **assassinating the President** [or equivalent answers]

[10] This man attempted to kill Ronald Reagan in 1981, claiming that he was trying to impress actress Jodie Foster.

ANSWER: John Warnock **Hinckley, Jr.**

[10] Giuseppe Zangara's attempt at killing Franklin Roosevelt resulted in the death of Anton Cermak, who was mayor of this city. A more famous mayor of it is Richard J. Daley.

ANSWER: **Chicago**

083-10-19-05214

15. One poet with this surname was so prolific in Imagist poetry that the movement was derisively dubbed "Amy-gism." For 10 points each.

[10] Give this surname, shared by American poets Amy, Robert, and James Russell.

ANSWER: **Lowell**

[10] Robert Lowell wrote about his experiences in Boston near the aquarium and the Robert Gould Shaw Memorial in a poem dedicated to these kind of "dead."

ANSWER: the **Union** dead [or "For the **Union** Dead"]

[10] James Russell Lowell penned the long poem "A Fable for Critics," which claimed that this other poet of "The Raven" was "three-fifths genius" and "two-fifths pure fudge."

ANSWER: Edgar Allan **Poe**

026-10-19-05215

16. Major cities in this nation include Da Nang and Can Tho. For 10 points each,
[10] Name this Asian country whose highest peak is Fan Si Pan and which is bordered to the east by the South China Sea and the Gulf of Tonkin.

ANSWER: **Vietnam**

[10] Vietnam, in the south, contains the delta of this river that forms the Tonle Sap as it flows through Cambodia.

ANSWER: **Mekong** River

[10] The north of Vietnam is home to the delta of this other river that is formed from the confluence of the Song Lo and Song Da Rivers.

ANSWER: **Red** River

040-10-19-05216

17. These organelles found in plant cells have stroma and grana. For 10 points each:

[10] Name these structures that have a double membrane and are the location of photosynthesis.

ANSWER: **chloroplasts**

[10] This tissue made from sieve elements transports sugars that are the end process of photosynthesis throughout the plant.

ANSWER: **phloem**

[10] Plant-filling tissue where photosynthesis takes place contains a high-level of chloroplasts is known as this kind of tissue. In leaves these cells form the mesophyll.

ANSWER: **parenchyma**

084-10-19-05217

18. This event occurred after its namesake had been invited by Oscar Potiorek to perform an arms inspection. For 10 points each:

[10] Name this event perpetrated by Gavrilo Princip on the orders of Dragovic Dimitrijevic, the leader of the Black Hand.

ANSWER: the **assassination** of Franz **Ferdinand** [or equivalent answers]

[10] The assassination of Franz Ferdinand sparked off this sprawling conflict from 1914-1918, which was characterized by little movement and a lot of trench warfare.

ANSWER: **World War I** [or **First World** War; or **Great** War]

[10] This French general led the counterattack at the first Battle of the Marne and became the commander of Allied forces in the spring of 1918.

ANSWER: Ferdinand **Foch**

080-10-19-05218

19. This text requires adherents to follow the three vows of *obedientia*, *stabilitas*, and *conversatio morum*. For 10 points each:

[10] Name this text written by a saint from Nursia.

ANSWER: The Monastic **Rule** of St. **Benedict**

[10] This patron saint of astronomers founded a namesake Order of Preachers in order to convert the Albigensians. A Latin pun suggests that his order is "the dogs of God."

ANSWER: St. **Dominic**

[10] This founder of the Friars Minor offered the Porziuncola Indulgence and received the stigmata on La Verna.

ANSWER: St. **Francis of Assisi**

080-10-19-05219

20. Cardioids and lemniscates are easily generated curves in this coordinate system. For 10 points each:

[10] Name this coordinate system based on a radial coordinate r and an angular coordinate θ .

ANSWER: **polar** coordinates

[10] A commonly seen one of these curves in polar coordinates is given by $r = a \theta$, while the one named for Fermat is $r^2 = a^2 \theta$.

ANSWER: **spiral**

[10] This more commonly used coordinate system named for a French philosopher uses the intersection of two perpendicular lines to specify a point. The components are usually labeled x and y .

ANSWER: **Cartesian** coordinates [or **rectangular** coordinates]

001-10-19-05220

21. Azerbaijan, Armenia, and Russia are among the countries with territory in this region. For 10 points each:

[10] Identify this Europe-Asia border area, which is the namesake of a mountain range and a racial designator, and is found between the Black Sea and the Caspian Sea.

ANSWER: the **Caucasus** [or **Kavkaz**]

[10] Located entirely within the Caucasus, this former Soviet republic has engaged in recent territorial disputes with Russia over Abkhazia and South Ossetia. Its longtime president Eduard Shevardnadze (SHEV-ard-NOD-zay) governed from Tbilisi.

ANSWER: Republic of **Georgia** [or **Sakartvelo** Respublika]

[10] This city in the Russian Caucasus will be the site of the 2014 Winter Olympics.

ANSWER: **Sochi**

019-10-19-05221