

KNOWLEDGE ORGANISER

BIG IDEA: ECOSYSTEMS

TOPIC: RESPIRATION

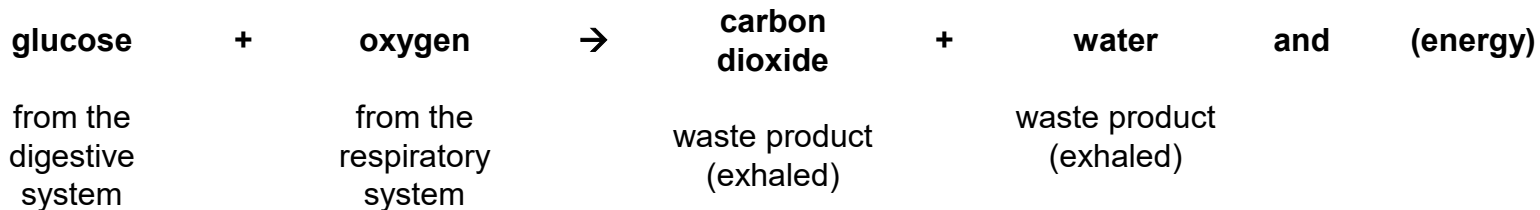
Most living things use **aerobic respiration** but switch to **anaerobic respiration**, which provides less energy, when oxygen is unavailable

Key Word	Definition
respiration	a chemical reaction, in cells, that breaks down glucose to provide energy and new molecules.
aerobic respiration	Breaking down glucose with oxygen to release energy and producing carbon dioxide and water.
anaerobic respiration	Releasing energy from the breakdown of glucose without oxygen, producing lactic acid
fermentation	Releasing energy from the breakdown of glucose without oxygen, producing ethanol and carbon dioxide in plants and microorganisms
mitochondria	The site of respiration in the cell

Anaerobic respiration occurs when there is not enough oxygen present. The build up of lactic acid leads to muscle fatigue, also known as cramp.

The **fermentation** of yeast is used in brewing and bread making. Yeast are unicellular fungi.

Aerobic Respiration



Anaerobic Respiration



Fermentation

