1. He negotiated for aid with the Irish, the Scots, and the French, all enemies of England and also intrigued with prominent English lords. He began to consider himself the prince of his country; he called a parliament, established his own government, and entered a formal alliance with France in 1404. A year later, an English army under Prince Henry, later Henry V, defeated his forces in three successive battles. He was pardoned by Henry V in 1415 , and nothing is known of him after that date. FTP, identify this last great champion of Welsh independence.

## Answer: Owen Glendower

2. Born in Brooklyn, New York, and educated at the City College of New York and the University of Wisconsin, he spent most of his teaching career at Brandeis University. Judging orthodox behaviorism and psychoanalysis to be too rigidly theoretical and concerned with illness, he developed a theory of motivation describing the process by which an individual progresses from basic needs such as food and sex to the highest needs of what he called self-actualization-the fulfillment of one's greatest human potential. FTP, identify this American psychologist, the leading exponent of humanistic psychology, whose works include Farther Reaches of Human Nature and Toward a Psychology of Being.

Answer: Abraham Harold Maslow
3. X-rays have revealed that there was originally a different figure, a naked woman, seated by the river instead of the present male figure dressed in contemporary Venetian clothing. The most singular and enigmatic of its artist's few mature works, one persuasive explanation is that it represents Adam and Eve after the Fall. Barely visible near the rock at the river's edge is a snake, and the broken columns could stand for death, the ultimate punishment of Original sin. FTP, identify this circa 1505 work depicting a woman and child, possibly Eve suckling Cain, observed by a man with a staff while a lightning bolt, perhaps representing the voice of God, calls attention to the impending storm, generally credited to Giorgione.

Answer: The Tempest or Tempesta
4. Born in Teignmouth, Devonshire, and was educated at the University of Cambridge, he became a fellow of the Royal Society in 1816 and was active in the founding of the Analytical, the Royal Astronomical, and the Statistical societies. His 1832 book Economy of Machines and Manufactures initiated the field of study known today as operational research. In the 1830s he began developing his Analytical Engine, which was designed to carry out more complicated calculations, but this device was never built. FTP, identify this British mathematician and inventor, better known for his Difference Engine, who designed and built mechanical computing machines on principles that anticipated the modern electronic computer.

Answer: Charles Babbage
5. North America's land link to Europe was broken, but its ties to South America were forged toward the end of the period. Grasses became more prominent, leading to marked changes in the dentition of plant-eating animals. With most of the dominant reptile forms having vanished at the end of the previous period, it launched the age of mammals. Thus, in the Eocene epoch, new mammal groups developed such as small, horselike animals; rhinoceroses; tapirs; ruminants; whales; and the ancestors of elephants. Other epochs in this period include the Paleocene, Oligocene, Miocene, and Pliocene. FTP, identify this geologic period, lasting from 65-2.5 million years ago, bounded by the Cretaceous and the Quaternary.

Answer: Tertiary
6. It arose from the imposition by the Virginia legislature in 1758 of a law to fix clergymen's salaries, theretofore payable in tobacco, at a flat rate in currency. King George II of Great Britain vetoed the law, and some clerics sued their vestries for the difference between the money they received in 1758 and the market price of tobacco. In the best known trial, Patrick Henry, then a young lawyer, defended a Hanover County, Virginia, parish against a minister's suit. The court decided against the validity of the law, but the jury, influenced by Henry's speech attacking the king's veto as tyrannical, awarded the cleric one penny in damages. FTP, identify this celebrated 1763 legal action in the colony of Virginia.

Answer: Parsons' Cause
7. With their neighbor Calvin O'Keefe, young Meg and her brother Charles embark on a cosmic journey to find their lost father, a scientist studying time travel, in this novel. Assisted by three rather eccentric women (Mrs. Whatsit, Mrs. Who, and Mrs. Which)the children travel to the planet Camazotz, where they encounter a repressed society controlled by IT, a disembodied brain that represents evil. Among the novel's themes are the dangers of unthinking conformity and scientific irresponsibility. The book's sequels, A Wind in the Door, A Swiftly Tilting Planet, and Many Waters did not receive the acclaim as their predecessor. FTP name this novel, winner of the 1963 Newberry Medal, the best-known work of Madeleine L'Engle.

## Answer: A Wrinkle in Time

8. His early verse includes Poems and The Tempers. His mature work, often radically experimental in technique and form, was influenced by the imagist movement in its rejection of expansive sentimentality, artificiality, and vagueness; instead, his work relies on emotional restraint, the language of common speech, and a concentration on concrete, sensory experience. In the late 1930s he began the composition of an extended poem dealing with the American scene in the period of the depression, Paterson. FTP, identify this American poet, novelist, and physician, who wrote in distinctly American speech about everyday situations.

Answer: William Carlos Williams
9. Built in 312 BC, it led southward from the Servian Wall in Rome to Capua and was later extended to Brundisium. The main route to Greece, it was more than 350 miles long. It was well constructed, although the present pavement of large hexagonal blocks, principally lava, laid on a firm foundation and strengthened by cement, is probably not the original bed. From Rome to Terracina the course is nearly straight, despite the steep grades of the Alban Hills and the swamps of the Pontine Marshes. Near Rome the road was lined with tombs, of which the ruins of many can still be seen. FTP, identify this oldest and most celebrated highway of the Roman Republic.

Answer: Appian Way
10. Describing his work, he wrote "I am neither a thinker nor a moralist, but simply a man of letters who turns his own perplexities and that respected system of perplexities we call philosophy into the forms of literature." In the 1930s his health failed as a result of a head wound, and he became progressively blind. Nevertheless, he worked at the National Library and eventually became its director. His works include Dream Tigers, The Book of Imaginary Beings, The Aleph and Other Stories, and Ficciones. FTP, identify this Argentine writer, whose challenging avant-garde poems and tales made him one of the foremost figures in Latin American and world literature.

Answer: Jorge Luis Borges
11. Mythology says that Orestes took shelter on this island after being pursued by the Furies because he killed his mother Clytemnestra. In 1537, the Turks without any resistance from its inhabitants conquered the island. It was under the occupation of the Turks that this island became and important educational center. The shipping industry grew as the island traded with Europe and Asia Minor. The island gained its independence at the end of World War II and in 1948 it merged with Greece. For ten points, name this island, whose most famous inhabitant was John the Apostle.

Answer: Patmos
12. Shortly after it was announced that this author had won the Nobel Prize, one of the Swedish judges, Arthur Lundkvist announced (in unprecedented fashion) that the author was "a little English phenomenon of no special interest." Weeks later, Auberon Waugh in the Spectator charged that the author's "one good novel" bore a remarkable resemblance to W.L. George's little-known 1926 novel Children of the Morning. FTP, name this author of The Inheritors and The Spire who was awarded the 1983 Nobel Prize in Literature.

Answer: William Golding
13. In 1921, he left Calcutta to become a Reader at Dacca University. It was during this period that he wrote the famous paper on the statistics of photons. In his famous paper on the statistics of photons, he derived Planck's Law of Radiation by proposing different states for the photon. He also proposed that there is no conservation of the number of photons. Instead of statistical independence of particles, he put particles into cells and talked about statistical independence of cells. For ten points, name this physicist whose name describes the statistics of these photons as well as the particles that obey these statistics.

Answer: Satyendra Nath Bose
14. Imprisoned by the Nazis, he was freed at the end of World War II. He then immigrated to the United States, where he taught at Saint Louis University until his retirement in 1968, after which he returned to his native country. He was elected to the Austrian parliament as a Christian Socialist in 1927 and was minister of justice in the rightist authoritarian government of Engelbert Dollfuss. FTP, identify this Austrian chancellor who tried unsuccessfully to resist the growing power of the Austrian Nazis and increasing pressure from Adolf Hitler for an Anschluss with Nazi Germany.

Answer: Kurt von Schuschnigg
15. The river is 765 miles long, beginning in Jasper National Park in southwestern Alberta. Its source is the Columbia Icefield, high in the Rocky Mountains. The river flows northeast across Alberta and empties through a shallow delta into the lake in northeastern Alberta. The lake, which straddles the Alberta-Saskatchewan border, is about 200 miles long and covers about 3064 square miles. It is drained to the north by the Slave River. FTP, identify the shared name of this river and lake in western Canada that form part of the Mackenzie River system.

Answer: Athabasca
16. Robert Surtees was the film's cinematographer, and it was based on a book by Charles Webb that was filled with bitter hilarity and showed that a wide-screen film can still look good. Its enormous commercial success was presumably due to its comparative frankness on sexual matters. Katharine Ross was nominated for an Oscar as Best Supporting Actress. Benjamin Braddock is a shy, aimless young man who, without any idea of responsibility or ambition, wanders from a sexual liaison with a married woman, the infamous Mrs. Robinson, to pursuit of her engaged daughter, Elaine. FTP, identify this 1967 film, starring Anne Bancroft and Dustin Hoffman, which won an Oscar for Best Director for Mike Nichols.

Answer: The Graduate
17. About 90 species are known; most are native to Africa and Madagascar, but a few live in Asia and there is one European species. Most are 7-10 inches long but the longest can grow to two feet in length. Some species have conspicuous head ornamentation that may include as many as three long horns projecting forward. The muscular prehensile tail can be curled around a branch and helps the animal to stay immobile as it watches for prey with its large, protuberant eyes that can be moved independently of one another. FTP, identify this variety of primarily tree-dwelling lizards characterized by their extensile tongues that can be shot out a bodylength away to catch prey as well as by their ability to change body color.

Answer: chameleon or chamaeleontidae
18. Among the notable features of this estate are a library, an art collection of pre-Columbian, Early Christian, Byzantine, and medieval works, and magnificent gardens. It was deeded to Harvard in 1940 by the American diplomat Robert Woods Bliss. However, it is best known as the site of the 1944 conversations, conducted by representatives of the United States, China, Great Britain, and the Soviet Union, which constituted the basic plan of an organization to be founded after the war. FTP, identify this estate in Washington, D.C., where 1944 discussions led to the 1945 San Francisco Conference creating the charter of the United Nations.

Answer: Dumbarton Oaks
19. It has no known industrial applications. One of the transuranium elements in the actinide series of the periodic table, it was isolated in 1952 from the debris of a hydrogen bomb explosion by the American chemist Albert Ghiorso and his coworkers. Subsequently it was prepared synthetically in a nuclear reactor by bombarding plutonium with neutrons and in a cyclotron by bombarding uranium- 238 with nitrogen ions. Isotoopes with mass numbers from 242 to 259 have been produced, and the 257 isotope, the longest-lived isotope, has a half-life of 80 days. FTP, identify this artificially created radioactive element with an atomic number of 100 .

Answer: fermium
20. Though his comedies resemble those of Plautus in the general nature of their plots, their stock characters--the courtesan, the young man in love, and the disapproving father-and in their use of mistaken identify and eventual discovery, their quality is essentially quite different, as he uses double plots and a gentler tone. His works include The Brothers, Phormio, The Eunuch, The Self-Tormentor, The Mother-in-Law, and The Woman of Andros. FTP, identify this Roman comic playwright, who was born a slave and educated and freed by his owner.

Answer: Terence

1. Identify the constellations from a description, FTP each.
A. Its brightest star is the yellow super giant Mirfak. The constellation's second brightest star, Algol, is the best known of all eclipsing binary stars.

Answer: Perseus
B. It was known in ancient times as a fertility or a harvest symbol. It contains the first-magnitude star Spica, and a large number of variable stars. It is famous for its nebulas, of which over 500 have been identified.

Answer: Virgo
C. This equatorial constellation, also called the Whale, lies to the south of Aries, the Ram. The two brightest stars are normally Deneb Kaitos and Menkar. The most remarkable star is Mira, a variable star first discovered in 1596. It usually varies in brightness from the ninth to the third magnitude over a period of about 11 months.

Answer: Cetus
2. Identify these characters from Shakespeare's The Comedy of Errors FTP each.
A. This aged merchant from Syracuse is condemned to death for landing in Ephesus while searching for one of his twin sons. In the final act, after being reunited with both his sons and his long-lost wife, Aemelia, he is pardoned by the Duke of Ephesus.

Answer: Aegeon
B. The two twin sons of Aegeon, one of Syracuse and one of Ephesus, both share this name.

Answer: Antipholus
C. To add to the confusion of the play, the servants to both Antipholuses are twin brothers who share this name.

Answer: Dromio
3. Identify the Massacio works, from a description, F15PE.
A. The biblical figures all stand in beautifully balanced contrapposto, and close inspection reveals fine vertical lines scratched in the plaster by the artist, establishing the gravitational axis of each figure. The episode depicts the arrival in Capernaum of Jesus and the Apostles, based on the account given in Matthew's Gospel, depicting the events surrounding Peter's confrontation with Roman tax collectors.

Answer: The Tribute Money
B. The vaulted arch in this painting is a perfect illustration of the linear perspective which fascinated contemporary Florentine artists. Massacio painted the scene so that all of the sightlines converge on a single point, the crucified Christ, while Mary, facing out, seems almost to invite the spectator into the scene.

Answer: The Holy Trinity
4. This figure's fusing of animal and human characteristics is an allegory of man's fall from amoral innocence to the knowledge of good and evil, a common theme in the author's works. In this story, an innocent young Italian man commits a violent act and both he and his companions are haunted by his actions.
For 5 points, name this story by Nathaniel Hawthorne.
Answer: The Marble Faun
For 10 points, who sculpted the statue of the Marble Faun in Florence that inspired Hawthorne to write the story? Answer: Praxiteles
For 15 points, name the protagonist, who kills a man who has been following a young American artist.
Answer: Donatello
5. Answer these questions about an ancient Greek republic, FTP each.
A. This republic bounded on the north by the Locris Opuntia region, on the east by Atalante Channel and Evripos strait, on the south by the regions of Attica and ancient Megaris and the Gulf of Corinth, and on the west and northwest by the region of Phocis. An Aeolian people, the populace of this republic was originally from Thessaly.

Answer: Boeotia
B. Boeotia emerged as a significant Greek state about 600 BC . At that time, this chief city of Boeotia succeeded in forming the Boeotian League, a confederation of 14 city-states.

Answer: Thebes
C. The Theban general Epaminondas led the army of the Boeotian League to a decisive victory over the army of Sparta in 371 BC. From that time until 338 BC, when King Philip II of Macedonia defeated a combined army of Thebans and Athenians, Boeotia ruled Greece. For a final ten, identify either of these battles.

Answer: Leuctra or Chaeronea
6. Identify the scientists who worked on the hydrogen bomb, from a description, F15P each. A. In 1941 he became an American citizen, and in the same year he joined the Manhattan Project. For more than a decade he worked with the Italian-born physicist Enrico Fermi on this and succeeding projects at Columbia University, at the University of Chicago, and at Los Alamos. In 1952 he became professor of physics at the University of California, Berkeley, and director of the Livermore, California, division of the university's radiation laboratory. He was the principal architect of the hydrogen bomb, first tested in 1952, and he strongly advocated that the United States continue the testing of thermonuclear weapons.

Answer: Edward Teller
B. Beginning in 1943 he worked at Los Alamos on the atomic-bomb project. After initial misgivings he took part in the later development of the hydrogen bomb. At the same time he continued his work for the peaceful use and international control of nuclear energy. A prime advocate of the partial test-ban agreement signed by the United States, the Soviet Union, and Great Britain in 1963, he became an opponent of the Strategic Defense Initiative, proposed by the United States in the 1980s. He was awarded the 1967 Nobel Prize in physics for his studies of the production of energy by the sun and other stars, which he postulated occurs through thermonuclear fusion, a long series of nuclear reactions by which hydrogen is converted into helium.

Answer: Hans Albrecht Bethe
7. Identify the historical figure, 30-20-10.
A. Upon his death in 1886, he bequeathed most of his fortune for the establishment of the New York Public Library.
B. Counsel for several railroads, he achieved nationwide fame in law. At the same time, he rose rapidly in Democratic Party ranks and was named state chairman in 1866. From 1868 to 1872 he led a successful attack on the Tweed Ring, which controlled politics in New York City and the state.
C. The Electorial Commission of 1877 declared that Rutherford B. Hayes had defeated him in 1876 by one electoral vote.

Answer: Samuel Tilden
8. Identify these figures in Egyptian mythology from descriptions, 5 points each, 5 bonus for all correct.
A. He was the god of wisdom and magic. He had the head of an ibis.

Answer: Thoth (also accept Dhouti)
B. She was the lover of Ra and the goddess of sex and slaughter. She often has the head of a cow.

Answer: Hathor (also accept Athor)
C. He was son of Osiris and Isis, the hawk-headed god of day.

Answer: Horus
D. He was the chief god of Memphis and was the engineer of the gods.

Answer: Ptah (also accept Phtha)
E. The son of Amen and Mut, he was the gods' executioner and was known for his brutality. He also had the head of a hawk.

Answer: Khonsu (also accept Khensu or Khuns)
9. FFP each, and a ten point bonus for all correct, put the ancient writers in chronological order, based on year of birth, from earliest to latest.
A. Lucretius, Pindar, Theocritus
Answer: Pindar, Theocritus, Lucretius
B. Aeschylus, Aesop, Anacreon
Answer: Aesop, Anacreon, Aeschylus
C. Heliodorus, Herodotus, Hesiod
Answer: Hesiod, Heredotus, Heliodorus
D. Plautus, Pliny the Elder, Plutarch
Answer: Plautus, Plutarch, Pliny the Elder
10. Answer these questions about pH measurement.
A. For 5 points, name the type of electrode mostly used in present-day pH meters.

Answer: glass electrode
B. For 15 points, what was the prominent electrode used before the era of glass electrodes.

Answer: quinhydrone electrode
C. Name the two compounds from which the name quinhydrone is most likely comprised off, for five points each.

Answer: quinone and hydroquinone
11. Answer the following about the meteorology of tornadoes FTPE.
a. A tornado's power can be measured from 1 to 5 on this scale, named for a Japanese meteorologist who researches tornadoes.
Answer: _Fujita_
b. Tornadoes often form from this lowering of the cloud base due to moist updrafts, which develops from a scud cloud.
Answer: _wall_cloud
c. This type of front is formed when a cold front catches up to a warm front, depicted as a purple line with alternating triangles and circles. The conflict often results in severe storms.
Answer: _occluded_front
12. Identify the German authors from works, 5-10-15.
A. Steppenwolf

Answer: Herman Hesse
B. The Weavers

Answer: Gerhart Hauptmann
C. An Egyptian Princess

Answer: Georg Moritz Ebers
13. Answer these questions about flamenco dancing, FTP each.
A. Flamenco traces its origins to this region of southern Spain, that includes the provinces of Cadiz, Granada, Seville, Malaga, and Cordoba.

Answer: Andalusia
B. This is the name given to describe the intricate toe- and heel-clicking steps of the men's flamenco.

Answer: Zapateado
C. While the flamenco has Moorish and Andalusian roots, it is most closely tied to this ethnic group.

Answer: Gypsy or Romani
14. Identify the African writers from works, FTP each.
A. Children of Gebelawi

Answer: Naguib Mahfouz
B. Anthills of the Savannah

Answer: Chinua Achebe
C. The Famished Road

Answer: Ben Okri
15. Identify the French composers from works, FTP each.
A. Piéces de clavecin en concerts, Castor et Pollux

Answer: Jean-Philippe Rameau
B. An 1887 Requiem Mass, and the song cycle La bonne chanson

Answer: Gabriel Faure
C. An instrumental ensemble with harpsichord, Concerts royaux, and the sonata Les nations Answer: Francois Couperin
16. Identify the Italians from a description, on a 5-10-15 basis.
A. In 1827 he joined the revolutionary Carbonari society, but after his imprisonment at Savona he abandoned that organization as ineffective. Exiled, he founded the Young Italy Society in Marseille, France, in July 1831. He argued that through coordinated uprisings, the people could drive the Italian princes from their thrones and oust the Austrians from dominance of the Italian Peninsula.

Answer: Giuseppe Mazzini
B. This Sardinian statesman became prime minister in 1852. He improved internal conditions in Sardinia and conducted the foreign affairs of the country with the aim of unifying the Italian Peninsula. He was instrumental in bringing about the proclamation of the kingdom of Italy on March 17, 1861, and the proclamation of Victor Emmanuel II as the first king. His diplomacy is generally credited with preparing the way for the unification of Italy in 1870.

Answer: Camilo Benso, Conti de Cavour
C. Pope Pius IX made him a cardinal in 1847. Forced to flee with the insurrection of 1848, he returned with the pope under French protection in 1850 and became secretary of state, a position he held until his death. His administration was marked by opposition to the restoration of constitutional government in the Papal States and to Italian nationalist aspirations.

Answer: Giacomo Antonelli
17. Answer these questions about the fall of the Incan Empire, FTSNOP.
A. F15P, in 1524 he formed a partnership with Francisco Pizarro, and in 1533 the partners completed the conquest of the country of the Incan Empire. In 1535 Charles V appointed him governor of New Toledo, an area lying south of Pizarro's grant and including the northern portion of present-day Chile. After invading and subjugating his lands in 1535-36, he split with Pizarro over the issue of whose region the ancient Incan capital was in, and in 1538 he was defeated and executed on Pizarro's orders.

Answer: Diego de Almagro
B. The death of Huayna Capac in 1525, before he could name his successor, divided the Incan empire. Two of his sons, and the ensuing bitter struggle between them, which ended in 1532 with the capture of one, seriously weakened the empire. After being imprisoned by Pizzaro, the other brother, fearful that Pizarro would depose him in favor of his brother, ordered his former rival executed. FFP for one, and fifteen for both, name these brothers.

Answer: Atahualpa and Huascar
18. Given clues, identify the vitamin deficiencies FTP each.
A. Usually affecting newborns, it renders the individual unable to properly process fats in foods. It is usually caused by use of formulas high in polyunsaturated fatty acids that are fortified with iron but not this vitamin.

Answer: vitamin E deficiency
B. This vitamin is required by the liver to form substances that clot the blood. Consequently, deficiency of this vitamin causes abnormal bleeding.

Answer: vitamin K deficiency
C. Deficiency of this vitamin lead to the inadequate production of collagen, a substance that binds the cells of bones, the teeth, and capillaries. On the other hand, too much of the vitamin can lead to kidney stone formation.

Answer: vitamin $\underline{C}$ deficiency
19. Identify the utopian writer from a description of their utopias, F15P each; or, given nationality and lifespan, for five.
A. (15) The ideal harmonious state was to be accomplished by dividing society into cooperative phalanxes, or communities, each consisting of about 1600 people who would live in the phalanstery, a vast communal building placed in the center of a highly cultivated agricultural area. Elaborate rules were laid down for the conduct of life within the individual phalanx. Assignment of work was based on talent. Private property was not to be abolished, but by mixing the rich and the poor, the visible distinctions between them would disappear. The communal wealth of the phalanx would provide liberally for the basic subsistence of the individual members. Marriage in the accepted sense was to be abolished and replaced by an elaborate system regulating the social behavior of those living together.
(5) French, 1772-1837

Answer: Charles Fourier
B. (15) One of his communities gained international fame when his experiments in enhancing his workers' environment resulted in increased productivity and profit. He had become convinced that the advancement of humankind could be furthered by the improvement of every individual's personal environment. Character, he reasoned, was molded by circumstances; improved circumstances would lead to goodness. Later, to advance his theories concerning human labor as the "natural standard of value," he purchased 20,000 acres of land in America as a site for a model communal village.
(5) Welsh, 1771-1858

Answer: Robert Owen
20. We're all familiar with Hawthorne's The Scarlet Letter and Hester's wearing of an " $A$ " for adultery. However, adultery was only one of many offenses the Puritans stigmatized with scarlet letters. For 5 points each, given a scarlet letter, name the offense:
A: "B"
B: "D"
C: "F"
D: "R"
E: "T"
Answer: blasphemy
Answer: drunkenness
Answer: forgery
Answer: rape
Answer: theft

