

Tossups:

1. Their grandfather was Scipio Africanus and their father was twice a consul. The elder of these brothers, on becoming a tribune, introduced a controversial agrarian bill, sought re-election unconstitutionally, and was lynched in 132 B.C. The younger sought to revenge his brother, but after supporting a bill giving citizenship to Latins could not gain re-election and died in a riot. For ten points, name these Roman tribunes associated with land reform.

Answer: Gracchi (Tiberius Gracchus and Gaius Gracchus)

2. Vergil gives this name to the evil brother of Dido in the *Aeneid*, but in Greek mythology it refers to a man from Cyprus who fell in love with a statue. In Ovid's version of the myth, he is a sculptor who makes the statue and, after Aphrodite gives it life, marries his creation. For ten points, name this mythological person who inspired a play by George Bernard Shaw.

Answer: Pygmalion

3. The solution to this problem became the basis for graph theory. It was inspired by a particular portion of the Pregel River in Russia where two islands were situated between the banks and a total of seven bridges connected the islands to each other and to the banks. For ten points name this problem whose goal was to determine whether or not a person could take a walk, cross each bridge exactly once, and return to their original starting point.

Answer: The Königsberg Bridge problem (or Königsberg walk problem)

4. This 19th-century movement adhered to an idealistic system of thought based on a belief in the essential unity of all creation, the innate goodness of man, and the supremacy of insight over logic and experience for the revelation of the deepest truths. Largely centered in New England, among its authors were Orestes Brownson, James Freeman Clarke, and Bronson Alcott. For ten points, name this movement whose writings were often featured in *The Dial* and whose most famous writers were Ralph Waldo Emerson and Henry David Thoreau.

Answer: transcendentalists

5. His chemistry textbook was the Russian standard until superseded by Mendeleev's. The law named after him established the field of thermochemistry and was the bridge between earlier work by Carnot and later work by Gibbs. For ten points, name this man whose law stated that the heat generated between two substances was independent of the chemical reaction caused by the conversion of one of those substances into the other.

Answer: Germain Henri Hess

6. The main character of this work was a salesman who supported his parents and his sister Grete, after his father's business was ruined by a financial collapse five years earlier. His name was Greogor Samsa, but we better remember him for awaking one morning to find himself transformed into a giant cockroach. For ten points, name this story by Franz Kafka.

Answer: "The Metamorphosis"

7. This work received a hostile reception from the French government upon its completion because it graphically depicted the plight of the crew of a sunken French ship. The beginnings of the Romantic movement are reflected in its heroic portrayal of the starving crew, with some dead and others waving for help in a stormy sea. For ten points, name this 1819 painting by Theodore Gericault.

Answer: "The Raft of the Medusa"

8. There is a national historic site dedicated to it and a pyramidal monument marks the spot where it was once located. Near its original location, one can now see replica's of Jupiter and No. 119 two train engines. For seventy-three years it remained in the spot where it had been driven to the ground. For ten points, name this item which gained its fame when it was used to complete the nation's first trans-

continental railroad.

Answer: Golden Spike

9. The term was used early on by J.W. von Goethe and was popularized by George Bernard Shaw. It refers to a man ~~man~~ with superior potential who completely masters himself and strikes off conventional Christian "herd morality" to create his own values. FTP, name this term often associated with the book *Thus Spake Zarathustra* by Friedrich Nietzsche.

Answer: Superman or Übermensch

10. He sailed for the British, but was not British by birth. His search for the Northwest Passage was thwarted by the arrival of winter, and his ship, the *Half-Moon*, got stuck in the ice. He himself died on voyage, and a large Canadian bay bears his name, as does a river. FTP, name this Dutch navigator.

Answer: Henry (Henrik) Hudson

11. This British economist postulated that accumulation of capital could proceed too rapidly, producing a glut of unsold goods, an idea echoed 100 years later by John Maynard Keynes. He is more famous, however, for his 1798 Essay on the Principles of Population, in which he declared that food supply could not keep pace with population growth. For ten points, name this grim economist.

Answer: Thomas Malthus

12. His feast is kept in both the east and the west on September 29th. This captain of the heavenly hosts also keeps the secret of the mighty "word" by the utterance of which God created heaven and earth and was the angel who spoke to Moses on Mount Sinai. For ten points, name this archangel, often depicted as a warrior.

Answer: archangel Gabriel

— that's Michael to this point!!

13. In the 1700's, they were not very loud because of the inherent weakness of the wood frame; thus, the cast-iron frame was introduced in the 1800's. Credit for its invention is usually given to Bartolomeo Cristofori. By 1860, the upright version was popular in the home and the twentieth century saw the introduction of the electric variety. FTP, name this instrument which makes sound when hammers strike a string.

Answer: piano

14. Its name means Bay of the Goddess A-ma. It consists of two islands, Taipa and Coloane, and a small peninsula on the western side of the Pearl River estuary. It borders the Chinese province of Kwangtung, and, to its north, lies the city of Canton. For ten points, name this territory, which is to the west of Hong Kong and which Portugal is scheduled to return to Chinese rule in 1999.

Answer: Macau

15. Blue represents the sky, so the air ducts are blue. The sun is the fundamental source of energy, so the electrical conduits are yellow. Green is for water pipes, and red is for transport. In 1977, the building, designed by Renzo Piano and Richard Rogers, which utilized this color scheme was completed in Paris. It houses France's modern art museum and serves as a national cultural center. For ten points, what is this building which is named after the French president who proposed its construction in 1971?

Answer: Centre Pompidou or the Beauborg

16. A crucial moment in the development of this work came about when its author's memory was jogged by the taste of tea and a rusk biscuit. The work, though fiction, is essentially an allegorical and psychological autobiography. For ten points, name this work, the first volume of which is entitled Swann's Way and which was written by Marcel Proust.

Answer: Remembrance of Things Past or A la recherche du temps perdu or In Search of Lost Times (Prompt on Swann's Way until the last sentence.)

17. It is not very popular in the United States, but the state of Michigan has used this revenue generating device--first from 1953 through 1967, and then again after 1975. The first country to adopt this on a large scale was France in 1954 and, today, most western European governments use it as a source of income. For

ten points, name this type of tax in which government puts a levy on the amount that a business firm adds to the price of a commodity during production and distribution of a good.

Answer: Value Added Tax or VAT

18. An early advocate of educational and social equality for women, she worked for James Johnson, a London publisher, and was a member of an influential radical group that included Thomas Paine and William Blake. She had two daughters, Fanny and Mary, the latter of which is famous in her own right. For ten points, name this eighteenth century British feminist and author of *Thoughts on the Education of Daughters* and *A Vindication of the Rights of Woman*.

Answer: Mary Wollstonecraft

19. This architectural innovation arose at the same time as the ribbed vault. While the vault's ribs focused support for the ceiling's weight at several discrete points, each of these structures distributed weight in several directions away from its highest point, helping to distribute the ceiling's thrust downward. FTP, name these structures, which replaced the round versions found in older barrel vaults.

Answer: Gothic arches

20. These are essentially very long columns of water with a heat source. The water at the bottom of the column does not boil because of the high pressure. As water near the top boils away, pressure at lower parts drops, and the water flashes into steam. Observers see this as a violent stream of steam and boiling water shooting over a hundred feet into the air. For ten points, name the geological phenomenon.

Answer: geysers

21. The French government called for a means to preserve food for the French army and navy. In 1809, Nicholas Appert developed such a means by sealing a bottle or a jar, heating it, and then maintaining the seal until use. This process was refined in 1810 in England by Peter Durand who first used metal containers. For ten points, name this type of food preservation which worked without explanation until Pasteur's studies fifty years after its first use.

Answer: canning

22. It was a fortified town on Mt. Petrachus which guarded the entry into the northern plain of Boeotia. It has been the site of two battles, in 86 B.C. there the Roman general Sulla defeated Mithradates VI of Pontus. The more famous battle occurred in 338 BC. Philip II of Macedon defeated Thebes and Athens. For ten points, name this battle which is considered to be the end of the independent Greek city-state.

Answer: Chaeronea

23. He is not Salman Rushdie, but in 1959 he had a novel condemned by Islamic religious leaders as blasphemous. Nearly all of his works are set in his native Cairo. He is the author of the novels *Children of Gebelawi*, *Midaq Alley*, and of *The Cairo Trilogy*. FTP, name this Egyptian winner of the 1988 Nobel Prize in literature.

Answer: Naguib (or Najuib) Mahfouz

24. According to legend, a bright star, which may have been Halley's comet, coincided with his birth. His grandfather Alapua ordered him put to death, but he was raised secretly. A war against his cousin Kiwalao in 1782 resulted in his first major conquest, and his kingdom was complete with the cession of Niihau and Kauai to his control in 1810. For ten points, name this ruler who unified the islands of Hawaii.

Answer: King Kamehameha I (or the Great)

Bonuses

1. For ten points each identify these sea creatures:

a) The common name for fish of the family Tetraodontidae. Many species are poisonous storing a highly toxic substance, tetraodontoxin, in their internal organs. In Japan, where they are called fugu, they are used for food.

Answer: pufferfish, swellfish, or blowfish

b) These are echinoid marine invertebrates with a globular body and a radial arrangement of organs. They have tube feet and long, movable spines. The mouth has a complex dental apparatus called Aristotle's lantern.

Answer: sea urchin

c) In genus Physalia, these are any of various invertebrate, jellylike marine animals noted for powerful sting. The body consists mainly of a gas-filled, bladderlike float, from which tentacles hang of up to 50 metres in length. They are often found on the ocean surface in groups of thousands.

Answer: Portugese man-of-war

2. 30-20-10 Name the sculptor

30: In 1862, he considered entering the church, but in 1864 the young sculptor met Rose Beuret, a seamstress, who became his life companion, although he did not marry her until a few weeks before her death in February 1917. He worked with the sculptor A.E. Carrier-Belleuse.

20: His first submission to the Salon, "The Man with the Broken Nose," was rejected. The first major monument he sculpted was for the City Hall of Paris. In the mid 1880's he became the lover of Camille Claudel.

10: Among his works are "The Kiss", "The Burghers of Calais", and "The Gates of Hell"

Answer: Auguste Rodin

3. For ten points each, name these mythological figures.

a) Her two sisters, Stheno and Euryale were immortal whereas she was not. Thus, Perseus was able to slay her. She had two sons by Poseidon, Chrysaor and Pegasus.

Answer: Medusa

b) This monster, one of the offspring of Typhon and Echidna, lived in marshes of Lerna near Argos. Of its many heads, only the center one was immortal.

Answer: Hydra

c) King Oeneus had omitted to sacrifice to Artemis; so, she sent this wild boar to ravage the country. His son Meleager organized a band of heroes, which included Atalanta to drive it away. Meleager eventually killed it himself.

Answer: Calydonian boar

4. 30-20-10 Name this American book.

30: Although not all historians agree as to its origins, some say it is the work of a clergyman, Solomon Spaulding. It relates the story of an ancient migration led by the prophet Lehi.

20: It was first published in 1830 in Palmyra, New York. The original translator claims he returned the manuscript to one of its authors.

10: One version of its history claims it was written on gold plates by the father of Moroni. Moroni supposedly then made additions to the work and buried the plates in upstate New York.

Answer: Book of Mormon

5. 30-20-10 Name the spice.

30: It is the largest spice by volume in world trade. It is unusual for a spice in that it is grown mainly in temperate climates, principally in Canada, the U.S., Britain, and Hungary.

20: Three major varieties are grown today: white, yellow, and brown. Its small seeds are used as a symbol of faith in the New Testament.

10: As a condiment, it is sold in three forms: as seeds, as a dry powder, and as a paste blended with other

spices. The paste is usually used as a spread and can be mixed with mayonnaises and sauces.

Answer: mustard

6. Give the animal behavior term which refers to the following types of symbiotic behavior, FTP each

a) Helpful behaviour which raises the recipient's direct fitness while lowering the donor's direct fitness.

Answer: Altruism

b) A relationship in which all organisms benefit.

Answer: Mutualism or cooperation

c) This relationship is similar to mutualism, but the benefit to the donor is delayed while the benefit to the recipient is immediate.

Answer: Reciprocity

7. Cassius Dio says that all five men who were consul with Tiberius suffered a sad fate. Name these three, FTP each:

a) Tiberius' first colleague in 13 B.C. was his brother-in-law. Tapped by Tiberius to govern Germany, he was killed in the Teutoberger Wald in A.D. 9.

Answer: Publius Quintillius Varus

b) Tiberius' nephew and adopted son, colleague in A.D. 18 was the beloved of the Roman people but he died mysteriously in the East in A.D. 19. Rumor says Tiberius' pal (and fellow consul in 7 B.C.) Calpurnius Piso poisoned him and committed suicide midtrial.

Answer: Germanicus Julius Caesar

c) Tiberius' fifth and last colleague was plotting to overthrow Tiberius but got the tables turned on him in A.D. 31. *Star Trek* fans will recognize Patrick Stewart in this role from BBC's *I, Claudius*.

Answer: Lucius Aelius Sejanus

8. For ten points a piece, given the clue, name the twentieth century American artist.

a) He spent most of his adult life in New York and was part of the Pop Art movement. He is most famous for his paintings of American flags.

Answer: Jasper Johns

b) Born in the Netherlands, he came to the United States in 1926 as a stowaway. A member of the Abstract Expressionist school, his mature works were exclusively about women--some of his most famous works being those in the series "Woman I-VI". He died in 1997.

Answer: Willem de Kooning

c) The creator of the technique of "action painting," which involves standing over the canvas and dripping industrial paint on it.

Answer: Jackson Pollock

9. 30-20-10. Name the Author.

30: His first novel, *Grimus*, was published in 1975 while he worked in London as an advertising copywriter.

20: The son of a prosperous Muslim businessman in India, he was educated at the Rugby School and the University of Cambridge. Other works of his include *Midnight's Children* and *The Moor's Last Sigh*.

10: His most well known novel is *The Satanic Verses*.

Answer: Salman Rushdie

10. Answer the following about conic sections, FTP each:

a) Given two points, called foci, this type of conic section is the set of points the sum of whose distances from the two foci is a constant.

Answer: Ellipse

b) This type of conic section, obtained by passing a plane vertically through a cone, is the set of points the difference of whose distances from two foci is constant.

Answer: Hyperbola

c) This quantity is less than one for an ellipse, more than one for a hyperbola, and one for a parabola. It can be viewed as a measurement of the roundness of a conic section.

Answer: eccentricity

11. 30-20-10 Name the leader.

30: At the secondary school, he received a nickname, meaning "The Perfect One," from his mathematics teacher. In 1895 he progressed to military school where he met Ali Fethi Okyar, who helped him in later life.

20: After World War I, at the urging of the Allies, he was sent to Anatolia to restore order. On May 19, 1919, he landed at Samsun, a port on the Black Sea.

10: By 1922, he had pushed the Greeks, and most of the Allies, out of Anatolia. In 1923, the allies negotiated the Treaty of Lausanne with the government he led in Ankara. With that treaty, the modern Turkish state was completed.

Answer: Kemal Ataturk (accept Mustafa Kemal)

12. Identify the following acids from their chemical formulas:

a) F5P, H_2SO_4

Answer: sulfuric acid

b) F5P, HNO_3

Answer: nitric acid

c) FTP, $HClO$

Answer: hypochlorous acid

d) FTP, $HC_2H_3O_2$

Answer: acetic acid

13. For ten points each name these U.S. rivers which flow into the Atlantic Ocean.

a) It rises in Lake Otsego in New York and empties into the Chesapeake Bay. Its tributaries include the Chemung and the Lackawanna and, although the river itself is not navigable, its valley served as an important land route to the Ohio River system.

Answer: Susquehanna

b) This river also drains into the Chesapeake Bay. It has a north and south branch, both of which unite southeast of Cumberland, Maryland. The North Branch forms the boundary between Maryland and West Virginia from its source to Harper's Ferry, West Virginia.

Answer: Potomac

c) It rises in New Hampshire's White Mountains at the confluence of the Pemigewasset and Winnepesaukee rivers. Flowing through Massachusetts as well, many of New England's important early textile factories used it as their power source. A famous ship was named after it.

Answer: Merrimack

14. Identify the following American expatriate authors from works:

a) F5P, *For Whom the Bell Tolls*, *Death in the Afternoon*, *The Sun Also Rises*

Answer: Ernest Hemingway

b) FTP, *Tender Buttons*, *Three Lives*, *The Autobiography of Alice B. Toklas*

Answer: Gertrude Stein

c) F15P, *My Education*, *Junky*, *Cities of the Red Night*

Answer: William S. Burroughs

15. Name the 20th century architects for ten points apiece.

a) This German architect founded the Bauhaus in 1919 and served as its director until 1928. He revolutionized architectural design by instructing his students to design in the actual materials instead of relying on blueprints.

Answer: Walter Gropius

b) This German architect was one of the leading designers in the International style and became director of the Bauhaus in 1930. His most famous buildings are the German Pavilion at the Barcelona exhibition and the Seagram Building in New York.

Answer: Ludwig Mies van der Rohe

c) Born Charles Edward Jeanneret, this Swiss architect advocated monumental yet functional designs. He emphasized efficiency and was known to describe houses as "dwelling machines." He envisioned cities of high-rise buildings surrounded by parkland, a desire reflected in the Unite d' Habitation, a high-rise apartment building complete with shops and a rooftop pool.

Answer: Le Corbusier

16. 30-20-10 Name the scientist:

30: He was born in Croatia and immigrated to the U.S. In 1884. Although scientifically his expertise had him under consideration for a Nobel prize at one point, his natural eccentricity degenerated into outright neuroticism later in life with an obsession for breeding pigeons.

20: At one time associated with Thomas Edison, the two of them had a falling out after Edison allegedly shorted him payment for an invention. Later, he and Edison caused severe controversy over the merits of alternating versus direct current, with his alternating current eventually winning out.

10: The MKS unit of magnetic flux density is named after him.

Answer: Nikola Tesla

17. Name the composer from works, 30-20-10.

30: *Threni, The Wedding, The Rake's Progress, In Memoriam Dylan Thomas*

20: *Petrushka, Symphony of Psalms, Pulcinella*

10: *The Rite of Spring, The Firebird*

Answer: Igor Stravinsky

18. Answer the following questions about Russian history, FTP each:

a) These old-fashioned nobles challenged Peter the Great unsuccessfully. A large number of them incurred hefty barber bills when he snipped off their beards.

Answer: Boyars

b) These terrifying Russian cavalry were auxiliaries in the army infamous for plundering everyone and anyone.

Answer: Cossacks

c) These wealthy peasants were landowners in tsarist Russia. Stalin exterminated them.

Answer: Kalchuks

19. 30-20-10 Name the historical pair.

30: In 1760, the two were selected by the Royal Astronomical Society to travel to Sumatra in order to observe the transit of Venus. They got no further than the Cape of Good Hope, however, before returning to England.

20: In 1763, they were commissioned to do a job in America. Their work involved setting milestones bearing P and M over a distance of over 200 miles. They did not complete their work due to hostile Indians, but they were still paid \$75,000, and their work was ratified by the British Crown.

10: They were commissioned by William Penn and Lord Baltimore to settle a dispute over the boundary between Pennsylvania and Maryland and gave their names to a "line" between the North and South.

Answer: Charles Mason and Jeremiah Dixon

20. Given the description of a relationship between two goods, you give the economic term for that relationship for ten points a piece:

a) Sales of these goods always increase and decrease together. An example would be left and right shoes.

Answer: complementary goods

b) Sales of these goods always move in opposite direction of each other. People do not buy one of these goods as a result of buying the other. An example is gloves and mittens.

Answer: substitute goods

c) As income rises, consumption of these goods falls.

Answer: inferior goods

21. 30-20-10 Name the epic:

30: The main character of its first half gained invulnerable skin by bathing in dragon's blood. However, a leaf fell on his back during this process and one spot, between his shoulder blades remained vulnerable.

20: Female characters include Kriemhild and Brunhild. The former is from Worms; the latter is from a place which is probably Iceland.

10: The hero of the first half is Siegfried. This German epic, comparable to the Aeneid in its importance to its people, inspired Wagner's Ring Cycle.

Answer: Nibelungenlied

22. 30-20-10 Name the author

30: She graduated from the University of Petrograd in 1924 and came to the U.S. in 1926 where she worked as a Hollywood screenwriter.

20: She is known mostly for two major works in which she presented her philosophy, a controversial one which was a reversal of traditional Christian ethics.

10: Her capitalist, laissez-faire loving philosophy was best presented in the novels *The Fountainhead* and *Atlas Shrugged*.

Answer: Ayn Rand

23. For ten points each, name the pope.

a) Born as Hildebrand, he was a great reformer. He is most often remembered for his disputes with the German Emperor Henry IV over lay investiture.

Answer: Saint Gregory VII

b) Like Gregory VII, he was a participator in political conflict. However, unlike Gregory, he was largely unsuccessful. An attempt to prevent Philip IV the Fair of France from taxing the clergy was a failure, and continued conflict with Philip eventually resulted in his brief capture by his enemies. He is perhaps most well known for writing the bull *Unam Sanctum*.

Answer: Boniface VIII

c) He was the first pope to use the name he chose in over six hundred years. He did not begin his reign until he was in his seventies. But his age did not stop him from being one of the most innovative modern popes. During his five-year reign, he is most famous for summoning an ecumenical council in 1962.

Answer: John XXIII

24. 30-20-10 Name the author

30: This seventeenth century Englishman wrote a very important translation of the Aeneid which is still published today.

20: A poet Laureate, his works include "MacFlecknoe" and "Absalom and Achitophel".

10: Some of his longest poems were "Annus Mirabilis" and "The Hind and the Panther". He was so influential in his times that the literary period in which he lived was named after him.

Answer: John Dryden

25. 30-20-10 Name the country.

30: The ancient forerunners of this nation were the Diauhi, ancestors of the Taokhoi, and the Kulkha, ancestors of the Colchians. The fabled wealth of the Colchians became known quite early to the Greeks and found expression in the legend the Golden Fleece.

20: In the ninth century, The Bagratid dynasty was formed, and under such leaders as Ashot I the Great and Bagrat III, much of the area that comprises this nation was taken out of Byzantine and Arab control. Stalin was a native of this country.

10: The birthplace of Edward Sheverdnadze, this former Soviet republic's capital is the city of T'bilisi.

Answer: Georgia