

1. If you break one of the bonds in this molecule, the amount of energy released is about the same as the energy in a single peanut. This bond releases so much energy because the negatively charged oxygen molecules repel each other so much and will release 7000 calories per mole when the oxygen's bond to phosphorous is broken. For ten points, this energy can be easily stored again through the reattachment of the phosphorous in this energy carrier molecule created in the mitochondria.

Answer: **ATP (adenosine triphosphate)**

2. He lives in Himinbjorg and rides the horse Gulltop. One of his alternate names is Gullintani, meaning “gold tooth”. Aegir, god of the sea, gave birth to nine daughters, the billow maidens, who gave birth to him. For ten points, name this Norse god of light who will call the world to Ragnarok with his gjallerhorn and who guards Bifrost, entry into Asgard.

Answer: **Heimdall**

3. 'The god of war has gone over to the other side' is what Hitler is reported to have said following this battle. It was there that the famous duel between Vassili Zaitsev (vah-silly ziet-zev) and Major Konig took place. It ended following the encirclement of the Germans by General Zhukov and saw the capture of General Friedrich von Paulus and the destruction of the German sixth army. This is, FTP, what battle, named for the city in which it was fought, sharing its name with the then leader of the USSR?

Answer: **Stalingrad**

4. His exploits with his brother at the battle of Salamis formed the idea for his second play, The Persians that includes the first dramatic scene with the archetypal “ghost”. His first play out of the seven that still survive is The Suppliants. His play writing was supposedly inspired by a dream in which Dionysus came to him and ordered him to write tragedies. For ten points, name this Greek playwright of Prometheus Bound, The Seven Against Thebes, and Agamemnon.

Answer: **Aeschylus**

5. After moving from the University of Gottingen to Berlin University at the age of 21 he studied under Dirichlet and Eisenstein. He learned more, however, when he returned to Gottingen for his PhD and studied under Gauss and Weber. In his Habilitation lecture he spent some time describing how to define n-dimensional space and this space now bears his name. For ten points name this German mathematician better known for describing how to define functions with infinite sums.

Answer: **Bernhard Riemann**

6. The fourth selection is “Rum Tum Tugger”, the fifth is “The Song of the Jellicles”, and the seventh is “Old Deuteronomy”. The first selection of this set of poems describes how you name the titular creatures, some of which go by Rumbleteazer, Gus, and Growltiger. And, although you would never know these names, Macavity is a mystery, Skimbleshanks likes the railway, and Bustopher Jones knows his way about town. For ten points name this poetry collection by T.S. Eliot, a little more optimistic than some of his other poetry.

Answer: **Old Possum's Book of Practical Cats**

7. The movie version was released in 1937 and featured Paul Muni playing the main character despite his Caucasian heritage. Despite the fact that it won the Pulitzer Prize and William Dean Howells medal and earned the Nobel Prize in literature for the author, the author states simply “I can only write what I know, and I know nothing but China...”. For ten points, name this 1931 novel about Wang Lung and his caring wife O-lan.

Answer: **The Good Earth**

8. An old Italian sailor swore on his deathbed that the death of this man was not an accident, but in fact robbery. His first important poem, Queen Mab, was published in 1814, followed by 1817's Hymn to Intellectual Beauty and Mont Blanc. His schooner, the Don Juan, sank in July 1822 and he drowned. A friend of Lord Byron, and husband of Mary Wollstonecraft Godwin, this is, FTP, what poet, creator of Prometheus Unbound and Ozymandias.

Answer: **Percy Bysshe Shelley**

9. His students include J. M. Cattell, Titchener, and Spearman. His journal, Philosophische Studien, was begun in 1871 as the first journal of psychology. He had a profound impact on the revolution of ^{psychology} ~~society~~ from a fundamentally philosophical science to, as explained in his Principles of Physiological Psychology, a laboratory science that attracted followers in his native Germany as well as students from America and Britain. For ten points, name this father of experimental psychology.

Answer: Wilhelm **Wundt**

10. The story begins at the Westerhazy's, where everyone talks about how they "Drank too much" the night before. The major metaphorical turning point in the story is when the main character crosses the highway, symbolizing a departure from normalcy. FTP, name this story in which Neddy Merrill travels down the "Lucinda" river, actually a series of pools, a work of John Cheever.

Answer: **The Swimmer**

11. To create an efficient one, look for an equilibrium where the concentration of the conjugate base and the concentration of the acid are close to equal and the pKa ("p-kay-ay") of the acid closest to the desired pH of the solution. The creation of one is based on the common ion effect, and there's even one in your blood right now regulating the carbon dioxide with carbonic acid. For ten points, name this specific type of solution so named because it is able to resist a change in pH with the addition of a strong acid or a strong base.

Answer: **buffer** solution

12. He attended the training camp of the New York Rangers at the age of 15, but eventually left because he was homesick. Donning the jersey of the Detroit Vipers in 1997 earned him yet another milestone, in addition to being the only man to play with two sons in a professional sport, and being the only professional athlete to play his sport in six decades. FTP, name this 21-time NHL all star, wearing number 9 and dubbed "Mr. Hockey."

Answer: Gordie **Howe**

13. Born in 1786, he entered the University of Pennsylvania at age 10. Later, following service in the American legations to France and England, he returned to the United States and was named by President Monroe to the position that later made him famous. During his tenure in that office, he made efforts to stabilize the currency and curb inflation. This is, FTP, what man, who as head of the Second Bank of the United States, fought a long and unsuccessful feud with Andrew Jackson?

Answer: Nicholas **Biddle**

14. One of the various taglines was "A comedy about finding your heart and losing your head." A big scene occurs during the rehearsal dinner, when a less than stirring rendition of "I Say a Little Prayer" is sung. Another stupid singing scene occurs in a bar, when Cameron Diaz---well she sings poorly. These are some delightful scenes from what crappy Julia Roberts film about a bitchy food critic with a gay best friend trying to break up the title event?

Answer: **My Best Friend's Wedding**

15. In Douglas Adams's Dirk Gently's Holistic Detective Agency, this is solved by telepaths, but it is more important to physics when you take a geiger counter, hammer, vial of poison, and a radioactive substance and throw them in a closed box. The Universe gets to slack off and doesn't need to decide the fate of the titular creature until the observer opens the box and "collapses the wave function" in, for ten points, this quantum physics paradox.

Answer: **Schroedinger's cat**

16. After throwing three Hebrew confessors into a burning, fiery furnace, he became afflicted with madness, but recovered before his death. Oldest son of Nabopolassar, he married the daughter of Cyaxares, and thus under him the Median and Babylonian dynasties were united. He later rescued Babylon from its dependence on Assyria and laid Nineveh in ruins. FTP name this first king elected by the Israelites, after whom Morpheus' hovership in *The Matrix* is named.

Answer: **Nebuchadnezzar**

17. It was written based on a black and white copy of the original painting by Arnold Böcklin, but the composer relates that he would not have written the piece if he had seen the original in color. The music, in an odd five-eight meter, mimics the oarsman's journey to the titular location. The music reaches a climax when he reaches his destination, unloads the corpses, and the music slowly fades away as Charon returns across the river Styx, in, for ten points, this Rachmaninoff tone poem.

Answer: **Isle of the Dead**

18. As the focal length of a lens increases the spherical aberration of the beam of light would hypothetically approach zero; however, since diffraction has to come along and complicate the matter, there is a limit to how small the focal point of the light can become, even if the aberration reached zero. Diffraction distributes the energy at the focus point and produces, for ten points, this phenomenon, defined as the diameter of the central ring in which 84 percent of the energy is contained.

Answer: **Airy's disc**

19. The artist, a National Guard member, is portrayed on the left side wearing a top-hat. On the right, a young boy holding a pistol in either hand marches in the procession. Two dead bodies lie in the foreground, one wearing no pants. A half-clothed woman holding a tricolor in one hand and a rifle in the other is, FTP, the main symbol in what Eugene Delacroix painting?

Answer: **La Liberté guidant le peuple** or **Liberty leading the people**

20. Adding potassium permanganate does nothing to the tertiary kind. The primary kind becomes acidic on addition of potassium permanganate, and oxidizing the secondary kind completely results in the formation of ketones. Basic in pH, with hydrogen bonding, they are used in common solvents, and react with carboxylic acids to form esters. FTP, name this class of organic compound, characterized by hydroxy groups, solutions of which are a favorite on college campuses.

Answer: **Alcohols**

21. Although he was born in Denmark, only returned there once after he joined the Russian navy at the age of 22. His first expedition was chartered by Peter the Great in 1725 and, although he reached his intended destination, had to return five years later with an expedition of 10,000. They trekked across the Siberian countryside and reached his destination a second time, but eventually became stranded on a small barren island that would later be named after him. For ten points, name this explorer whose quest to map the American west coast earned him a wintry grave and a strait to his name.

Answer: Vitus Jonassen **Bering**

22. She was born to a shoe and boot merchant and eventually married a man who was only supposed to be the barrel maker for the group. She and her husband eventually had around 10 children, although the rest of her family did not survive the first winter in the New World. For ten points, name this Plymouth female who founded Duxbury with her husband and is the subject of a famous, although not historically accurate, Longfellow poem.

Answer: Priscilla **Alden** (accept Priscilla **Mullins**)

23. Joe DiMaggio once called him "the best and fastest pitcher I've ever faced." He retired in 1953 at age 47, but his last playing appearance came at 59, when he pitched 3 shutout innings for the Kansas City Athletics. This can be disputed however, as his age was always ambiguous. FTP, name this phenomenal Negro League pitcher.

Answer: Leroy "Satchel" **Paige**

24. His father was a poor laborer who worked his way up to be the most influential construction contractor in the area, but his father died 13 years after he was born. He wasn't lacking in family, however, because he was the seventh son among fifty children of his Syrian mother. He started up his famous organization, whose name means the "base" in Arabic, in 1988 and he was blamed for events in Somalia, South Yemen, and a car bombing in Riyadh. For ten points, name this anti-American terrorist leader now hunted as leader of the Al-Qa'edah.

Answer: Osama **bin Laden**

25. He is one of the few rappers ever to really live the things he raps about, he followed in the steps of his hustler mother and became a quite successful crack dealer. In 2000 he released a song called "How to Rob" in which he describes how he would rob many famous rappers. Shortly after that was released though, he was shot nine times in his car, but survived. He was later the subject of a major bidding war for his talents between many major players in the rap world, including Eminem, who would eventually sign him to his Shady/Aftermath label. FTP, who is this rapper, real name Curtis Jackson, who has scored massive success with his debut album "Get Rich or Die Tryin'" which includes the single "In Da Club"?

Answer: **50 Cent**

26. She caught Hephaestus when he was thrown from Mt. Olympus. Because of a prophecy that she would bear a son more powerful than his father, Zeus gave this Nereid to Peleus, a mortal. At their wedding, Eris threw her infamous golden apple, setting into motion events that would lead to major heroism by this figure's son. FTP, name this sea-nymph, the mother of Achilles.

Answer: **Thetis**

27. She once stormed into the Cordeliers and and was able to speak her piece about a Temple of Liberty to be erected on the foundations of the Revolution-wrecked Bastille. As hard as she tried, however, she was never able to attain concrete goals, for as radical as the Revolution got, feminists were not often conceded rights. She died young in an insane asylum and is not often remembered despite the fact that she was the flamboyant leader of the March of the Women on Versailles, dressed in red and prancing on a black horse. For ten points, name this feminist French actress of the Revolution.

Answer: **Theroigne de Mericourt**

BONI – SOUTH CAROLINA B**MOON PIE CLASSIC 2003 – UT-CHATTANOOGA**

Packet compiled by University of South Carolina--B(oo-yah): Erick (with a “c” and a “k”) Bousman and Joe Stanton

1. 15-5, name the amino acid. You’ll get fifteen points from the description of the molecular structure, five if you need the one letter symbol.

a) Fifteen points: The heaviest of the amino acids, its R group consists of two joined rings, one a benzene ring.

Five points: W

Answer: **Tryptophan**

b) Fifteen points: This amino acid, synthesized in 1900, has its R group looped back onto the nitrogen attached to the main carbon atom.

Five points: P

Answer: **Proline**

2. For ten points each, name terms related to the Milankovitch cycle affecting the Earth’s climate.

a) This term describes the changing in the shape of the Earth’s orbit as it elongates and returns back to normal size. It cycles approximately every 100,000 years.

Answer: **Eccentricity**

b) This term describes how the tilt of the earth makes slight changes. It cycles approximately every 41,000 years.

Answer: **Obliquity or Tilt**

c) This term describes how the Earth’s tilt wobbles like a spinning top. It cycles approximately every 25,700 years.

Answer: **Precession**

3. Name these Tom Wolfe books, FTPE.

a) This book concentrates on the exploits of Ken Kesey’s Merry Pranksters, especially in respect to Kesey himself and Neal Cassidy.

Answer: The **Electric Kool-Aid Acid Test**

b) This fiction effort centers on Sherman McCoy, a Wall Street go-getter who runs over a black youth in the Bronx.

Answer: The **Bonfire of the Vanities**

c) This non-fiction work centers on the original seven Mercury astronauts.

Answer: The **Right Stuff**

4. The Supreme Court has heard many cases involving illegal search and seizure. Answer these questions, 5-5-10-10.

a) For a quick five points, what is the term applied when evidence obtained illegally is discluded from use in the court case.

Answer: **Exclusionary rule**

b) For another five, what is the well-known case where the Supreme Court ruled 6-3 that “all evidence obtained by searches and seizures in violation of the Constitution is inadmissible in a state court,” thus applying the exclusionary rule to state cases.

Answer: **Mapp v. Ohio**

c) For ten points, Mapp v. Ohio overturned this 1949 case that upheld the Fourth Amendment right protecting against unlawful search and seizure, but did not apply the exclusionary rule to states.

Answer: **Wolf v. Colorado**

d) For the last ten points, name this 1984 case where the good faith exception was added to the exclusionary rule. It said that evidence could still be introduced that was seized on the basis of a mistakenly issued search warrant.

Answer: **United States v. Leon**

5. Verdi Operas from plot, FTPE

10) This opera follows the drama of an Ethiopian slave in Egypt as Ethiopia is preparing to attack Egypt. Ramades, the commander of the Egyptian army against the invading Ethiopian forces, is in love with the slave and upon his being unwittingly betrayed and therefore sentenced to death by live burial, she chooses to share in his fate.

Answer: **Aida**

10) This opera takes place in 16th century Mantua, Italy, involving a duke and his court. Gilda is kidnapped and then falls in love with the duke for whom she dies, foiling the plan of her father to take his revenge on the duke, leaving her father to cry out in grief at how his plan has tragically gone wrong.

Answer: **Rigoletto**

10) Violetta, a Paris prostitute sick with Tuberculosis, falls in love with Alfredo. Alfredo's father Georgio makes Violetta promise not to see his son any more and so she deceives Alfredo making him think that she is now loyal to another lover. At the end Giorgio writes to his son revealing that he made Violetta promise not to see him and so Alfredo goes to see his love and they have but a few moments of happiness together before she dies.

Answer: **La Traviata**

6. An American author, 30-20-10

30) Her autobiography, 1984's 'One Writer's Beginnings', ends "As you have seen, I am a writer who came of a sheltered life. A sheltered life can be a daring life as well. For all serious daring starts from within"

20) Born in 1909 in Jackson, Mississippi, she first gained fame with 1941's 'A Curtain of Green'. She won the 1973 Pulitzer Prize for fiction for her novel 'The Optimist's Daughter'.

10) Steve Dorner developed an email client bearing her name in 1990. Reportedly, she is the only Pulitzer Prize winner whose belches can compete with Jay Sherman.

Answer: Eudora **Welty**

7. For Erick's sake, here's a polyatomic ion bonus. For ten points each, given the name of the polyatomic ion and the element, give the oxidation number of the element in the ion.

a) ion: oxalate, element: carbon

Answer: **+3**

b) ion: amide, element: nitrogen

Answer: **-3**

c) ion: tantalate, element: oxygen

Answer: **-2**

8. For ten points each, name the President from the clues as sung by the Animaniacs to the tune of the William Tell Overture.

a) "how do you phrase? That guy was dead in thirty days"

Answer: William Henry **Harrison**

b) "his big debut, he gets the blame and loses, too"

Answer: Herbert **Hoover**

c) his "speeches" scripts all came from famous movie clips"

Answer: Ronald **Reagan**

9. Name these lands visited by Lemeul Gulliver, ~~of Gulliver's Travels fame~~, 5-10-15

a) 5 points: This is a land of barbaric little people who fight over which end eggs should be cracked on.

Answer: **Lilliput** (accept **Lilliputians**)

b) 10 points: In this land, Gulliver regards the Yahoos as primitive beasts, when they are in fact really humans.

Answer: **Houyhnhnmland** (accept **Houyhnhnms**) *these are pronounced **Whin-ems** and **Whin-em-land** but use your judgement, it is hard to pronounce.*

c) 15 points: In this land of science and philosophy, Gulliver rides in a flying ship, which is levitated by magnets.

Answer: **Laputa**

10. For the stated number of points, answer these questions about Chinese religion.

a) For ten points: This group of deities form the basis of Chinese religion, they include Ho Hsien Ku, the patroness of housewives, and Lu Tong Pin, patron of barbers.

Answer: **The Eight Immortals or Pa Hsien**

b) For five points: The Eight Immortals form the basis for this important Chinese religion.

Answer: **Tao or Taoism**

c) For fifteen points: This chief of the Eight Immortals carries a peach and a fan; he represents both the military man and wealth and carries the Elixir of Life.

Answer: **Chung Li Ch'uan**

11. For ten points each, given the description of the quantum particle, name the Greek letter the particle is named after.

a) This particle was discovered in 1947 and gave the name "strange" to one of the quarks that comprises it since it lasted so much longer than expected in the experiments. It is a baryon consisting of three quarks, an up, a down, and a strange quark.

Answer: **lambda**

b) This particle (the lightest meson) was formulated by Hideki Yukawa; the positive type consists of an up and an anti-down quark and the neutral type decays to an electron, positron and gamma rays.

Answer: **pi (accept pion)**

c) This particle (also a meson) has the same quark composition as the pion, but is in an excited state. However, since this vector meson has more energy, the angular momentum is one, therefore the spins are parallel.

Answer: **rho (accept rho meson)**

12. British Prime Ministers, FTPE

10) Gaining the position in 1715, he was the first British Prime Minister. He stayed in that position for 27 years, until he resigned in 1742.

Answer: **Robert Walpole**

10) Prime minister from 1830 to 1834, he has a variety of tea named after him

Answer: **Earl Grey**

10) Prime minister from 1916 to 1922, in 1936, he would visit Hitler and attempt to persuade him ~~not~~ to stop taking military action in Europe.

Answer: **David Lloyd George**

13. Given the following statistics about the country, name it, 30-20-10.

a) Thirty points: It had the lowest inflation of any country in the world in 2000, actually with a 6% deflation rate.

b) Twenty points: It is the third smallest country in the world, with a whopping 8.1 square miles of country.

c) Ten points: Its capital is Yaren with a stunning 559 people. It is an independent republic, however, it became one in 1968.

Answer: **Nauru**

14. Name these being that are the result of the bloody severed phallus of Uranus in Hesiod's *Theogony* for ten points each.

a) When Kronos cast away the genitals, a drop of blood from the aforementioned phallus dropped to the earth and created these goddesses of vengeance.

Answer: **The Furies**

b) Also springing from that same blood that fell to earth, these creatures attacked Olympus, but the gods vanquished them with the help of Hercules.

Answer: **Gigantes**

c) She sprung from the actual phallus when it landed in the ocean, and her name comes from the foam caused by it.

Answer: **Aphrodite**

15. Given a description name the German Federal State FTSTNOP:

5) This German Federal State houses its namesake, Germany's capital.

Answer: **Berlin**

10) This German Federal State surrounds Berlin. A group of J.S. Bach works include its name.

Answer: **Brandenburg**

15) The treaty of Versailles made it an autonomous territory, administered by France pending ^{elections} a to be held in 1935 to determine its final status. More than 90% of its people later voted to join Germany.

Answer: **Saarland**

16. Name the rapper from lyrics, FTPE, five if you need the title of the song.

a) Ten points: Where'd you get that platinum chain with them diamonds in it?/ Where'd you get that matching Benz with them windows tinted?

Five points: "Roll Out"

Answer: **Ludacris**

b) Ten points: From Standing on the corners boppin/ To driving the hottest cars New York has ever seen/ For dropping some of the hottest verses rap has ever heard.

Five points: "Hard Knock Life (Ghetto Anthem)"

Answer: **Jay-Z**

c) Ten points: Are we living in a dream world?/ Are your eyes still green girl?/ I know you're sick and tired of arguing/ But you can't keep it bottled in

Five points: "Come Close to Me"

Answer: **Common**

17. For ten points each, identify these things involving music with similar names.

a) The subtitle of Shostakovich's Thirteenth symphony is this poem by Yevtushenko.

Answer: **Babi Yar**

b) This Russian children's story character is the focus of the ninth section of Mussorgsky's Pictures at an Exhibition: "The Hut on Fowl's Legs".

Answer: **Baba Yaga**

c) This Poulenc work chronicles a story on piano created by Jean de Brunhoff.

Answer: **Babar**: the Elephant, or The History of **Babar**, or L'Histoire du **Babar**

18. Name these sons of Fyodor Karamazov, from *The Brothers Karamazov* for ten points each.

a) The oldest brother, he is accused of his father's murder, but refuses to defend himself adequately to preserve the reputation of his ex-fiancee.

Answer: **Dmitry** Fyodorovich Karamazov

b) The most intellectual member of the Karamazov clan, he is wracked with guilt after wishing for his father's death.

Answer: **Ivan** Fyodorovich Karamazov

c) This half-witted product of a rape is the bastard son and murderer of Fyodor Karamazov.

Answer: **Smerdyakov**

19. Name the basic circuits or circuit component, given a description, FTPE

10) Used to store energy in the form of charge buildup, they are measured in Farads

Answer: **Capacitors**

10) Typically created using a PN or NP junction, these are devices that pass current on one direction only, and are classified according to their IV characteristics

Answer: **Diodes**

10) Created using two or more diodes, this type of circuit is available in two varieties. The full wave type is used to convert AC into DC.

Answer: **Rectifiers**

20. Identify these mixed up and smushed together music and literary things for ten points each (for example, if I said “minimalist composer meets the Wingfield family” you’d say “Philip Glass Menagerie”)

a) Rod Stewart romantic female figure meets Crane’s disgraced titular protagonist

Answer: **Maggie Mae: A Girl of the Streets**

b) Stravinsky opera meets Angelou semi-autobiographical work

Answer: **I Know Why the Caged Firebird Sings**

c) Huxley dystopia meets Dvorak’s ninety-fifth opus

Answer: **Brave New World Symphony**

21. Name the poem from lines, 30-20-10.

a) 30 points: What sphinx of cement and aluminum bashed open their skulls and ate up/ their brains and imagination?

b) 20 points: Carl Solomon! I’m with you in Rockland/ where you’re madder than I am

c) 10 points: I saw the best minds of my generation destroyed by madness, starving hysterical naked

Answer: **Howl**

22. For ten points each, name these Greek battles that were not Salamis or Marathon.

a) This naval battle, closely related to Thermopylae, took place on the north end of Euboea and featured Themistocles in second command to Eurybiades, a Spartan. Both sides sustained losses and pulled away from the fighting.

Answer: **Artemisium**

b) After the Persian retreat, Xerxes left a hundred thousand men north of Greece to attempt to take Greece again the next year under the command of Mardonius. They were defeated, however, at this battle in 479 BC.

Answer: **Plataea**

c) The Ionian revolt in 500 BC led by Aristagoras was crushed in 494 BC at this battle.

Answer: **Miletus**

23. For ten points each, answer these questions about seemingly unrelated topics.

a) This magazine was originally started in 1936 by Henry Luce but is now owned by the Time Magazine Group.

Answer: **Life**

b) This Tolstoy novel contains characters such as Peter Ivanovich and Schwarz, both friends of the titular character.

Answer: **The Death of Ivan Ilych**

c) This man championed drastic tax cuts during his eleven year tenure as Secretary of the Treasury in the early twentieth century.

Answer: **Andrew Mellon**

24. For the stated number of points, identify these related social science questions.

a) Five points: This is the United States' southernmost territory.

Answer: **American Samoa**

b) Five points: Name the anthropologist famous for her studies among the people of this island group.

Answer: **Margaret Meade**

c) Ten points: This group of six inhabited islands are called Land of Men by their inhabitants and lie 400 to 600 miles south of the equator and 1,000 miles northeast of Tahiti.

Answer: **Marquesas Islands**

d) Ten points: This man studied the people of the Marquesas islands and found that civilization in Polynesia probably began in the Marquesas around 150 BC. He also excavated the dunes on the Ha'atuatua dunes of Nuku Hiva.

Answer: **R.C. Suggs**

25. If you're a piano player, you've probably already learned to loathe these piano etude exercise collections. Name them, 5-10-15.

a) Five points: The complete set is two books of 24 preludes and fugues by Johann Sebastian Bach.

Answer: **The Well-Tempered Clavier, or Das wohltemperirte Clavier**

b) Ten points: This work by Carl Czerny, his Opus 299, features four books of ten exercises each, where each exercise is, in fact, a complete musical composition that requires the student to pay attention to every musical detail.

Answer: **The School of Velocity**

c) Fifteen points: This work by C. L. Hanon is subtitled "For the Acquirement of Agility, Independence, Strength, and Perfect Evenness in the Fingers, as well as Suppleness of the Wrist" and comes in sixty exercises.

Answer: **The Virtuoso Pianist**

26. Name these ugly literary women, FTPE.

a) The June 29, 1919, issue of *The Onion* ran an article about her saying she was Literature's most Famous Bachelorette (hint, hint, fellows). Critics consider her *Three Lives* her best work.

Answer: Gertrude **Stein**

b) This woman was recently the subject of an Oscar-nominated movie, and is best known for works like *A Room of One's Own*, and *To the Lighthouse*.

Answer: **Virginia Woolf**

c) This woman founded *NOW* magazine and is best known for *The Feminine Mystique*.

Answer: **Betty Friedan**

27. Five-ten-fifteen, give the chemistry term named after their alliterative namesakes.

a) Five points: This equation accounts for the intermolecular forces and the real volume of gas molecules to find the pressure, volume, or moles of a non-ideal gas.

Answer: **Van der Waals equation** (pronounced "van-der-vals")

b) Ten points: This equation explains why the vapor pressure of water increases more rapidly than the temperature of the system, or, more specifically that the logarithm of the vapor pressure will increase as the temperature of the system increases.

Answer: **Clausius-Clapeyron equation**

c) Fifteen points: Alumina is dissolved in a carbon-lined bath of cryolite and the solution is electrolyzed. The desired product is produced as a liquid at the cathode and sinks to the bottom while the carbon anode is bubbled away as carbon dioxide.

Answer: **Hall-Heroult process**

28. 30-20-10 name the constellation given the stars that comprise it.

a) Thirty points: Alioth, Phecda, Mizar

b) Twenty points: Megrez, Alkaid

c) Ten points: Murak, Dubhe

Answer: **Ursa Major**

29. For the stated number of points, name these people related to the unhappy collapse of the Etruscan empire.

a) Five points: this is the last emperor of Rome died in exile at Cumae, no one mourned his death, however, because nobody missed his rule of despotism and murder of numerous members of the Senate.

Answer: **Lucius Tarquinius Superbus**

b) Ten points: name Superbus' father, the fifth King of Rome, whose glorious reign saw the institution of the Circus Maximus, the "great" games, the beginning of the construction of the Temple to Jupiter, and the construction of the sewer system.

Answer: **Lucius Tarquinius Priscus**

c) Fifteen for both, five for one: name Superbus' son, the last Prince of Rome, and the girl he raped who later stabbed herself to death.

Answer: **Sextus, Lucretia** (respectively)

30. For five points each, given the following battles, name the leader of the winning army and the leader of the army that was defeated (give winning party first, then the losing party).

a) Manzikert, 1071 AD

Answer: **Alp Arslan, Romanus IV**

b) Hastings, 1066 AD

Answer: **William the Conqueror** (accept **Guillaume Le Conquereur** or **William of Normandy**; also accept **Guillaume le Batard** or **William the Bastard**, but only begrudgingly); **Harold II**

c) Dannoura, 1183 AD

Answer: **Minamoto Yoritomo, Taira Kiyomori**