**Oxidative Phosphorylation:** is the [metabolic pathway](http://en.wikipedia.org/wiki/Metabolic_pathway) in which the [mitochondria](http://en.wikipedia.org/wiki/Mitochondria) in [cells](http://en.wikipedia.org/wiki/Cell_(biology)) use their structure, [enzymes](http://en.wikipedia.org/wiki/Enzyme), and [energy](http://en.wikipedia.org/wiki/Energy) released by the [oxidation](http://en.wikipedia.org/wiki/Redox) of [nutrients](http://en.wikipedia.org/wiki/Nutrient) to reform [ATP](http://en.wikipedia.org/wiki/Adenosine_triphosphate).

**Substrate Level Phosphorylation:**is a type of metabolic reaction that results in the formation of [adenosine triphosphate](http://en.wikipedia.org/wiki/Adenosine_triphosphate) (ATP) or [guanosine triphosphate](http://en.wikipedia.org/wiki/Guanosine_triphosphate) (GTP) by the direct transfer and donation of a [phosphoryl](http://en.wikipedia.org/wiki/Phosphoryl) (PO3) group to [adenosine diphosphate](http://en.wikipedia.org/wiki/Adenosine_diphosphate) (ADP) or [guanosine diphosphate](http://en.wikipedia.org/wiki/Guanosine_diphosphate) (GDP) from a phosphorylated [reactive intermediate](http://en.wikipedia.org/wiki/Reactive_intermediate).

**Redox Reaction:** reactions include all [chemical reactions](http://en.wikipedia.org/wiki/Chemical_reaction) in which atoms have their [oxidation state](http://en.wikipedia.org/wiki/Oxidation_state) changed; redox reactions generally involve the transfer of [electrons](http://en.wikipedia.org/wiki/Electron) between [species](http://en.wikipedia.org/wiki/Chemical_species).

**Electron acceptor:** An electron acceptor is a chemical entity that accepts [electrons](http://en.wikipedia.org/wiki/Electron) transferred to it from another compound. It is an [oxidizing agent](http://en.wikipedia.org/wiki/Oxidizing_agent) that, by virtue of its accepting electrons, is itself [reduced](http://en.wikipedia.org/wiki/Redox) in the process.[[1]](http://en.wikipedia.org/wiki/Electron_acceptor#cite_note-1)

**Electron Transport Chain :**couple s[electron](http://en.wikipedia.org/wiki/Electron) [transfer](http://en.wikipedia.org/wiki/Electron_transfer) between an [electron donor](http://en.wikipedia.org/wiki/Electron_donor)(such as [NADH](http://en.wikipedia.org/wiki/Nicotinamide_adenine_dinucleotide)) and an [electron acceptor](http://en.wikipedia.org/wiki/Electron_acceptor) (such as [O2](http://en.wikipedia.org/wiki/Oxygen)) with the transfer of [H+ions](http://en.wikipedia.org/wiki/Proton) (protons) across a [membrane](http://en.wikipedia.org/wiki/Cell_membrane).

**Glycolysis**: Is the [metabolic pathway](http://en.wikipedia.org/wiki/Metabolic_pathway) that converts [glucose](http://en.wikipedia.org/wiki/Glucose) C6H12O6, into [pyruvate](http://en.wikipedia.org/wiki/Pyruvate), CH3COCOO− + H+.

**Kreb Cycle**: Is a series of [chemical reactions](http://en.wikipedia.org/wiki/Chemical_reaction) used by all [aerobic organisms](http://en.wikipedia.org/wiki/Aerobic_organism) to generate energy through the [oxidation](http://en.wikipedia.org/wiki/Redox) of [acetate](http://en.wikipedia.org/wiki/Acetate) derived from [carbohydrates](http://en.wikipedia.org/wiki/Carbohydrate), [fats](http://en.wikipedia.org/wiki/Fat) and [proteins](http://en.wikipedia.org/wiki/Protein) into [carbon dioxide](http://en.wikipedia.org/wiki/Carbon_dioxide) and chemical energy in the form of [adenosine triphosphate](http://en.wikipedia.org/wiki/Adenosine_triphosphate) (ATP).

**Fermentation:** Is a metabolic process that converts [sugar](http://en.wikipedia.org/wiki/Sugar) to acids, gases and/or [alcohol](http://en.wikipedia.org/wiki/Alcohol). It occurs in [yeast](http://en.wikipedia.org/wiki/Yeast) and [bacteria](http://en.wikipedia.org/wiki/Bacteria),

**Areobic**:  "requiring [air](http://en.wikipedia.org/wiki/Earth%27s_atmosphere)", where "air" usually means [oxygen](http://en.wikipedia.org/wiki/Oxygen).

**Anaerobic**: Is a form of [respiration](http://en.wikipedia.org/wiki/Cellular_respiration) using electron acceptors other than oxygen. Although oxygen is not used as the final electron acceptor, the process still uses a respiratory [electron transport chain](http://en.wikipedia.org/wiki/Electron_transport_chain); it is [respiration](http://en.wikipedia.org/wiki/Cellular_respiration) without oxygen.

**Pyruvate**:  Is an [organic acid](http://en.wikipedia.org/wiki/Organic_acid), a [ketone](http://en.wikipedia.org/wiki/Ketone), as well as the simplest of the [alpha-keto acids](http://en.wikipedia.org/wiki/Keto_acids).

**Acetyl coA**: Is an important molecule in [metabolism](http://en.wikipedia.org/wiki/Metabolism), used in many [biochemical reactions](http://en.wikipedia.org/wiki/Biochemical_reaction).

Cytochrome: In general, membrane-bound (i.e. [inner mitochondrial membrane](http://en.wikipedia.org/wiki/Inner_mitochondrial_membrane))[heme proteins](http://en.wikipedia.org/wiki/Hemeprotein) containing [heme](http://en.wikipedia.org/wiki/Heme) groups and are primarily responsible for the generation of [ATP](http://en.wikipedia.org/wiki/Adenosine_triphosphate) via [electron transport](http://en.wikipedia.org/wiki/Electron_transport).

**ATP synthase:** an important [enzyme](http://en.wikipedia.org/wiki/Enzyme) that provides energy for the cell to use through the synthesis of [adenosine triphosphate](http://en.wikipedia.org/wiki/Adenosine_triphosphate) (ATP).

**Chemiosmosis:** is the movement of ions across a selectively permeable membrane, down their electrochemical gradient.

**Lactic Acid Fermentation:** is a biological process by which [glucose](http://en.wikipedia.org/wiki/Glucose), [fructose](http://en.wikipedia.org/wiki/Fructose), and [sucrose](http://en.wikipedia.org/wiki/Sucrose) are converted into cellular energy and the metabolite [lactate](http://en.wikipedia.org/wiki/Lactic_acid).

**Alchohol Fermentation:** is a biological process in which sugars such as [glucose](http://en.wikipedia.org/wiki/Glucose), [fructose](http://en.wikipedia.org/wiki/Fructose), and [sucrose](http://en.wikipedia.org/wiki/Sucrose) are converted into [cellular energy](http://en.wikipedia.org/wiki/Adenosine_triphosphate) and thereby produce [ethanol](http://en.wikipedia.org/wiki/Ethanol) and [carbon dioxide](http://en.wikipedia.org/wiki/Carbon_dioxide) as metabolic waste products.

**Matrix**: is the material (or tissue) in animal or plant [cells](http://en.wikipedia.org/wiki/Cell_(biology)), in which more specialized structures are embedded, and a specific part of the [mitochondrion](http://en.wikipedia.org/wiki/Mitochondrion) that is the site of oxidation of organic molecules.

**Cristae:** The in foldings or inward projections of the inner membrane of the [mitochondrion](http://www.biology-online.org/dictionary/Mitochondrion), which are studded with [proteins](http://www.biology-online.org/dictionary/Proteins) and increase the surface area for chemical reactions to occur like [cellular respiration](http://www.biology-online.org/dictionary/Cellular_respiration).

**Cytosol:**is the liquid found inside [cells](http://en.wikipedia.org/wiki/Cell_(biology)). It is separated into compartments by membranes.

**Proton Pump:**is an [integral membrane protein](http://en.wikipedia.org/wiki/Integral_membrane_protein) that is capable of moving [protons](http://en.wikipedia.org/wiki/Proton) across a [biological membrane](http://en.wikipedia.org/wiki/Biological_membrane).