## National Academic Quiz Tournaments, LLC

All questions © 2014 by National Academic Quiz Tournaments, LLC. NAQT licenses these questions to your program only on the condition that you fully pay for these questions and accept all terms of our license agreement. Possession of these questions constitutes acceptance of the license. If you cannot comply with all terms below, return these questions to NAQT for a refund.

$$
\begin{array}{ll}
\text { naqt@naqt.com } & 11521 \mathrm{~W} \text { 69th Street } \\
\text { http://www.naqt.com } & \text { Shawnee, KS 66203 } \\
& \text { 1.888.411.NAQT (1.888.411.6278) }
\end{array}
$$

Uses These questions may be used only for on-campus events by your program, such as intramural tournaments, exhibition matches, practices, and try-outs. Other uses are prohibited without an explicit prior license from NAQT.

Distribution Unless the host obtains a prior license from NAQT, distribution of these questions to any person or entity by any means is absolutely prohibited. "Distribution" includes making available in any form, selling, or exposing someone to the questions, including all persons affiliated with other programs and entities in competition with NAQT, except as necessary to conduct the tournament.

Security Question security is critical for the integrity of events which might use these questions in the future, as well as to protect the marketability of NAQT's product. As such, the content of the questions may not be discussed with any person not affiliated with NAQT or your tournament until July $1,2015$.

Violations Violators' entire programs will be banned from NAQT events-perhaps forever. In addition, we will fully prosecute violators of this license to enforce our rights, not excluding state and federal legal actions and administrative grievances.

Questions We are happy to license alternate uses of these questions. However, if you are not sure if something you want to do with these questions is permitted, please ask first. Also, if you find mistakes in these questions, please let us know.

1. The intensity produced by Rayleigh [RAY-lee] scattering is proportional to this power of the frequency. Halving the distance between two masses increases their gravitational attraction by this (*) factor. Special relativity has-for 10 points - what number of dimensions of spacetime?
answer: $\underline{4}$ (accept 4th power)
2. In this state's 2014 Senate race, Ed Gillespie and Robert Sarvis oppose incumbent Mark Warner. In September its ex-governor Bob McDonnell was found guilty of corruption. Dave Brat won a Republican primary over ( ${ }^{*}$ ) Eric Cantor in - for 10 points - what state now governed by Terry McAuliffe?
answer: (Commonwealth of) Virginia
3. This novel's protagonist recalls how Asher was disciplined for confusing the words "snack" and "smack." After experiencing a sled ride, this novel's protagonist learns why the Community abolished snow. (*) Jonas is selected as the "Receiver of Memories" in - for 10 points - what novel by Lois Lowry?
answer: The Giver
4. In $\mathbf{1 8 7 5}$ Aristides [uh-RISS-tin-deez] won the first edition of this annual sporting event that has been won by a female three times. This mile-and-a-quarter long race takes about two minutes to complete. The (*) "Run for the Roses" is-for 10 points - what first leg of the Triple Crown of horse racing?
answer: Kentucky Derby (prompt on "Derby")
5. The Pescadores [peh-skuh-DOR-ayz] Islands are controlled by this nation that lies north of the Bashi [BAH-shee] Channel, a part of the larger Luzon [loo-ZAHN] Strait. The primary island of this nation was originally given the Portuguese name (*) "Formosa" [for-MOH-suh]. For 10 points - name this East Asian nation whose capital is Taipei ["TIE-pay"].
answer: Taiwan (or Republic of China or Zhonghua Minguo; do not accept or prompt on "People's Republic of China")
6. Pencil and paper ready. Wayne needs to find the base 10 equivalent of the base 9 number 888 ["eight eight eight"]. He can either do a calculation for each power of 9 , or realize that, in base 9,888 is one less than 1000 ["one zero zero zero". (*) For 10 points-find the base 10 equivalent of the base 9 number 888.
answer: $\underline{728}$ [The expression 10009-19 $=8889$ can be converted to the base 10 equivalent $729-1=728$.]
7. Because this woman's two sons are British citizens, she may be prevented from running in a 2015 presidential election. She won the 1991 Nobel Peace Prize while she was under house arrest by a military government called the SLORC [rrymes with "stork". (*) For 10 points - name this pro-democracy activist from Burma.
answer: (Daw) Aung San Suu Kyi lawng sahn soo chee] (prompt on partial answers)
8. The province of Tarapacá was given to one nation at the end of this war following the Treaty of Ancón [ann-KOHN]. This war, which began in 1879, was fought over control of a nitrate-rich part of the ( ${ }^{*}$ ) Atacama Desert. For 10 points-identify this South American war won by Chile and named for an ocean.
answer: War of the Pacific (or Guerra del Pacifico; accept Saltpeter War)
<360893>
9. This figure allegedly motivated a hide-and-seek game led by Morgan Geyser and Anissa Weier, whose wish to be "proxies" for this figure led them to stab a Waukesha [WAH-keh-shaw], Wisconsin classmate. A 2009 (*) SomethingAwful.com ["something awful dot com"] post introduced - for 10 points - what "CreepyPasta" figure who is unnaturally thin?
answer: Slenderman (or The Slender Man; prompt on "The Operator" or "Der Grossmann" or "Mr. Slim" or "The Administrator" or "Daddy LongLegs" or "The Tall Man" or "Slendy"; prompt on "Mr. Thin" before "thin")
10. The Clausius-Clapeyron [KLAW-zee-us KLAP-uh-ron] equation relates the logarithm ["Og"-uh-"rhythm"] of this quantity to the enthalpy [EN-thul-pee] of vaporization. Boyle's law says it is inversely related to volume for an (*) ideal gas at fixed temperature. For 10 points-name this force per unit area that can be measured in pascals [pass-KALZ] or atmospheres.
answer: pressure
11. When asked what he can do, this novel's protagonist replies that he can think, wait, and fast. Kamala dies of a snakebite in this novel, whose title character searches for enlightenment. (*) For 10 points-name this Hermann Hesse [HEss-suh] novel about a Brahmin who shares his name with the Buddha.
answer: Siddhartha [sin-DAHR-tah]
12. This instrument was redesigned by Theobald Boehm [TAY-oh-"bald" berm]. Players of it include Jean-Pierre Rampal [rahm-pahl] and James Galway. This instrument represents the bird in (*) Peter and the Wolf. For 10 points - name this transverse, all-metal woodwind instrument with no reed, whose smaller variant is the piccolo. answer: (transverse) flute(s)
13. This scientist modeled the solar system with a set of layered Platonic solids in Mysterium Cosmographicum [miss-TEE-ree-um kahss-moh-GRAFF-ee-kum]. He stated that orbits sweep out equal areas in equal time, and have (*) elliptical shapes. Three laws of planetary motion were posited by - for 10 points - what German astronomer? answer: Johannes Kepler
14. The eighth monarch of this name was known as "the lion"; his son, the ninth monarch of this name, was the only king of his nation to be canonized. The (*) 16th king of this name died in 1793 at the guillotine [GHEE-uh-teen]. For 10 points-give this name shared by many French monarchs, including the Sun King.
answer: Louis (accept Louis VIII ["the eight"] or Louis IX ["the ninth"] or Louis XVI ["the 16th"] or Louis XIV ["the 14th"])
15. Pink flowers blow across one half of this painting, whose title figure is about to be covered up by a cloth. On the left side of this work, Chloris [KLOR-iss] clings to Zephyrus [zEH-fil-riss]. The title character emerges from a ( ${ }^{*}$ ) shell in-for 10 points - what Sandro Botticelli [bott-ih-CHELL-ee] depiction of the goddess of love?
answer: The Birth of Venus (or Nascita de Venere)
16. This woman is called "the last / Of her great race" in John Dryden's play All for Love. In another play, Enobarbus praises the "infinite variety" of this woman, who uses asps to (*) commit suicide. For 10 points - what title character of a Shakespeare play is an Egyptian queen who loves Antony?
answer: Cleopatra (VII Philopator) (accept Antony and Cleopatra after "Antony")
17. Two days before this battle, forces led by William of Orange met Michel Ney [mee-shell nay] at the Battle of Quatre Bras [KAHT-run brah]. Gebhard von Blücher [BLoo-kur] led a Prussian army that assisted the ( ${ }^{*}$ ) Duke of Wellington at this 1815 battle. For 10 points - name this battle that was the final defeat for Napoleon.
answer: Battle of Waterloo
18. This is the namesake color of stars like Proxima Centauri [PRAHK-sih-muh sen-TAH-ree]. Sources move away from observers in the type of Doppler effect named for this color. Light of this color has wavelengths of 620 to 740 nanometers, ( ${ }^{*}$ ) longer than other visible colors. For 10 points-Mars is called what color "planet?"
answer: red (accept red dwarfs or redshift or Red Planet; do not accept or prompt on "infrared")
19. One story by this man centers on a pet named Pluto who is hanged by the narrator. This author of "The Black Cat" also wrote about Montresor [mohn-tray-sor], who lures Fortunato to his death by mentioning "The (*) Cask of Amontillado" [ah-mohn-tee-AH-doh]. For 10 points - name this author who evoked "lost Lenore" in his poem "The Raven."
answer: Edgar Allan Poe
<347545>
20. The Provisions of Oxford expanded on this document that was signed following the Battle of Bouvines [boo-veen]. It established a committee of 25 barons and was signed at Runnymede [RUN-ih-meed] during the reign of King (*) John. For 10 points - what English legal document limiting the king's power was signed in 1215? answer: Magna Carta (Libertatum) (or Great Charter of Liberties)
<336259>
21. He was living near Caesarea Philippi [see-zun-REE-uh FLL-hh-"pie"] when Jesus gave him Apostolic Primacy by renaming him "Kipha." His ministry brought him to Rome, where he was crucified upside (*) down. He is believed to guard the gates of heaven. For 10 points - name this saint, the first pope recognized in Catholicism. answer: Saint Peter (or Simon Peter; do not prompt on "Simon")
22. The 1919 version of this event was "fixed" by Meyer Wolfsheim, according to the title character of The Great Gatsby. The winner of this event, which was first held in 1903, receives the (*) Commissioner's Trophy. For 10 points-the "Fall Classic" is the nickname of what baseball championship?
answer: (the) World Series
<349900>
23. During the Civil War, this state was the site of battles at Prairie Grove and Pea Ridge. A governor of this state, Orval Faubus [FAW-bus], tried to prevent nine black students from integrating its capital's ( ${ }^{*}$ ) Central High School. For 10 points - name this home state of Mike Huckabee and Bill Clinton.
answer: Arkansas
24. This structure has rubisco [roo-BISS-koh] and other Calvin cycle enzymes floating in its stroma [STROH-muh]. It may have originated as cyanobacteria ["sigh"-AN-oh-"bacteria"], which, like this structure, have stacks of (*) thylakoids ["THIGH"-luh-koydz] where light-dependent reactions take place. For 10 points-name this organelle ["organ"-EL] where photosynthesis ["photo"-SIN-thuh-siss] occurs.
answer: chloroplasts [KLOH-roh-plasts] (prompt on "stroma" before "stroma")

Invitational Series \#139A
Packet 1

## Bonuses

## National Academic Quiz Tournaments, LLC

1. Pencil and paper ready. On a 4-hour car trip, Ed drove 30 miles per hour for the first 3 hours, and then drove at 70 miles per hour for the final hour. For 10 points each-
A. What total distance, in miles, did Ed drive?
answer: 160 miles $[(3 \times 30)+(1 \times 70)=90+70=160]$
B. What was Ed's average speed, in miles per hour, for the 4 -hour trip?
answer: $\quad \underline{40}$ miles per hour [( 160 miles)/(4 hours) $=40 \mathrm{mph}$ ]
C. If instead Ed had driven half the distance at 30 miles per hour and the other half at 70 miles per hour, his average speed would have been what number, the harmonic mean of 30 and 70 ? You have 10 seconds.
answer: $\underline{42}$ miles per hour $[H=2 x y /(x+y)=(2 \times 30 \times 70) /(30+70)=(60 \times 70) / 100=4200 / 100=42]$
2. This modern-day country was created in 1964 by the merger of two now-defunct nations. For 10 points each-
A. Name this east African nation whose most populous city is Dar es Salaam [DAHR ess san-LAHM].
answer: (United Republic of) Tanzania [tan-zuh-NEE-ub] (or Jamhuri ya Muungano wa Tanzania)
B. Tanzania was created by a merger between Tanganyika [tan-gun-YEE-kuh] and this island. In 1896 this state was defeated by Britain in a 38 -minute war.
answer: Zanzibar [ZAN-zun-bar] (or Unguja)
C. Although Dar es Salaam is still home to many government buildings, Tanzania's official capital is this city in the central part of the country.
answer: Dodoma [doh-DOH-mah]
3. After this man is defeated by the Knight of the White Moon, he agrees to return home to his village. For 10 points each-
A. Name this title character of a 17th-century novel, who fights windmills that he confuses for giants.
answer: Don Quixote [dohn kee-HoH-tay] (de La Mancha) (or Alonso Quijano [kee-HAH-noh] or Alonso Quixada [kee-HAH-dah] or Alonso Quesada [kay-SAH-dah] or Alonso Quexana [kay-HAH-nah]; accept any underlined name; accept The Ingenious Gentleman Don Quixote de la Mancha or El ingenioso hidalgo don Quijote de la Mancha)
B. Don Quixote was written by this Spanish author, who claimed that the novel was "begotten" while he was imprisoned.
answer: Miguel de Cervantes [sayr-VAHN-tayz] (Saavedra)
C. Don Quixote wishes to kick at Ganelon [gan-ay-lawn], a traitor who appears in this medieval French epic about the Battle of Roncevaux [rawn-sun-voh] Pass.
answer: The Song of Roland (or La Chanson de Roland)
4. Their second studio album, Nevermind, depicted a naked baby swimming underwater on its cover. For 10 points each -
A. Name this grunge band led by Kurt Cobain [koh-bayn], whose songs included "Smells Like Teen Spirit."
answer: Nirvana
B. After Cobain's death, his bandmate Dave Grohl formed this rock group whose hits include "This Is a Call" and "Best of You."
answer: Foo Fighters
C. Nirvana's Unplugged album included a cover of "The Man Who Sold the World," a song by this British performer of "Space Oddity."
answer: David Bowie [BOH-wee] (or David Robert Jones)
5. For 10 points each - answer the following about American labor history:
A. This 1911 disaster claimed the lives of over 100 textile workers at a New York City factory.
answer: Triangle Shirtwaist Factory Fire
B. This union, which is the largest labor federation in the United States, formed when its two predecessors merged in 1955.
answer: AFL-CIO (or American Federation of Labor and Congress of Industrial Organizations)
C. This leader of the International Brotherhood of Teamsters cultivated a long relationship with the Mafia, until his 1975 disappearance outside a Detroit restaurant.
answer: Jimmy Hoffa (or James Riddle Hoffa)
6. Numerous methods exist for classifying single-cell organisms. For 10 points each-
A. This term refers to any organism that has a membrane-bound nucleus, unlike prokaryotes [proh-"CARE"-ee-ohts] such as bacteria.
answer: eukaryotes [yoo-"CARE"-ee-ohts] or eukaryotic [yoo-"care"-ee-AH-tik]
B. Specific strains of a bacterium can be diagnosed depending on the ability of cells to withstand infection by these viruses that target bacteria.
answer: phages [FAY-jiz] or bacteriophages [bak-TEER-ee-uh-fay-jiz]
C. This method uses crystal violet and safranin [SAF-ruh-nin] dyes to assess whether bacteria are "positive" or "negative," based on the compositions of their cell walls.
answer: Gram stain (accept variants; accept Gram-positive or Gram-negative)
<366908>
7. For 10 points each-name these cities that are all in the same state:
A. The South Platte [plat] River flows through this "Mile High" city near the Front Range of the Rocky Mountains.
answer: Denver
B. The U.S. Air Force Academy is in this city near Pikes Peak.
answer: Colorado Springs
C. This city in western Colorado is named for the joining of the Colorado and Gunnison [GUN-ih-sun] Rivers.
answer: Grand Junction
<364974>
8. For 10 points each—answer the following about Millard Fillmore:
A. Fillmore became president upon the death of this man, under whom he had served as vice president. This man was nicknamed "Old Rough and Ready."
answer: Zachary Taylor
B. Fillmore was the last president from this political party, whose other members included Henry Clay.
answer: Whig Party
C. In his first year as president, Fillmore signed this package of bills meant to reduce tension between the north and south; it included the Fugitive Slave Act.
answer: Compromise of 1850
9. This anthropologist controversially claimed that the Tchambuli [CHAM-boo-lee] people had a female-dominated society. For 10 points each-
A. Name this woman who also described the Arapesh [AR-uh-pesh] and Mundugumor [mun-Doo-guh-mawr] peoples in Sex and Temperament in Three Primitive Societies.
answer: Margaret Mead
B. Derek Freeman has criticized Mead's conclusions about adolescent girls who lived on Ta'u [tah-oo], part of this South Pacific island group.
answer: (American) Samoa (or Samoan Islands; accept Coming of Age in Samoa)
C. Mead's voyage to Samoa broke off her relationship with this linguist. Along with Benjamin Whorf, this man names a hypothesis about how language affects cognitive processes.
answer: Edward Sapir ["SAY-peer"] (accept Sapir-Whorf hypothesis)
10. This artist sculpted a seated man who might be the poet Dante [DAHN-tay]. For 10 points each-
A. Name this French sculptor of The Thinker.
answer: (François-)Auguste(-René) Rodin [oh-goost roh-dan]
B. The Thinker is part of Rodin's larger sculpture of these structures "of Hell." Sculpted reliefs of aurochs [OR-"ox"] and dragons decorate one of these originally dedicated to Ishtar.
answer: gates (accept The Gates of Hell or La Porte de l'Enfer; accept Ishtar Gate; do not accept or prompt on "door(s)" or other synonyms)
C. The Gates of Hell also originally included this sculpture of Paolo [POW-loh] and Francesca da Rimini [rrann-CHESS-kah dah REE-min-nee] performing the title action.
answer: The Kiss (or Le Baiser)
11. For 10 points each-answer these questions about functional groups:
A. Ethers [EE-thurz] consist of two carbon groups bonded to an atom of what element, the second-most abundant element in the atmosphere?
answer: oxygen
B. What molecules, such as isopropanol ["eye"-soh-PROH-puh-nahl], tend to be polar because they contain a hydroxyl [hye-DRAHK-sil], or $\mathrm{OH}^{[\text {"O }} \mathrm{H}$ '], group?
answer: alcohols
C. TNT contains three of what often explosive functional groups whose chemical formula is $\mathrm{NO}_{2}$ [ $\mathrm{N}-\mathrm{O}$ "two"]? answer: nitro (do not accept or prompt on "nitrite")
12. He was a leader of the 1942 "Quit India" movement. For 10 points each-
A. Name this non-violent activist known as the "Mahatma," who was shot by a Hindu extremist in 1948.
answer: Mahatma Gandhi (or Mohandas K(aramchand) Gandhi)
B. Gandhi's 1930 march to the seaside village of Dandi [DUN-dee] protested Britain's tax on this substance, essential for cooking.
answer: salt (accept salt march)
C. The salt march is also known by this Sanskrit term for "truth force," which may be applied to any of Gandhi's non-violent protests.
answer: satyagraha [SAHT-yah-GRAH-hah]
13. The title of an 1819 story by John William Polidori describes Lord Ruthven as one of these supernatural creatures. For 10 points each-
A. Name these creatures which Polidori called "human blood-suckers."
answer: vampires (or vampyres; accept The Vampyre; A Tale)
B. The pale-skinned Edmond Dantès [dahn-tez] is referred to as "Lord Ruthven" in this novel by Alexandre Dumas [doo-mah].
answer: The Count of Monte Cristo (or Le Comte de Monte-Cristo)
C. Polidori's story "The Vampyre" was initially published under the name of this poet who wrote the epic Childe Harold's Pilgrimage.
answer: George Gordon (Noel), Lord Byron (accept any underlined name)
14. One formulation of this statement relates energy and time. For 10 points each-
A. Name this principle stating that position and momentum cannot both be determined precisely at the same time.
answer: Heisenberg ["HIGH"-zen-berg] uncertainty principle (accept either underlined part)
B. One-half times the "reduced" form of this constant serves as a lower bound for uncertainty calculations. This constant times frequency gives a photon's energy.
answer: Planck's constant (prompt on " $h$ "; do not accept or prompt on "Dirac's constant" or "h-bar")
C. Heisenberg's uncertainty principle was the subject of debates between Einstein and this scientist, who postulated that electrons orbit an atom's nucleus in discrete energy levels.
answer: Niels (Henrik David) Bohr [neelz bor]
15. Artist Damien Hirst's For the Love of God is a platinum cast of one of these structures encrusted in diamonds. For 10 points each-
A. Name this structure depicted in anamorphic perspective by Hans Holbein the Younger in the painting The Ambassadors.
answer: human skull
B. Skulls of spun sugar and other morbid confections are created for this Mexican celebration of loved ones who have passed away.
answer: Day of the Dead (or Dia de Muertos)
C. This bone of the human skull makes up the lower jaw.
answer: mandible
16. For 10 points each - name these authors who have won Pulitzer Prizes for Fiction:
A. This author won in 1953 for his novel about a fisherman named Santiago, The Old Man and the Sea.
answer: Ernest (Miller) Hemingway
B. Celie [SEEL-ee] falls in love with Shug [shoog] Avery in this author's novel The Color Purple, which won in 1983. answer: Alice (Malsenior) Walker
C. This Texan author of Terms of Endearment won the 1986 prize for Lonesome Dove, a novel about a cattle drive.
answer: Larry (Jeff) McMurtry
17. For 12 and 8 , this value is 4 . For 10 points each-
A. Identify this number, the largest number that will divide evenly into two or more given numbers.
answer: greatest common divisor or GCD ["GCD"] (or greatest common factor or GCF ["G C F"] accept highest or largest in place of greatest; do not accept or prompt on "greatest common denominator")
B. The GCD of 7 and 12 is 1 , so 7 and 12 are said to have this property with respect to each other.
answer: relatively prime or coprime [koh-"prime"] (accept word forms such as relative primality or coprimality; do not prompt on "prime")
C. This method for finding greatest common factors relies on repeatedly finding the remainder when the larger number is divided by the smaller.
answer: Euclid's [yook-lid's] algorithm or Euclidean [yook-LID-ee-un] algorithm
18. They included the Mausoleum of Halicarnassus [maw-zuh-LEE-um "of" HAL-ih-kahr-NASS-us], a tomb built by Artemisia [ahr-teh-MEE-zhuh] for her husband. For 10 points each-
A. Give the collective term for these works from antiquity, which also included the Temple of Artemis at Ephesus.
answer: Seven Wonders of the Ancient World (prompt on "Seven Wonders" or "Wonders of the World"; accept variations such as Seven Ancient Wonders of the World)
B. Another of the Seven Wonders was a statue of this Greek god at Olympia, which was created by the sculptor Phidias [FIH-dee-us]. This god's spouse was Hera.
answer: Zeus (do not accept or prompt on "Jupiter")
C. One of the Seven Wonders, the Pharos of Alexandria, was an example of this type of building.
answer: (a) lighthouse
19. For 10 points each-identify these television shows that are named after families:
A. Jeff Garlin plays the gruff father of the title family in this ABC sitcom, which is set in the 1980s.
answer: The Goldbergs
B. The theme song of this 1970s sitcom explained that the title family was formed when a "lovely lady" with three daughters married a man with three sons.
answer: The Brady Bunch
C. Richard Thomas played "John Boy" in this 1970s series that portrayed a Virginia family's life during the Great Depression.
answer: The Waltons
<361198>
20. For 10 points each — name these men who led Russia during the first half of the 20th century:
A. Joseph Dzhugashvili [zHOo-gahsh-VEEL-ee] was the real name of this dictator who led the Soviet Union from the 1920s until his death in 1953.
answer: Joseph (Vissarionovich) Stalin
B. This man, who abdicated the throne in 1917, was Russia's last tsar.
answer: Nicholas II of Russia (or Nikolay II; prompt on "Nicholas" or "Nikolay")
C. The treatise What Is to Be Done? was written by this revolutionary leader, who introduced the New Economic Policy in 1921.
answer: Vladimir (Ilyich) Lenin (or Vladimir (Ilyich) Ulyanov)
21. In May 2014 his return was secured via the exchange of five Taliban prisoners. For 10 points each-
A. Name this U.S. soldier held for nearly five years in Afghanistan.
answer: Bowe (Robert) Bergdahl [boh burg-DAHL]
B. In response to media uproar over the deal, this Secretary of Defense stated that the United States "didn't negotiate with terrorists." This man succeeded Leon Panetta [puh-NEH-tah] in 2013.
answer: (Charles Timothy) Chuck Hagel
C. Following Bergdahl's release, some members of his platoon suggested that his capture was a result of this action, whose U.S. military definition involves intent of permanent absence or avoidance of "hazardous duty."
answer: desertion (accept word forms; do not accept "(going) AWOL" or "absent without leave" or equivalents)
22. The air on either side of these boundaries may differ in density or temperature. For 10 points each-
A. Name these leading edges of airmasses that are often depicted on weather maps with lines of blue triangles or red half-circles for their cold and warm varieties.
answer: weather fronts (or frontal zones; accept cold fronts or warm fronts)
B. This term describes fronts which move slowly or not at all.
answer: stationary fronts
C. A stationary front can devolve into a line signaling this local change in a wind's speed or direction. This term also denotes the type of stress produced by $S$ waves.
answer: wind shear (accept shear line or shear stress)
23. The victors of this battle used two sets of walls to encircle the target city and to keep enemy reinforcements out. For 10 points each-
A. Name this 52 BC battle that ended with the surrender of the Celtic [KELL-tik] leader Vercingetorix [VUR-sin-JEH-tuh-riks]. answer: (Battle of) Alesia [uh-LEE-zhuh]
B. The Battle of Alesia was won by forces commanded by this Roman general. He later waged a civil war against Pompey [PAHM-pee].
answer: (Gaius) Julius Caesar (accept either underlined name)
C. Alesia ended Caesar's campaign to conquer this region, which included most of what is now France.
answer: Gaul (or Gallia)
24. Bellerophon [buh-"LAIR"-uh-fahn] used a golden bridle to tame this steed. For 10 points each-
A. Name this winged horse from Greek myth.
answer: Pegasus (or Pégasos)
B. Pegasus was born when this monster was beheaded.
answer: Medusa
C. Bellerophon tried to ride Pegasus to the top of Mount Olympus, but was thrown when one of these creatures attacked Pegasus. In Norse myth, one of these creatures bit Brokk while he was forging Mjollnir [m'Yohl-neer]. answer: gadfly or gadflies (or Diptera)
