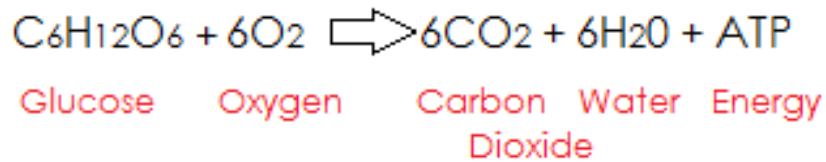


Biology Kerboodle: B9 Respiration

Name: _____

1. Aerobic respiration

Respiration	An exothermic reaction which continuously happens in living cells
Purpose	Transfer energy for: <ul style="list-style-type: none"> • Chemical reactions • Movement • Warmth
Aerobic	With oxygen



3. Anaerobic Respiration

Anaerobic	Without oxygen
Anaerobic respiration in muscle cells	glucose → lactic acid
Anaerobic respiration in yeast cells (fermentation)	glucose → ethanol + carbon dioxide
Lactic acid	A chemical that when built up in muscles causes fatigue
Oxygen debt HT ONLY	The amount of oxygen the body needs after exercise to remove the lactic acid

2. Response to exercise

Change	Reason
Heart pumps faster	Supply more oxygenated blood to the muscles
Breathing rate increases	
Deeper breaths	

4. Metabolism

Metabolism	The sum of all the reactions in a cell or the body
Includes:	<ul style="list-style-type: none"> • Conversion of glucose to starch, glycogen and cellulose • Formation of lipids from glycerol and 3 fatty acids • Use of glucose and nitrates to make proteins (PLANTS) • Respiration • Breakdown of protein to form urea.