

He got his brothers to climb a mountain with a barometer and thus establish Torricelli's view that pressure would drop at higher altitudes. In correspondence he and Fermat tackled the inquiries of a puzzled gentleman gambler and worked out the basics of probability theory. Before an intense conversion led him to chuck science for theology, he also pointed out that pressure exerted on a fluid in a closed vessel is transmitted undiminished through the vessel at right angles to the container's surface. FTP name this prodigy, best known for his mathematical triangle. [Blaise Pascal]

2. The world's worst estate planning: This man wrote no will, executed his only son for rebellion, and decreed that only he could choose his successor. On his deathbed he wrote, "Give everything to..." and then his strength failed him. He summoned his daughter to help him finish it but died before she reached his bedside. Oops. The ensuing succession crisis didn't fully stabilize until 1762, 37 years after his death. FTP name this tsar, succeeded briefly by his widow, Catherine I. [Peter I or Peter the Great]

3. There are two varieties of it, classical and Christmas disease, plus there is another disorder often confused with it called von Willebrand's disease. Von Willebrand's differs in three ways: it causes prolonged external bleeding, seldom involves that bleeding into the joints which can cripple the sufferers of the other, and affects both sexes. FTP name this hereditary disease characterized by absence of clotting factors, common among descendants of Queen Victoria. [hemophilia]

4. He was born in Germany and died in Ecuador, but his legacy is uniquely American. He got the last laugh when one of his targets, "Boss" Tweed, was apprehended while avoiding trial in Spain because a local policeman confused one of his caricatures for a wanted poster. FTP name this illustrator for Frank Leslie's Illustrated Newspaper and Harper's Weekly, creator of the GOP elephant, the Democratic donkey, and the Tammany tiger. [Thomas Nast]

At the age of 19 this shoemaker's apprentice rebelled against the established church and began his wandering preaching. Condemning church formalism and ties to the state, he was often jailed and routinely beaten for refusing to doff his hat to anyone. In the late 17th century he traveled to Barbados, Jamaica, Holland, Germany, and the American colonies, sometimes with such followers as Robert Barclay and William Penn. FTP name the founder of the Society of Friends, or Quakers. [George Fox]

8. As this widower's only daughter was 10 years old at his inauguration, his sister Mary served as official White House hostess. In one of the odder episodes of his presidency, he tried to soothe tensions with his onetime mentor, Roscoe Conkling, by appointing him to the Supreme Court, but Conkling refused the nomination. Among the highlights of his administration were dedication of the Washington Monument, treaties with Nicaragua, Korea, and Hawaii, and the establishment of the Civil Service Commission. FTP name our 21st President. [Chester A. Arthur]

9. His first full-length novel, My Uncle Oswald, was a bizarre tale about a black market for the sperm of the brilliant and powerful. Before that novel's 1979 release he had almost 40 years of experience writing short stories in such collections as Over to You and Switch Bitch. He also wrote the screen adaptations of two dramatically different Ian Fleming novels, You Only Live Twice and Chitty Chitty Bang Bang. FTP name the author of The Witches, James and the Giant Peach, and Charlie and the Chocolate Factory. [Roald Dahl]

10. Just before this lieutenant colonel was to retire, he appeared on ABC News' Issues and Answers, criticized tactics and training, and lambasted his fellow officers for wasting their troops' lives in pursuit of medals and promotions. The Pentagon tried to delay his retirement so they could court-martial him. Disgusted, he spent the next 18 years in self-imposed exile in Australia, working on his memoir, About Face. FTP name the Army's most

decorated officer in the Vietnam War, now a commentator on military issues for Newsweek. [David **Hackworth**]

11. Operating from the port of Fiume he wreaked enough havoc on Allied shipping in World War I to earn a baronetcy. Although the largest crew he had commanded was only five, in 1938 he was offered command of a new submarine by Hitler. He opted to defect rather than serve the Nazis, fleeing first to Italy, then to the U.S., where his family eventually established a ski resort in Vermont. FTP name this Austrian naval commander, whose wartime exploits are far less well known than the musical talents of his wife and children. [Georg von **Trapp**]

12. Its author was a master of literary fraud, although instead of claiming the works of others as his own, his scam was to write stuff and pass it off as translations of the works of others. It told of the lowly life and death of a Spanish cigarette factory worker. FTP name this short story by Prosper Merimee, basis for an opera by Georges Bizet. [“**Carmen**”]

14. They are the metallic salts of the fatty acids and can be prepared by boiling a fat with sodium hydroxide. For examples, if you boiled glyceryl stearate with sodium hydroxide, it would yield glycerine plus one of these compounds with the formula  $C_{17}H_{35}COONa$ . They lower the surface tension of grease films, which explains their cleaning properties. FTP name this common class of compounds. [soaps; do not accept detergents.]

“A musician must make music, and artist must paint, a poet must write, to be ultimately at peace with himself. What a man can be, he must be.” This was the core concept of this Brooklyn native’s influential 1954 book Motivation and Personality, which examined the ultimate goal of self-actualization as well as other motivations that had to be satisfied before one could pursue it. FTP name this proponent of humanistic psychology who described the five-tiered hierarchy of needs. [Abraham **Maslow**]

17. It may be the only prominent work of fiction in which the dramatic climax is stated clearly in the 1st sentence. It concludes with the protagonist’s family making a holiday of his death day. The protagonist committed suicide for his family’s sake, although the back wound from the apple thrown at him might have proved fatal anyway. FTP name this Franz Kafka story in which the protagonist wakes up one morning as a giant bug. [The **Metamorphosis**]

18. Denied asylum by the king of Sardinia, he lived for 3 years on Staten Island, avoiding all political activity and trying to dodge the hero’s welcome that awaited him in Manhattan. In 1853 he went back to sea, and in 1854 he settled on the island of Caprera. 6 years later he led his Red Shirts to take Sicily and Naples from Austrian rule, thus setting the stage for a unified Italy. FTP name this hero of the Risorgimento and hero of the Italian independence movement. [Giuseppe **Garibaldi**]

19. He was blamed for creating the Sahara Desert and making Africans black before Zeus nailed him with a thunderbolt. Why anyone would name a style of automobile after the first known bad driver is beyond me. FTP name this mythological figure who asked his dad for the keys to the chariot, his dad being Helios. [**Phaeton**]

23. It’s named for the 17th century explorer and naturalist who first described its abundant bird life, although its Whooping Crane Pond no longer contains whooping cranes. After the Union captured Fort Walker the white plantation owners fled, and it wasn’t until the bridge across Calibogue Sound and Shull Creek was built in the mid-’50’s that it attracted many newcomers. FTP name the largest of the U.S.’s Atlantic sea islands, a popular South Carolina golf and tennis resort. [**Hilton Head Island**]

No one predicted its existence, and its role in the universe is unclear, as is that of its smaller cousin, the muon. It has all the properties of an electron except that it has over 900 times the mass. FTP name this corpulent lepton. [**tauon**]

25. There have been over 400 suicides there, not counting the Hungarian tailor who died trying to demonstrate his new improved parachute. Thanks partly to these suicides, the restaurant at the top was closed and has been moved in its entirety to New Orleans. FTP name this Parisian landmark. [the **Eiffel Tower**]

10. FTP each, name that syndrome:

(a) Usually resulting from non-disjunction, it occurs in men whose chromosomes have the genetic constitution XXY. Results include a small penis, sparse pubic and body hair, and small testes lacking spermatogenesis.

[Klinefelter's syndrome]

(b) Also resulting from non-disjunction, its sufferers have only one chromosome (an X) per cell. Results include webbing of the neck, narrowed aorta, reduced height, and undifferentiated gonads.

[Turner's syndrome]

(c) Also resulting from non-disjunction, it's characterized by trisomy of chromosome 21. Characterized by mental retardation, mongoloid facial features, simian palm, and reduced life expectancy. [Down's syndrome]

1. Name the guy from resume items, 30-20-10:

(a) Co-author of *Introduction to Quantum Mechanics* (1935); confirmed that sickle-cell anemia is genetic. With Robert Corey, worked on the structures of amino acids and polypeptides and first proposed the helical shapes of proteins.

(b) Author of *The Nature of the Chemical Bond*, *The Structure of Molecules and Crystals* (1939) and *No More War* (1958).

(c) Winner of Nobel Prize for Chemistry, 1954, and Nobel Peace Prize, 1962. [Linus Pauling]

10. Give the musical terms with the following definitions, 10 pts. each:

(a) A direction that the string of a bowed instrument is to be picked with the finger [pizzicato]

(b) A symbol placed on the staff at the beginning of a piece that shows the key and meter [signature]

(c) A passage that brings a piece or movement to a conclusion [coda]

1. Name the author from works and influences, 30-20-10:

(a) "The Secret Rose" and "The Cold Heaven," both of which end with questions; "Among School Children," which ends with the famous question, "How then can we know the dancer from the dance?" and "No Second Troy," in which every sentence (obviously including the last) is a question.

(b) "The Wild Swans at Coole," which also ends in a question, and from which the teacher in *Educating Rita* draws "swans/stones" as an example of consonance, which Rita then explains as "the rhyme's not right."

(c) "The Second Coming," which also ends with a question, and "Easter, 1916," written in answer to a poem by none other than Joyce Kilmer, which began by mocking his earlier "September 1913" -- *neither of which ends with a question!* [William Butler Yeats]

For this question it's a good thing the Milwaukee Brewers have never won the World Series. For 5 pts. each, given one of the six divisions in major league baseball, name the team currently in that division which has most recently won the World Series.

(a) NL East [Florida Marlins (1997)]

(b) NL Central [Cincinnati Reds (1990)]

(c) NL West [Los Angeles Dodgers (1988)]

(d) AL East [New York Yankees (1996)]

(e) AL Central [Minnesota Twins (1991)]

(f) AL West [Oakland A's or Athletics (1989)]

How hot are you? Assuming normal human body temperature, give your temperature in:

(a) For 5 pts., within one degree, degrees Fahrenheit [98.6; accept 97.6 - 99.6]

(b) For 10 pts., within three degrees, degrees Celsius [37; accept 34 to 40]

(c) For 15 pts., within three degrees, degrees Kelvin [373.15; accept 370.15 to 376.15]