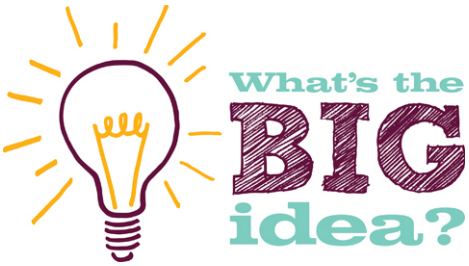
You need to know the content of this sheet. 100%

100% Sheet
Breathing and Respiration



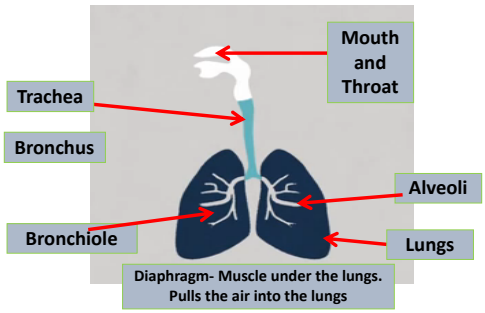
Organisms

are organised on a cellular basis and require a supply of energy or materials.

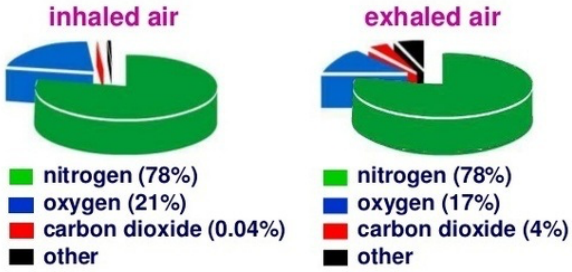
KEY POINTS

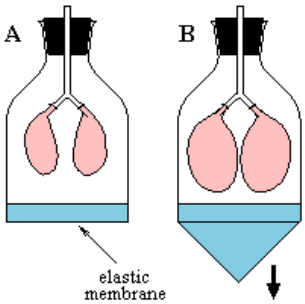
BREATHING occurs through the action of muscles in the ribcage and diaphragm to allow the exchange of gases.
In gas exchange, oxygen and carbon dioxide move between alveoli and the blood.
Oxygen is used in the cells for **RESPIRATION** where it is used with glucose to provide energy for the cells.
The waste products of **RESPIRATION** are carbon dioxide and water vapour which are removed and exchanged from the blood to the alveoli in the lungs

Know the parts of the breathing system

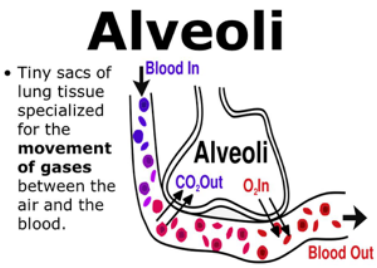


Know the difference between air we breathe in and air we breathe out





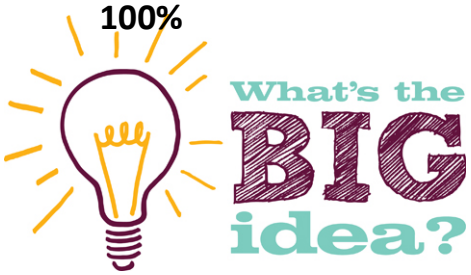
Breathing in controlled by the diaphragm
As it moves down it creates more space and a lower pressure around the lungs. Air enters the lungs due to this difference in pressure.
As the diaphragm move up it creates higher pressure and forces the air out of the lungs



Respiration	Is when…	It makes…
Aerobic	There is lots of oxygen	Carbon dioxide, water & energy
Anaerobic	There is little/no oxygen	Lactic acid **in humans**
Anaerobic	There is little/no oxygen	Alcohol, carbon dioxide & energy **in yeast**

You need to know the content of this sheet. 100%

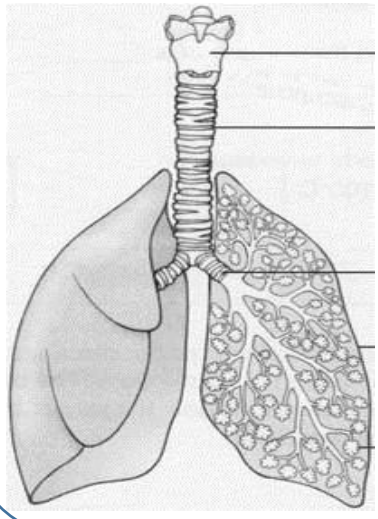
100% Sheet
Breathing and Respiration



Organisms

are organised on a cellular basis and require a supply of energy or materials.

Add labels to the diagram



What is the function of the alveoli and how are they adapted to do their job well

Where does respiration happen?

Complete the word equation for respiration

_____ + _____ → _____ + _____

Explain why we breathe harder when doing exercise

Our 'flight or fight' response allows us to use a lot of energy very quickly for a short period of time. Explain this response in terms on anaerobic respiration.