

1. His mother fled into the forest to save him from the warrior's lifestyle that killed his father. However, when he mistakes some knights for angels he decides to take up chivalry. His mother collapses and dies as he leaves for King Arthur's court. There, he slays the Red Knight with a javelin, then steals his armor. He eventually ends up at the castle of the Fisher King, where he fails to ask the right question. Later on, he finds the Grail and heals the king. FTP, name the titular character of the famous medieval poem by Wolfram von Eschenbach.

Answer: **Parsival** (Accept Percival, Parsifal, clear equivalents)

2. There are actually two laws by this name, not really related except that the same guy wrote them. The one dealing with electricity can be expressed [ $Q$  equals  $P$   $t$  equals  $I$  squared  $r$   $t$ ], an equation yielding the amount of heat liberated by a current with given resistance over a given time. The one in thermodynamics states that there is no change of temperature when a gas expands without doing external work and without receiving or rejecting heat. FTP give the name shared by these laws.

Answer: **Joule's Law** [pronounced "Jowl" but saying it like "jewel", etc., is OK]

3. She has been portrayed as a strumpet, a feminist victim, and a heroine. She studied under Agostino Tassi, her father's collaborator, who was successfully prosecuted for her rape. She achieved renown for her use of chiaroscuro in the style of Caravaggio, and during her life enjoyed both success and fame, becoming the first woman admitted to the Academy of Design in Florence. FTP, name this artist whose works include *Self Portrait as Allegory of Painting*, *Susanna and the Elders*, and *Judith Slaying Holofernes*.

Answer: **Artemisia Gentileschi**

4. He never held elective office, and his greatest civic achievements occurred after the event for which he is best known. He surprised his political allies by successfully defending before the Supreme Court a Communist in a civil liberties case, and he cited domestic race relations as an obstacle to U.S. credibility worldwide in his anti-isolationist 1943 bestseller *One World*. It was his opposition to TVA as a utilities executive that led to his surprise grass-roots Presidential candidacy. FTP name this man, the Republican nominee defeated by Franklin D. Roosevelt in the election of 1940.

Answer: **Wendell Willkie**

5. A devout young woman falls in love with a man, who is handsome, but whose values are questionable. Willing to believe she can alter his character, she marries him. Her marriage becomes a misery so she flees to a bleak and forgotten home. Once there, local gentleman farmer, Gilbert Markham, becomes infatuated with her and curious about her secretive ways. So that Gilbert will not misunderstand her and believe the rumors being spread about her, Helen gives him her journals. FTP, name this 19<sup>th</sup> century novel by Anne, the youngest of the Bronte sisters.

Answer: **The Tenant of Wildfell Hall**

6. Product makers of this recreational apparatus are currently in the process of trying their best to sue the makers of *Dickie Roberts: Former Child Star*. This toy has long been notorious for being a potentially dangerous hobby. It can trace its roots back to a children's activity widely practiced in the 1980s that involved a slight slope and some slick plastic. Greased with a suitable lubricant, children would run and glide in their own individual fashion. FTP, name this Wham-O! product with a long, yellow runway that facilitates movement when wet.

Answer: **Slip 'N Slide**

7. They came into Roman lands with imperial agreement in 375, but they soon rebelled against the negligent treatment and defeated Valens before moving westward. When no Roman authority would consent to their integration into Roman forces in exchange for food, they invaded Italy, resulting in the plundering of Rome. After failing to get to North Africa, they moved north from Italy into Gaul, where they fought for Rome. In late 418, they were made foederati and settled in western Gaul. FTP, name this group that was most famously led by Alaric.

Answer: **Visigoths**

8. The novel begins in prison, where a psychologist is interviewing a woman sitting on death row for having killed a pimp in a Cairo street. Firdaus is an ex-prostitute who refuses to speak with anyone in or out of the prison but at last agrees to tell her story. During her childhood, she was abused and witnessed the abuse of her mother by her father. She underwent a female circumcision, was molested by her uncle, forced into marriage, betrayed by lovers, and bitterly exploited by pimps. FTP, name this novel by Egyptian writer Nawal El Sadaawi.

Answer: **Woman At Point Zero**

9. This process begins with a single molecule of glucose and concludes with the production of two molecules of pyruvic acid. Much of the energy that is liberated upon degradation of glucose is conserved by the simultaneous formation of ATP. The process occurs in two major stages, the first of which is the conversion to a common intermediate, glucose-6-phosphate. The second major phase is the conversion of glucose-6-phosphate to pyruvate. FTP, name this biological process that literally means the dissolution of sugar.

Answer: **glycolysis**

10. Although the Spanish explored here as early as 1515, it wasn't till 1624 that they established the settlement Soriano. Colonization efforts by the Portuguese in 1680 and 1717 led Spain to drive them out. In the 1820's the Spanish and Portuguese were themselves ousted by the Thirty-Three Immortals, a small group of gauchos, and with Britain backing it as a buffer state it achieved independence in 1830. FTP name this South American nation with its capital at Montevideo.

Answer: **Uruguay**

11. His 2,342 hits over his 18-year career rank 107<sup>th</sup> all-time, or exactly 100<sup>th</sup> among players who have retired. Before finishing his career with the Mets, he enjoyed his best years in St. Louis from 1969-1974 after being traded for Orlando Cepeda by the Braves. He eventually managed all three of those teams, with a combined .471 winning percentage, but he's elevated his career percentage to .522 thanks to his current gig. FTP name this man, who (so far) has led the Yankees to six division titles and four World Series titles.

Answer: **Joe Torre**

12. On January 9, 1905, peaceful marchers in St. Petersburg carried a petition to Tsar Nicholas II asking for higher wages, a shorter workday, better working conditions, a legislative assembly, and universal manhood suffrage, hoping for reform. Nicholas II ordered his guard to fire into the unarmed crowd. When news of one hundred dead and hundreds more wounded escaped, public opinion almost universally turned against the old regime. FTP, name this day that was followed by a series of strikes, riots, assassinations, and naval mutinies.

Answer: **Bloody Sunday**

13. Produced most efficiently by bombarding lithium-6 with neutrons in fission reactors, this has a half-life of 12.3 years and degenerates via beta decay. It is used commercially in making night sights and as a radioactive tracer. Occurring in natural water 10<sup>-18</sup> times as much as ordinary hydrogen, this is, FTP, what hydrogen isotope whose nucleus contains one proton and two neutrons?

Answer: **Tritium**

14. He held that the collective mind of society was the source of religion and morality and that the common values developed in society are the cohesive bonds of social order. He suggests the division of labor makes for cohesiveness, but the loss of commonly held values leads to social instability and disorientation of the individual. He also studied suicide to show the importance of anomie, the loss of morale that accompanies decline in social identity. FTP, name this French sociologist one of the chief founders of modern sociology and author of *Suicide*.

Answer: **Emile Durkheim**

15. Although trained for the law, he preferred the company of the literary coterie at Rome. He enjoyed early and widespread fame as a poet and was known to the emperor Augustus. For no known reason, he was abruptly exiled to Tomis, where he later died. His works fall into three groups: erotic poems, mythological poems, and poems of exile. His verse is in elegiacs, which are of unmatched perfection. The poems of exile include *Tristia* and *Letters from the Black Sea*. The love poems include *Amores* and *The Art of Love*. FTP, name the author of the mythological work, *The Metamorphoses*.

Answer: **Ovid**

16. He was born in Germany in 1763, and later went to New York City, where he started a business for trade in musical instruments. He became an astute investor in lands, but he is best remembered as a fur trader. In 1808, he chartered the American Fur Company and founded the Pacific Fur Company. His firm exercised a virtual monopoly of the trade in the 1820s and still did when he retired from it in 1834. Upon his death, he was wealthiest man in the United States. FTP, name this man whose name is linked to the luxurious Waldorf hotels.

Answer: John Jacob **Astor**

17. He was an honored figure in the public life of Rome. In 510, he became the minister of the Emperor Theodoric. Late in Theodoric's reign false charges were brought against him; after imprisonment in Pavia, he was sentenced without trial and put to death for treason. His treatise on ancient music, *De musica*, was for a thousand years the unquestioned authority on music in the West. FTP, name the last ancient Neoplatonist philosopher of early medieval Europe, who while in prison wrote his most famous writing, *The Consolation of Philosophy*.

Answer: **Boethius**

18. She taught at the Central School of Art and Design and was Senior Lecturer in English and American Literature at University College, London, before returning to full-time writing in 1983. Her estrangement from her half-sister, Margaret Drabble, was not triggered by literary rivalry, but like Drabble she has published both criticism and fiction. Her critical works include *Degrees of Freedom* and essays in *Passions of the Mind*, and her fiction includes *Angels and Insects* and *The Djinn in the Nightingale's Eye*. FTP, name this author whose novel, *Possession*, won the 1990 Booker Prize.

Answer: A.S. **Byatt**

19. The first detailed theory of this was put forth by German meteorologist Alfred Wegener in 1912. On the basis of geology, biology, climatology, and the alignment of the continental shelf rather than the coastline, he believed that about 275 to 175 million years ago, all the continents were united into a vast super continent, before moving to their current positions. Wegener's theory stirred considerable controversy during the 1920s and was not accepted until the 1950's and 60's. FTP, name the geologic theory that first proposed that earth's landmass was not static.

Answer: **Continental Drift** [prompt on plate tectonics – not Wegener's milieu, but close enough]

20. The same guy who tried to patent the telephone one hour after Bell, Elisha Gray, invented arguably the first of these. In 1928 Maurice Martenot improved on Lev Terman's theremin by making it keyboard-based. Canadian Hugh LeCaine's 1945 breakthrough was the first voltage-controlled one and the first to use this name. FTP name this instrument, further improved in the 1960's by Robert Moog and popularized by the Walter Carlos album *Switched-On Bach*.

Answer: **synthesizer**

[prompt on early buzz with electronic music, theremin, Moog, etc., before "the first to use this name"]

[EDITOR'S NOTE: This round's distribution needed either a music question or a computer question, so it got both.]

21. With chemical formula  $C_{17}H_{21}NO_4$ , it operates by blocking the reuptake of dopamine at presynaptic terminals and thereby causing sensory overload. First isolated in 1859, it became widely used in liquid form by doctors for conditions such as toothache, exhaustion, and morphine addiction. Praised by Pope Leo XIII, Thomas Edison, and Sigmund Freud, it reached perhaps its peak in legal popularity in 1886 when John Pemberton included small amounts in the original formula for Coca-Cola. FTP, this is what narcotic derived from the coca leaf?

Answer: **cocaine**

22. The defining feature of this kind of storm is the fact that it has a closed off circulation and can be detected by satellite, radar and reconnaissance aircraft. This type of storm has winds of twenty five to thirty eight miles per hour, but unlike greater weather hazards it is not named. Instead, it is numbered. FTP, name this predecessor of the tropical storm.

Answer: **Tropical Depression**

23. Despite the assumption that the stock market crash that marked the start of the Great Depression occurred on a Tuesday, the Depression truly began on October 24, 1929, the day stock traders engaged in a selling panic, moving more than twelve million shares through the market. That day, the market dropped in value an astounding nine percent, beginning the snowball effect that destroyed the stock market and led the economy to ruin. FTP, name the colorful day that was the true start of the Great Depression.

Answer: **Black Thursday**

24. When this woman was five years old, she went to Paris with her father who had been appointed astrologer and secretary to King Charles V. She was educated in ancient languages and literatures. At the age of fourteen she married a nobleman from Picardy. After her husband died, she found herself in straitened circumstances. She resolved to make a living with her pen. Her writings in prose and verse soon gained her great renown. FTP, name this author of *The Treasure of the City of Ladies* and *The Book of the Deeds and Good Conduct of the Wise Charles V*.

Answer: **Christine de Pisan**

25. The name means “winged” reptiles. These creatures ruled the skies for 150 million years, first appearing in the Triassic period and then going extinct at the end of the Cretaceous period. They were the first vertebrates to evolve true flight, and are therefore not true dinosaurs. Wings, hollow bones, a keel-shaped chest, and tails aided their flying capabilities. More than 120 named species were part of this prehistoric group, which varied greatly in size and shape. FTP, name this group that includes Quetzalcoatlus, the largest flying vertebrate of all time.

Answer: **Pterosaur**



1. Name the Shakespeare play from the Book-A-Minute.com synopsis, FTPE.

FTP: Help me strand my enemies on my magic island. That's enough. Enemies, I forgive you all, and one of you can marry my daughter. I'm going home.

Answer: **The Tempest**

FTP: I can be civilized now that a man has bossed me around. I love you madly, Petruchio.

Answer: **The Taming of the Shrew**

FTP: We're all in love with each other the wrong way around. Everyone goes into the woods. They have wacky experiences, pair off correctly, and live happily ever after.

Answer: **Midsummer Night's Dream**

2. Name these cell organelles, FTPE.

FTP: These cylindric organelles participate in cell division as microtubule organizing centers. They are in fact composed of tubulin in a characteristic arrangement of nine microtubular triplets.

Answer: **Centrioles**

FTP: Once assembled from RNA and cytoplasmic proteins, these small organelles pass through the nuclear pores to the cytoplasm where they take part in protein synthesis. Some are free in the cytoplasm; others are attached to the ER.

Answer: **Ribosomes**

FTP: A curved membrane stack resembling a stack of pancakes, finishes the post-translational modifications, concentrates and packages proteins for export or storage. It also adds directions for the destination of the protein package.

Answer: **Golgi complex/apparatus/body**

3. Name these Renaissance artists who all sculpted David, FTPE.

FTP: His David is depicted before the battle with Goliath. The slingshot he carries over his shoulder is almost invisible, emphasizing that David's victory was one of cleverness, not sheer force. Proportionally, the hands are a little large.

Answer: **Michelangelo**

FTP: His David leaves no doubt that the proud hero was capable of slaying the giant. David is clothed, carries a small sword in one hand and, with his other confidently poised on his hip, looks triumphantly out at the viewer.

Answer: **Andrea Del Verrochio**

FTP: His David was the first unsupported standing work in bronze cast since classical times. The nude figure is wearing a girly little bonnet, carrying a long sword, and has a foot resting on Goliath's head.

Answer: **Donatello**

4. On Nov. 8, 1923, Adolf Hitler jumped onto a table at a Munich pub called the Burgerbraukeller and proclaimed the Weimar government overthrown. He and his supporters marched into the street and were promptly arrested. FTPE:

(10) What name is commonly given to this small, somewhat comic revolt?

Answer: **the Beer Hall Putsch**

(10) This World War I hero, whose tactics greatly helped Hindenburg at Tannenberg and Masurian Lakes, assisted Hitler.

Answer: **General Erich von Ludendorff**

(10) The event Hitler interrupted was a rally for Gustav von Kahr, president of this German state where the putsch took place. Von Kahr wisely promised his support, a promise he kept till the first phone he could get to.

Answer: **Bavaria**

5. Some cultures have all the luck. 5-10-20-30, give these terms about multiple marriages from definitions.

a) The state or practice of having more than one mate at the same time.

Answer: **Polygamy**

b) The practice of one man having multiple wives.

Answer: **Polygyny**

c) The practice of one woman having multiple husbands.

Answer: **Polyandry**

d) Analogous to levirate marriages, these usually involve a widower marrying his late wife's sister, but can also be a man marrying his living wife's sister if wife #1 proves to be barren.

Answer: **sororate marriages**

6. Name the Isabel Allende [*aye-YEN-day*] novel from a plot synopsis, FTPE.

FTP: This is the first of Allende's novels to focus solely on North American characters. Greg Reeves is the son of an itinerant preacher and grows up in an LA barrio. Allende chronicles his journey to Vietnam and two disastrous marriages.

Answer: **The Infinite Plan**

FTP: The title character is the result of her mother's liaison with a man dying of snakebite. From there, she is farmed out as a maid and makes friends with a stunningly beautiful transsexual, a whorehouse madam, and a guerrilla leader.

Answer: **Eva Luna**

FTP: Name Allende's first novel that chronicles the trials and tribulations of Esteban Trueba and Clara the Clairvoyant and their motley collection of relatives.

Answer: **House of the Spirits**

7. 5-10-20-30, answer some quick questions about an American president.

a) He represented the United States at Versailles and idealistically sought to create a new world order after World War I that did not include war as a tool of foreign policy.

Answer: **Woodrow Wilson**

b) President Wilson enumerated this list of goals he wanted included in any peace treaty. The final goal called for the creation of a League of Nations.

Answer: **Fourteen Points**

c) Before he was president of the United States, he was a professor and president at this Ivy League school.

Answer: **Princeton University**

d) A blot on Wilson's historical legacy is the act of this Attorney General, who oversaw a series of civil liberty-defying raids on Communists, Socialists, labor leaders, and pacifists. His protege was a young J. Edgar Hoover.

Answer: **A. Mitchell Palmer**

8. FTPE answer the following about a certain class of hydrocarbon:

a) When exhibiting one triple bond, these aliphatic hydrocarbons, with the general formula  $[C_{sub N}, H_{sub 2N-2}]$

Answer: **alkynes**

b) This is the common name for ethyne, the simplest alkyne, a volatile compound used in illuminants and cutting torches.

Answer: **acetylene**

c) Like alkanes and alkenes, alkynes belong to this class of organic compounds whose carbon atoms are joined together in straight or branched open chains rather than in rings.

Answer: **aliphatic compounds**

9. Name these psychological disorders, FTPE.

FTP: A mental disorder occurring within four weeks following a traumatic event and which is characterized by dissociative symptoms, such as: avoidance, re-experiencing, and marked anxiety or arousal.

Answer: **Acute Stress Disorder**

FTP: A disorder that is associated with the experience of a traumatic incident that is characterized by recurring symptoms of numbing, re-experiencing, and hyper-arousal following exposure to some traumatic stressor. It usually lasts longer and has a delayed onset.

Answer: **Post Traumatic Stress Disorder or PTSD**

FTP: Individuals are plagued by persistent, recurring thoughts that reflect exaggerated anxiety or fears. The thoughts may lead an individual to perform a ritual or routine to relieve the anxiety caused by the obsession.

Answer: **Obsessive Compulsive Disorder or OCD**

10. Everyone likes to laugh. Therefore, name the comedian from titles of stand up tours, 10-5.

FTP: I'm the One that I want

FFP: Notorious C.H.O

Answer: **Margaret Cho**

FTP: Dressed to Kill

FFP: Circle

Answer: **Eddie Izzard**

FTP: I'm Telling You for the Last Time

FFP: Comedian

Answer: **Jerry Seinfeld**

11. Time for some questions about Westward Expansion, FTPE.

FTP: Perhaps the most well known of the overland trails to the Far West, this trail led many settlers to the Willamette Valley between 1840 and 1848 and was representative of the hardships of overland travel.

Answer: **Oregon Trail**

FTP: Southwestern travelers more often than not used this trail to move westward from St. Louis, which led to the establishment of strong economic connections between the regions surrounding the endpoints of the trail.

Answer: **Santa Fe Trail**

FTP: After years of court battles, in 1835, federal agents forced the Cherokee to cede their land and move west. Between 2,000 and 4,000 of the 16,000 migrating Cherokees died along this trail, which began at... Chattanooga.

Answer: **Trail of Tears**

12. Just when you haven't had enough tea and crumpets, it's time to name the Jane Austen novel from characters 10-5:

- a) 10: Lucy Steele, Sophia Grey, Mrs. Jennings  
5: John Willoughby, Colonel Brandon, Marianne Dashwood

Answer: **Sense and Sensibility**

- b) 10: Rushworth, Yates, Mrs. Norris  
5: Fanny Price, Edmund Bertram, Henry Crawford

Answer: **Mansfield Park**

- c) 10: Robert Martin, Miss Bates, Harriet Smith  
5: Mr. Knightley, Jane Fairfax, Frank Churchill

Answer: **Emma**

13. Name the dinosaur family from members, FTPE.

FTP: Albertosaurus, Oviraptor, Tyrannosaurus Rex

Answer: **Theropods**

FTP: Brachiosaurus, Diplodocus, and Camarasaurus

Answer: **Sauropods**

FTP: Iguanodon, Maiasaurus, Edmontosaurus

Answer: **Ornithopods**

14. FTPE identify the programming language:

(10) Developed mainly by Bill Joy and James Gosling at Sun Microsystems, using features from C++ and Smalltalk, this object-oriented language was widely hyped for its ability to create platform-independent applications. It is currently rivaled by Microsoft's .net (dot-net) platform.

Answer: **Java**

(10) Edsger Dijkstra (DIKS-tra) said: "'The use of [this language] cripples the mind; its teaching should, therefore, be regarded as a criminal offense.'" Created in 1957, it is still used in commercial data processing. Every program must contain the four identification, environment, data, and procedure divisions.

Answer: **COBOL**

(10) Most notably used in the construction of Google, this language was developed in the early 1990s in the Netherlands. Among its features is the extensive significance of whitespace, and it is often used as a scripting alternative to Perl.

Answer: **Python**

15. Three good reasons not to golf on a stormy day: Name these types of lightning FTPE.

(10) It is a crooked or branched lightning stroke. Many branches form off of the main channel because the branches go in the direction where the electric field is greatest.

Answer: **Forked Lightning**

(10) Capable of making clouds miles away appear visible, it happens when the observer is close enough to hear the thunder. The flash occurs within the cloud and a lightning channel cannot be distinguished.

Answer: **Sheet Lightning**

(10) Some scientists still do not believe this rare form actually exists. Glowing orbs develop from extremely violent thunderstorms. Usually another form of lightning flashes right before it appears. It can last from a second to several minutes.

Answer: **Ball Lightning**

16. Name these early French dynasties, FTPE.

FTP: This was the dynasty of kings that ruled the Franks, a Germanic tribe, from 481 to 751. The first ruler was Clovis I, who expanded the kingdom to include most of what is now France and part of Germany.

Answer: **Merovingian**

FTP: This dynasty was founded in the 7th century. The family was at its height under Charlemagne, who was crowned emperor in 800. Charlemagne successfully conquered all of Gaul and parts of Germany and Italy.

Answer: **Carolingian**

FTP: This royal house of France ruled continuously from 987 to 1328. Hugh the Great's son, also named Hugh, became king. His descendants remained on the throne until the death of Charles IV, when it passed to the house of Valois.

Answer: **Capetian** (accept Capet)

17. Name these early Christian church heresies, FTPE.

FTP: This Christian heresy from 320s, held that the divine, being more powerful, pushed out and superceded the human in Christ. It was the form of Christianity first adopted by Goths, Vandals, and Alans.

Answer: **Arianism**

FTP: This heresy from the 430's held that the human and divine in Christ were inseparable and totally intermingled. The idea was One Nature in One Person.

Answer: **Monophysitism**

FTP: This heresy was proposed in response to Monophysitism, by Heraclius, who said Christ was of two natures, and did not have a single energy, but possessed a single will. Pope John IV condemned it in 641.

Answer: **Monothelism**

18. Name these characters from Pearl S. Buck's classic novel, The Good Earth, FTPE.

FTP: He begins life as a poor farmer. He maintains a fierce attachment to the land, but he is also extremely ambitious and envies the material success of the wealthy Hwangs.

Answer: **Wang Lung**

FTP: She was sold to the wealthy Hwang family as a slave when she was ten years old. After she marries Wang Lung, she achieves a respectable position as the mother of three sons. She is a strong, hardworking, resourceful woman and a devoted wife.

Answer: **O-Lan**

FTP: A beautiful, delicate prostitute with bound feet and a terrible temper, she becomes Wang Lung's concubine.

Answer: **Lotus**

19. During the summer, Liz Phair released her fourth, self-titled album to fairly decent reviews. However, can you name songs from the album from lyrics?

FTP: You think that I go home at night, take off my clothes, turn out the lights. But I burn letters that I write to you, to make you love me.

Answer: **Extraordinary**

FTP: I want to play Xbox on your floor. Say hi to your roommate who's next door. You don't have a dime, but I don't mind. Who gives a damn?

Answer: **Rock Me**

FTP: I scored again last night. I said, "Thanks for the drinks. Nice party." Then I turned out the light. I've got timing and attitude. That can get to the baddest dude.

Answer: **My Bionic Eyes**

20. Name these Islamic terms, FTPE.

FTP: This is the sect that felt Ali should have been first Caliph, and that only his descendants are fit to rule Islamic state.

Answer: **Shi'a or Shi'ite**

FTP: This is a Muslim prayer leader. In Shi'ism it refers to the male descendants of Ali, the only ones fit to rule.

Answer: **Imam**

FTP: This is the name for emigrants with Muhammad to Mecca in 622.

Answer: **muhajirun**



21. Remember reading those Laura Ingalls Wilder books when you were a kid? No? Too bad. From a short synopsis, name the particular book of the series, FTPE.

FTP: The first book of the series takes place in 1871 Wisconsin. Laura's family lives in a log cabin and must grow and hunt for their own food.

Answer: **Little House in the Big Woods**

FTP: Pa travels to South Dakota to work on the Railroad and build a new town, and the family takes their first train trip to join him. By this time, Mary is blind, and Laura is thirteen.

Answer: **By the Shores of Silver Lake**

FTP: Fifteen year old Laura becomes a teacher and is saved from homesickness because Almanzo Wilder takes her home every weekend. Their friendship turns to love.

Answer: **These Happy Golden Years**

22. FTPE, name these types of volcanoes.

FTP: A broad, gently sloping volcano built from fluid basaltic lavas.

Answer: **Shield Volcano**

FTP: A rather small volcano built primarily of pyroclastics ejected from a single vent.

Answer: **Cinder Cone**

FTP: A volcano composed of both lava flows and pyroclastic material.

Answer: **Composite or Stratovolcano**

23. 1066 was a pretty important year for the English. FTPE, answer these questions about the Norman Conquest.

FTP: Harold II had more problems than a cranky Norman who wanted his throne. Before Hastings, he had to jet up to Stamford Bridge to fight his own brother. Name this ill-mannered sibling.

Answer: **Tostig**

FTP: Tostig was in cahoots with the King of Norway. This man was a famed fighter and had even been a warrior in Byzantium.

Answer: **Harold Hardraada**

FTP: Of course, everyone knew something was up, just by looking at the sky. What was passing overhead in 1066?

Answer: **Halley's Comet**

24.

Name the painter from work, FTPE.

FTP: The Third Class Carriage

Answer: **Daumier**

FTP: The Gleaners

Answer: **Millet**

FTP: Portraits in a New Orleans Cotton Office

Answer: **Edgar Degas**

25. For the stated number of points give the following terms from fluid mechanics:

(5) This is the property of a fluid that resists shear deformation.

Answer: **Viscosity**

(10) This term describes flows where the Reynolds number is greater than 4000.

Answer: **Turbulent**

(15) This term refers to fluids whose viscosity decreases with the length of time for which a shear force is applied.

Answer: **Thixotropic**