

1. Mercuric chloride and pure crystalline iodine are often isolated by using this as a purification technique; other practical applications include frost-free freezers and passive fire protection. This phenomenon occurs for carbon dioxide at -78.5°C . The reverse of this process is called deposition, and frost is a common example. Occurring at temperatures and pressures below the triple point, FTP, name this process by which a substance converts from the solid phase to the gas phase with no intermediate liquid phase.

Answer: Sublimation

2. Her father, a deacon at Christ's Church, Cambridge, spent a year in jail for his "subversive" allegations that most ministers in the Church of England held their positions for political reasons despite a lack of training or competence. Longtime foe John Winthrop denounced her as "an American Jezebel... gone a-whoring from God." Perhaps the most famous adherent of Antinomianism, she was banished from the Massachusetts Bay Colony, along with her followers, for "blasphemy and lewd conduct," for which she was posthumously pardoned in 1987 by then-governor Michael Dukakis. Killed in a 1643 Indian raid, FTP, name this revolutionary 17th century Puritan woman now recast as a hero of the modern feminist movement.

Answer: Anne Hutchinson

3. Though he published his first collection of poems in 1912, he first gained notice for his poem "The Old Vicarage, Grantchester." He traveled for a few years after recovering from a nervous breakdown, but when war broke out in Europe in 1914, he enlisted in the British Royal Naval Division. He never participated in combat; however, as he died of blood poisoning while sailing to Gallipoli. FTP, name this author whose volume of sonnets *Nineteen-Fourteen* includes his most famous poem "The Soldier."

Answer: Rupert Brooke

4. A four-year court case resolved in 2000 not only rejected Sean Gallagher's claim to a trademark for this, but found him guilty of fraud in his registration paperwork. Originally termed "contrology" by its developer, it was invented by one of the "enemy aliens" in a British internment camp on the Isle of Wight for POWs during World War One. It was popularized within the dance community with the help of Rudolf von Laban, and George Balanchine was one of the founder's students. This physical fitness system is based around six central principles: centering, concentration, control, precision, breathing, and fluidity. FTP, name this exercise regimen named after its German originator.

Answer: The Pilates Method

5. A former member of the Gallaudet University Board of Trustees, his many awards include the ACM's Alan Turing Award in 2004 and the Presidential Medal of Freedom in 2005, both shared with Robert Kahn. Recently he has worked with Adrian Hooke on the Interplanetary Internet study committee for NASA's Jet Propulsion Laboratory and in 2005 he was hired by Google Inc. as "Vice President and Chief Internet Evangelist." Along with Kahn, he is widely credited with the co-invention of the ubiquitous TCP/IP protocol. FTP, name this hearing impaired computer scientist considered a founding father of the Internet.

Answer: Vinton Gray Cerf

6. (OK) His name means one-legged and he is often depicted with his second leg transformed into a serpent. He ~~X~~ created the world by floating above the primordial waters, chanting "earth" repeatedly until the lands rose above the waves. When the first race of man angered the gods, he destroyed the people with a great storm that flooded the planet. FTP, name this Mayan god of storms and wind, whose name is the source for our word for an intense tropical storm.

Answer: Huracan [grudgingly accept "hurricane", since it qualifies as a phonetically plausible version]

7. Born in Normandy, he served under Montcalm in Canada and fought at the capitulation of Fort William Henry during the French and Indian War before settling in New York and marrying Mehitabel Tippet of Yonkers. Suspected by the British of being a spy, he left in 1780; returned in 1783 as the French consul in New York, he found his estate torched and his wife murdered. During his overseas hiatus he published a series of essays about life in America written under the Anglicized pen name J. Hector St. John. FTP name this author of *Letters from An American Farmer*.

Answer: Michel Guillaume Jean de Crèvecoeur (accept J. Hector St. John before it's said)

8. She was briefly married to the Russian poet Sergei Esenin. Though her personal life was marked by tragedy – both of her children drowned in the Seine River in 1913– she left her legacy on the art world through the three highly influential dance schools she opened. Famous for her scandalous behavior, during a 1923 performance in Boston, she bared her breast and declared "This is red! So am I!" FTP, name this "Mother of Modern Dance," killed when her scarf was caught in the wheels of a car.

Answer: Isadora Duncan

9. Interstate 565 in Huntsville, Alabama, is officially named in his honor. He was portrayed in HBO's *From the Earth to the Moon* by Ted Levine. The only man to become a millionaire while an astronaut in the American Space Program, he was also the only Mercury astronaut to walk on the moon. A diagnosis of Meniere's disease kept him from flight status between 1964 and 1969, but he commanded the Apollo 14 mission in 1971, nearly ten years after his journey in Freedom 7. FTP, name this first American in space.

Answer: Alan Shepard

10. (OU) It may become inflamed when infected by either HIB or *Streptococcus pneumoniae* and malformation of this organ can be responsible for breathing difficulties in children as well as for sleep apnea. It serves as protection for the air passage through the larynx and is one of the three cartilaginous structures which make up the voice box. FTP, what is this piece of cartilage which closes over the trachea to prevent food from entering the lungs?

Answer: Epiglottis

11. It is bordered on the west by the Courantyne River and on the west by the Maroni River. Prior to European colonization, the territory was inhabited by Arawak, Carib and Warrau tribes. Colonized by the English, it was seized in 1667 by a Dutch fleet and was ceded to the Netherlands in the Treaty of Breda in exchange for New Amsterdam. While the Congress of Vienna restored some territory back to Britain, it remained part of the Netherlands until 1975 when under Prime Minister Henck Arron it was granted its independence. FTP, name this South American nation with capital at Paramaribo that borders Brazil, Guyana and French Guiana.

Answer: Suriname

12. Preparations are underway for a festival in May honoring the centenary of her birth. Obsessed with the history of her own family, she wrote biographies of her actor-manager father and her grandfather, the author who created the mesmerist Svengali. Her first novel, *The Loving Spirit*, tells the story of a family of shipbuilders in her native county of Cornwall, about which she also wrote two acclaimed nonfiction tributes. Her work was popularized by three separate film adaptations by Alfred Hitchcock. FTP name the author of the short story "The Birds" and the novels *Jamaica Inn* and *Rebecca*.

Answer: Daphne Du Maurier

13. (RA) Launched on November 18, 1989, aboard a Delta rocket, this satellite had three primary instrument packages: the Differential Microwave Radiometer, the Far-Infrared Absolute Spectrophotometer, and the Diffuse Infrared Background Experiment. The mission lasted for four years, and, in 1992, a famous map of the anisotropy of the Cosmic Microwave Background radiation was released. FTP, name this NASA mission which provided additional evidence of the Big Bang and led to 2006 Nobel medals for George Smoot and John Mather.

Answer: Cosmic Background Explorer (COBE)

14. One of the victor's two forces was led by Cuthbert Collingwood on the *Royal Sovereign*. Vice Admiral Pierre Charles de Villeneuve attempted to leave Cadiz to land troops in southern Italy, but October 21 the French and Spanish line was penetrated by two sections of the divided British fleet. The British destroyed or captured 20 ships without losing a single one themselves. FTP, name this 1805 naval battle in which the victorious Admiral Nelson was mortally wounded.

Answer: Battle of Trafalgar

15. (OK) Many of its adherents follow a dietary law known as "Ital", which is based on the rules established in Leviticus and Deuteronomy. Members of this religion also hold to the idea of physical immortality, focusing on the concept of "everliving" life. Among the things most associated with this religion by outsiders are the hairstyle of members, which represent the Lion of Judah, and the smoking of cannabis. FTP, name this Afro-centric religion, which holds that Haile Selassie is God incarnate.

Answer: Rasta or Rastafari Movement (accept equivalents)

16. Born in Barnwell, South Carolina, he began his music career at 16 when he met fellow musician Bobby Byrd in reform school. In 1988 he was sentenced to six years in prison for assault and eluding police, but was paroled in 1991 and won a Grammy Lifetime Achievement Award for a career which included 114 hits on the Billboard R&B Singles Chart, including "Please, Please, Please" and "Papa's Got a Brand New Bag." FTP, name this "Godfather of Soul".

Answer: James Brown

17. He accompanied Columbus on his third voyage in 1498 and returned to settle in Hispaniola in 1502, eight years before he was ordained a priest. While Pedro de la Gasca undid much of his work, his firsthand accounts of Spanish atrocities against the natives in Cuba did convince Charles I of Spain to pass the New Laws in 1542, prohibiting Indian slavery. FTP, who was this Dominican priest who condemned the *encomienda* system in the Spanish colonies in his writings later collected as *Historia de Las Indias*?

Answer: Bartolome de Las Casas

18. The earliest American instance of this form was written by James Whitcomb Riley, and this poetic form was praised by Edmund Gosse in his essay, "A Plea for Certain Exotic Verse Forms". It has received a great deal of attention from the American New Formalists, but this fixed nineteen line poetic form originated in France. Line one is repeated as lines six, twelve, and eighteen; line three is repeated as lines nine, fifteen, and nineteen, and finally the first and third lines are once again repeated as a rhymed couplet to cap the poem. FTP, name this form of poetry, the most famous example of which is Dylan Thomas's "Do Not Go Gentle into That Good Night."

Answer: Villanelle

19. Among its crew and passengers were a French colonial governor, Colonel Julien-Desiré Schmalz and his wife. Seeking to re-establish the French colony at Senegal, it was captained by Hugues Deroys de Chaumareys, who had not served aboard a French ship for 20 years. Carrying only six lifeboats, it ran aground in July 1816. The majority of the passengers were placed on a makeshift raft that would be towed, but the ropes were untied, and by the fourth day the people had turned to cannibalism. FTP, name this ill-fated ship whose inhabitants were the subject of a painting by Theodore Gericault.

Answer: Medusa (accept "Raft of the Medusa" on an early buzz)

20. When diluted by 5% water, this chemical compound forms an azeotrope, or constant boiling mixture, at 78.15°C. Since that is slightly below the pure compound's boiling point of 78.5°C, the pure form cannot be obtained by simple distillation. Its freezing point of -114.1°C makes it an ideal liquid for thermometers used in -40°C climates. A clear, colorless liquid recently made popular for its capabilities as an alternative fuel, its primary commercial use is in beverage manufacturing. FTP what is this alcohol with chemical formula is C₂H₅OH?

Answer: Ethanol (accept ethyl alcohol or grain alcohol; prompt on alcohol)

21. (NGU/CS) Its 38th and final chapter is titled "The Bend in the Road," while the ninth is titled "Mrs. Rachel Lynde Is Properly Horrified." The first three chapters are titled "Mrs. Rachel Lynde Is Surprised," "Mr. Matthew Cuthbert Is Surprised," and "Mrs. Marilla Cuthbert Is Surprised"; the Cuthberts intended to adopt an orphan boy to help out on their farm but received the title protagonist instead. The girl spends her days exploring the woods with her best friend Diana and avoiding the torment of Gilbert Blythe. Drawing upon the author's experiences on Prince Edward Island, FTP, name this novel by L.M. Montgomery.

Answer: Anne of Green Gables

22. Founded in 1967 by Paddy Roy Bates, this country almost burned down in a recent electrical fire on June 23, 2006. Though it has issued stamps, coins, and a flag; as well as sponsoring a national soccer team, this country has not been formally recognized as a nation by any international entity, and currently exists in a state of legal limbo. FTP, name this controversial micronation that is located on an abandoned Maunsell Sea fort called Rough's Tower, six miles off the coast of Suffolk, England.

Answer: Principality of Sealand

23. It originated as a graduate project at Carnegie Mellon University by F. H. Hsu under the name "Chip Test." Its name is a combination of the nickname of the company which produced it and the name of the computer from *The Hitchhiker's Guide to the Galaxy*. Between 1993 and 1997, it played 22 games and had a record of four win and seven draws before retiring after defeating the world champion. FTP name this IBM computer which beat Gary Kasparov 3.5 to 2.5 in May 1997.

Answer: Deep Blue

1. Name the jazz musician FTPE.

a) This trumpeter and South Carolina native was one of the founders of the jazz style known as bebop. Some of his hits include "Salt Peanuts", "Manteca", and "A Night in Tunisia."

Answer: John Birks "Dizzy" Gillespie

b) This jazz saxophonist collaborated with such musicians as Gillespie and Miles Davis. He also composed several solo albums, including *Giant Steps* and *A Love Supreme*.

Answer: John Coltrane

c) Born Ferdinand Lamothe, this Creole pianist with a sweet nickname played in several groups, including the New Orleans Rhythm Kings and the Red Hot Peppers. A relentless self-promoter, his business card read "originator of jazz."

Answer: Ferdinand "Jelly Roll" Morton

2. They weren't *all* executed. FTPE name these wives of Henry VIII:

a) Henry's third wife who died 12 days after giving birth to future King Edward VI.

Answer: Jane and/or Seymour

b) Henry's sixth and last wife who outlived him, but coincidentally died in childbirth after marrying Jane Seymour's brother.

Answer: Catherine Parr

c) Also outliving Henry was his fourth wife; the marriage was never consummated because he found her repulsive, and she wisely consented to an annulment and divorce on technical grounds.

Answer: Anne of Cleves

3. FTPE name the authors of the following sonnets, none of which are by Petrarch or Shakespeare:

a) "Leda and the Swan", 1928

Answer: William Butler Yeats

b) "Astrophel and Stella", 1591

Answer: Philip Sidney

c) *Sonnets from the Portuguese*, 1850

Answer: Elizabeth Barrett Browning [accept Elizabeth Barrett]

4. Given a compound, FTPE name its chemical formula.

a) Calcium fluoride

Answer: CaF₂

b) Sodium nitrate

Answer: NaNO₃

c) Aluminum oxide

Answer: Al₂O₃

5. Name these chess rules or maneuvers, FTSNOP.

15) From the Italian for "on the flank," this defensive act places a bishop one square ahead of its adjacent knight's starting position, resulting in that bishop's threatening of the maximum number of diagonal squares across the board.

Answer: Fianchetto (fian-CHET-to) (note: fianchetto is a verb, therefore accept "fianchetto-ing,"

"fianchettoed", or the infinitive.)

10) This rule allows a pawn that has just advanced by two squares to be captured by any opposing pawn on the same rank and opposing file.

Answer: En passant (ON pass-ONT). (accept: Capture in Passing or Capturing in Passing).

5) This defensive maneuver involves moving the King two squares to the right or left, as the case may be, and the Rook towards which the King has moved is then placed upon the square which the King jumped over.

Answer: Castling

6. Name the following Pulitzer Prize-winning plays FTPE.

a) Jonathan Larson won the 1996 Pulitzer for this musical based on "La Boheme." In it, the characters are struggling young artists and musicians living in New York under the specter of AIDS.

Answer: Rent

b) The play by Alfred Uhry, winner of the 1988 Pulitzer and made into a film that won the 1989 Best Picture Oscar, tells of the growing friendship between an elderly Jewish lady and her African-American chauffeur.

Answer: Driving Miss Daisy

c) From 1936-1941, Robert E. Sherwood took home three Pulitzers in Drama. Name any of his three winning plays FTP.

Answer: any one of Idiot's Delight, Abe Lincoln in Illinois, or There Shall Be No Night

7. (CS) For 10 pts. each, name these electrical effects:

(a) A superconducting ring interrupted by a thin layer of insulating material gives rise to an alternating current in the barrier when a steady external voltage is applied to it.

Answer: Josephson effect

(b) An electric current-carrying conductor develops a potential difference across it when placed in a strong transverse magnetic field.

Answer: Hall effect

(c) The splitting of spectral lines into a number of components by a strong electric field

Answer: Stark effect

8. FTPE name the party which nominated each of the following candidates in the given year.

a) John Bell – 1860

Answer: Constitutional Union Party

b) Robert M. La Follette – 1924

Answer: Progressive Party

c) Strom Thurmond – 1948

Answer: State's Rights Party or Dixiecrats [accept State's Rights Democrats]

9. **THE NEWLY DEAD GAME:** FTPE identify these notable political figures who died in 2006.

a) Prime Minister and eventual President of South Africa from 1978-1989, he was long opposed to loosening apartheid policies.

Answer: P (ieter) W (illem) Botha

b) This senator from Texas and former secretary of the treasury is remembered for telling Dan Quayle, "Senator, you are no Jack Kennedy" during a 1988 debate.

Answer: Lloyd Bentsen

c) In addition to dating Bill Dauterive on *King of the Hill*, this former Texas governor is notable for her 1988 Democratic Convention speech in which she said George H. W. Bush was "born with a silver foot in his mouth."

Answer: Ann Richards

10. Identify these figures in the Old Testament Apocrypha, FTPE.

a) A righteous blind man, he is healed after his son marries a widow named Sarah and exorcises the demon that has killed her previous husbands.

Answer: Tobit

b) This woman is accused of adultery and nearly put to death before Daniel interviews the accusers separately to prove they are lying.

Answer: Susanna

c) This Jewish widow cuts off the head of Holofernes, allowing the Hebrews to defeat the leaderless Assyrians.

Answer: Judith

11. Name the Pacific battles of World War II FTPE.

a) During this pivotal June 1942 naval battle, four Japanese aircraft carriers, two cruisers and three destroyers were destroyed, while the US losses included the Yorktown and one destroyer.

Answer: Midway

b) The naval battle during May 7-8, 1942 in this sea northeast of Australia halted a Japanese invasion of that country and marked the end of the Japanese advances south.

Answer: Coral Sea

c) The US began its shelling of this island, second largest of the Mariana Islands; in June 1944 and had captured it by August. It was used as the steppingstone to the invasions of Iwo Jima and Okinawa.

Answer: Saipan

12. (MR) FTPE identify these neurotransmitters:

A derivative of tryptophan, it affects mood, sleep, appetite, and aggression. It is linked psychologically to depression.

Answer: serotonin

This amino acid is involved in neural inhibition in the central nervous system. Valium and other tranquilizing drugs act to increase its inhibitory effects to decrease anxiety.

Answer: Gamma Amino butyric Acid (GABA)

The most abundant fast excitatory neurotransmitter in the human nervous system, this amino acid is taken in by post-synaptic cells via the NMDA receptor. It is involved in synaptic plasticity and higher cognitive functions such as learning and memory.

Answer: glutamate or glutamic acid

13. FTPE, identify the museum in which the following paintings may be found.

a) Rembrandt's "The Night Watch," Jan Vermeer's "The Milkmaid"

Answer: Rijksmuseum

b) Rubens's "The Adoration of the Magi", Goya's "Nude Maja"

Answer: Museo del Prado

c) Chagall's "I and the Village," Rousseau's "Sleeping Gypsy"

Answer: Museum of Modern Art (accept: MOMA)

14. (CS) FTPE answer the following questions on Caribbean geography:

(a) This British territory south of Cuba & northwest of Jamaica is a mecca for deep-sea diving and suspicious banking.

Answer: Cayman Islands

(b) Atlanta Braves outfielder Andruw Jones is perhaps the best-known native of this island lying between Aruba and Bonaire, the principal island of the Netherlands Antilles.

Answer: Curacao

(c) If you flew a straight line from Martinique to Guadeloupe, you'd cross this independent island with capital at Roseau.

Answer: Dominica

15. Identify the author from stories on a 30-20-10 basis.

30) "The Broken Heart," "Philip of Pokanocket"

20) "The Spectre Bridegroom," "The Devil and Tom Walker"

10) "The Legend of Sleepy Hollow," "Rip Van Winkle"

Answer: Washington Irving

16. While we often remember Oscar winning films, we sometimes forget the person most responsible, the director. FTPE name the following Oscar winning directors from the film which also won Best Picture.

a. *American Beauty*

Answer: Sam Mendes

b. *The Last Emperor*

Answer: Bernardo Bertolucci

c. *The English Patient*

Answer: Anthony Minghella

17. Identify the 18th century author from notable characters, FTPE.

a) Pamela Andrews, Clarissa Harlowe

Answer: Samuel Richardson

b) Joseph Andrews, Tom Jones

Answer: Henry Fielding

c) Polly Peachum, Lucy Lockit

Answer: John Gay

18. Name these 19th and 20th century treaties leading up to the Panama Canal Treaty, FTPE.

A) This 1850 treaty ensured that the U.S. and Great Britain would work together to develop a canal in Central America.

Answer: Clayton-Bulwer Treaty

B) Replacing the Clayton-Bulwer Treaty, this treaty allowed the U.S. to begin building a neutral canal in Central America.

Answer: Hay-Pauncefote Treaty

C) Defining America's construction and maintenance rights, this is the final treaty before breaking ground in 1904.

Answer: Hay-Bunau-Varilla Treaty

19. (CS) Answer the following related philosophy questions FTPE:

(a) In philosophy, this is the description & classification of acts of perception as the only objects of knowledge possessing ultimate reality.

Answer: phenomenology

(b) Phenomenology was developed in the early 1900's by this German philosopher, author of *Logical Inquiries* and teacher of Jean-Paul Sartre.

Answer: Edmund Husserl

(c) Another follower of Husserl and teacher of Sartre was this author of *Being and Time*.

Answer: Martin Heidegger

20. (MR) FTPE name these biological enzymes involved with DNA replication:

At the initiation of replication, it unwinds DNA, splitting the two strands ahead of the fork. Single-strand binding proteins subsequently prevent the DNA from recoiling.

Answer: DNA helicase

At the completion of replication, Okazaki fragments are united with aid of this enzyme. It is generally used in the laboratory to join two strands of DNA.

Answer: DNA ligase

This class of enzymes introduces catalyzing the unknotting of DNA in order to make strands easier to replicate and ligate.

Answer: topoisomerase

21. FTPE, provide the correct astronomical term.

a) A rock in space that has the potential to collide with the Earth's atmosphere, ranging in size from a speck of dust to a chunk about 100 meters in diameter, though most are smaller than a pebble.

Answer: Meteoroid

b) The dramatic streak of light that is given off when a chunk of extra-terrestrial mineral, heated by air friction, descends through Earth's atmosphere.

Answer: Meteor

c) If that wad of rock is not destroyed by the intense heat of entry through the atmosphere and lands intact on the surface of Earth, the rock is technically referred to with what final term?

Answer: Meteorite

22. Given the outgoing and incoming officials in 2006, name the Federal position they shared FTPE.

a) John Snow was replaced by Henry Paulsen Jr. in this cabinet post.

Answer: Secretary of the Treasury (accept equivalents)

b) Dirk Kempthorne replaced Gale Norton in this position.

Answer: Secretary of the Interior (accept equivalents)

c) After Porter Goss resigned, Michael Hayden stepped into this role.

Answer: Director of the CIA (accept equivalents)