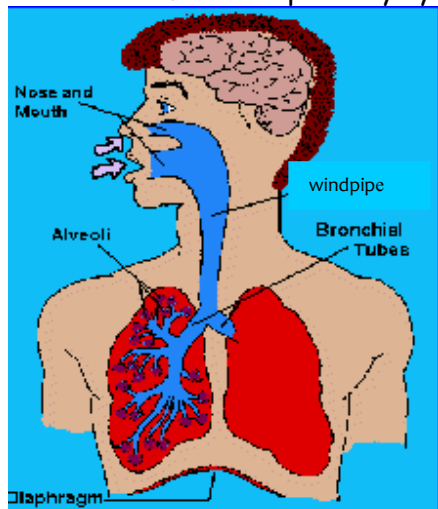


S1 Biology - Plant and Animal Systems Revision Sheet

Respiratory (Breathing) System

We breathe in oxygen and breathe out carbon dioxide. If oxygen is present then it will relight a glowing splint. We can test for the presence of carbon dioxide as it turns lime water from clear to cloudy.

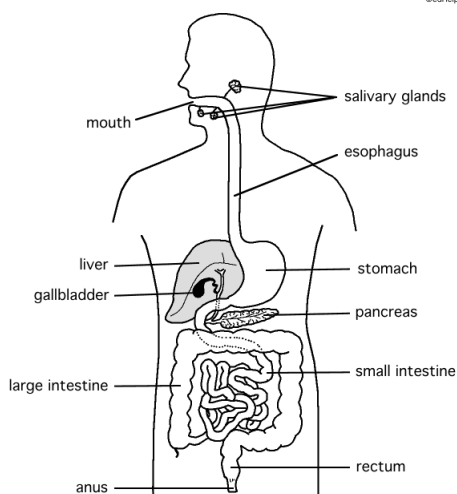
Structure of the respiratory system:



Part of Respiratory System	Function
Mouth and Nose	Air enters the body
Windpipe	Tube which air travels down to the lungs
Ribs	Protect the lungs from damage
Intercostal Muscles	Move air in/out of body
Diaphragm	Sheet of muscle which moves air in/out of the body

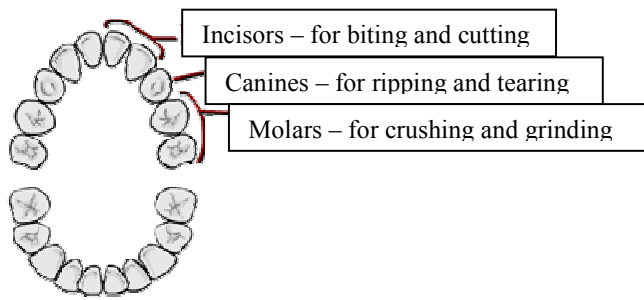
When we breathe in our ribs move up and out. Our diaphragm moves down.
When we breathe out our ribs move down and in. Our diaphragm moves up.

Digestive System



Digestive System

Part of Respiratory System	Function
Mouth	Teeth and enzymes start digestion of food
gullet	Carries food to the stomach
Stomach	Churns food with acid and enzymes
Small intestine	Absorbs useful products of digestion
Large intestine	Absorbs water from waste to form faeces



Know why the different food groups are needed in a balanced diet:

<i>Food Group</i>	<i>Use</i>
Carbohydrates/Fats	Energy
Protein	Body building
Vitamins and Minerals	Protect from disease

Know about the following food tests:

<i>Test</i>	<i>Tests for...</i>	<i>Colour change</i>
Iodine	Starch	Orange to Blue-black
Benedict's	Sugar	Blue to Green/Orange
Biuret's	Protein	Blue to Lilac

Plant Reproduction

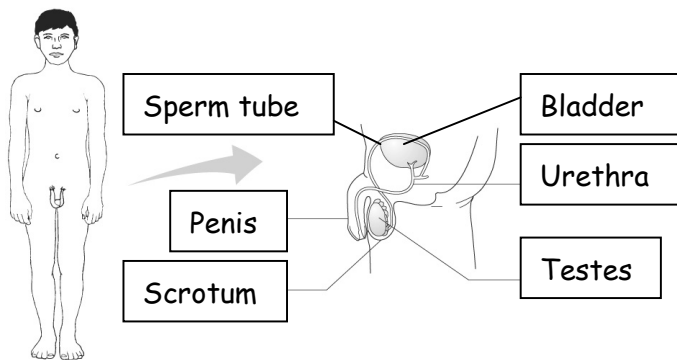
- Pollination - transfer of pollen from the anther of one flower to the stigma on another. Pollination can either be by:
 - Wind - the pollen is carried from one plant to another by the wind.
 - Insect - pollen is carried to another plant attached to an insect, such as a bee or fly.
- Fertilisation - the joining of the male and female sex cells.
- Seed dispersal - seeds are spread as far away from the parent plant as possible. Seed dispersal can be:
 - Wind - these seeds are blown in the wind and have wings or feather-like attachments.
 - Animal internal - some seeds have a sweet, tasty fruit surrounding them. Animals eat the fruit and carry the seed inside their digestive system. Later the seed will exit the body in the faeces.
 - Animal external - some seeds have hooks or barbs. These seeds catch on the fur of animals and can be carried great distances before they rub off.
 - Explosive - some seeds are contained within pods. Suddenly the pod will burst open shooting the seeds away from the parent plant.
- Germination - when a seed bursts into life and a new plant starts to grow.

Puberty

- Puberty is the name for the time when your body begins to develop as you move to adulthood.
- During puberty both boys and girls will start to grow hair under the arms and around the pubic area.
- Girls will develop breasts and their periods will start.
- Boys will start to produce sperm and their voices become deeper.
- Puberty is controlled by special chemicals called hormones.
- Puberty begins between the ages of 10 and 14 for girls and 10 and 16 for boys.

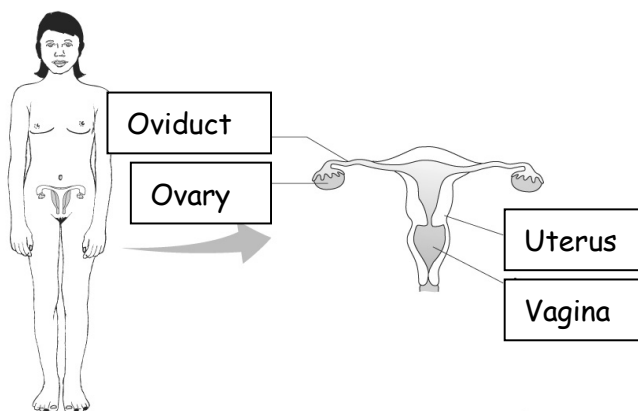
Human Reproduction

Male reproductive system:



Part of Male Reproductive System	Function
Penis	Places sperm into the female's vagina
Testes	Produce sperm
Urethra	Carries sperm and urine out through the penis
Scrotum	Sac of skin which holds the testes
Sperm tube	Carries sperm from the testes to the urethra
Bladder	Stores urine

Female reproductive system:



Part of Female Reproductive System	Function
Oviduct	Carries the eggs from the ovary to the uterus. Site of fertilisation
Ovary	Produces eggs
Uterus	Site where foetus develops
Vagina	Site where sperm enters the female