

1. (F/CS) Her real name was Victorine Meurent. One critic described her as “this yellow-bellied Odalisque, this vile model picked up who knows where.” While critics such as Phyllis Floyd cite clues to the contrary, she is widely assumed to be a prostitute because of the black cord around her neck and the defiant way she looks the viewer in the eye. To her left is a servant holding a bouquet of flowers and on the edge of the bed is a black cat. This painting was given to the Luxembourg in 1890 and transferred to the Louvre in 1908, a far cry from the outcry it provoked at the 1865 Salon. For ten points name this nude painting by Edouard Manet.

Answer: Olympia [Note: Do not accept “Luncheon on the Grass.” Meurent was also the model for that, but the question is worded so as to exclude it from the get-go.]

2. (MR) The Trouton-Noble experiment is considered an analog to it in electrostatics, though its sensitivity is questionable, unlike the Trouton-Rankine experiment. It utilized a device that would send white light through a semi-silvered mirror in order to split the light into two beams traveling perpendicular to one another on a rotating turntable. FTP identify this 1887 experiment, the namesake of two American physicists, which used the interferometer to disprove the existence of luminiferous aether.

Answer: Michelson-Morley experiment

3. From his first recorded appearance in the Great Dionysia, it took 15 years before his first victory there; it was another twelve years before the premiere of his earliest extant work, *The Persians*. Wounded at the battle of Marathon, he died in Sicily in 455 BC. Remembered for introducing the second actor to Greek drama, FTP name this tragedian whose works included *Seven Against Thebes* and the *Orestia*.

Answer: Aeschylus

4. He wrote two sets of memoirs, *As it Happened* and *Twilight of Empire*, but only a few biographies have been written on him, perhaps due to what the *Reader's Guide to British History* calls the “lack of major controversies in his life.” All this despite his administration's establishment of the National Health Service, an atomic bomb program and the decolonization of Ceylon and India. Voted, in an Ipsos MORI poll, the most effective British peacetime prime minister, FTP name this Labour politician who succeeded -- and preceded -- Winston Churchill in that post.

Answer: Sir Clement Richard Attlee, 1st Earl Attlee

5. He held the same teaching position for 37 years, propounding his “four-field” approach which incorporated human evolution, archaeology, language, and culture. On a geological expedition to Baffin Island, he became interested in the customs and practices of the Inuit people that lived there and began his study of human cultures. An outspoken opponent of cultural evolution, he supported his claims with examples gleaned from his study of the Kwakiutl (“*kwa-key-you-tle*”) Indians. FTP, name the “Father of American Anthropology.”

Answer: Franz Boas

6. (CS) Konrad Block and Feodor Lynen shared the 1964 Nobel Prize in Physiology and Medicine for their work on this compound, formula C-27 H-46 O, which was discovered in 1812. It is found in gallstones, and therefore was named from the Greek for “bile-solid”. A component of all cell membranes, it is converted from acetic acid in a process involving 36 distinct chemical transformations. FTP name this metabolic precursor of such vital compounds as vitamin D, cortisone, and sex hormones, which in high levels contributes to heart disease.

Answer: cholesterol

7. Founded in Batavia, New York, it grew out of a series of local mass meetings but was greatly strengthened by political organizers like Thurlow Weed, who sought to limit Martin Van Buren's political power in the state. By the end of 1832, it had elected twenty-five congressmen and a Vermont governor, William Palmer, and its presidential candidate William Wirt managed to carry Vermont. For ten points, name this party remembered for holding, in Baltimore, the first party convention in history.

Answer: Anti-Masonic Party

8. The only settlements near this lake are the Dene community Délj̄ne ("DE-le-nay"), formerly known as Fort Franklin, and a mining community now called Echo Bay but originally called Port Radium, from which material was extracted for the Manhattan project in the 1940s. It is drained by its namesake river, which flows into the Mackenzie. There are few trees beyond its northern shore, as it straddles the Arctic Circle, making it the most northerly of the world's 25 largest lakes. For ten points, name the largest lake wholly in Canada and the eighth largest in the world.

Answer: Great Bear Lake (or Grand lac de l'Ours) (accept Sahtu)

9. One is a tortured intellectual who cannot accept the woman he loves. Another sheds his cassock and seeks to make amends between the rivalries of those he loves. The third, a man governed by impulse and passion, is accused of murdering his father. Amid the many facets of their lives are philosophical treatises, theological questions and the famous Legend of the Grand Inquisitor. Centering around Dimitri, Alyosha, and Ivan, FTP name this lengthy novel revolving around a patricide, and written by Fyodor Dostoevsky.

Answer: The Brothers Karamazov [or Bratya Karamazovi]

10. Before their first Top Ten hit, they already had such a following that they'd released a collection of B-sides and rarities, *Dead Letter Office*. Their 1982 EP *Chronic Town* didn't include the two songs from their first single, "Radio Free Europe" and "Sitting Still," but both those songs were re-recorded for their 1983 debut LP, *Murmur*. They broke through to mainstream audiences with *Life's Rich Pageant* in 1986 and *Document* in 1987. With notable singles including "Man on the Moon," "The One I Love," and "Losing My Religion, FTP name this influential band fronted by Michael Stipe.

Answer: R.E.M.

11. The result of this theorem is derived algebraically by noting that the nonzero elements of the field  $Z_p$  ("Z mod p"), where p is prime, form a group under multiplication, and as such, the order of any element of this group must divide p-1, the order of the group. This leads to the formulation that for any integer b such that p does not divide b,  $b^{p-1} \equiv 1 \pmod{p}$  ("b to the p minus one is congruent to one mod p"). FTP, name this theorem, which is not so great as the "last theorem" of the same mathematician.

Answer: Fermat's Little Theorem

12. His lesser-known works include the blank verse plays *A Masque of Reason* and *A Masque of Mercy*. Born in San Francisco, this writer sold his farm in 1912 and took his wife and four young children to England. There he published his first collection, *A Boy's Will*. The next year he gained international reputation with *North of Boston*, which contained "The Death of the Hired Man" and "Home Burial." For ten points name this poet, author of "The Gift Outright" and "The Road Not Taken."

Answer: Robert Frost

13. It has an acronymous motto, *FERT*, that has not been definitively deciphered. It gave its name to a French *departement* on the Italian border, with its capital at Chambéry. One of its more valuable possessions was Sardinia, gained by Victor Amadeus II but renounced, in 1746, by Umberto II -- along with everything else the house had since acquired, including the Italian throne. For ten points, what is this European house, known for producing general Eugene?

Answer: La Casa dei Savoia (or the House of Savoy or Savoie)

14. Gryphons reside here, guarding hoards of gold. The inhabitants loved music, rejected meat and lived for 1,000 years. Leto and Eileithya ("eye-lye-THY-ya") may have come from here, as did the legendary healer Abaris. While some descriptions would place it around the Ural Mountains, some ancient maps showed it as a peninsula or island beyond France. FTP name this magical land, mentioned in the Epigoni, located so far north that the sun only sets once a year.

Answer: Hyperborea (or Hyperboria)

15. This carbon fixation pathway separates the light and dark reactions of the Calvin cycle temporally. Plants that close their stomata during the day to conserve moisture, opening them only at night to fix atmospheric carbon dioxide into organic acids. FTP, name this photosynthesis variant common to the pineapple and cactus that is often confused with C4 photosynthesis.

Answer: Crassulacean Acid Metabolism (can be pronounced "cam")

16. First employed in 1305 by King Henry I, it was first codified in 1679, and not, as Stephen Colbert recently claimed, in the Magna Carta. In the early 1870's, in nine counties in South Carolina, President Grant suspended it, invoking the exception for "cases of rebellion or invasion" stated with its guarantee in the First Article of the US Constitution. Latin for "you should have the body," FTP, name this writ which grants the imprisoned the right to challenge his or her imprisonment.

Answer: **habeas corpus**

17. He officially changed the spelling of his name when he left Germany and re-converted to Judaism in 1933. Born in Vienna in 1874, this composer spent his early career in Berlin where he wrote his *Harmonielehre*, or *Textbook on Harmony*, which to this day remains one of the most influential music-theory books. Associated with the German expressionism art movement, FTP name the composer of *Pierrot Lunaire*, innovator of the twelve tone technique.

Answer: Arnold **Schoenberg**

18. It retained French civil law, allowing the seigneurial system to persist until 1854. More offensive to American colonists were the provisions that purported to annex the Ohio Country, thwarting land speculators and leading to unpopular Roman Catholic settlement there. Often labeled one of the Intolerable Acts, for ten points, name the Act of Parliament which enfranchised Canadian Catholics.

Answer: **Quebec Act**

19. (F/CS) The three principal characters' names translate loosely as "Embracer," "Scot-free," and "Neighbor." It is estimated that only one-tenth of it survives, the longest episode being the "Banquet of Trimalchio." This work is a picaresque satire in which the narrator Eclopius and his two fellow adventurers observe the true behaviors of people. FTP name this Roman work attributed to Petronius, which compares human behavior to certain uncouth sylvan creatures.

Answer: The **Satyricon** or Satyricon Liber or Book of Satyrlike Adventures

20. This attraction is single-handedly responsible for the ability of noble gases to assume liquid form. It is caused by the uneven distribution of electrons about the atomic nuclei, which temporarily creates small, temporary charges that attract one another. Also referred to as instantaneous dipole-induced dipole interaction, FTP, what is this weakest type of intermolecular force?

Answer: **Van der Waals force** or **dispersion force** or **London force** or **London dispersion force**

21. He studied medicine and sometimes wrote under the pen name "The doctor without patience." Especially fond of vaudevilles and French farces, he produced some hilarious one-act plays; other works include the short story "The Lady with the Dog." FTP name this Russian writer, best known as a dramatist for works such as *The Seagull*, *Uncle Vanya* and *The Cherry Orchard*.

Answer: Anton **Chekhov**

22. Sanskrit for "sign" or "mark," this object is often worshipped with offerings of flowers, water, fruit, leaves, and rice. It traces its origins to a story in the Puranas, in begins <sup>when</sup> with Brahma and Vishnu are arguing over who is the greater. Usually located in the rear of a temple and often appearing with a *yoni*, FTP, what is this phallic structure, associated with the god Shiva?

Answer: **linga** (or **lingam**)

23. It was named after an English astronomer who, inspired by the work of Gustav Spörer, discovered it in 1893 through extensive research of past solar observations. Stretching from 1645 to 1715 CE, it is hypothesized to be at least partially responsible for a decrease in average global temperature that occurred at the same time. FTP, name this period marked by a dearth of sunspot activity, coinciding with the coldest part of Little Ice Age.

Answer: the **Maunder Minimum**

## Questions by Furman with Ray Anderson and your genial quizmaster

1. Remember when evil had its own empire and not just a lousy axis? In 1970, in addition to the Soviet Union, there were eight full members of the Council for Mutual Economic Assistance, or COMECON. Name any six FTPE.

Answer: (any six of) Albania, Bulgaria, Czechoslovakia, East Germany [or German Democratic Republic, or GDR], Hungary, Mongolia, Poland, Romania

2. Name these works of literature from their first lines for ten points each.

a) Happy families are all alike; every unhappy family is unhappy in its own way.

Answer: Anna Karenina

b) Whether I shall turn out to be the hero of my own life, or whether that station will be held by anybody else, these pages must show.

Answer: David Copperfield

c) If you really want to hear about it, the first thing you'll probably want to know is where I was born, and what my lousy childhood was like, and how my parents were occupied and all before they had me, and all that David Copperfield kind of crap, but I don't feel like going into it, if you want to know the truth.

Answer: The Catcher in the Rye

3. (RA) Give the namesake for each statement of an eponymous chemical law or principle, FTPE.

a. Atoms seek to maximize the number of unpaired electrons, thus increasing the total spin, and increasing atomic stability due to electrons residing in different orbitals.

Answer: Frederich Hund

b. Equal volumes of gases, at the same temperature and pressure, contain equal numbers of molecules of gas. The number of molecules in a gas is independent of the size of the molecule.

Answer: Amedeo Avogadro

c. The total pressure exerted by a gas is the sum of the partial pressures of the individual gas components.

Answer: John Dalton

4. (F/CS) FTPE, stuff about a composer:

a) Besides his own works, such as the Italian Symphony and Fingal's Cave Overture, this German Romantic composer rescued the music of J.S. Bach from obscurity with a famous revival of the St. Matthew Passion.

Answer: Felix Mendelssohn

b) Mendelssohn wrote an overture to this Shakespeare play at age 17; sixteen years later he added some incidental music for it that included his famous "Wedding March."

Answer: A Midsummer Night's Dream

c) Mendelssohn's Fifth Symphony makes use of this famous hymn, with lyrics by Martin Luther paraphrasing Psalm 46.

Answer: A Mighty Fortress is Our God

5.(F/CS) Name these Coen Brothers films from supporting players FTPE, or from summaries for 5:

a) 10: Randall "Tex" Cobb, Trey Wilson, Frances McDormand

5: When a childless couple of an ex-con and an ex-cop decide to help themselves to one of another family's quintuplets, their lives get more complicated than they anticipated. Starring Nicolas Cage and Holly Hunter.

Answer: Raising Arizona

b) 10: Tim Blake Nelson, Stephen Root, Charles Durning

5: Starring George Clooney, this film is Homer's epic poem "The Odyssey", set in the Deep South during the 1930's. In it, three escaped convicts search for hidden treasure while a relentless lawman pursues them.

Answer: O Brother Where Art Thou?

c) 10: This is undoubtedly the only film to include Bruce Campbell, Anna Nicole Smith, and Paul Newman.

5: Taglined as "A comedy of invention," it is about a naive business graduate installed as president of a manufacturing company as part of a stock scam.

Answer: The Hudsucker Proxy

6. (F/RA) Name these eponymous genetic conditions from clues FTPE.

a. It results from a third copy, or trisomy, of chromosome 21.

Answer: **Down's Syndrome**

b. First described in the 1940s by an Oklahoma endocrinologist, this disorder occurs in females who possess only one X chromosome. Symptoms include short stature, swelling of the hands and feet, broad chest, amenorrhea, and a generalized underdevelopment of female sexual characteristics.

Answer: (Bonnie-Ulrich-)**Turner's Syndrome**

c. It occurs in males where non-disjunction results in a XXY trisomy.

Answer: **Klinefelter's Syndrome**

7. Name these beastly plays FTPE:

a) In this Peter Shaffer play, an emotionally unstable boy goes mad and gouges out the eyes of all the racehorses in the stable where he works.

Answer: **Equus**

b) Edward Albee won his second Pulitzer for this play, in which one of the two couples discussing personal relationships happen to be human-sized lizards.

Answer: **Seascape**

c) The physically unattractive protagonist of this Eugene O'Neill play shovels coal on a ship. When a tourist derides him for being animal-like he is so devastated that he goes to a zoo and commits suicide in one of the animal cages.

Answer: The **Hairy Ape**

8. Give the division of Japanese history from the event that prompted its beginning, for ten points each.

a) Emperor Kammu moves the capital to Kyoto.

Answer: **Heian** period

b) Ashikaga Takauji defeats Emperor Go-Daigo and establishes a shogunate.

Answer: **Muromachi** period (prompt: **Ashikaga** period)

c) The Meiji Emperor dies and Crown Prince Yoshihito comes into power.

Answer: **Taishō** period

9. Name these works of Hegel from descriptions, for ten points each.

a) Hegel's first published work, its preface argues that philosophy should not rely on epistemology but should examine the processes of consciousness and knowing as they function.

Answer: **Phänomenologie des Geistes** (or The **Phenomenology of Spirit** or The **Phenomenology of Mind**)

b) Hegel's third work, it begins with a shortened version of his second. Its remainder traces the development of the *Geist* or spirit and the sprouting of natural philosophy.

Answer: **Encyclopädie der philosophischen Wissenschaften im Grundrisse** (or **Encyclopedia of the Philosophical Sciences**)

c) Hegel's fourth and last work, it lays out his views on the state, society and ethics, suggesting that each series of states tends to be more free than the last.

Answer: **Grundlinien der Philosophie des Rechts** (or **Elements of the Philosophy of Right**)

10. Given a description of a Millennium Problem issued by the Clay Institute, state the name of the problem FTPE.

a) The oldest of the Millennium Problems, it is a conjecture that all of the nontrivial solutions of a particular series have a real component of one-half.

Answer: The **Riemann Hypothesis**

b) The only Millennium Problem to have a proposed solution, it conjectures that every simply connected closed 3-manifold is homeomorphic to the 3-sphere.

Answer: The **Poincaré Conjecture** (The solution was proposed by Grigori Perelman.)

c) This Millennium Problem asks whether there exist polynomial time algorithms for problems that can be calculated in nondeterministic polynomial time—my money's on no.

Answer: **P versus NP**

11. Given the name of the first women ever to serve as governor, name the U.S. state for ten points each.

a) Martha Layne Collins, from 1983-1987

Answer: **Kentucky**

b) Nellie Tayloe Ross, from 1925-1927

Answer: **Wyoming**

c) Jeanne Shaheen from 1997-2003

Answer: **New Hampshire**

12. (RA) On a 5-10-20-30 basis, given a year and the winner(s) of the Nobel Prize in Physics, name the discovery, theory, or creation that won them the prize.

a. 1921 - Albert Einstein

Answer: **Photoelectric Effect**

b. 1935 – James Chadwick

Answer: Discovery of the **neutron**

c. 1939 – Ernest Orlando Lawrence

Answer: Invention and development of the **cyclotron**

d. 2001 – Eric Allin Cornell, Wolfgang Ketterle, and Carl Edwin Wieman

Answer: Producing or creating the **Bose-Einstein Condensate** state of matter

13. Name the ancient literary work from a short description FTPE:

a) Series of biographies by Plutarch in which he juxtaposes the life of a noted Roman with a Greek analogue.

Answer: **Parallel Lives**

b) Called the world's first true novel, it recounts the life and loves of the titular prince amidst the aristocrats of Japan.

Answer: **The Tale of Genji**

c) The narrative framework has to do with a peasant who is unjustly cheated out of his possessions by the serf of chief steward. The peasant takes his complaint to the steward, presenting his case so well that eventually he is granted justice. Name this anonymous Egyptian work.

Answer: The **Eloquent Peasant** (or The **Tale of the Peasant and the Workman** or The **Tale of the Eloquent Peasant** or The **Plea of the Eloquent Peasant**)

14. (CS) Before they rowed their canoes through the halls of skyscraper offices on *The Kids in the Hall*, French-Canadian fur trappers introduced several terms into the vocabulary of the mountain man. Name them from a brief definition FTPE

(a) The canoe-paddling hired boatmen, namesakes of a national park in Minnesota

Answer: **voyageurs**

(b) A ravine, with or without a stream; the term is best known from the dam across a grand one.

Answer: **coulee**

(c) A delicacy made from buffalo intestines, which shares its name with the popular blood sausages of Louisiana.

Answer: **boudin**

15. FTPE name these mountains, each of which is the highest in its respective range:

a) Pyrenees: Part of the Maladeta massif, the summit is guarded by a formation called the Bridge of Mohammed.

Answer: Mount **Aneto** (or Mont **Néthou**)

b) Caucasus: It's a stratovolcano that last erupted around 2,000 years ago, at which time it may have been known as the mountain to which Prometheus was chained.

Answer: Mount **Elbrus**

c) Andes: It features the prominent Polish glacier on the east side and a field of scree called the Canaleta.

Answer: Cerro **Aconcagua** (or Mount **Aconcagua**)

16. Identify the artist from the following descriptions. Ten points each.

a) This painter lived with Van Gogh and Somerset Maugham wrote about him in *The Moon and Sixpence*. He had a successful business and five kids but ditched it all to paint in Tahiti with his 13-year-old mistress.

Answer: Paul **Gauguin**

b) He was the childhood friend of Emile Zola and painted the “geometry of nature” thus foreshadowing cubism with his style. Name this painter of *The Card Players*.

Answer: Paul **Cezanne**

c) In the later half of his life this painter went into seclusion and painted a series of disturbing works known as the dark paintings, among which is *Saturn Devouring his Children*.

Answer: Francisco **Goya**

17. Name the following chemicals associated with cellular respiration FTPE.

a) A product of the Pyruvate Dehydrogenase Reaction, this molecule is fed into the Krebs cycle.

Answer: **acetyl-CoA**

b) This four-carbon organic acid is combined with acetyl-CoA to form citric acid.

Answer: **oxaloacetic acid** (also accept **oxaloacetate**)

c) This protein is one of several imbedded in the mitochondrial membrane that assists in oxidative phosphorylation. It is distinctive for its resistance to mutation, which makes it useful for studying evolutionary divergence.

Answer: **cytochrome c**

18. Name the following hostilities in the Thirty Years' War, for ten points each.

a) The count of Tilly routed Christian of Anhalt-Bernburg's Bohemian forces in this 1620 battle.

Answer: Battle of **Bílá Hora** (or Battle of **White Mountain**)

b) Field Marshal Pappenheim died in this 1632 battle, as did the victorious Swedish king Gustavus Adolphus.

Answer: Battle of **Lützen**

c) The Swedish army stagnated for the next two years, then lost well over 10,000 men in this battle, which largely ceded southern Germany.

Answer: (First) Battle of **Nördlingen**

19. Name these poetic works for ten points each.

a) This Emma Lazarus poem begins “Not like the brazen giant of Greek frame/With conquering limbs astride from land to land;/Here at our sea-washed, sunset gates shall stand./A mighty woman with a torch, whose flame/Is the imprisoned lightning, and her name Mother of Exiles.”

Answer: The **New Colossus**

b) In this controversial Sylvia Plath poem the speaker blames her father for leaving her and compares his behavior with that of the Nazis concerning the Jews.

Answer: **Daddy**

c) In a Tennyson poem these title objects “Rise in the heart and gather at the eyes” and are “Fresh as the first beam glittering on a sail.” Name this poem in which the speaker cannot but help remember “The days that are not more.”

Answer: **Tears Idle Tears**

20. FTPE, name the characters from the *Ramayana*, given a brief description.

a) Wife of Rama, her fidelity during her capture by Ravana was questioned; she was ultimately exiled from Ayodhya.

Answer: **Sita**

b) A sage, this man offered shelter to Sita after her banishment from Ayodhya. He is also the author of the *Ramayana*.

Answer: **Valmiki**

c) A nephew of Garuda, this eagle demi-god tried unsuccessfully to rescue Sita from Ravana immediately after her capture.

Answer: **Jatayu**

21. For ten points each identify the following writer or character from the following clues.

a) This Bostonian, author of *The Rise of Silas Lapham*, is known as the father of American realism.

Answer: William Dean **Howells**

b) This author founded the Provincetown Players and won the Pulitzer for *Allison's House*, a drama based on the life of Emily Dickinson. She made her own short story "A Jury of Her Peers" into the one act play "Trifles."

Answer: Susan **Glaspell**

c) Out of the many men in her life Teacake is her favorite. Name this protagonist from Zora Neale Hurston's *Their Eyes Were Watching God*.

Answer: **Janie Crawford**

22. Given the physical constant, report the metric units in which it is measured FTPE.

(Note to reader: accept variations that include the word "times" or that alter the order in which the units appear.)

a) Planck's constant,  $h$

Answer: **Joule seconds** or **electron volt seconds** or **Newton meter seconds**

b) The ideal gas constant,  $R$

Answer: **Joules per Kelvin** per **mole** (Joules may be replaced by one of the following: **liter atmospheres**, **cubic meter atmospheres**, **kilopascal liters**, **liters times millimeters Mercury**, **liters Torr**, or **liter millibars**)

c) Avogadro's number,  $N_A$  (*n sub a*)

Answer: **atoms per mole**