

## 1. Aerobic Respiration



Series of reactions that takes place in the cells of living organisms

Energy is released  
Takes place in the mitochondria

Oxygen is carried from the lungs to the cells in the blood  
Carbon dioxide and water are waste products and are taken away from the cells to the lungs by the blood

## 2. Anaerobic Respiration



No oxygen needed  
Does not release as much energy as aerobic respiration but is quicker

Lactic acid builds up in muscles causing them to ache

## 3. Fermentation



Anaerobic respiration happens in microorganisms such as bacteria as they need to release energy from glucose.

Yeast carry out a process called **fermentation**  
The ethanol (alcohol) is useful for brewers  
Carbon Dioxide is useful for bakers (makes bread rise)

## 4. Keywords

Respiration	Process in living things to release energy from glucose
Aerobic respiration	Respiration that requires oxygen
Anaerobic respiration	Respiration without oxygen
Lactic acid	A chemical produced during anaerobic respiration
Mitochondria	Structures in the cytoplasm of all cells where aerobic respiration takes place
Oxygen debt	The amount of extra oxygen required by the body for recovery after vigorous exercise

