

Organisms - Breathing KEY LEARNING

We need oxygen, we do not need carbon dioxide.

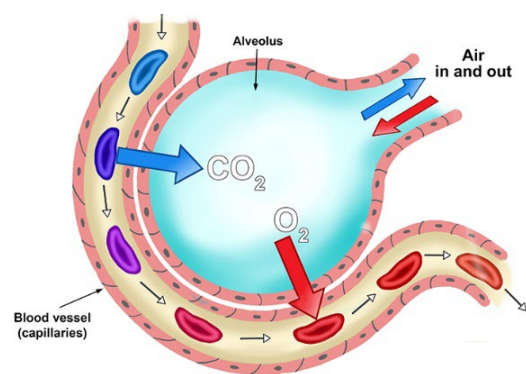
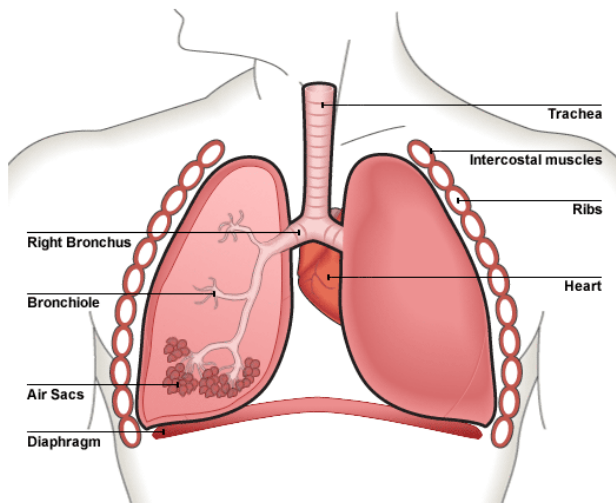
GAS	INSPIRED AIR	EXPIRED AIR
OXYGEN	21%	16%
CARBON DIOXIDE	0.04%	4%

Inspired air is air we breathe in.

Expired air is air we breathe out.

Our body keeps some of the oxygen. Our body removes extra carbon dioxide.

Breathing is the movement of oxygen into the lungs and carbon dioxide out of the lungs.



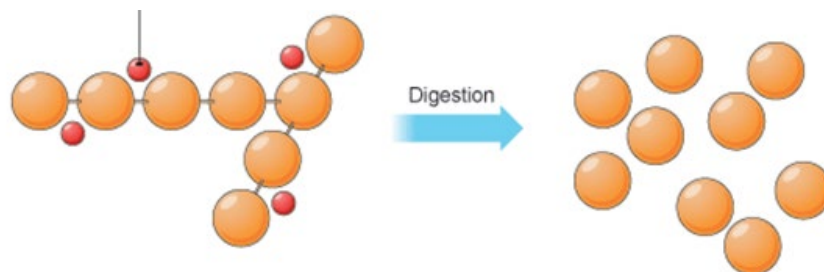
Trachea (windpipe)	Carries air from mouth to lungs.
Bronchi	2 tubes carry air to lungs
Bronchiole	Small tubes in lung.
Rib	Bones around lungs to form the ribcage.
Alveoli	Air sacs where oxygen goes into the blood.
Diaphragm	Sheet of muscle under lungs.

Organisms - Digestion KEY LEARNING

A balanced diet is essential. It contains the correct amounts of carbohydrates, fats, proteins, vitamins, minerals, fibre and water.

Food Group	Why do we need this in our diet?
Carbohydrate	The body's main source of energy.
Fat	For insulation, energy and cell membranes. Found in butter, milk and eggs.
Protein	For growth and repair. Found in meat, fish, eggs, beans, nuts and seeds.
Vitamins and minerals	Small amounts needed for the body to work properly. E.g: iron for blood.
Fibre	Parts of plants that cannot be digested. Helps the body remove waste.
Water	For hydration.

Digestion breaks large food molecules into small ones.



Key Learning Questions	Year 8 Organisms
Air contains which essential gas?	Oxygen
Which waste gas do we breathe out?	Carbon dioxide
Name all 7 components of a healthy diet.	Protein
	Carbohydrate
	Fats/lipids
	Vitamins
	Minerals
	Fibre
	Water
What is it called when we eat all 7 in the correct amounts?	Balanced diet
What process breaks large food particles down into small ones?	Digestion

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	F
	V
	M
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Extension Questions	Year 8 Organisms
Name the air sacs where oxygen goes into the blood.	Alveoli
Where is food digested <u>and</u> absorbed into the blood?	The small intestines.
Name the chemicals that speed up digestion?	Enzymes
Which food group is needed for energy only?	Carbohydrates.
Which food group is needed for growth and repair?	Proteins.
Where is water reabsorbed from our waste?	The large intestines.
Which food turns iodine black?	Starch
Which food turns Benedict's solution brick red when heated?	(Reducing) Sugars
Which food turns biuret solution lilac/purple?	Protein

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