

1. The "anomalous" version is supposed to have confused a young Wolfgang Pauli while he was at Bohr's Institute of Theoretical Phys. The "normal" version, explained by Lorentz, (\*) creates three lines, one at the original position of the spectral line, with two lines symmetric about it, but only when the source emitting the light is submitted to a uniform magnetic field. FTP name this effect, given its name by the Dutch winner of the 1902 Nobel who discovered it. Zeeman Effect

2. His debut came in 1894, when he sang in Mario Morelli's L'Amico Francesco in Naples and the Teatro Nuovo. He created the chief tenor parts in Adriana Lecouvreur, \* Germania, and the Girl of the Golden West. Starting in 1903, he sang opening night at the Met for seventeen straight years. FTP, name this early 20th-century Italian tenor, one of the first to record his voice.

A: Enrico Caruso

3. The Count of Rousillon, upset that he has been married off without his knowledge, departs to Florence to escape his betrothed, saying that he will not marry her until she has his ring and his baby. This does not stop\* Helena, who goes to Florence in disguise, and both takes Bertram's ring and sleeps with him. After Bertram hears Helena is dead, he goes back to France, finds her, and accepts her. FTP, name this Shakespeare play with a nice ending.

A: All's Well That Ends Well.

4.

Administered by a curator of praetorian rank, it was praised by both Horace and Statius. At first it went only to Capua\* but by 244 BC it reached Brundisium, which was the main seaport to Greece and the Eastern Mediterranean. It was 20 feet wide, and had a surface of lava blocks and a foundation of heavy stone blocks. FTP, name this first Roman road, which went from Rome to Southern Italy.

A: Appian Way

5. In 1901, she became the first woman to receive an honorary degree from Bowdoin; because of poor health she had been unable to attend school. By her 1909 death she had written 20 novels, such as Deephaven\* and A Country Doctor. One of the first regional writers, her best work is the Country of the Pointed Firs. FTP, name this Maine novelist.

A: Sarah Orne Jewett

6. Its pretext was the French defeat at the Battle of Poitiers and the capture of King John the Good by the English. After the order by the dauphin Charles in early 1358\* that the peasants help refortify the castles, revolts broke out both

in Compeigne and in Paris. They lasted less than a month, however, and were both defeated by early June. FTP, name this French peasant uprising, so named because of the nobles' habit of calling the peasantry by a certain name.

A: Jacquerie

7. His real name is Captain Larsen; he is the captain of the Ghost. Among the people the Ghost picks up are Maude Brewster, a poet, and Humphrey\* Van Weyden, an intellectual shipwrecked near Angel Island. In the end the Ghost is wrecked; Larsen frustrates the attempts of Maude and Humphrey to repair the ship, though in the end they are rescued. FTP, name this nautical novel by Jack London.

A: The Sea Wolf

8. Serving as both Arizona assistant attorney general and Superior Court Judge in Maricopa County after graduating from Stanford, this lawyer became the first\* woman to serve as floor leader in a state legislature, by being Majority Leader in the Arizona State Senate. Rumor has it that she voted with the majority in Bush vs. Gore because she wanted to be replaced by a GOP President. FTP, name this first female Supreme Court Justice.

A: Sandra Day O'Connor

9. Originally apprenticed to a lawyer, the lawyer introduced him to Francois Bouchard, who taught him painting. The winner of the 1756 Prix de Rome, on his return to Paris\* he painted Coresus Sacrifices Himself to Save Callirhoe. After acquiring a Louvre studio, he painted the Progress of Love at the request of Madame du Barry, the royal mistress. FTP, name this French rococo painter.

A: Jean-Honore Fragonard

10. Though not Salman Rushdie, he is also the target of a fatwa; unlike Rushdie, an attempt was actually made on his life in 1994, which he survived. His novel the Children of Gebalawi was criticized for its treatment of Mohammad.\* Palace Walk, Palace of Desire, and Sugar Street comprise his Cairo Trilogy, which led to his receiving the Nobel Prize for Literature in 1988. FTP, name the only Arabic writer so honored.

A: Naguib Mahfouz

11. This painting is based on a narrative poem by Lord Byron. At each corner of huge bed is a carved ivory elephant head. On the floor are overturned tables of jewels \*, gold vases, and rich fabrics. Scattered throughout the room are servants massacring both horses and concubines. FTP, name this orgiastic painting of death and destruction by Delacroix in which an Assyrian King sits atop his bed watching all his worldly possessions destroyed.

A: Death of Sardanapalus

12. He believed that truth was not fixed, but rather based on the consequences of ideas. In 1937, he led a commission that established that Stalin's charges against Trotsky were fraudulent. In 1904, after a disagreement with the President of the University of Chicago,\* he moved to Columbia. FTP, name this author of Experience and Education, the School and Society, one of the founders of pragmatism, and one of the leading American educational theorists.

A: John Dewey

13. Late in life he helped to establish Girard College, as well as holding literary salons at Andalusia, his country estate. In 1812 he became editor of Port Folio, the first American literary journal, three years before he wrote Pennsylvania's rejection\* of the Hartford Convention. In 1819 he was named a director of the Second Bank of the United States; he stayed there until forced out in 1836. FTP, name this banker and arch-enemy of Andrew Jackson.

A: Nicholas Biddle

14. Let  $X$  be a set and  $d$  a binary operation on the set. Assume  $d$  is commutative and positive. (\*) Assume  $d$  produces zero if and only if both operands are identical. Furthermore, assume  $d$  follows the triangle inequality - namely  $d(x,y)$  is less than  $d(x,z) + d(z,y)$  for all  $x,y,z$  in the set. FTP, if  $d$  obeys these three axioms, the set  $(X,d)$  is properly called what object?  
\_metric space\_

15.

The leading disciple of the political scientist Artur Moeller van den Bruck, he led a party which in the 1928 elections only won four seats in the\* Reichstag. The son of a minor Habsburg beureaucrat, he only became a German citizen in May 1932, which enabled him to run for president, though he lost. In January 1933 he succeeded Kurt von Schliecher as Chancellor. FTP, name this leader of Nazi Germany.

A: Adolf Hitler

16. The book divided into two: the first part is set in the thriving social scene of Bath, while the second in the ancestral home of the Tilney Family. Isabella Thorpe becomes engaged to James\* Morland, but breaks off the engagement when it turns out the Morlands are poor; but Henry Tilney marries Catherine Morland even after she has been kicked out by his father for the same crime. FTP, name this Jane Austen novel, a spoof of the Gothic melodrama.

A: Northanger Abbey

17. In 1804, he wrote a paper on Halley's Comet in which he calculated the orbit from the 1607 observations. This was impressive enough that in 1808 he built an observatory in Konigsberg for the\* Prussian government. The first to use a heliometer, his measurement of the positions of 50,000 stars allowed the first accurate assessment of interstellar distances. FTP, name this astronomer whose function determines the motion of three bodies moving under mutual gravitation.  
a: Friedrich Bessel

18. In 1831, he appeared in Vienna, where he played his La ci darem la mano variations; this prompted Robert Schumann in the Neue Zeitschrift fur Musik to say, "Hats off gentlemen, a genius!"\* Spending most of the next seventeen years in Paris, the Baeleric Islands, or Nohant, the estate of his lover George Sand, he composed almost entirely for one instrument. FTP, name this Polish piano composer.

A: Frederic Chopin

19. By 1755 he was the chief of the Ottawas; five years later he led a confederation of the Ottawa, Potawatomi, and Ojibwa Indians. In 1760 he met Major Rogers, a British officer on his way to occupy French forts, and formed an alliance\* with the British. Within two years this alliance had collapsed, and he attacked Detroit and won the Battle of Bloody Run. FTP, name this Indian chief who led a war against the British in the Great Lakes region, who has an American car named for him.

a: Pontiac

20. Serving as both governor of New Mexico and minister to Turkey, he was the president of the court of inquiry that condemned the commandant of Andersonville, Henry Wirtz, to death.\* His novel The Fair God was about the Spanish conquest of Mexico, while The Prince of India dealt with the Wandering Jew. FTP, name this author of Ben Hur.

A: Lew Wallace

1. Name these 20th century Russian novelists from clues FTPE.

1. The first Russian to win a Nobel Prize in Literature, his works include The Village and the Gentleman from San Francisco. Ivan Bunin

2. Almost a surrealist, his novella The Heart of a Dog looks at attempts to remake humanity, while the Master and Margarita examines what would happen if Satan came to 20th century Moscow. Mikhail Bulgakov

3. Arguably the worst writer ever to win a Nobel Prize, this hack wrote The Quiet Don and Virgin Soil Upturned. Mikhail Sholokhov

2. Name these ex-slaves from clues FTPE.

1. Minister to Haiti, he edited the North Star and wrote an influential Autobiography.

Frederick Douglass

2. One of the leading conductors on the Underground Railroad, she often pushed escapees farther with a pistol. Harriet Tubman

3. A traveling evangelist and abolitionist, her "Ain't I A Woman" speech made her the most visible abolitionist speaker before the Civil War. Sojourner Truth

3. Answer these questions about heart surgery FTPE.

1. This South African doctor was the first to perform a heart transplant operation. Christian Barnard

2. Though he lived less than three weeks, he was the first successful heart transplant recipient. Louis Washkansky

3. This Baylor professor invented the roller-pump, and the first successful implantation of a device into the chest to improve heart action. Michael DeBakey

4. The third Hanoverian king of Britain was the first one to actually speak English. Answer these questions about him FTPE.

1. Who was this king, who reigned from 1760-1820? George III

2. This man served as George III's Prime Minister from 1770-1782, overseeing the loss of the American colonies. Lord North.

3. After an interval of about a year, this son of a former Prime Minister became PM himself at the age of 24, keeping the post for nearly 20 years. William Pitt the Younger

5. Name these terms tangentially related to "super" from the world of physics, FTPE

a. superconductivity is described and explained in this theory, named from the initials of the three men who discovered the phenomenon

BCS theory

b. actually rather different from the non-super theory, this branch of physics posits ten about ten dimensions, and tiny vibrating loops more basic even than quarks

SUPERSTRING theory (NOT string theory, they are different)

c. described by Osheroff and Douglass (they shared the 1996 nobel for the work)  
this is the special state of helium below a temperature of about 4 K  
SUPERFLUIDITY

6. Answer these questions about The Year of the Four Emperors for the stated number of points.

First, for ten points, what is the year of the four emperors?

A:69AD

The crisis was precipitated by the suicide of this Julian emperor the previous year. Name him for five points.

A:NERO

Now for five points each, name any three of the four emperors that reigned in 69AD

A:GALBA, OTHO, VITELLIUS, VESPASIAN

7. Answer these questions about German politics FTPE.

1. This Social Democrat defeated Helmut Kohl in 1998 and is up for reelection as Chancellor this year. Gerhard Schroeder

2. This Green Foreign Minister aroused controversy when a 1973 photograph of him beating a police officer was published. Joschka Fischer

3. Schroeder's opponent has yet to be determined because of bickering within this largest opposition party. Christian Democrats

8. Answer these questions about the St. Louis Cardinals FTPE.

1. This man, manager since 1996, plans to return next year. Tony LaRussa

2. Mark McGwire's frequent injuries were offset in 2001 by the emergence of this NL Rookie of the Year. Albert Pujols

3. After McGwire's retirement the Cardinals brought in this former New York Yankees first baseman to replace him. Tino Martinez

9. Name these American aviators from clues FTPE.

1. The leading American WWI ace with 26 victories, his autobiographical Fighting the Flying Circus retold his exploits. Eddie Rickenbacker

2. The first woman to fly alone over the Atlantic Ocean, she mysteriously disappeared over the Pacific in 1937. Amelia Earhart

3. Later portrayed as Willard Whyte in the James Bond flick Diamonds Are Forever, he designed the Spruce Goose and even once flew the monstrosity. Howard Hughes

10. Answer these questions about the Risorgimento FTPE.

1. After he brought Piedmont into the Crimean War, he gained French support for the war against Austria, regaining Lombardy. Count Camillo de Cavour

2. This well-traveled mercenary liberated Sicily and southern Italy with his Redshirts. A republican, he was not happy with the monarchy. Giuseppe Garibaldi

3. This Piedmontese king became the first king of a united Italy in 1861. Victor Emmanuel II

11. Identify the following types of electrochemical cells, ten points each.

A. In this type of cell, a spontaneous redox reaction produces electricity.  
Galvanic cell

B. In this type of cell, the compositions of the two electrodes and the electrolytes are identical. A current is produced due to differing electrolyte molarities.

Concentration cell

C. Unlike galvanic cells, this type of cell uses electricity to drive a non-spontaneous redox reaction.

Electrolytic cell

12. Name the writer from clues 30-20-10.

30. Born Marguerite Johnson, in the early 1960's she worked on the Arab Observer in Cairo and the African Review in Ghana.

20. In 1961 she acted in a touring production of Porgy and Bess. Her movie credits include Poetic Justice and How to Make an American Quilt.

10. In 1993, she read her poem On the Pulse of Morning at Bill Clinton's first inaugural.

A: Maya Angelou

13. Name these Booker Prize-winning novelists from clues FTPE.

1. This Australian author won in 1982 for Schindler's Ark, made into a 1993 film by Steven Spielberg. Thomas Kennealy

2. In addition to winning the Nobel Prize, this South African won a Booker for the Conservationist. Nadine Gordimer

3. Her earlier novels include An Unofficial Rose and Under the Net. She won the 1978 Booker for The Sea, the Sea. Iris Murdoch

14. Still haven't learned your laws of physics apart? Better hope someone on your team has. Identify these laws of physics INCLUDING NUMBER IF APPLICABLE for ten points each:

a. every action has an equal and opposite reaction

NEWTON'S THIRD law

b. an induced current will be oriented in the direction that opposes the change in magnetic field inducing it

LENZ'S law

c. the planets follow elliptical orbits with the sun at one of the foci of the ellipse

KEPLER'S FIRST law

15. Name these French existentialists from clues FTPE.

1. Killed in a car crash in 1960, his works include the Myth of Sisyphus, The Plague, and the Stranger. Albert Camus

2. A sometime Soviet sympathizer, his works include Being and Nothingness, Nausea, and No Exit. Jean-Paul Sartre

3. Sartre's pimp, she had an affair with Nelson Algren and wrote the Mandarins and the Second Sex. Simone de Beauvoir

16. When given a description of the Eastern European Communist leader, name him FTPE.

1. Succeeding Walter Ulbricht as East German leader, he was put on trial in reunified Germany and died in Peru in 1993. Erich Honecker

2. A member of the Polish landed nobility, he was commander of the army and Prime Minister when he imposed martial law as a move against Solidarity in 1981. Wojciech

Jaruzelski

3. His forced urbanization of Romania in the 1980's led to widespread hatred, and he and his wife were shot by firing squad in December 1989. Nicolae Ceaucescu

17. Name these American newspaper proprietors from clues FTPE.

1. A leader of the phonetic spelling movement, he violently opposed FDR and ordered the Dewey Defeats Truman headline in the Chicago Tribune. Robert McCormick

2. Originally with the St. Louis Post-Dispatch, he bought the New York World in 1883 and made it profitable, establishing a series of bequests in his name for journalistic excellence. Joseph Pulitzer

3. After buying the Chattanooga Free Press, he bought the New York Times under the headline "All the News That's Fit to Print." Adolph Ochs

18. Answer the following about the Franco-Prussian War FTPE.

1. France declared war on Prussia after Bismarck doctored this letter making it look as if the Kaiser insulted France. Ems Telegram

2. Napoleon III surrendered himself and his largest army at this decisive 1870 battle. Sedan

3. "Taciturn in seven languages" this head of the German General Staff's knowledge of railways gave Prussia a decisive advantage. Helmuth von Moltke

19. Answer these questions about Johannes Brahms FTPE.

1. Brahms, who never married, was in love with this woman for forty years, though it was never consummated. Clara Schumann

2. This 1868 work was based on writings of Luther rather than the traditional mass.

A German Requiem or Eines Deutes Requiem

3. Brahms was born in this port city on the Elbe in 1833, where he made money as an adolescent by playing the piano in brothels. Hamburg

20. Name these Georgia governors from clues FTPE.

1. Known as "ax-handle" because he urged whites to beat blacks with those objects, he was a leading ally of Jimmy Carter in the early 1970's. Lester Maddox

2. Spending two terms as Georgia's governor in the 1990's, his keynote address at the 1992 Democratic convention said that the presidential election was between an "autocrat, an aristocrat, and a Democrat." Zell Miller

3. The current governor, he was recently granted great authority over Atlanta's transportation problems. Roy Barnes

