1) This act was originally proposed by John F. Kennedy but failed to pass. Lyndon Johnson was able to sign it into law and it was immediately challenged in Heart of Atlanta Motel v. U.S. FTP name this law, which established the Equal Employment Opportunity Commission, passed in 1964.
Answer: _Civil Rights Act_
2) His first major work was a collection of short stories entitled In Our Time. In 1926 he published The Torrents of Spring and made famous the term "lost generation" in The Sun Also Rises. FTP name this author and ambulance driver who wrote For Whom the Bell Tolls and A Farewell to Arms.
Answer: Ernest_Hemingway_
3) This condition results when an animal is unable to produce tyrosinase and is related to vitiligo. In humans it is an autosomal recessive trait and can cause photophobia and astigmatism. FTP name this genetic defect which is characterized by a lack of pigment in the eyes, hair, and skin.
Answer: _albinism_ (accept albino)
4) This first American school of painting free of European influence was founded in part by Thomas Doughty and Asher Durand. Many artists of this school drew from a region of the Catskills in New York but others painted the Grand Canyon, and the Mississippi River as well. FTP name the school, also founded by Thomas Cole, known for landscape painters of the $19^{\text {th }}$ century.
Answer: _Hudson River_ school
5) Works from this literary movement include Not Without Laughter and God's Trombones. Authors associated with it include James Weldon Johnson and Wallace Thurman. Beginning in New York City in the 1920's, it demonstrated the cultural pride of black Americans. FTP name this literary movement whose most famous authors include County Cullen and Langston Hughes.
Answer: _Harlem Renaissance_
6) This project was first proposed in 1983 as part of the largest peacetime arms buildup in history. Twenty-six billion dollars was appropriated but the project was abandoned under criticisms that it was easily countered, impossible to build, and might bring on a preemptive attack to prevent its construction. FTP what United States defense system proposed by Reagan that would employ free-electron lasers was nicknamed "Star Wars?" Answer: SDI or Strategic Defense Initiative (prompt for more information on "Star Wars")
7) This scientist developed statistical mechanics and studied thermodynamics extensively, his most famous paper being entitled "On the Equilibrium of Heterogeneous Substances." An equation named for him gives the degrees of freedom of a system in relation to the phases and components present and is known as his phase rule.
FTP name this scientist whose namesake thermodynamic quantity is given by enthalpy minus temperature times entropy and is known as free energy.
Answer: Josiah Willard _Gibbs_
8) Fantine resorts to prostitution after being fired from Madeleine's factory in Montreuil. Pursued by Javert, the main character fakes his own drowning and escapes to the Gorbeau House in Paris where he is found again and forced to flee to a convent with Cosette. FTP name this Victor Hugo novel in which Jean Valjean is imprisoned for 19 years for stealing bread.
Answer: _Les Miserables_
9) The main characters include the Earl of Gloucester and his sons, Edgar and Edmund. The title character, banished by his unfaithful daughters, Goneril and Regan, is aided by the fool and his youngest daughter, Cordelia. FTP name this Shakesperian tragedy ending with Goneril's suicide, Cordelia's hanging, and the death of, among others, the title character.
Answer: _King Lear_
10) It was revoked in part by Cardinal Richelieu and in its entirety by Louis XIV causing France to lose a great deal of businessmen to neighboring countries. When it was first enacted in 1598 by Henry IV it gave Protestants the right to public worship, except in Paris, but also made it impossible to extend Protestant worship in France. FTP name this law which gave a great deal of religious freedom to the Huguenots.
Answer: _Edict of Nantes_
11) The Crab Nebula is number 1 and the Pleiades is number 45. It is still used although the New General Catalogue has largely replaced it. The majority of this catalog was published in 1771 to facilitate comet hunting by listing objects whose positions in the sky did not change. FTP name this astronomical catalog of about 109 objects referred to by their number and the letter "M."
Answer: _Messier_ Catalog
12) He made his home in Breidablik and was a favorite among the gods. He was impervious to harm but vulnerable to mistletoe which his brother, Loki, used to kill him. FTP name this god who would rise from the dead during Ragnarok, the son of Odin and Frigg.
Answer: _Balder_
13) His interest in anthropology was inspired by Frazer's Golden Bough. He rejected the societal approach of Emile Durkheim and Marcel Mauss and formulated his own theory of functionalism that focused on the individual. His work in Australia, New Guinea, and the Trobriand Islands challenged existing ideas of marriage, family, and ritual. FTP name this author of Sex and Repression in Savage Society, the father of social anthropology.
Answer: Bronislaw _Malinowski_
14) This composer was the first American student of Nadia Boulanger whose request for a composition to be played at her American appearances resulted in the creation of Symphony for Organ and Orchestra. The influence of Stravinsky's work is evident in Piano Variations but one of his more important works was the ballet Billy the Kid produced in 1938. FTP name this composer whose most famous work, commissioned by Martha Graham, is Appalachian Spring.
Answer: Aaron _Copland_
15) This property is responsible for the fictitious "centrifugal force." Mass is a numerical measure of this property as a resistance to a force and moment is a measure as resistance to torque. FTP name this property addressed in Newton's first law of motion.
Answer: _inertia_
16) During his reign he put down a revolt by the streltsy, fought the Northern War, took the Grand Embassy to Western Europe, and officially abolished the title of "tsar." He brought the church under state control by establishing the Holy Synod, he reorganized Russian currency, and his urban reforms greatly improved economic conditions in Russia. FTP name this leader of Russia, who forced the nobility to shave their beards, referred to as "the Great."
Answer: _Peter I_
17) His real name is Armin Tamzarian but he often goes by "Spanky." He is 41 , still lives with his mother, and though he is dating Edna Krabappel he is still a virgin, perhaps because of the metal plate in his butt. FTP name this man, the principal of Springfield Elementary School.
Answer: Seymour_Skinner_
18) This god is often depicted with his consorts, Laksmi and Bhumidevi, and holding a conch, discus, club, and lotus in each of his four hands. He rides a bird named Garua, lives in Vaikuntha, and his over 1,000 names include Narayana and Vasudeva. FTP name this principal Hindu deity whose incarnations have included Rama and Krishna.
Answer: _Vishnu_
19) Housed at the Art Institute of Chicago this painting is characterized by dark colors and an empty, desolate feeling. It depicts a diner called "Phillie's" with large windows on a dark street corner. Inside, four patrons are seen: two men in suits, a woman with a red dress, and a man in white behind the counter. FTP name this painting by Edward Hopper.
Answer: _Nighthawks_
20) This country, the only one in the Middle East to use the Islamic solar calendar, is dominated by Persian culture. It is bordered by the Caspian Sea, Pakistan, and Armenia, its official language is Farsi and its official religion is Shi'ite Islam. FTP name this country once led by Ruhollah Khomeini with its capital at Tehran.
Answer: _Iran_
21) The first was ended when Catulus's victory earned the Romans possession of Sicily and the Lipari Islands. In the second, Scipio Africanus gained control of Spain and the Mediterranean Islands while the third, and final, saw Scipio Aemilianus defeat Carthage once and for all. FTP name this series of wars between Rome and Carthage whose second saw Hannibal lead his army over the Alps.
Answer: _Punic Wars_
22) This law results from the combination of the constant " $R$ " with Boyle's, Charles's, and Avogadro's Laws. It predicts that one mole of gas will have volume of 22.4 liters at standard temperature and pressure. FTP name this law which serves as the basis for the combined gas law and states that $\mathrm{PV}=\mathrm{nRT}$.
Answer: _Ideal Gas_Law

## BONI -- KENTUCKY I

1) Identify the author from works 30-20-10.

30: Sartoris, Soldiers' Pay
20: The Marble Faun, A Fable
10: As I Lay Dying, The Sound and the Fury
Answer: William _Faulkner_
2) Identify the constitutional amendment from excerpts the stated number of points.

5: "The right of people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause" Answer: _fourth_amendment
5: "Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction."
Answer: _thirteenth_ amendment
10: The eighteenth article of amendment to the Constitution of the United States is hereby repealed. Answer: _twenty-first_ amendment
10: Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.
Answer: _eighth_amendment
3) Given a chemical compound identify the molecular geometry of that compound FTSNOP:

5: Carbon Dioxide
Answer: _linear_
10: Phosphorus Pentafluoride
Answer: trigonal _bipyramidal_
5: Carbon Tetrachloride
Answer: _tetrahedral_
10: Boron Trifluoride
Answer: trigonal _planar_
4) Identify the Greek goddess $30-20-10$

30: Worship of this goddess was probably at its height in pre-Hellenic Crete. In the Peloponnese she is often called the "Lady of the Lake," attended by naiads and worshipped as a goddess of the tree cult.
20: Sometimes pictured as a stag, Homeric myth stresses her chastity and refers to her as the Mistress of Animals. She was also associated with childbirth.
10: She is the daughter of Zeus and Leto and the twin sister of Apollo.
Answer: _Artemis_
5) Identify the leader, $30-20-10$

30: He founded the Revive China Society in Hawaii and was the head of the United League in Tokyo. He later formulated the Five-Power Constitution which is still used in Taiwan.
20: He established a regime in Canton under the control of the Nationalist Party in 1921. After the first Chinese parliament was dissolved by a coup he reorganized the Nationalist Party under Soviet guidance to resemble more closely the Bolshevik party. His Three Principles of the People were nationalism, democracy, and people's livelihood.
10: Succeeded by Chiang Kai-shek, he was the first president of the Republic of China.
Answer: _Sun_ Yat-sen
6) Identify the following from biology FTPE.

A: This process consumes two molecules of ATP to produce four molecules of ATP and pyruvic acid. It takes place without oxygen and is often called the anaerobic phase of respiration.
Answer: _glycolysis_
B: This cycle, also known as the citric acid cycle and the TCA cycle, is carried out in the mitochondria. Large molecules, like sugars or fatty acids, are converted to acetyl coenzyme A before entering this cycle which is then converted to energy and carbon dioxide.
Answer: _Krebs_Cycle
C: This cycle, also known as the reductive pentose phosphate cycle, allows the cell to synthesize organic molecules from carbon dioxide. This cycle constitutes the "dark" reactions in photosynthesis.
Answer: _Calvin_Cycle
7) Identify the war for ten points from the treaty which ended it and the year it was signed, or for five if you need some of the forces it involved.
10: Treaty of Paris, 1856
5: Russia, Britain, France, and Ottoman Turks Answer: _Crimean_ War
10: The Peace of Westphalia, 1648
5: German Protestants, German Catholics, and Sweden Answer: _Thirty Years'_ War
10: Treaty of Nanking, 1842
5: Britain and China
Answer: _First Opium_ War
8) Identify the philosopher, $30-20-10$

30: Seeing the fate of ancient Athens as a warning against democracy he published a translation of Thucydides in 1629. His first philosophical work was entitled A Short Tract on First Principles written after being asked "What is sense?" He also wrote The Elements of Law, Moral, and Politick.
20: Charles II brought him to court and, when a bill against heresy was passed, the House of Commoons investigated his most famous work which was an attack on the university system, especially Oxford. The works of Galileo greatly influenced his approach to natural philosophy.
10: In 1651 he wrote Leviathan.
Answer: Thomas _Hobbes_
9) Classify each of the following particles as a baryon, lepton, meson, or non-meson boson FFPE.

A: electron
Answer: _lepton_
B: proton
Answer: _baryon_
C: J/psi particle
Answer: _meson_
D: neutron
Answer: _baryon_
E : neutrino
Answer: _lepton_
F: photon
Answer: _non-meson boson_
10) Given some lines of English poetry identify, for five points, the author and, for an additional five points, the title of the poem containing that line.
A: "When old age shall this generation waste, Thou shalt remain, in midst of other woe Than ours, a friend to man, to whom thou say'st, "Beauty is truth, truth beauty,"-that is all Ye know on earth, and all ye need to know."
Answer: _Ode on a Grecian Urn_by John _Keats_
B: "Thou know'st that this cannot be said A sin, nor shame, nor loss of maidenhead ; Yet this enjoys before it woo, And pamper'd swells with one blood made of two ; And this, alas! is more than we would do." Answer: _The Flea_ by John _Donne_
C: "Good men, the last wave by, crying how bright Their frail deeds might have danced in a green bay, Rage, rage against the dying of the light."
Answer: _Do Not Go Gentle into that Good Night_ by Dylan _Thomas_
11) Identify the following bands FTPE.

A: This band's members include Mark "Fish Guts" Hoppus, Tom "Hot Pants" DeLonge, and Travis "**Expletive Deleted** Boy" Barker
Answer: _Blink 182_
B: This band's frontman recently released a feature with Santana. Their songs include "Long Day," "Push," and "3am."
Answer: _Matchbox 20_
C: This band's release, "Whatever and Ever Amen" boasted the hit "Brick." They are considered to be unique because their frontman plays piano.
Answer: _Ben Folds Five_
12) Identify the American river from clues on a 10-5 basis:.
A. 10: It runs through Hell's Canyon and contains Twin Falls and Shoshone Falls.

5: This river is formed by runoff from Utah, Nevada, Idaho, and Oregon. Its course is 1,040 miles long and it is the biggest tributary of the Columbia River.
Answer: _Snake_River
B: 10: This river forms part of the boundary between West Virginia and Maryland. It is paralleled by the Chesapeake and Ohio Canal and its largest falls is logically called Great Falls.
5: The largest city on its banks is Washington, D.C.
Answer: _Potomac_River
C: 10: It is formed by the confluence of the Gallatin, Jefferson, and Madison Rivers.
5: Rising in Montana, its 2,315-mile course includes part of the South Dakota - Nebraska border.
Answer: _Missouri_ River
13) Identify the composer from an initial set of works FTP or for five if you need additional (and hopefully easier) works.
10: The Rake's Progress, The Soldier's Tale
5: The Firebird
Answer: Igor_Stravinsky_
10: Rinaldo, Judas Maccabeus
5: Water Music, Messiah
Answer: George Frideric _Handel_
10: Elijah, Overture to A Midsummer Night's Dream
5: Scottish Symphony, Italian Symphony
Answer: Felix _Mendelssohn_
14) Identify the American novel given a list of characters for ten points, or for five if you need the author.

10: Dick Diver, Nicole Diver, Rosemary Hoyt
5: F. Scott Fitzgerald
Answer: _Tender is the Night_
10: George Milton, Lenny Small
5: John Steinbeck
Answer: _Of Mice and Men_
10: Billy Pilgrim, Montana Wildhack
5: Kurt Vonnegut
Answer: _Slaughterhouse Five_
15) Identify these characters from Austin Powers: International Man of Mystery for the stated number of points.
5: This is Dr. Evil's one-eyed, right hand man. He is played by Robert Wagner and Rob Lowe. Answer: _Number Two_
5: This man works for British Intelligence and briefs Austin on his missions. Austin punches his mother in the face and pulls her hair, mistaking her for one of Dr. Evil's spies.
Answer: Basil_Exposition_
10: This henchman's mistake causes Mr. Bigglesworth to lose all his hair so Dr. Evil ejects him into a pit of fire which malfunctions and leaves him "very badly burned." He is then shot, but not killed, and is eventually finished off.
Answer: _Mustafa_
10: The daughter of Austin's old partner, her task is to acquaint Austin with the $20^{\text {th }}$ century. She and Austin end up married in the end. She is played by Elizabeth Hurley. 5 pts. each for first and last (well, maiden) name.
Answer: _Vanessa Kensington_
16) Identify the authors of the following works on a ten - five basis.

10: Tamburlaine the Great
5: The Tragicall History of Dr. Faustus
Answer: Christopher_Marlowe_
10: Every Man in His Humour and Bartholomew Fair
5: The Alchemist and Volpone
Answer: Ben _Jonson_
10: Titus Andronicus and Cymbeline
5: The Merry Wives of Windsor and The Comedy of Errors
Answer: William _Shakespeare_
17) Identify the following kings of France with the same name 5-10-15.

5: This Sun King had his palace at Versailles.
Answer: _Louis XIV_
10: This last Bourbon king of France was married to Marie-Antoinette Answer: _Louis XVI_
15: This Valois king led the Praguerie revolt against his father, Charles VII, and, as king, was challenged by the League of the Public Weal but eventually established his authority. His rule lasted from 1461to 1483.

Answer: _Louis XI_
18) Identify the law of thermodynamics from a description FTPE.

A: This law states that for any process a thermodynamic system may undergo, the reverse is impossible. The system and surroundings can never return to their original states.
Answer: _second_ law of thermodynamics
$B$ : This law states that if object $A$ is in thermal equilibrium with object $B$ and $B$ is in thermal equilibrium with object C , then A and C are in thermal equilibrium.
Answer: _zeroth_ law of thermodynamics
C: This law states that at absolute zero, the entropy of a perfect crystal is equal to zero.
Answer: _third_ law of thermodynamics
19) Identify the following market structures for the stated number of points.

5: This market structure is characterized by having costless entry and exit into the market, a large number of firms, complete product information, and all firms marketing identical products.
Answer: _perfect competition_
5: The opposite of perfect competition, this market structure has only one firm.
Answer: _monopoly_
10: This market structure is characterized by the presence of a few firms. Its simplest form is a called a duopoly and it is characterized by barriers to entry. The firms in this market structure are interdependent because they take each others' actions into account through various degrees of collusion.
Answer: _oligopoly_
10: This market structure is characterized by the existence of many sellers, independent firms, differentiated products, and no long-run profits. Firms in this market structure have a strong incentive to advertise.
Answer: _monopolistic competition_
20) Identify the following types of matrices FTPE.

A: A matrix whose dimensions are $n$ by $n$.
Answer: _square_
For the next two parts, assume $A$ and $B$ are square matrices of equal dimension.
$B$ : If $A$ times $B$ gives $B$, then $A$ is what type of matrix?
Answer: _identity_
C: If B has a nonzero determinant then there exists for B a matrix of this type. B times this matrix will yield 1.
Answer: _inverse_
21) Given an artist identify the school or period with which he or she is most closely associated FFPE.

A: Vincent van Gogh
Answer: _Post-Impressionism_
B: Pablo Picasso
Answer: _Cubism_
C: Salvador Dali
Answer: _Surrealism_
D: Peter Paul Rubens
Answer: _Baroque_
E: Mary Cassatt
Answer: _Impressionism_
F: Donatello
Answer: Italian _Renaissance_

