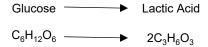
## **Science Knowledge Organiser**

Y8 Ecosystems: Respiration

## **Aerobic respiration**

Glucose + Oxygen 
$$\longrightarrow$$
 Carbon bioxide + Water  $C_6H_{12}O_6$  +  $6O_2$   $\longrightarrow$   $6CO_2$  +  $6H_2O$ 

## **Anaerobic respiration in animals**



Key Terms:	
Aerobic respiration	Respiration is a series of chemical reactions, in cells, that breaks down glucose to provide energy and form new molecules.
Anaerobic respiration	Releasing energy form glucose when oxygen isn't available. Produces lactic acid in animals. Produces ethanol and carbon dioxide in plants and microorganisms.
Fermentation	Anaerobic respiration in microorganisms.
Mitochondria	The cell organelle where aerobic respiration takes place in animals and plants.
Yeast fermentation	Used in brewing (for ethanol) and baking (for the carbon dioxide).