

1. It begins on the protagonist's wedding day, when he is preparing to go and retrieve his bride, O-Lan. Prosperity follows their marriage, they acquire more land, but then a famine strikes, driving Wang Lung and his family into poverty. However, their fortunes improve, and they return to their land and begin to amass great wealth. FTP name this novel by Pearl S. Buck.

Answer: **The Good Earth**

2. Science doesn't fully understand the maintenance of this mechanism, essential to plants that exhibit photoperiodism. It is endogenous, meaning it can be maintained in the absence of external cues, although external cues do make it more accurate and serve to reset it. FTP give the term for an internal clock that governs biological activity.

Answer: **circadian rhythm(s)**

3. Standing about five meters high for most of its length, some of its original sections were built from turf. Beginning at Wallsend-on-Tyne and running west, on its south side is the Vallum, a deep ditch used to control access to its milecastles and parapets. Meant to keep out the northern barbarians, and later the Picts and Scots, FTP this is what famous barrier in England built at the order of a Roman emperor?

Answer: **Hadrian's Wall**

4. The video for this song was directed by Mark Romanek and shot at the artist's home and museum. Although it was nominated for six MTV Video Music Awards, it only won for Best Cinematography In A Video. FTP, identify this cover of a Nine Inch Nails song by the late Johnny Cash.

Answer: **"Hurt"**

5. Pencil and paper may help. For ten points, and within 10 seconds, find the x-coordinate of the vertex of the parabola with equation $y = 2x^2 - 5x + 6$.

Answer: **5/4**

6. She was the wife of Tyndareus, by whom she had a son and daughter, but her children by Zeus are more famous. One of her daughters was the most beautiful woman in the world and her sons were the Dioscuri. FTP name this queen of Sparta whom Zeus seduced in the form of a swan.

Answer: **Leda**

7. It names both a novel by historian Shelby Foote and a poem by Melville, in which the "swallows fly low" over the eponymous battlefield. After leading his troops from Corinth, Mississippi, Confederate General Albert Johnston attacked somewhat oblivious Union forces on the morning of April 6, 1862, telling his fellow officers "Tonight we will water our horses in Tennessee." Site of the sunken road and the hornet's nest, FTP name this Civil War battle called Pittsburg Landing by Confederates.

Answer: **Shiloh**

8. A Broadway musical based on it solved the problem of its unknown conclusion by allowing the audience to choose from a series of possible endings. After the title character disappears, Neville Landless is arrested for his murder, but is released when no body is found. Landless is in love with the title character's ex-fiancée, Rosa Budd, but then so is pretty much every man in the story. FTP name this novel, left unfinished and without enough notes to solve it upon the death of its author, Charles Dickens.

Answer: **The Mystery of Edwin Drood**

9. Some elements in this group are named after Enrico Fermi, Dmitri Mendeleev, Albert Einstein and Alfred Nobel. Many of them do not occur naturally in nature and have very short half-lives. FTP, identify this group of elements that make up elements 89 to 102 on the periodic table which have similar characteristics to lanthanides.

Answer: **actinide series (or just actinides; prompt on transuranic elements)**

10. Seven small human figures, mostly in black, stand before a body of water on which the shadows of buildings can be seen. The upper half of the canvas is dominated by a blue sky mostly obscured by clouds. At the right a large, mastless ship is docked in front of the title city. Painted in 1660, FTP, this describes what famous painting of the home of the artist Jan Vermeer?

Answer: View of Delft

11. First, the daimyo were ordered to return their feudal fiefs back to the emperor. Compulsory education was instituted and followed Western models. Shinto experienced a sharp revival and worship of the emperor was encouraged again. Beginning around 1868, FTP this describes what period of Japanese history, in which modernization began in earnest, named for the emperor who took over after the end of the Tokugawa dynasty.

Answer: Meiji Restoration

12. Born in 1875, she was the last of 17 children and the only one born after the end of slavery in South Carolina. In the late 1930s, after successfully establishing a school for African-American children in Florida, she became special advisor to Franklin Roosevelt on minority affairs. FTP name this educator, the founder of the Daytona Normal and Industrial Institute for Negro Girls, which later became a four-year college after merging with the Cookman Institute.

Answer: Mary McLeod Bethune

13. The magnetic analog of this effect is called magnetostriction and occurs when ferromagnetic materials respond to magnetic fields. Barium titanate, lead zirconate, and lead titanate are ceramic materials which exhibit the effect, and thus they are used in ultrasonic transducers and microphones. Rochelle salts and quartz both exhibit this as well. FTP what is this effect in which a crystal produces a charge when compressed.

Answer: piezoelectricity (acc. piezoelectric effect)

14. In the work that introduced him, this disillusioned former high school sports star leaves his wife and family in hopes of finding meaning in his life. Three sequels followed – [BLANK] *Redux*, [BLANK] *Is Rich*, and [BLANK] *At Rest*. FTP name this most famous creation of John Updike.

Answer: Harry “**Rabbit**” Angstrom [accept Angstrom; prompt on just Harry]

15. Jim Jr. practices medicine, but the rest of the family has followed in the footsteps of Jim Sr., a scout for the San Francisco 49ers and former college coach. Jay was the starting quarterback for the Orlando Predators in 2003 before a week 4 injury sent him to the bench, where he had previously won two Arena League championships as a coach before serving as an assistant with his brother in the NFL. FTP what is the last name shared by Jon, who won Super Bowl 37 as head coach of the Tampa Bay Buccaneers?

Answer: **Gruden**

16. The only elected office this man held was as an Indiana state representative from Terre Haute in 1885. During that time he was already Grand Secretary of the Brotherhood of Railway Firemen, and eight years later he founded the American Railway Union in Chicago. Jailed for speaking out against American participation in World War I, in 1920 the Socialist Party had buttons made reading “Convict No. 9653 for President.” FTP name this firebrand who ran for president five times in the early 1900s.

Answer: Eugene V. Debs

17. Seen through a magnifying lens, it appears to be a mass of silky fibers of glass, full of small cells separated by larger pores. It forms when lava emerges to the surface, the pressure on the molten rock is relieved and superheated steam is given off, which puffs up the rock. Often used as an abrasive, FTP, name this rock which can float on the water.

A: pumice

18. Among the works of this British author are “History of Spiritualism”, a series of Napoleonic tales centering on the character of Brigadier Gerard, the fantasy “The Lost World”, and some historical novels—the most notable about Saxon archers of the 14th century. After writing “White Company”, this man attempted to kill off his famous detective character, but—FTP—name this author who was never allowed to discontinue writing about Sherlock Holmes.

Answer: Sir Arthur Conan **Doyle**

19. In 1829 this composer made the first of his nine trips to England, where he was a favorite. In London in 1832 he first performed his *Capriccio Brilliant* and the first six of his *Songs without Words*. He was also an influential conductor, and his revival of Bach's *St. Matthew Passion* helped pull that composer out of obscurity. FTP name this composer best known for his overture to *A Midsummer Night's Dream* and his *Italian Symphony*.

Answer: Felix Mendelssohn

20. Upon reaching its summit in 1893, Katherine Lee Bates was so inspired by the view that she penned "America the Beautiful." Discovered by its namesake in 1806, his prediction that it would never be climbed was proved wrong just 14 years later. FTP name this mountain in Colorado named for a young lieutenant named Zebulon.

Answer: Pike's Peak

21. Its two buildings stand at 800 South Halsted Street, and it is now a museum run by the University of Illinois at Chicago. In 1889 Ellen Gates Starr and its most famous occupant moved in and used its space for the first public playground, gymnasium and nursery school in the area. Attracting immigrants, suffragettes and labor organizers, among others, FTP name this social settlement which earned the 1931 Nobel Peace Prize for Jane Addams.

Answer: Hull House

22. This dance, originally performed by men as a victory dance, is now more popularly performed by women. With the right arm far out from the body, the dancer jigs and skips about to the tune of a bagpipe. FTP, name this national dance of Scotland.

Answer: the **Highland Fling**

23. Born in Haiti of partial African heritage, he moved first to France and came to the U.S. in 1803. He conducted the first study of bird migration habits in America, banding a species called the Eastern Phebe. While running a dry goods store in Kentucky, he began amassing a portfolio detailing the various species in his area. FTP who is this influential artist/naturalist, author of *Birds of America*?

Answer: John James Audubon

1. Tell who wrote the following plays FTPE.

A. The Birthday Party

Answer: Harold Pinter

B. Miss Julie

Answer: August Strindberg

C. Our Town

Answer: Thornton Wilder

2. Answer the following about St. Augustine of Hippo FTPE:

A. In what present-day country would Hippo be found?

A: Algeria

B. What is the name of Augustine's spiritual autobiography that details his early sinful life and conversion to Christianity?

A: Confessions

C. What is the name of Augustine's theological interpretation of history including the decline of Rome?

A: (The) City of God

3. FTPE answer the following about conflicts between South Carolina and the U.S. government in the 1830's:

(a) This is the name for the doctrine espoused by South Carolinians that the state could decide not to accept Federal laws.

Answer: **nullification**

(b) The dominant figure behind nullification was this Vice President, who chose to run for the Senate instead of re-election.

Answer: John C. **Calhoun**

(c) South Carolinian Robert Hayne's 1830 denunciation of the 1828 Tariff of Abominations prompted Daniel Webster's memorable reply, a lengthy speech that ended with this memorable 9-word quote.

Answer: **"Liberty and Union, now and forever, one and inseparable!"**

4. Can't we all just get along? Answer the following from biology FTPE:

(a) This term is applied to two species that live together in close contact during a significant portion of their lives.

Answer: **symbiosis** (or symbiotic)

(b) One of three types of symbiosis, it describes a relationship where one species benefits from the relationship and the other is neither helped nor harmed. A simple example is birds and trees.

Answer: **commensalism**

(c) Tapeworms and humans exhibit this form of symbiosis, where one species benefits at the other's expense.

Answer: **parasitism** (accept forms)

5. Much has been made of the starting pitchers in this year's baseball playoffs, but what about the guys on the other end of that pitch? FTPE or 30 for all 5, given a catcher who has appeared in the 2003 playoffs, name the team.

[READER: accept either name or city unless otherwise noted in bold below.]

(a) Javier Lopez

Answer: Atlanta **Braves**

(b) Jorge [HOR-hay] Posada

Answer: New York **Yankees**

(c) Jason Varitek

Answer: Boston **Red Sox**

(d) Benito Santiago

Answer: San Francisco **Giants**

(e) A.J. Pierzynski

Answer: Minnesota **Twins**

6. Answer the following about a certain French guy FTPE.

A. What 17th century playwright wrote *The Bourgeois Gentleman* and *The Imaginary Invalid*?

Answer: Moliere (acc. Jean Baptiste Poquelin)

B. What Moliere play's title character is a religious hypocrite out to scam the family of Orgon?

Answer: Tartuffe

C. What Moliere play's title character is Alceste, who comes to hate the hypocrisy of society, though not necessarily all men, as the title suggests?

Answer: The Misanthrope

7. Name these groups who mixed it up with the Romans FTPE.

A. Under Genseric these people formed a vast North African empire, and in 455 CE they sacked Rome, probably doing lots of damage to businesses and homes.

Answer: Vandals

B. These guys defeated Roman armies at Adrianople in 378 CE, and under Alaric I they also sacked Rome in 410.

Answer: Visigoths

C. Led by Theodoric, these people forged an alliance with Eastern Roman Emperor Zeno in 471 CE, and of course they too sacked Rome in 488, after its fall.

Answer: Ostrogoths

8. Identify the class of organic compounds from its general formula FTPE.

A. R-OH

Answer: alcohols

B. R-NH₂

Answer: amines

C. R-C-O-R' (read R, C, double bond O, R prime)

Answer: esters

9. Given a Presidential election year, name the losing major party candidate FSPE and their running mate for 5 more:

(a) 1984, losing to Ronald Reagan's reelection bid

Answer: Walter **Mondale**, Geraldine **Ferraro**

(b) 1996, losing to Bill Clinton's reelection bid

Answer: Robert **Dole**, Jack Kemp

(c) 1948, losing to Harry Truman's... well, actually, not really reelection since Truman assumed the office on FDR's death.

Answer: Thomas E. **Dewey**, Earl **Warren**

10. Answer the following about an artist FTPE.

10) He studied law and economics at the University of Moscow from 1886 to 1892, but eventually moved to Germany to start a new career. Name this artist who is often considered the father of abstract art because of works such as *Autumn in Bavaria*, *Contrasting Sounds*, and *Tempered Elan*.

Answer: Wassily **Kandinsky**

10) In 1911, Wassily Kandinsky co-founded this German expressionist group of artists along with Franz Marc.

Answer: **Blue Rider** Group -or- **Der Blaue Reiter**

10) He began teaching at this art school in 1922. It focused on several principles, such as that crafts were on equal footing with the arts and that a guild system should be used to teach artists.

Answer: **Bauhaus**

11. Name the modern philosophers who wrote the following FTPE. And yes, they're all in that Monty Python song.

A. *Tractatus Logico-Philosophicus*

Answer: Ludwig Wittgenstein

B. *The World as Will and Idea*

Answer: Arthur Schopenhauer

C. *Thus Spake Zarathustra*

Answer: Friedrich Nietzsche

12. Given a recent album release, name the artist FTPE. If you need another clue, you'll get five.

10) *Heavier Things*

5) *Heavier Things* is the follow up to his album *No Room For Squares*, which contained the songs "No Such Thing" and "Your Body Is A Wonderland."

Answer: **John Mayer**

10) *Grand Champ*

5) You may know this hardcore rap star's hit single "Party Up (Up in Here)" or for his film roles in *Romeo Must Die*, *Exit Wounds*, and *Cradle 2 the Grave*.

Answer: **DMX**

10) *Life For Rent*

5) She rose to fame after Eminem sampled "Thank You" in his song "Stan."

Answer: **Dido**

13. Answer the following from fluid dynamics FTPE.

(a) This quantity, measured in poise, is a measure of the resistance of a fluid to flow.

Answer: **viscosity**

(b) This equation named for a Swiss mathematician models the pressure, speed and height of a steady-flowing, non-viscous, incompressible fluid.

Answer: **Bernoulli's Equation**

(c) This more set of general partial differentials equations models all flow of incompressible fluids, and as of yet has not been analytically solved.

Answer: **Navier-Stokes Equations**

14. Name these writers of the Harlem Renaissance FTPE.

A. He collaborated with Zora Neale Hurston on the play "Mule Bone," but is better known for poems like "The Negro Speaks of Rivers."

Answer: **Langston Hughes**

B. Though an accomplished poet, this author is best known for the novel "Cane."

Answer: **Jean Toomer**

C. He is best known for "The Autobiography of an Ex-Colored Man" and "God's Trombones."

Answer: **James Weldon Johnson**

15. Provide the capitals of these Asian nations FFPE with a five-point bonus for getting them all.

A. Vietnam

Answer: **Hanoi**

B. Laos

Answer: **Vientiane**

C. North Korea

Answer: **Pyongyang**

D. Cambodia

Answer: **Pnomh Penh**

E. Thailand

Answer: **Bangkok**

16. Pencils and paper ready, find the first derivative with respect to x of each of the following FTPE:

A. $\sin(\cos 2x)$ [read: sine of the cosine of 2x]

Answer: $-2 (\sin 2x) \cos(\cos 2x)$ [read: negative 2 sine of 2x times the cosine of the cosine of 2x]

B. $\cosh e^x$ [read: Hyperbolic cosine of e to the x power]

Answer: $e^x \sinh e^x$ [read: e to the x power times the hyperbolic sine of e to the x power]

C. $\tan_x x$ [read: tangent squared of x]

Answer: $2 \tan x \sec_x x$ [read: 2 tangent x secant squared x]

17. Answer the following about the Treaty of Brest-Litovsk FTPE.

10) It was signed in Brest-Litovsk, now called just Brest, in what European country?

Answer: **Belarus**

10) As part of the treaty, this country relinquished any control of lands including Poland, Ukraine, and Finland.

Answer: **Russia**

10) This Russian foreign relations minister announced that Russia what withdraw from treaty negotiations because of German demands to succeed territories.

Answer: **Leon Trotsky**

18. Given a short story name the author, FTP.

"Occurrence at Owl Creek Bridge"

Answer: **Ambrose Bierce**

"Bride comes to Yellow Sky"

Answer: **Stephen Crane**

"The Man that Corrupted Hadleyburg"

Answer: **Mark Twain**

19. Answer the following biochemical questions FTPE:

a. This chemical plays an important role in addiction, by affecting brain processes that control movement, emotional response, and ability to experience pleasure and pain.

Answer: **Dopamine**

b. Found in both central and peripheral, this chemical is involved with thought, learning, and memory, and is thought to be linked with Alzheimer's disease.

Answer: **Acetylcholine**

c. Otto Loewi called acetylcholine "Vagusstoff" when he discovered it. It was the first known chemical of what type?

Answer: **neurotransmitters**

20. Name these musical terms from brief description FTPE.

A technically brilliant sometimes improvised solo passage toward the close of a concerto or aria.

Answer: **Cadenza**

One or more notes or tones preceding the first downbeat of a musical phrase.

Answer: **Anacrusis**

A musical chord sequence moving to a harmonic close or point of rest and giving the sense of harmonic completion.

Answer: **Cadence**

21. Name these scandals that occurred during U.S. Grant's administration FTPE.

A. Oakes Ames bribed dozens of members of congress to keep them from stopping him and his cohorts from skimming millions from the building of the Union Pacific railroad.

Answer: **Credit Mobilier**

B. Grant's personal secretary accepted bribes to help a group of distillers avoid paying excise taxes on the namesake libation.

Answer: **Whiskey Ring**

C. Jim Fisk and Jay Gould tried to corner the gold market in the scandal named for the day when speculative trading in gold bankrupted many legitimate businessmen.

Answer: **Black Friday**

22. 30-20-10 Name this athlete.

A. (30 pts.) He served as a volunteer assistant coach to a Native American school basketball team in the fall of 2000 after a stint as an assistant with the Clippers.

B. (20 pts.) One of the NBA's 50 Greatest Players, his record for years and games played has only been surpassed by another center, Robert Parrish.

C. (10 pts.) His greatest record is the 38,387 points he scored, many on his patented sky hook.

Answer: **Kareem Abdul Jabbar**