

Tossups

1. Reference to this man, whose first name was probably Georg, may be found in the works of Philipp Melanchthon, but in a 1587 book printed by Johann Spies his name was switched to Johann. In one play, he seduces and impregnates a girl named Gretchen, who drowns their child; this story also appears in an opera by Charles Gounod. FTP, name this legendary subject of plays by Marlowe and Goethe who sells his soul to the demonic spirit Mephistopheles.

Answer: Faust

2. In one myth, this son of the virgin goddess Coatlicue threw himself on a funeral pyre after being seduced by another deity, after which his heart became the morning star. Associated with water and fertility, he introduced the calendar and agriculture, and a myth which predicted his appearance in the form of a light-skinned, bearded man appeared to have come true in 1519. FTP, name this feathered serpent and major deity of the Toltec and Aztec.

Answer: Quetzalcoatl

3. This chemical compound, obtained mainly from coke-oven gas and discovered in a gas made from whale oil in 1825, is the parent substance of such compounds as maleic anhydride, aniline, phenol, and toluene. At 1.39 angstroms, the distance between its carbon atoms is unusual, reflecting the accuracy of the models constructed by Linus Pauling and August Kekule describing the resonance behavior of its single and double bonds. FTP, name this aromatic compound of formula  $C_6H_6$ .

Answer: Benzene

4. This work, whose climactic phrase was used as the epigraph for T.S. Eliot's "The Hollow Men," is narrated by a former river steamer operator who also narrates such works by the same author as *Chance*, *Youth*, and *Lord Jim*. Intrigued by stories about a powerful trader, the narrator travels upriver to see him, only to find the trader, Kurtz, ruthlessly exploiting the region's natives. FTP, name this 1902 novella set in the Congo by Joseph Conrad.

Answer: Heart of Darkness

5. This priest of the Greek god Asclepius led the Athenian chorus in its celebration of the victory at Salamis as a 16 year old. Of his more than 100 plays, which were the first to use a third speaking actor, only seven survive in full, including *Philoctetes* and *Ajax*. FTP, name this tragic dramatist and rival of Aeschylus and Euripides best known for *Antigone* and *Oedipus the King*.

Answer: Sophocles

6. After this man's parents separated when he was six, he lived with his mother Nandi in the Langeni clan, but the Langeni later drove the family out, a decision the clan leaders would regret when he had them impaled shortly after taking power. In 1827, his mother died, and in his grief he banned the planting of crops and the use of milk for a year and killed all pregnant women and their husbands, having by this point taken over virtually all of modern-day Natal. FTP, name this founder of the Zulu Empire.

Answer: Shaka (Zulu)

7. The derivative of the inverse of this function is negative 1 divided by the square root of the quantity one minus  $x$  squared. It may be expressed as  $e$  to the  $ix$  plus  $e$  to the  $-ix$  all over two, and the graph of its hyperbolic form takes the shape of a catenary. FTP, name this trigonometric function which for small values is approximated by the parabola  $1 - x^2/2$  and whose reciprocal is the secant.

Answer: cosine

8. With Robert Southey, he intended to found a utopian community in Pennsylvania based on the scheme of pantisocracy, but abandoned the plan due to financial difficulties in 1796. After traveling to Germany and translating Schiller's *Wallenstein*, he settled with William Wordsworth in the Lake District, where he

became addicted to opium and wrote such poems as "Christabel" and "Dejection: An Ode." FTP, name this romantic poet best known for "Kubla Khan" and "The Rime of the Ancient Mariner."

Answer: Samuel Taylor Coleridge

9. This artist began as an assistant to Lorenzo Ghiberti around 1405, and while working with Ghiberti he developed a new kind of relief called *schicciato* with his marble panel, "St. George Killing the Dragon." His knowledge of ancient sculpture exceeded that of any other artist of his day, but he is recognized for rejecting the serenity of ancient art in favor of a more vigorous style, seen in such works as "Feast of Herod" and an equestrian statue of Gattamelata. FTP, name this artist who did much of his best work in bronze and who, like fellow Ninja Turtle Michelangelo, is best known for a statue of David.

Answer: Donatello (or Donato di Niccolò di Betto Bardi)

10. As a result of the "Final Act" of this meeting, which began 6 months after the signing of the Treaty of Chaumont, Denmark gained control of the region Lauenberg, Prussia took Thorn, Norway acquired Sweden, and Krakow became a free city. Delegates to the meeting included Karl von Hardenberg, the Duke of Wellington, Viscount Castlereagh, Tsar Alexander I, and Talleyrand. FTP, name this assembly which reorganized Europe after the Napoleonic Wars and was hosted by minister Klemens von Metternich of Austria.

Answer: Congress of Vienna

11. This artistic movement, associated with such poets as Detlev von Liliencron and Rainier Rilke and with composers such as Ottorino Respighi, grew out of an organization called the Anonymous Society of Artists, Painters, Sculptors, etc.. The movement was named by its harshest critics, who specifically objected to the lack of continuous brushstrokes in an 1872 painting of a sunrise. FTP, name this movement best represented by the painters John Singer Sargent, Alfred Sisley, Mary Cassatt, Edgar Degas, and Claude Monet.

Answer: Impressionism

12. This river passes through the Iron Gate gorge after flowing across the Little and Great Alford plains on its way from the Breg and Brigarch springs in the Black Forest to its delta near Izmail, Moldova. It takes a 90 degree turn southward at Visegrad near the border between Slovakia and Hungary, and runs through such cities as Linz, Bratislava, Belgrade, Budapest, and Vienna. FTP, name this Eastern European river inaccurately referred to as "blue" in the title of a waltz by Johann Strauss.

Answer: Danube

13. This composer, regarded as a founder of the bel canto style of singing, wrote no operas in the last 39 years before his 1868 death, restricting himself to a few choral works such as *Stabat Mater*. Born in the Papal States, he lived much of his life in Paris, where he composed "The Journey to Reims" for the coronation of Charles X, having established his reputation with comic operas like *The Lady of the Lake*, *Semiarimide*, and *Cinderella*. FTP, name this composer of *William Tell* and *The Barber of Seville*.

Answer: Gioacchino Antonio Rossini

14. This notion in economics was premised on the existence of a surplus of labor and the fact that wealthier people have more children who live to adulthood, so that increasing salaries would ultimately increase the size of the workforce. Put forward in the 1817 book *Principles of Political Economy and Taxation*, it maintains that any attempt to raise the real income of laborers is futile, so that wages will remain near the subsistence level. FTP, name this law proposed by David Ricardo.

Answer: Iron Law of Wages

15. Although they knew nothing of agriculture and, at least initially, had no central leadership, in 376 they defeated the Visigoths in what is now Romania, allowing them to demand tribute from the Romans. In 432, Rua became their king, and when he died two years later he was succeeded by his two nephews, one of whom killed the other and lost only one battle in a series of campaigns which saw him take over the Balkans and sack several Italian cities. FTP, name this group of nomads who gradually disappeared from the map of Europe after the death of their leader Attila.

Answer: Huns

16. Construction on this building, which is built to sway as much as 18 inches, began in 1963, 15 years after its design was chosen as a result of a nationwide competition. Consisting of 143 triangular segments, it is located two blocks away from the courthouse which saw the first two Dred Scott trials. FTP, name this catenary-shaped structure designed by Eero Saarinen as part of the Jefferson National Expansion Memorial in St. Louis.

Answer: Gateway Arch (prompt on "Jefferson National Expansion Memorial")

17. Part of this organ is regulated by the hormone secretin, is connected by the duct of Santorini and the duct of Wirsung to the duodenum, and uses its acinar cells to manufacture the precursors to the enzyme trypsin. Its other, endocrine, part makes small amounts of somatostatin in the islets of Langerhans, but mainly functions to regulate the storage of sugar. FTP, name the organ which produces glucagon and insulin.

Answer: Pancreas

18. She co-authored *A Rap on Race* with James Baldwin one year after the publication of her 1970 work, *Culture and Commitment*, a biography of Ruth Benedict. Her first book was published a year before she received her Ph.D. from Columbia University and reflected her belief in cultural determinism, a position which caused later anthropologists to question the book's observations on such matters as culture change, psychology, and sexual behavior. FTP, name this author of such works as *Growing up in New Guinea* and *Coming of Age in Samoa*.

Answer: Margaret Mead

19. Legend says he retired from politics when his son Caeso (KIGH-zo) Quinctius (KWINC-tius) was put on trial by a tribune and fined. Nevertheless, this great patriot put aside his personal grief--and his plow--when a delegation from the Senate appointed him dictator in 458 B.C.. FTP, what Roman patrician rescued the consul and his country from the Aequi (EYE-kwi) and is today honored by a city in Ohio?

Answer: Lucius Quinctius Cincinnatus

20. This electrical device can be used as a filter to divert potentially damaging electrical signals or as a place to store information from computer memory in case of a power failure, and a variable one is used as a tuning device in radios. Its effectiveness is improved when the electric field inside it is decreased through the introduction of an insulating dielectric, which carries bound charges on its surface. FTP, name this device often consisting of two parallel plates, whose effect is measured in farads.

Answer: Capacitor

21. This author's 1986 play *Dreaming Emmett* was based on the life of a young boy killed by a lynch mob, but her 1993 Nobel Prize resulted mainly from her novels, whose characters include Pecola, Jadine, Sisto, and Milkman. Born Chloe Anthony Wofford, she used 1920s Harlem as a setting for her second most recent novel, *Jazz*. FTP, name this author of *The Bluest Eye*, *Paradise*, and *Beloved*.

Answer: Toni Morrison

22. Their names include Theodore, Eulalius, Ursinus, Paschal, and Novatian. Three of them were named John; the first, Hippolytus, was a saint; and four of them ruled between 1378 and 1417 out of Avignon. FTP, give the term for an illegitimate claimant to the throne of the pope.

Answer: Antipopes

23. Probably invented in Russia, this instrument was perfected in 1849 by Ignaz Stowasser and has often been used in military bands. Often pitched in E-flat or C, it is also known as the helicon, but obtained its more common American name when a removable bell was attached to it. FTP, name this marching instrument named after the composer of "El Capitan" and "Stars and Stripes Forever."

Answer: Sousaphone (accept "helicon" early)

24. After joining the Communist Party while on a work-study program in France two years after his participation in the May Fourth Movement, he worked as a military organizer under Chiang Kai-Shek, only to be purged by Chiang in 1927. However, thanks in part to his charm and negotiating skills, that was the

only time in his life that he was purged, and as foreign minister he signed a 30-year alliance with Russia. FTP, name this premier and diplomat whose 1971 meeting with Henry Kissinger set the stage for the historic meeting between Richard Nixon and Mao Zedong.

Answer: Chou En-Lai (Zhou Enlai)

Cal Classic IV  
Packet by Mike Usher

Boni

1. Identify the following social reformers, FTP each:

a) The Welsh born utopian socialist who founded several small utopian communities, including New Lanark, Scotland, in 1816 and New Harmony, Indiana, in 1825.

Answer: Robert Owen

b) The advocate for the mentally ill whose 1843 report to the Massachusetts state legislature about the condition of mental patients in prison led to the construction of numerous mental hospitals.

Answer: Dorothea Dix

c) The winner of the 1931 Nobel Peace Prize best known for founding Hull House, a social settlement in Chicago.

Answer: Jane Addams

2. Identify the following anthropological terms relating to marriage customs, for the stated number of points:

a) FFP, the general term for the marriage of a single person to multiple spouses.

Answer: polygamy

b) FTP, the specific term for the marriage of a woman to multiple husbands.

Answer: polyandry

c) F15P, the term for the marriage of a widow to her deceased husband's brother.

Answer: levirate marriage

3. Identify the following short stories by Mark Twain, FTP each:

a) The 1865 story about a frog-jumping contest with which Twain first achieved fame as a storyteller.

Answer: "The Celebrated Jumping Frog of Calaveras County"

b) The 1900 story about a stranger to a town who concocts a scheme to test the honesty of its leading citizens.

Answer: "The Man that Corrupted Hadleyburg"

c) The 1898 story about a 16th century Austrian boy's encounter with Satan.

Answer: "The Mysterious Stranger"

4. Identify the following rulers of Russia, FTP each:

a) The tsar from 1682 to 1725 known for his efforts to modernize Russia so that it could compete with the nations of Western Europe and for his victory over Sweden in the Great Northern War.

Answer: Peter I or Peter the Great (accept Pyotr for Peter)

b) The German-born empress of Russia from 1762-1796 who continued Peter's efforts at modernization and annexed the Crimea and much of Poland.

Answer: Catherine II or Catherine the Great (accept Yekaterina for Catherine)

c) The emperor of Russia from 1855-1881, best known for emancipating the serfs.

Answer: Alexander II

5. Identify the following 17th century Dutch painters from works, FTP each:

a) *The Anatomy Lesson of Dr. Tulp*, *The Company of Franz Banning Cocq*, *Supper at Emmaus*

Answer: Rembrandt Harmenszoon van Rijn

b) *The Raising of the Cross*, *Landscape with the Castle of Steen*

Answer: Peter Paul Rubens

c) *The Lacemaker*, *The Artist in his Studio*

Answer: Jan Vermeer

6. Identify the following kinds of musical compositions, FTP each:

a) A composition for relatively few instruments, usually consisting of three or four movements of contrasting rhythm and mood but similar tonality. Examples include "Kreutzer" and "Moonlight" by Beethoven.

Answer: Sonata

b) A large-scale composition usually based on Scripture. Examples include Bach's *Passion According to St. Matthew*, Handel's *Messiah*, and Haydn's *The Creation*.

Answer: Oratorio

c) A composition, similar to an overture, inspired by a literary theme to which the title usually alludes. Examples include *The Preludes* by Franz Liszt, who invented the form; Richard Strauss' *Don Juan* and *Also Sprach Zarathustra*; and Claude Debussy's *Prelude to the Afternoon of a Fawn*.

Answer: Symphonic poem or tone poem

7. Identify the following explorers, FTP each:

a) The Spaniard who led the first stable settlement in the New World at Darién, Panama, and who in 1513 became the first European to see the Pacific Ocean.

Answer: Vasco Núñez de Balboa

b) The Portuguese navigator who in 1500 accidentally discovered Brazil on what was supposed to be the second major expedition around the Cape of Good Hope to India.

Answer: Pedro Álvares Cabral

c) The one-time governor of Guatemala who, in 1542, became the first European to explore the coast of California.

Answer: Juan Rodríguez Cabrillo

8. Identify the following ancient battles between the Greeks and the Persians, FTP each:

a) The 490 B.C.E. battle in which the Athenians under Miltiades repulsed the first Persian invasion of Greece. The battle is probably most famous for the exploits of a messenger who ran from the battlefield to Athens to report the result.

Answer: Battle of Marathon

b) The August 480 B.C.E. battle in which the Spartans under Leonidas unsuccessfully tried to stop the numerically superior Persians from advancing into central Greece.

Answer: Battle of Thermopylae

c) After the Greek defeat at Thermopylae, a naval stand near Athens was the Greeks' salvation, as the smaller Greek fleet defeated the Persians in narrow confines. Legend says Themistocles induced the Persians to attack by pretending the Greeks were about to flee in fear, inspiring Xerxes to "finish them off."

Answer: Battle of Salamis

9. Identify the following rules from chemistry, FTP each:

a) This principle, which in its most general form says that no two indistinguishable fermions can occupy the same quantum state, results in the rule that a single orbital can't hold more than two electrons.

Answer: Pauli Exclusion Principle

b) This rule, violated by compounds containing hydrogen, states that each atom in a compound will have eight valence electrons associated with it.

Answer: Octet rule

c) This rule states that if two or more orbitals are available to be filled by two electrons, the electrons will occupy different orbitals and have parallel spins.

Answer: Hund's rule

10. Identify the following German or Austrian authors from works, FFP each:

a) *The Magic Mountain*, *Buddenbrooks*

Answer: Thomas Mann

b) *Siddhartha*, *Steppenwolf*

Answer: Herman Hesse

c) *The Tin Drum*, *The Flounder*

Answer: Günter Grass

d) *Roman Elegies*, *The Sorrows of Young Werther*, *Iphigenia in Tauris*

Answer: Johann Wolfgang von Goethe

e) *The Castle*, *The Trial*, "Metamorphosis"

Answer: Franz Kafka

f) *The Robbers*, *Don Carlos*



Answer: (Johann Christoph) Friedrich von Schiller

11. Identify the founders of the following religions, FTP each:

a) Jainism

Answer: Mahavira (or Vardhamana)

b) Sikhism

Answer: Guru Nanak

c) Baha'i

Answer: Baha'ullah (or Mirza Husayn Ali)

12. Identify the following works by Daniel Defoe, for the stated number of points:

a) FFP, Defoe's novel about a mariner who spends over 24 years on an uninhabited island.

Answer: *The Life and Strange Surprising Adventures of Robinson Crusoe, of York, Mariner*

b) FTP, Defoe's 1722 novel about a woman who spends parts of her life as a whore and as a thief but eventually gets rich, reforms herself, and dies.

Answer: *Moll Flanders*

c) F15P, Defoe's account of the 1665 bubonic plague epidemic in England.

Answer: *A Journal of the Plague Year*

13. Give the values of the following physical constants to at least two significant figures, for the stated number of points:

a) FFP, Avogadro's number

Answer: 6.0221367 times 10<sup>23</sup>

b) FFP, the universal gravitational constant, measured in meters-cubed per kilogram per second squared

Answer: 6.7 times 10<sup>-11</sup> ( $6.67259 \times 10^{-11}$ )

c) FTP, the charge of the electron, measured in coulombs

Answer: -1.60217733 times 10<sup>-19</sup>

d) FTP, Boltzmann's constant, measured in Joules per degree Kelvin

Answer: 1.4 times 10<sup>-23</sup> ( $1.380658 \times 10^{-23}$ )

14. Given an abbreviation commonly found on sheet music, give the Italian word or phrase it represents, FFP each:

a) ff

Answer: fortissimo

b) dim

Answer: diminuendo

c) D.C.

Answer: da capo

d) sfz

Answer: sforzando

e) rit

Answer: ritardando

f) rall

Answer: rallentando

15. Identify the following ancestors of Zeus, FTP each:

a) Zeus' father, the youngest of the twelve titans, who swallowed Zeus' brothers and sisters but was overpowered by Zeus.

Answer: Cronus

b) Zeus' paternal grandfather, who personified the sky and was castrated by Cronus.

Answer: Uranus

c) Zeus' paternal grandmother, the earth goddess who was both mother and mate to Uranus.

Answer: Gaia

16. Given an animal, identify the phylum (not the sub-phylum) into which it is classified, for the stated number of points:

a) FFP, humans

Answer: Chordata

b) FFP, lobsters

Answer: Arthropoda

c) FFP, roundworms

Answer: Nematoda, Aschelminthes, or Nemathelminthes

d) FFP, jellyfish

Answer: Cnidaria or Coelenterata

17. Identify the capitals of the following African nations, FFP each:

a) Morocco

Answer: Rabat

b) Mauritania

Answer: Nuakchott

c) Ghana

Answer: Accra

d) Zambia

Answer: Lusaka

e) Ethiopia

Answer: Addis Ababa

f) Chad

Answer: N'Djamena

18. Identify the early-twentieth century American authors from works, FFP each:

a) *O Pioneers!*, *My Ántonia*

Answer: Willa Cather

b) *Sister Carrie*, *An American Tragedy*

Answer: Theodore Dreiser

c) *The Gentleman from Indiana*, *Alice Adams*, *The Magnificent Ambersons*

Answer: Booth Tarkington

19. Identify the following world leaders:

a) FFP, the Prime Minister of Canada

Answer: Jean Chrétien

b) FFP, the Chancellor of Germany

Answer: Gerhard Schröder

c) FFP, the President of Poland

Answer: Aleksander Kwasniewski

d) FFP, the President of South Korea

Answer: Kim Dae Jung

20. Identify the following periods in the history of architecture, FFP each:

a) The period which reached its peak in the 11th century and was inspired partly by Roman architecture, in particular in the use of vaulting. Examples include the cathedral at Santiago de Compostela in Spain.

Answer: Romanesque

b) The period corresponding to the late Middle Ages, which featured the use of pointed arches. The most famous example is the cathedral of Amiens in France.

Answer: Gothic

c) The period, at its height in the 17th century, which replaced the restrained style of the renaissance with freer and more active architectural forms. Its late period is sometimes called Rococo.

Answer: Baroque

21. Identify the following rhetorical devices, for the stated number of points:

a) FFP, a comparison between two things of different kind, usually introduced by "like" or "as."

Answer: Simile



b) FTP, the substitution of the name of one thing for that of another with which it is commonly associated. One special type of this device is synecdoche.

Answer: Metonymy

c) F15P, the repetition of a word or expression at the beginning of successive phrases for rhetorical or poetic effect.

Answer: Anaphora

22. Answer the following relating to B.F. Skinner, FTP each:

a) Identify the school of psychology, which was inspired partly by the experiments of Ivan Pavlov and holds that humans are controlled entirely by external factors, with which Skinner is most commonly associated.

Answer: Behaviorism

b) Name the founder of behaviorism.

Answer: John Broadus Watson

c) Name Skinner's 1948 novel based on his principles of social engineering, whose title alludes to a work by Henry David Thoreau.

Answer: Walden Two