

1. Paul Dirac first postulated their existence to account for the otherwise superfluous negative energy states predicted by his relativistic electron theory. Emitted in the positive beta decay of proton-rich radioactive nuclei, this positively charged subatomic particle is stable in a vacuum, but quickly reacts with the electrons of ordinary matter by annihilation to produce gamma radiation. FTP, identify this antiparticle of the electron whose existence was established by David Anderson in 1932 while studying cloud-chamber photographs of cosmic rays.

Answer: Positron

2. These people invaded the region of Southwest Asia known as the Hatti around 1900 BC. In the first half of the 17<sup>th</sup> Century BC Labarna established the Old Kingdom and succeeded in conquering Central Anatolia. Further conquests by Labarna's successors eventually led to clashes with Egypt in the disputed territory of Syria. FTP – identify this ancient kingdom, often credited with first smelting iron.

Answer: Hittite Kingdom

3. He wrote the poem "The Strength of Fields" for Jimmy Carter's inauguration ceremony. His first book of poems was *Into the Stone*, and other collections include *The Zodiac*, *Drowning with Others*, and *Buckdancer's Choice*. FTP, name this Georgia-born author best known for his manly novel *Deliverance*.

Answer: James Dickey

4. In his work *The Phenomenon of Man*, he used the term "Omega Point" to describe the integration of all individual consciousness, a state that could be achieved with the return of Jesus Christ. FTP, name this French priest and anthropologist who discovered Peking Man.

Answer: Pierre Teilhard de Chardin

5. The people of this country are believed to be descendants of the inhabitants of the Black River valley found in northern Vietnam and Laos and southern China. In 1350 King Rama Tibodi established the Ayutthaya Kingdom which flourished for the next 400 years, until General Pya Taksin defeated invading Myanmar troops and declared himself king. His successor General Pya Chakri, crowned Rama I in 1782, founded the dynasty that continues to rule this country. FTP - identify this Southeast Asian nation.

Answer: Kingdom of Thailand or Prathet Thai

6. The title character in this opera has spent twenty years shut up in her country house with all of the mirrors covered after being left by her lover, Anatol. Her mother, the Old Baroness, will not speak to her, and she has only her niece Erika as a companion. When she learns that Anatol is dead, she falls in love with his son also named Anatol, unaware that Erika is pregnant with Anatol's child. FTP identify this Samuel Barber opera that ends with Erika and her grandmother locking themselves into the old country house and recovering the mirrors.

Answer: Vanessa

7. Part one, "The Window," describes a rather uneventful day during a house party at the country home of Mr. and Mrs. Ramsay. Their young son James is badly disappointed when bad weather cancels a planned excursion. Part Two, "Time Passes," shows the gradual decay of the country home after Mrs. Ramsay's death. In the final section, James, now 16, finally gets that boat excursion and reconciles with his remote father. FTP name this 1927 stream-of-consciousness novel by Virginia Woolf.

Answer: To the Lighthouse

8. Directed by Mel Stuart, with music and lyrics by Leslie Bricusse and Anthony Newley, its lead was played by Peter Ostrum. Ostrum would have played the title character had screenwriter Roald Dahl kept the name of his book intact for the film. FTP, name this 1971 film featuring Mr. Slugworth and the Oompa-Loompas, a star turn for Gene Wilder.

Answer: Willie Wonka and the Chocolate Factory

9. In Arab legend she is called Belkis and her kingdom is Saba. The Koran describes her as “ruling over people who prostrate themselves to the sun.” In the Old Testament, her story is told in 1st Kings, which describes her coming to see Solomon. FTP, name this mysterious oriental princess who legend said sired the line of Ethiopian kings as a result of her liaison with Solomon.

Answer: the Queen of Sheba

10. Lying under the diaphragm on the left side of the abdominal cavity, this soft, purplish organ acts as a filter against foreign organisms that infect the blood stream. Consisting of an intricate meshwork of tiny blood vessels surrounded by nests of B lymphocytes, blood enters this organ from an artery off of the aorta on its way to the liver. It's responsible for the manufacturing of red blood cells toward the end of fetal life and acts as a blood reservoir. FTP, identify this organ that commonly ruptures when damaged in automobile accidents, and after its removal sepsis infections can be expected.

Answer: Spleen

11. Its counties include Izard, Saline, Searcy, St. Francis, Desha, Lonoke, and Ouachita. Its man-made lakes include Hamilton and Catherine. The highest elevation is Magazine Mountain, located in the Ouachita Mountains. FTP, name this U.S. state home to Pea Ridge National Military Park, Hot Springs National Park, and the Ozark Mountains.

Answer: Arkansas

12. This Bostonian is one of the leading practitioners in the neo-noir mystery genre. His works are usually set in Boston and the first five featured his detective Angela Gennaro. His latest novel looks into the aftermath of the abduction of a boy 25 years earlier. FTP, name this author of *Mystic River*.

Answer: Dennis Lehane

13. In 1976, 11 billion pounds of this substance was manufactured with more than 260 million pounds of it emitted into the atmosphere. Consequently, in April of 1977, OSHA released a study showing that an increased incidence of leukemia occurred in workers exposed to this substance. Originally named carbuted hydrogen, Michael Faraday first isolated this hydrocarbon in 1825 from the oil used to light the streets of London. FTP identify this single compound somewhere in between the two cyclohexadiene isomers, best described by two equivalent cyclohexatrienic resonance forms with chemical formula C<sub>6</sub>H<sub>6</sub>.

Answer: benzene

14. Aristotle claimed this playwright was the first to use two actors in a play, curtail the role of the chorus, and make dialogue the leading part of the play. Yet, for all his creativity, he saw drama not as a conflict between forces, but between a solitary hero—such as Agamemnon or Electra—against his or her fate. FTP—name this father of Greek tragedy who penned the *Oresteia*.

Answer: Aeschylus

15. Occurring from July 5 to August 6, 1943, this World War II battle saw the last general Nazi offensive on the Eastern Front. After the defeat at Stalingrad, Field Marshal Gunther von Kluge led approximately 900,000 troops as well as large numbers of artillery against the Russian trenches near Smolensk, but was driven back by Soviet antitank guns. FTP – name this World War II battle, the greatest tank battle in history.

Answer: Battle of Kursk

16. Measured in joules/Kelvin, the German chemist Rudolf Clausius proved this value is continually increasing by relating it to the constant energy of the Universe. A change in it is defined as the reversible heat flow divided by the absolute temperature at which the heat flow occurs. In terms of a single reversible path, it can be classified as either an isothermal or isobaric one, and only when all of the processes which occur in the system and all of the processes which occur in the surroundings are reversible can the sum of it be zero. FTP, identify this quantity in the Second Law of Thermodynamics with symbol S, defined as the measure of order in a system.

Answer: Entropy

17. The Greek word for “breath,” it is used to mean life, soul, spirit or mind. In *The Golden Ass*, Apuleius uses her story to symbolize the union between the human soul and divine love. FTP, name this beautiful girl who eventually becomes immortal because of the love of Cupid.

Answer: Psyche

18. Cathy Ames is an evil, manipulative and beautiful prostitute who marries Adam, yet betrays him on their wedding night by sleeping with Adam's brother Charles. Later, after giving birth to twins sons, Caleb and Aron, Cathy shoots Adam and returns to her life as a whore. FTP, this describes the plot of what novel by John Steinbeck.

Answer: East of Eden

19. The first, drafted by Thomas Jefferson in 1784, proposed that each territory would be admitted as a state on an equal footing with the original 13 states. The 2<sup>nd</sup> came in 1785 and set up an efficient mechanism for dividing and selling land in 6-square mile townships. The 3<sup>rd</sup>, passed in 1787, established the method for a territory's admittance as a state. FTP, by what name are these acts known?

Answer: Northwest Ordinances

20. According to William Butler Yeats, it was "the colour of magic in every country and has been so since the very earliest times." Irish witches supposedly wore caps of this color, which they placed on their heads before flying to their coven meetings. FTP, name this color associated with the planet Mars and the shirts of Garibaldi's men.

Answer: red

21. Floyd Collins died there. It contains a region of forests and hills traversed by the Green River, which receives the Echo River and other underground streams. FTP, name this national park, located in southwestern Kentucky, which is the longest known cave system in the world?

Answer: Mammoth Cave

22. Born on August 1, 1744 in a small village in northern France, this botanist formulated one of the earliest theories of evolution outlined in his book *Philosophie Zoologique*. His contributions to science include advancements in meteorology, chemistry, and paleontology, but he is best remembered for his work in invertebrate zoology where he published an impressive seven-volume book entitled *Natural History of Animals without Backbones*. He was the first to separate the Crustacea, Arachnida, and Annelida from the Insecta, and he broke with tradition in removing the tunicates and the barnacles from the Mollusca. FTP, identify this man, the first to classify invertebrates and vertebrates.

Answer: Jean Baptiste Lamarck

23. According to tradition, their rule ended when the son of their king raped Lucretia, a Roman noblewoman of great virtue. Most likely, however, their end began when Roman nobles rebelled against Servius Tullius's shift of the military from cavalry to heavily armed infantry. FTP, name this people who gave Rome the toga and the fasces.

Answer: Etruscans

24. She used the pseudonym John Sedges on five novels and wrote acclaimed biographies of her parents Absalom and Caroline Sydenstricker. FTP, name this writer who won the 1938 Nobel Prize in Literature for such works as *Sons*, *House Divided* and *The Good Earth*.

Answer: Pearl S. Buck

25. Born in 1854 at Strehlen in Upper Silesia, this scientist was frequently seen carrying a cigar box under his arm because he had a habit of smoking twenty-five cigars a day. He earned a doctorate of medicine by means of a dissertation on the theory and practice of staining animal tissues, and his work centered on W. H. Perkins's discovery of aniline dyes. He showed that all the dyes used could be classified as being basic, acid or neutral and his work on the staining of granules in blood cells laid the foundations of future work on hematology. FTP identify this scientist that formulated the famous side chain theory and received the Nobel Prize in 1908 along with Ilya Mechnikov for developing a treatment of syphilis.

Answer: Paul Ehrlich

26. Born in Southampton County, Virginia, in 1816, he received his military training at West Point. He saw his first action in the Mexican War and returned to teach at his alma mater in 1851. Upon Virginia's secession he chose to remain loyal to the Union and went on to lead troops in the Federal victories at Mills Springs and Nashville. FTP - name this general who earned his nickname for staunch resistance to Confederate attacks at the Battle of Chickamauga.

Answer: George Henry Thomas

1. Given the year, discipline, and his or her claim to fame, identify the person who won the Nobel Prize.

A.(10) 1927, Physics, for an effect demonstrating photons have momentum.

Answer: Arthur Compton

B.(10) 1934, Chemistry, for his discovery of heavy hydrogen

Answer: Harold Urey

C.(10) 1983, Medicine and Physiology, for her discovery of mobile genetic elements better known as jumping genes.

Answer: Barbara McClintock

2. Identify the authors of these ancient works, FTPE.

a. *Art of Love*

Answer: Ovid

b. *Satyricon*

Answer: Petronius

c. *The Trojan Women* and *Medea*

Answer: Euripides

3. In the NHL, NBA, and NFL, there are six teams whose names do not end with an "S." For 5 points each, give the six team names. *You have 15 seconds to begin your answer.*

Answer: Miami Heat; Utah Jazz; Orlando Magic; Colorado Avalanche; Tampa Bay Lightning; Minnesota Wild

4. Answer these questions about 17<sup>th</sup> century England for the stated number of points.

a. For 5 pts., name the English monarch ousted by William and Mary.

Answer: James II

b. FTP: After the Presbyterian members of Parliament were purged, there were only 53 members of the House of Commons. By what nickname was the Parliament which tried and condemned Charles I known?

Answer: Rump

c. For 15 pts: Passed in 1673, this anti-Catholic act specified that only Anglicans could hold military and civil offices.

Answer: Test Act

5. Given a list of characters, identify the opera FTP each.

a. Lucia, Rodolfo, Mimi

Answer: La Boheme

b. Ferrando, Despina, Don Alfonso

Answer: Così fan tutte

c. Kapar, Melchior, Balthazar

Answer: Amahl and the Night Visitors

6. FTP each, identify the physics term from the given information.

a. Commonly known as the rotational analogue to mass, in equation form it is defined as  $I$  equals  $m$  times  $r$  squared. Where  $m$  is the mass and  $r$  is the mass relative to the axis of rotation.

Answer: Moment of inertia

b. This term refers to a boundary impermeable to heat transfer or a reaction occurring without gain or loss of heat.

Answer: adiabatic

c. Related to surface tension, this adhesive property of water can be seen when a person is drinking from a straw.

Answer: Capillarity or Capillary Action

7. Identify the psychologist who penned these works, FTPE.

a. *Child and Society*

Answer: Erik Erikson

b. *The Neurotic Personality of Our Time*

Answer: Karen Horney

c. *Psychology of the Unconscious*

Answer: Carl Jung

8. Between Vladimir Lenin and Mikhail Gorbachev, five different men headed the Communist Party of the Soviet Union. For 5 pts. each, name them, with a 5 pt bonus for naming them in the correct chronological order, earliest to latest.

Answer: Joseph Stalin, Nikita Khrushchev, Leonid Brezhnev, Yuri Andropov,

Konstantin Chernenko (in that order)



9. The success of *The Lord of the Rings* has cast new light on the fantasy genre, British style. I'll identify a famous British fantasy work, you identify its author, FTPE.

- |                              |         |                     |
|------------------------------|---------|---------------------|
| a. <i>Titus Groan</i>        | Answer: | Mervyn <u>Peake</u> |
| b. <i>Prince Caspian</i>     | Answer: | C.S. <u>Lewis</u>   |
| c. <i>The Dark is Rising</i> | Answer: | Susan <u>Cooper</u> |

10. Identify the artist who or group which recorded these classic works of the 90's , 5 pts. each.

- |                                    |         |                          |
|------------------------------------|---------|--------------------------|
| a. <i>Ok Computer</i>              | Answer: | <u>Radiohead</u>         |
| b. <i>Slanted and Enchanted</i>    | Answer: | <u>Pavement</u>          |
| c. <i>Mutation</i>                 | Answer: | <u>Beck</u>              |
| d. <i>Grace</i>                    | Answer: | Jeff <u>Buckley</u>      |
| e. <i>Automatic for the People</i> | Answer: | <u>R.E.M.</u>            |
| f. <i>Jagged Little Pill</i>       | Answer: | Alanis <u>Morissette</u> |

11. FTP each, identify the following parts of the brain from a short description.

- a. It's responsible for automatic functions such as digestion, breathing, and heart rate.

Answer: Medulla oblongata

- b. Lying below the corpus callosum, this gland produces the hormone melatonin and is believed to control the biological rhythms of the body.

Answer: pineal gland

- c. Located directly above the brainstem, it is where high level functions take place and is responsible for controlling posture, balance, and coordination.

Answer: cerebellum

12. Identify this author, 30-20-10.

30: He wrote a column for the Chicago *Defender* and the New York *Post* featuring the comic character Jesse B. Semple.

20: He wrote the poem "The Negro Speaks of Rivers" the summer after he graduated from high school.

10: This Harlem Renaissance figure also authored *Montage of a Dream Deferred* and *The Weary Blues*.

Answer: Langston Hughes

13. Only one man has served as both Speaker of the House of Representatives and President of the United States, and only two have served as both Speaker of the House and Vice-President. Name them now FTPE or from years served for 5.

[PAUSE FOR ANSWERS; CORRECT ANSWERS WORTH 10 @. USE CLUES BELOW AS NECESSARY]

[5] President from 1845 to 1849

Answer: James Knox Polk

[5] Vice President from 1869 to 1873

Answer: Schuyler Colfax

[5] Vice President from 1933 to 1941

Answer: John Nance Garner

14. Answer these questions about the geography of Mozambique, FTPE.

- a. Its coastline is indented by numerous rivers, most notably this one, which is navigable for about 290 miles within the country.

Answer: Zambezi

- b. About one third of this large lake falls within Mozambique's borders.

Answer: Lake Malawi or Nyasa

- c. This is its capital, formerly called Lorenzo Marques.

Answer: Maputo

15. Answer these questions about the Crusades, FTPE.

- a. What pope called the First Crusade?

Answer: Urban II

- b. What cleric called the Second Crusade?

Answer: Bernard of Clairvaux

- c. What pope called the Fourth Crusade?

Answer: Innocent III

16. FTP each, identify the subatomic particle from a brief definition.

a. Discovered by Murray Gell-Mann, there name originated from a phrase used by James Joyce in his novel *Finnegan's Wake*. There are six different types: up, down, bottom, top, charm, and strange.

Answer: **Quarks**

b. These are lightweight elementary particles not composed of quarks. Examples include the electron, muon, and neutrino.

Answer: **Lepton**

c. These are massive particles that are composed of quarks. Examples include baryons and mesons.

Answer: **Hadron**

17. Name these novels given their subtitles, FTP; if you need the author, you'll get 5 pts.

a. (10) "The Source of the Susquehanna"

(5) James Fenimore Cooper

Answer: **The Pioneers**

b. (10) "A Peep at Polynesian Life"

(5) Herman Melville

Answer: **Typee**

c. (10) "The Decline of a Family"

(5) Thomas Mann

Answer: **Buddenbrooks**

18. Expand the following computer acronyms FTP each.

a. GUI Answer: **graphical user interface**

b. RAM Answer: **random access memory**

c. BASIC Answer: **beginner's all-purpose symbolic instruction code**

19. Identify the artists responsible for these works of Rococo art, FTPE.

a. *The Pilgrimage to Cythera* Answer: Antoine **Watteau**

b. the ceiling of the Bishop's Palace at Wurzburg Answer: Battista **Tiepolo**

c. the series *The Progress of Love; The Swing* Answer: Jean-Honore **Fragonard**

20. Answer these questions about Buddhism, FTPE.

a. Translated it means "The Three Baskets." This is an important collection consisting of Buddha's saying, comments and the sayings and rules for monks.

Answer: **Tipitaka**

b. What is the name for the moderate Middle Way, a code for living followed by Buddha in his search for enlightenment?

Answer: **Eightfold Path**

c. Members of this Buddhist sect, whose name means meditation, use riddles called koan to contradict people's usual patterns of logical thinking.

Answer: **Zen**

21. FTPE, answer these questions about Goethe's *Faust*.

a. This dwarf is created to replace mankind's reliance on sex for reproduction.

Answer: **Homunculus**

b. Homunculus leads Faust to watch this witches' Sabbath.

Answer: **Walpurgis Night**

c. Faust seduces this girl, but her faith in God remains strong.

Answer: **Gretchen**

22. FTP each, given a chemical compound identify the type of bond that each forms.

A.(10)  $H_2O$  (Water)

Answer: Angular or Bent

B.(10)  $CH_4$  (Methane)

Answer: tetrahedral

C.(10)  $NH_3$  (Nitrite)

Answer: trigonal pyramidal

23. Answer these related musical questions, FTPE.

a. This scale involves using all the notes of the chromatic scale in a fixed ordering, which can change from composition to composition.

Answer: 12-tone

b. The common scale based upon seven pitches.

Answer: diatonic

c. The reverse of the diatonic scale, it is a scale based only on the tones represented by black notes on a piano keyboard.

Answer: pentatonic

24. Answer the following related questions, FTPE.

a. Living from circa 480-524, this man's most famous work, written while he was in prison, was *On the Consolation of Philosophy*.

Answer: Boethius

b. From a Roman aristocratic family, this contemporary of Boethius wrote histories in which he attempted to show that the Goths were preserving Roman tradition. His final work was *Divine and Human Readings*.

Answer: Cassiodorus

c. Both Cassiodorus and Boethius served under this Ostrogothic king.

Answer: Theodosius