

1. The amount of charge one of these devices can store is related to the voltage applied to it times its capacitance. It is a cylindrical container made of a dielectric material with a layer of metal foil on the inside and outside. With the outside surface grounded, a charge is given to the inside surface. This gives the outside an equal but opposite charge. A spark of electricity occurs when the outside and inside surfaces are connected. FTP, identify this device used by early experimenters, such as Benjamin Franklin, to store electric energy.

Answer: Leyden jar

2. The movie version of it included current Tennessee Senator Fred Thompson as Admiral Joshua Painter. It begins in Polyarnyy, USSR, and ends eighteen days later in Annapolis, Maryland. Along the way, one F-16 took a missile hit, and two Alpha-class Soviet submarines were sunk, as well as one old U.S. missile sub, the Ethan Allen, used to simulate the destruction of the title object. FTP, identify this novel where Marko Ramius successfully defects to the U.S. with the aid of Jack Ryan, Tom Clancy's first.

Answer: The Hunt for Red October

3. The first composer to employ the "basso continuo," he began his musical education under Ingegneri as a boy chorister in the cathedral of Cremona. This was, perhaps, the biggest influence behind the nine books of madrigals he composed during his lifetime. He also wrote masses, motets, vespers, and magnificats, but is better known for creating a new type of composition. FTP, name this major figure in the development of the Baroque school of music, the composer of Orfeo and L'incoronazione di Poppea, and the creator of the first operas.

Answer: Claudio Monteverdi

4. Its rulers brought unity and stability and enlarged their sphere of influence to include Korea, the Northeast, Mongolia, Xinjiang, and what is now Vietnam. These kings were able to control the nomads and maintain the silk route between Xian and Rome. The old feudal order broke down, and systems of land ownership changed, allowing individuals to own property. Also, ancient China's greatest achievements in science and art were made under this dynasty. FTP, identify this ancient Chinese dynasty that lasted from 207 B.C.E. to 220 C.E., the fourth in Chinese history.

Answer: Han Dynasty

5. He was born in Chinon, France, and received his baccalaureate in medicine at Montpellier. This "founder of modern French prose" is most famous for two of his creations, some of whose adventures are chronicled in the Third Book, Fourth Book, and Fifth Book. FTP, name this creator of such legendary figures as Gargantua and Pantagruel.

Answer: Francois Rabelais

6. He is not known for his poetry today, but he was a friend to many of the great poets of his time. He helped correct the proofs for Lyrical Ballads, and he employed Coleridge and Southey in his chemical laboratory to sample and classify gases by inhaling them. FTP, name this discoverer of several of the alkaline earth metals who later grew jealous of the success of his assistant, Michael Faraday.

Answer: Sir Humphrey Davy

7. In this painting (now hanging in the Louvre), the main subject lies on a grand bed, as if oblivious to the surroundings. Seven women are being slaughtered, and all of the main subject's belongings are being brought to his chamber, as everything within it will be burned, including him and his horses. FTP, name this 1827 painting by Eugene Delacroix.

Answer: The Death of Sardanapalus

8. Just when Brokk and Eitri were about to finish their work, Loki, disguised as a horsefly, bit Brokk on the eyelid, causing the dwarf to stop fanning the fire. Thus, the handle was a little too short on the item they were creating. It was stolen by Thrym, king of the frost giants, who promised to return it if he could marry Freya. Its rightful owner disguised himself as Freya and killed Thrym after reclaiming it. FTP identify this magic weapon of Norse mythology, the golden hammer that returned to its owner whenever thrown, wielded by the god Thor.

Answer: _Mjollnir_

9. He was born in Poland and instead of becoming a rabbi, he opted for the life of a writer, immigrating to the U.S. in 1935. Setting most of his stories in the Poland of the past, he wrote such Yiddish novellas as *The Family Moskat*. Identify this 1978 Nobel Prize for Literature winner, the author of *The Golem* and *Lost in America*.

ANSWER: Isaac Bashevis Singer

10. Bantu-speaking peoples settled in this present-day country in the first century C.E. After colonization in 1505, policies instituted benefited European settlers and Portugal, but overlooked the native inhabitants. FTP, identify this country plagued with political problems due to the terrorist group "Renamo," whose capital is Maputo.

Answer: _Mozambique_

11. A psychotic man wants to pour lamb's blood on his son's head in the forest and then sacrifice the lamb to God. Dr. Parcival believes everyone is Christ. Joe Welling babbles nonsense about creating a new race of plants. A lonely young woman comes upon the idea of running naked into the rain where she finds an old man that frightens her and sends her crawling home in shame. All these characters can be found in the same midwestern town chronicled by reporter George Willard. FTP, identify this 1919 interwoven collection of short stories, perhaps the most famous work by Sherwood Anderson.

Answer: _Winesburg, Ohio_

12. His doctrine asserted his nation's right to intervene in the internal affairs of other nations when its own strategic interests were affected. For ten points, name the man who Khrushchev would promote to full member of the Politburo in 1957, but would eventually force Khrushchev out of power to become the leader of the Soviet Communist Party from 1964 to 1982.

ANSWER: Leonid Ilich Brezhnev

13. This Algonquin-speaking tribe was divided into bands ruled by subchiefs, or sachems, and they were nearly wiped out after a smallpox epidemic in 1633. Christian missionaries like John Eliot converted the last remaining members and their tribal culture was lost. For ten points, name this Native American group for which a New England state is named.

ANSWER: Massachuset (accept begrudgingly "Massachusetts")

14. This tradition of Islam emphasizes the inner spiritual state of love and devotion. Many orders of this tradition exist, the most famous being the Turkish Mevlevi order, better known as the "Whirling Dervishes." FTP, name this tradition, existing since the eighth century C.E.

Answer: _Sufism_

15. This nation's name means "Land of the Thunder Dragon" in Dzongkha, its official language. Since 1907, it has been ruled by hereditary monarchs of the Wangchuk family. In 1960, its government began to transform the country into a modern economic nation, though today it is still grouped as one of the least developed countries in the world. Its main rivers, the Torsa, the Raidak, the Sankosh, and the Manas, rise in the Himalayas and flow south into India. FTP, identify this Himalayan nation of just under 2 million, with its capital at Thimphu.

Answer: _Bhutan_

16. This novel records the events of June 16, 1904 in the lives of Leopold Bloom, his wife Molly, and Stephen Dedalus, combining the history of heresy, Irish legend, Gaelic, and Gypsy slang in a stream of consciousness pattern. For ten points, what is this 1922 James Joyce novel?

ANSWER: Ulysses

17. "So act that the moral of thy doing shall, at thy will, become universal law," is how the creator of this philosophical doctrine phrased it. In other words, moral choices are only valid if they are choices that everyone should hold to at all times. It was an injunction to be obeyed as a moral duty, regardless of an individual's impulses, to produce a humanitarian society based on reason and thus created by free will. FTP, identify this philosophical theory purported in the Critique of Pure Reason by the German philosopher Immanuel Kant.

Answer: categorical imperative

18. This 29-year old artist was born and raised in Sweden, where he currently lives. He went to the "Fame" high school, and appeared once on The Cosby Show. He played the drums when he was nine in his father Don's band, and his father now serves as his inspiration, since he has passed away. FTP, name this artist, singer of the very successful song "Save Tonight."

Answer: Eagle Eye Cherry

19. In 1250AD, Albertus Magnus is believed to have obtained this element, whose word origin comes from the Persian for "gold", "zerni-zar". Its most common mineral is mispickel. For ten points, name this element best known as a poison.

ANSWER: arsenic

20. The 4th step of this reaction mechanism is very interesting: aldolase breaks fructose 1,6-biphosphate into the two three-carbon chains, dihydroxyacetone phosphate and glyceraldehyde 3-phosphate. The former is converted into the latter by triose phosphate isomerase. In the better-known first step, hexokinase phosphorylates a well-known six-membered molecule, expending a molecule of ATP. FTP, identify this metabolic pathway that converts glucose into pyruvate and is followed by the Krebs cycle and the electron-transport chain.

Answer: glycolysis

21. On this day in 1862, Union General John Pope fought Stonewall Jackson at the battle of Cedar Mountain. On the same day in 1842, the Webster-Ashburton Treaty settled the Aroostook Conflict over the U.S.-Canadian border in Maine. In 1974, Richard Nixon resigned as President on this day. FTP, identify this month and day in which the second atomic bomb was dropped on Nagasaki in 1945.

Answer: August 9

22. In this book, Selena returns home because her mother is once-again accused of murder – this time of Vera Donovan, her employer. The D.A. prosecuting the case is the same one who tried to convict the title character, Selena's mother, for the murder of her husband many years ago. In trying to help her mother, Selena is forced to remember traumatic events of her childhood. FTP, name this Stephen King novel made into a movie starring Jennifer Jason-Leigh and Kathy Bates.

Answer: Dolores Claiborne

23. It varies from 5 meters to 137 meters wide and its length is about 48 kilometers. The precipitous cliffs that border its sides range from 180 meters to 300 meters high. During the Afghan Wars, it was the scene of numerous skirmishes between Anglo-Indian soldiers and the native Afghans. It runs from Safed Koh, near Peshawar, Pakistan, to Kabul, Afghanistan. FTP, identify this mountainous pass that was used for centuries to invade the Indian subcontinent and whose highest point lies on the Afghanistan-Pakistan border.

Answer: Khyber Pass

1. Identify this man, 30-20-10.

- His first short story, Rescue Party, appeared in the periodical Astounding Science in 1946.
- He studied physics and mathematics at King's College, London, and graduated with first-class honors in 1948. He first introduced the idea of satellite communication in 1945 and was the first to purport the geosynchronous orbit in 1948.
- He is best known for such science-fiction novels as Childhood's End, Rendezvous with Rama, and the short story The Sentinel, which was adapted into a famous 1968 film by Stanley Kubrick.

Answer: Arthur C. Clarke

2. Answer the following about the Greek god Pan FTSNOP.

- (5 points) Who is the Roman equivalent of Pan?
Answer: Sylvanus ✗
- (10 points) Which god is Pan's father?
Answer: Hermes ✗
- (15 points) What is the name given to Pan's reed pipes?
Answer: Syrinx ✗

3. In Latin-American literature, there are five authors associated with the movement known as "el boom", probably the least-known of which is José Donoso of Chile. FTPE, name these other authors associated with "el boom" from works; if you need their home country you'll get only 5 pts.

1a) Love in the Time of Cholera

1b) Colombia

Answer: Gabriel García-Márquez ✓

2a) Aunt Julia and the Scriptwriter

2b) Perú

Answer: Mario Vargas Llosa ✗

3a) The Old Gringo

3b) Mexico

Answer: Carlos Fuentes ✗

[READER'S NOTE: The fifth author associated with "el boom" was Julio Cortazar.]

4. Answer these questions about the works of Edouard Manet FTPE:

- A black maid on the right holding a multi-coloured pillow provides the contrast in this "racy" painting.

Answer: Olympia ✓

- The woman with a "hungry" look in her eyes is Victorine Meurent, an acquaintance of Manet.

Answer: Luncheon on the Grass or Le Dejeuner sur L'Herbe ✓

- Horses and jockeys come thundering from the right in this painting.

Answer: The Races of Longchamp ✓

5. Neuroglia, or simply glia, make up a large percentage of the cells of the brain. Answer the following about glia FTSNOP.

- Name the five types of glial cells in any order F5PE.

Answer: Schwann cells, astrocytes, ependymal cells, microglia, oligodendria ✗

- (5 points) Which type of neuroglia exists only in the nerves of the peripheral nervous system?

Answer: Schwann cells ✗

6. It was negotiated in the towns of Münster and Osnabrück, beginning in 1644. For ten points each:
a. Name this treaty, signed on October 24, 1648, whose signatories included Sweden, France, various German princes, and the Holy Roman Empire.

ANSWER: Peace of Westphalia ✓

b. The Peace of Westphalia brought to an end this war, which began in 1618.

ANSWER: Thirty Years' War ✓

c. The Thirty Years' War began with this incident, in which the Bohemians, fearing for their religious freedom, rejected two emissaries from the Holy Roman Emperor, Matthias.

ANSWER: defenestration of Prague ✓

7. Given a description, identify the works by Norman Mailer FTPE.

a) This was Mailer's first novel, published in 1948. It is based on Mailer's experience in World War II, particularly the Battle of Luzon.

Answer: The Naked and the Dead ✓

b) This journalistic novel documents the 1968 peace rallies in Washington, D.C., during which Mailer was jailed. It won both the Pulitzer Prize and the National Book Award. It is thought that this work earned him 6% of the vote when he ran for Mayor of New York City.

Answer: Armies of the Night ✗

c) This novel chronicles the Republican and Democratic National Conventions held in 1968. It is named after the two cities that hosted those Conventions.

Answer: Miami and the Siege of Chicago ✗

8. Answer the following questions about Henry James's Daisy Miller: A Study FTSNOP.

a) (5 points) What European capital does Daisy Miller die in?

Answer: Rome ✗

b) (10 points) Who is the gentleman narrator of the story who loves Daisy?

Answer: Frederick Winterbourne ✗

c) (15 points) What is the name of the Italian gentleman who courts Daisy to Winterbourne's disapproval?

Answer: Mr. Giovanelli ✗

9. Given a description, identify the chemical laws FTPE.

a) Also known as Proust's law, this law states that elements in a compound are present in a fixed proportion by weight, regardless of how the compound is prepared.

Answer: law of definite proportions ✗

b) This fundamental law of chemistry states that under identical conditions of temperature and pressure, equal volumes of gases contain an equal number of molecules.

Answer: Avogadro's law ✓

c) This law shows the relationship between the molar or molecular mass of a gas and the rate at which it will effuse. The effusion rate of a gas is inversely proportional to the square root of its molecular mass.

Answer: Graham's law ✓

10. Answer the following questions about the moons of Mars FTSNOP.

a) Identify both of Mars' moons FFPE.

Answer: Phobos and Deimos

b) For an additional ten points each, identify the two largest craters on Deimos. Both approximately 3 kilometers wide and named after 18th century satirists, one English, one French.

Answer: Swift and Voltaire

15. How familiar were you with the top 95 songs of 1995? Answer the following questions FFPE.

a) Madonna goes through the ups and downs of love with a matador in the video for what song?

Answer: Take a Bow ✗

b) This artist, famous in the early 80's for songs like "Goody Two Shoes", made an appearance with the hit "Wonderful".

Answer: Adam Ant ✗

c) This artist's "Total Eclipse of the Heart" garnered her the tenth best song of 1995.

Answer: Nicki French ✓

d) This one-hit wonder asked the question, "What about Breakfast at Tiffany's?"

Answer: Deep Blue Something ✓

e) The number eight song, "I'll Be There For You", debuted in 1995, courtesy of this group.

Answer: The Rembrandts ✓

f) This female group from Stockholm followed ABBA and Ace of Base success-wise, landing the number 92 spot with "I Saw You Dancing".

Answer: Yaki-Da ✗

16. Eight Vice-Presidents have been re-elected to a second term under the same President as their first term. Given the President, name the Vice-President, for ten points each.

a. Richard Nixon

ANSWER: Spiro Agnew ✓

b. Franklin Roosevelt

ANSWER: John Nance Garner ✓

c. James Monroe

ANSWER: Daniel Tompkins ✗

17. Identify the similarly-named physicists FTPE.

a) His many contributions to quantum theory earned him a share of the 1954 Nobel, especially for his statistical interpretation of the wave-function. His books include Cause and Chance (1949), Physics and Politics (1962), and the first popular, but scientifically solid, treatment of relativity in his 1922 work Einstein's Theory of Relativity. ✗

Answer: Max Born

b) Both father and son won Physics Nobels – the son shared the 1975 prize for discoveries involving motion within the nucleus, and the father won the prize in 1922 for his investigations of atomic structure. Provide the shared last name.

Answer: Bohr (Niels and Aage) ✗

c) He was the last graduate student to study under Robert Oppenheimer at the University of California, Berkeley, in 1943. His best known work, Quantum Theory, was an attempt to understand quantum theory from the perspective of Niels Bohr. His best-known recent work, Wholeness and the Implicate Order, challenged the conventional understanding of quantum theory. Identify this scientist and philosopher.

Answer: David Bohm ✗

18. The most populous city in Africa is Cairo (in 1996), with a population of six million. FFPE, with a five-point bonus for all correct, name the next five most populous African cities.

Answer: Kinshasa ✓ (3 million), Alexandria (2.9 million), Casablanca (2.1 million), Abidjan (1.93 million), Addis Ababa (1.91 million)

19. Answer the following about Judaism FTPE:

- a) Jews of the Middle Ages who settled in Germany, as well as Central and Eastern Europe, were referred to by what term?

Answer: Ashkenazic or Ashkenazim or Ashkenazi

- b) Jews of the Middle Ages who settled in Spain and Portugal were referred to by what term?

Answer: Sephardic or Sephardim or Sephardi

- c) Jews native to Ethiopia are referred to by this term.

Answer: Falashas

20. Answer the following about The Adventures of Baron Münchhausen FTPE.

- a) First, spell Münchhausen.

Answer: M-U-(E)-N-C-H-H-A-U-S-E-N (umlaut not necessary)

- b) The Baron's second trip was to visit the sultan of this Muslim country.

Answer: Turkey

- c) Munchhausen tossed an axe so high that it landed here, and he had to go get it!

Answer: the Moon

21. Answer the following questions about evolution FTPE.

- a) The kind of organism that would fill a particular environmental niche ought to be predictable in general terms because the environment exerts control over the adaptations that arise by natural selection. Identify this two-word evolutionary term exemplified by the breaking away of the Australian continent 60 million years ago, causing marsupials and monotremes to be the dominant life forms there.

Answer: adaptive radiation

- b) When different species are compared, some adaptive features can be described by either of two terms. Identify the term used to describe features that have different embryological origins but perform the same function. An example would be the comparison of a bat wing and an insect wing.

Answer: analogous structures

- c) The other term to describe adaptive features is used when the structures in question arise from the same structures in the embryo but are used in entirely different kinds of functions. Identify this term exemplified by the comparison between the forelimb of a rat and the wing of a bat.

Answer: homologous structure