

Living Things

1.1 Plants

Classification of plants.

Classification of plants is the act of dividing plants into groups according to their similar features.

There are two groups of plants; Flowering and non-flowering plants.

1



Flowering plants.

They are plants that produce flowers.

Examples; maize plant, pawpaw and beans.

2



Non-flowering plants.

They are plants that don't produce flowers.

Examples; mosses, ferns and algae.

Flowering plants

Importance of flowering plants.



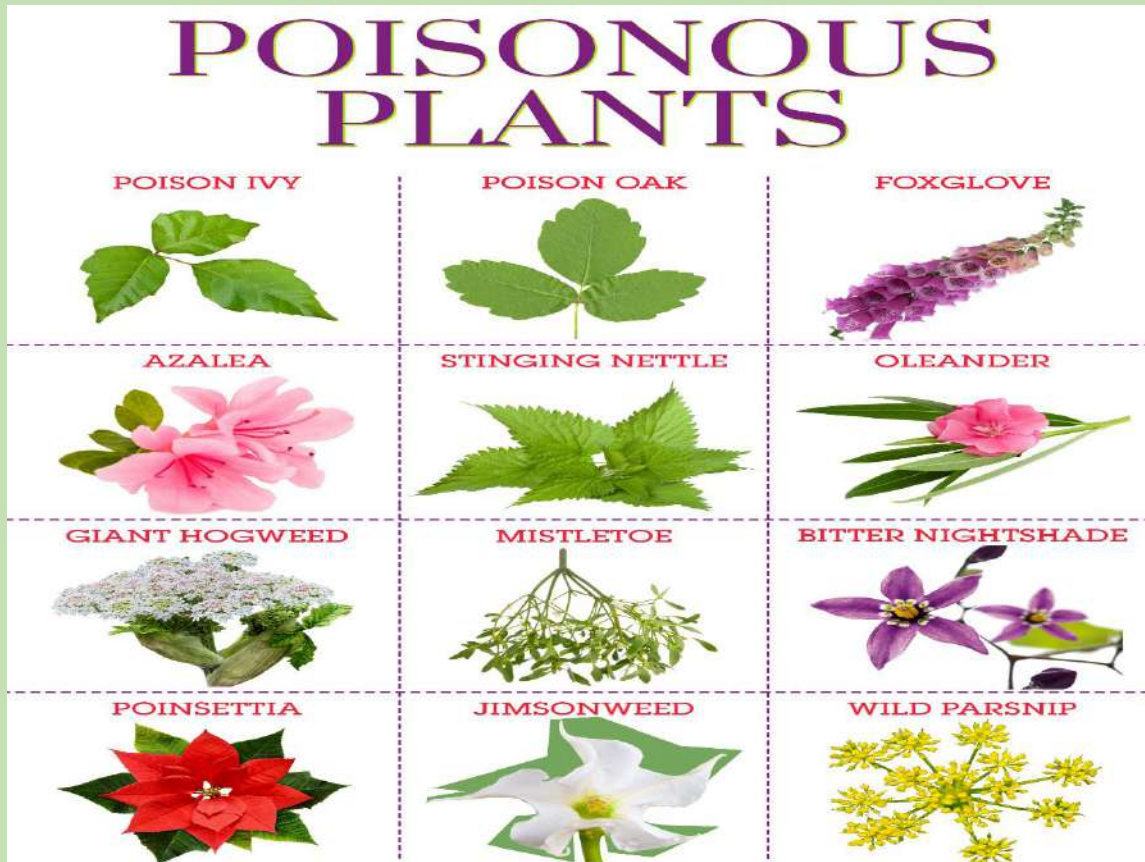
1. Flowering plants give us food, medicine, shade, timber and make the environment beautiful.

2. They provide animals with food

3. Some flowering plants are home for some animals.

Safety precautions when handling harmful plants

Harmful plants.



Safety precautions

1. Some plants are harmful. We should take precautions when handling them.
2. We should put on protective cloths when handling harmful plants.
3. We should use a pair of forceps when handling harmful plants. Some are poisonous.
3. We should wash our hands with soap and clean water after handling harmful plants.

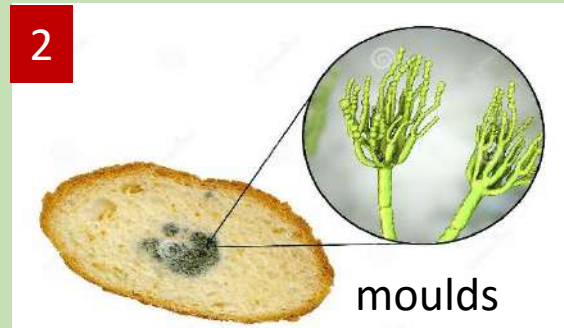
Fungi

Identifying fungi.

Fungi are living things. They are neither plants nor animals. They grow on plants or rotting things.



1



2

moulds



3

Examples of fungi.

- i. **Mushroom**
- ii. **Yeast**
- iii. **Bread moulds**
- iv. **puffballs**



4

Bread moulds



5

Fungi skin infection

Importance of fungi.

Importance to humans.

1. Some fungi are used as food. Example, mushroom
2. Some are used in cooking process. Yeast is used in baking to make dough.
3. Some fungi are used to make medicine.
4. Some are used to in making beverages.



Baking flour + yeast



Baking dough

Economic importance

1. Mushroom farming is carried out for food. They are sold on local markets and in other countries.
2. Yeast is used for making bread and cakes that are sold in shops.



Mushroom farming in Kenya.



Bread and cakes sold in shops.

Safety precautions when handling fungi

Effects of harmful fungi.



Safety precautions

1. There are poisonous fungi. We should only collect mushrooms with the guidance of adults.
2. Always wear protective cloths such as gloves, safety boots, safety goggles and dust masks.
3. Always wash your hands with soap and clean water after handling fungi.

vertebrates

Vertebrates are animals that have a backbone.

They include cat, cow, lizard duck fish and frog.



**The
backbone.**



Cat



Cow



Lizard



Frog



Duck



Fish

Safety precautions

Safety precautions when handling animals.



Safety apron



Safety boots



Safety gloves



Safety mask



Safety goggles



Safety helmet

Safety precautions.

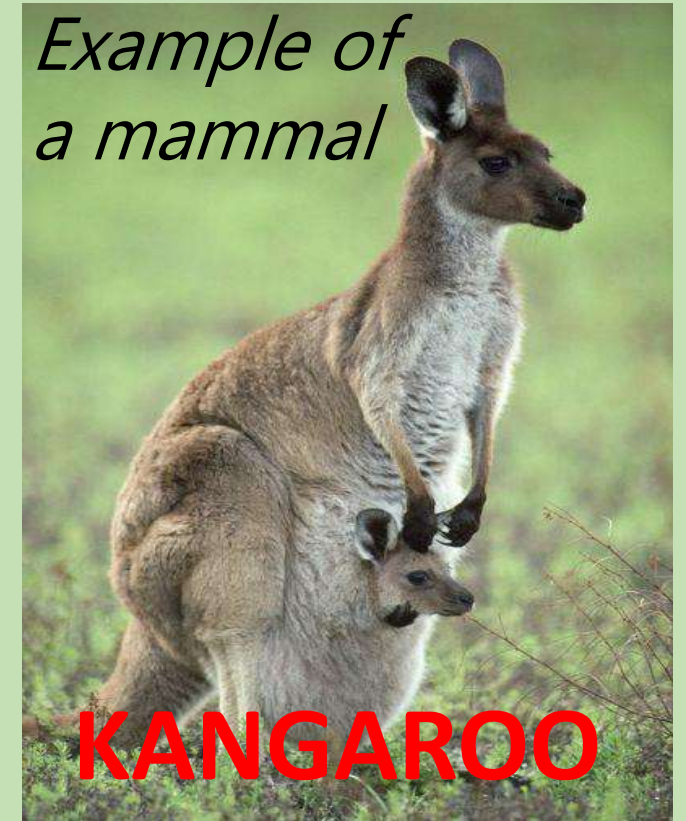
1. Avoid dangerous animals.
2. Handle animals using safety gears above.
3. Approach animals with caution.
4. Be alert when around animals.
5. Do not run when around animals.
6. Avoid animals that have young ones.

Characteristics of mammals

Vertebrates are divided into; **mammals, birds, fish, reptiles and amphibians.**

- i. **Mammals have a backbone,**
- ii. **They give birth to young ones. Some lay eggs, e.g., Duck-billed platypus.**
- iii. **They have mammary glands to breast feed their young ones.**
- iv. **Mammals live on land, some underground and others in water.**
- v. **Their body is covered with fur or hair.**
- vi. **Mammals are warm blooded. Their body produces heat.**

*Example of
a mammal*



KANGAROO

Characteristics of birds

BIRDS

- a) Birds are warm blooded.
- b) They have a backbone.
- c) Their body is covered with feathers.
- d) They lay eggs that hatch into young one.
- e) Birds have beaks.
- f) Birds have wings.

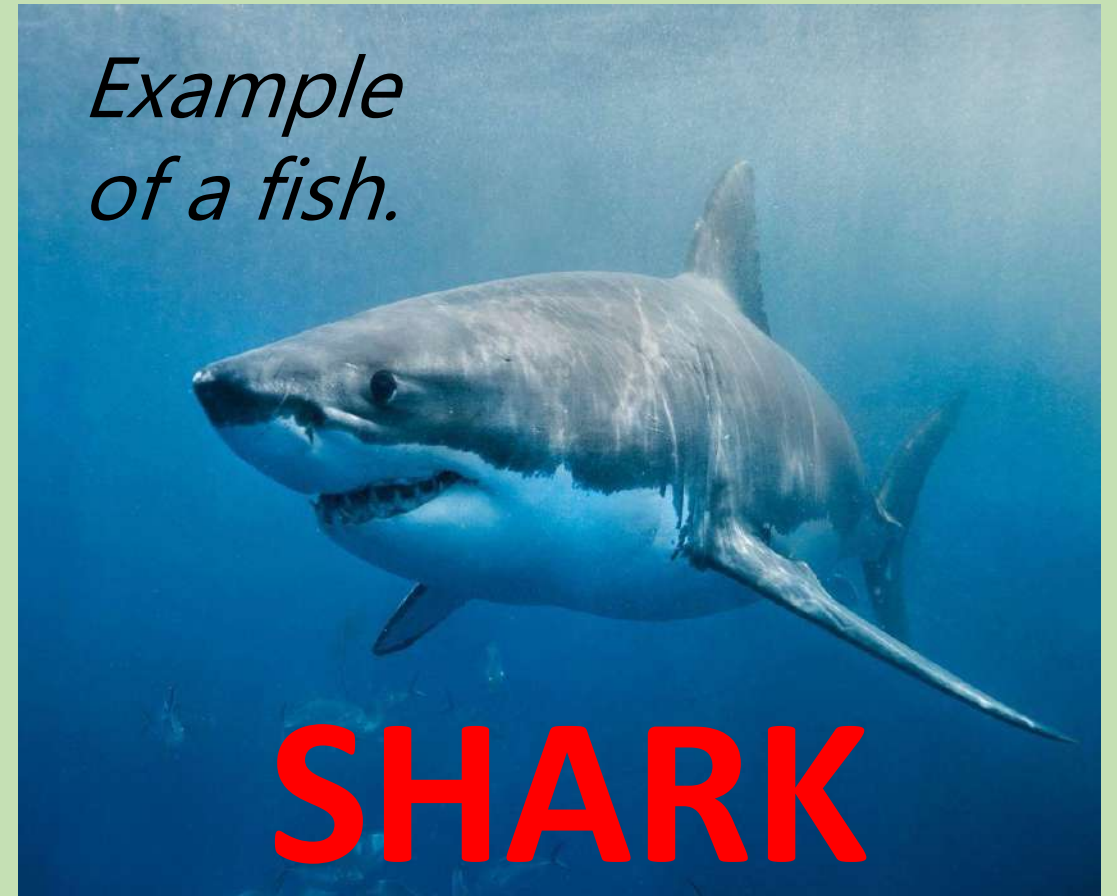


Characteristics of fish

FISH

1. Fish have a backbone.
2. They live in water.
3. They have fins.
4. Lay eggs that hatch into young ones.
5. Their body is covered with scales.
6. They are cold blooded.
7. They breath through gills
8. Fish move by swimming.

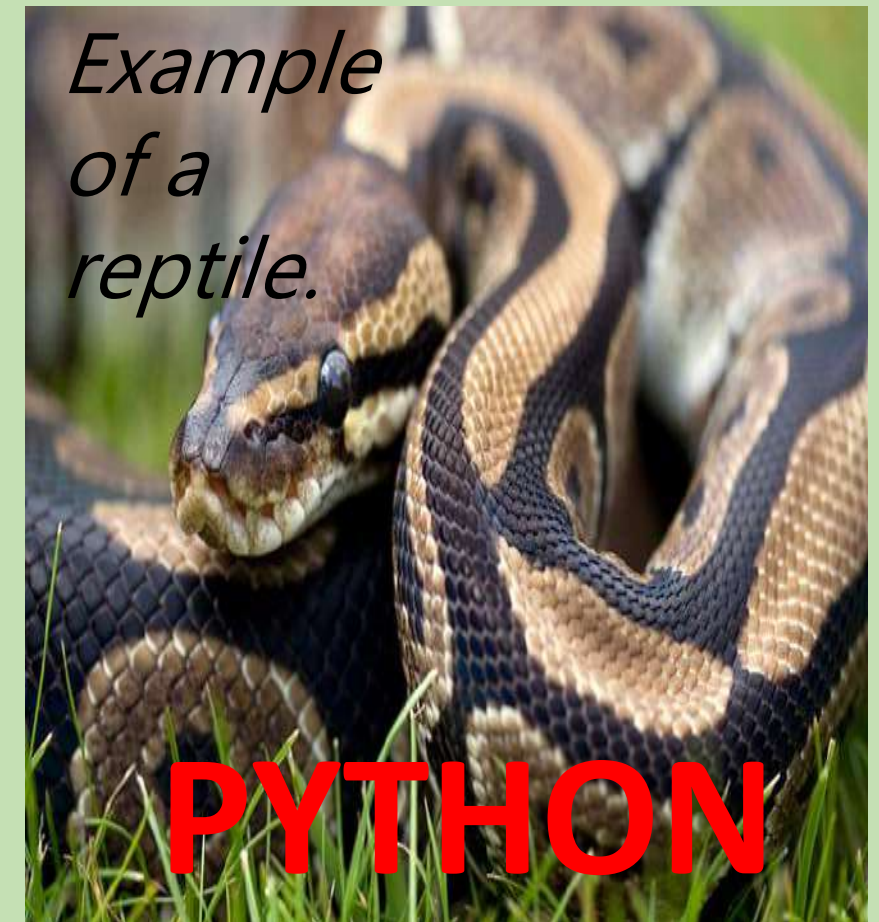
*Example
of a fish.*



Characteristics of reptiles

REPTILES

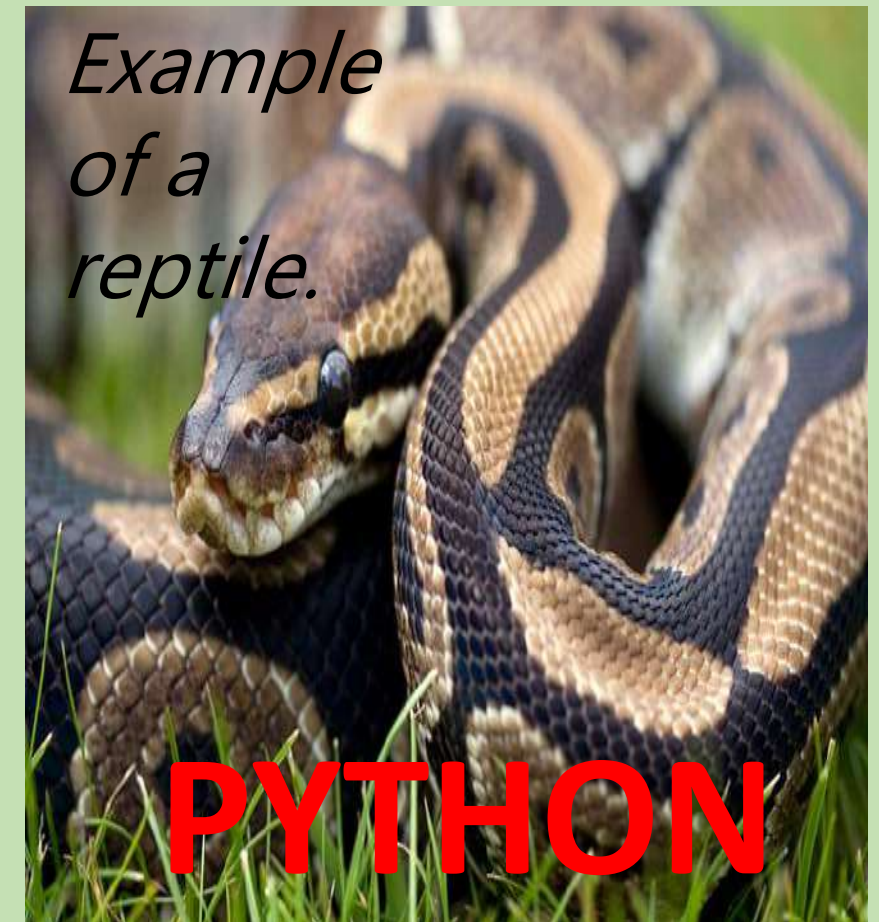
- a) Reptiles have a backbone.
- b) They are cold blooded. Their body temperature changes with the environment, cold at night and warm during the day.
- c) Their body is covered with scales.
- d) Reptiles live on land and in water.
- e) They breath through the lungs.
- f) Most of them lay eggs and hatch into young ones.



Characteristics of reptiles

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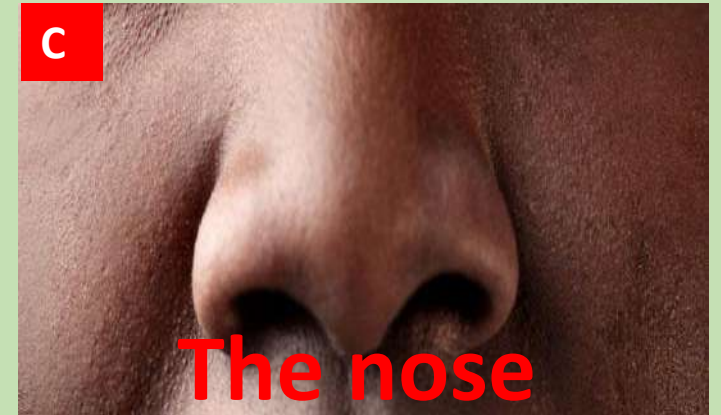
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Sense organs

Human being have 5 main sense organs.

They include;



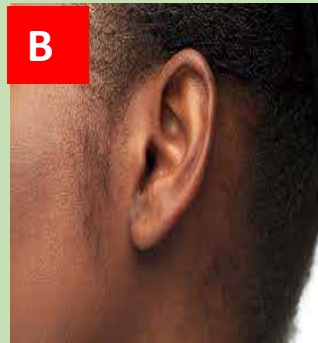
Functions of the sense organs



A

We use our eyes to see. We see objects and the environment using our eyes.

The eyes



B

Ears are used to hear. We listen and sense sound using our ears.

The ear



C

The tongue

The tongue is used to taste. With the tongue, we can sense sugary or salty food using the tongue.



D

The skin tells us if it is hot or cold, rough or smooth, or when we are hurt and feeling pain.

The skin



E

We smell with our nose. The nose is used to sense good or bad smell.

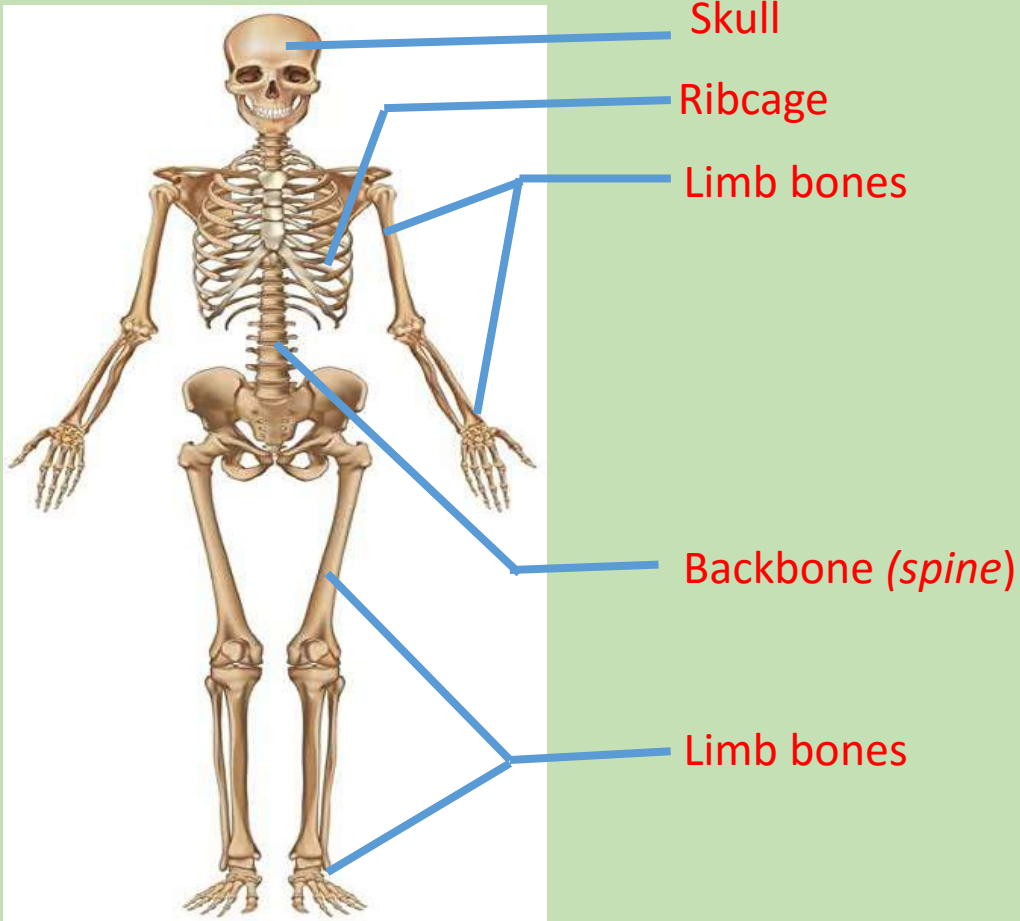
The nose

Care for sense organs

- a) We should bath daily using soap and clean water.
- b) We should apply oil on our skin to keep it moist.
- c) We should always brush our tongue and teeth when cleaning our mouth.
- d) We should keep our nose clean using a clean handkerchief.
- e) We should clean our ears using cotton buds.
- f) We should not put sharp objects in our nose or ears.



The human skeleton

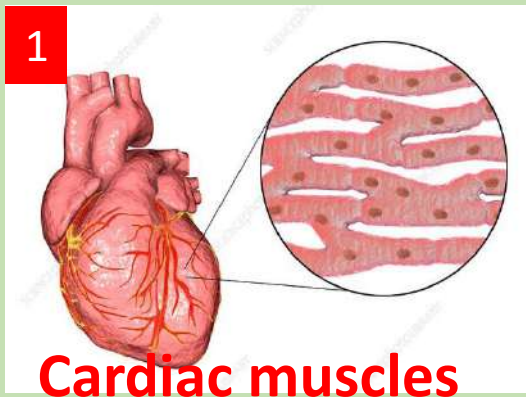


FUNCTIONS OF THE HUMAN SKELETON.

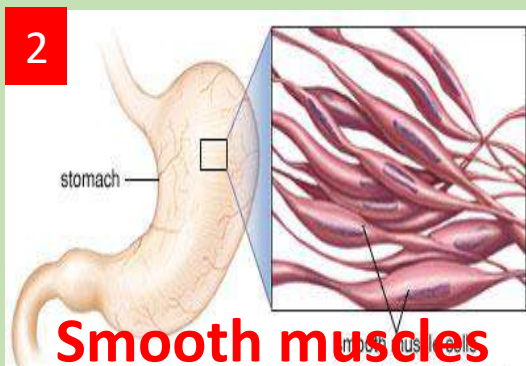
1. The skull protects the brain from injury.
2. The backbone provides support to the entire body and helps the body to remain upright.
3. The ribcage protects the heart and lungs.
4. The limb bones supports the weight of the human body.

The human muscles

Three types of muscles.

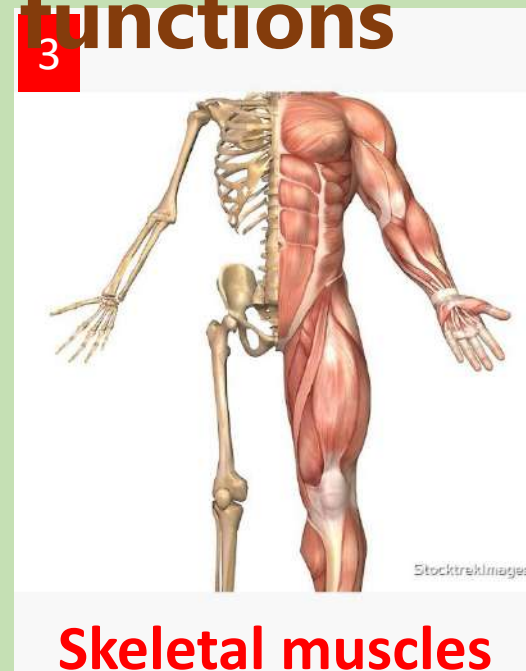


Cardiac muscles are found in the heart. They are the heart muscles.



Smooth muscles are found in the stomach and the intestines. They are also called **involuntary muscles**.

Skeletal muscles and their functions

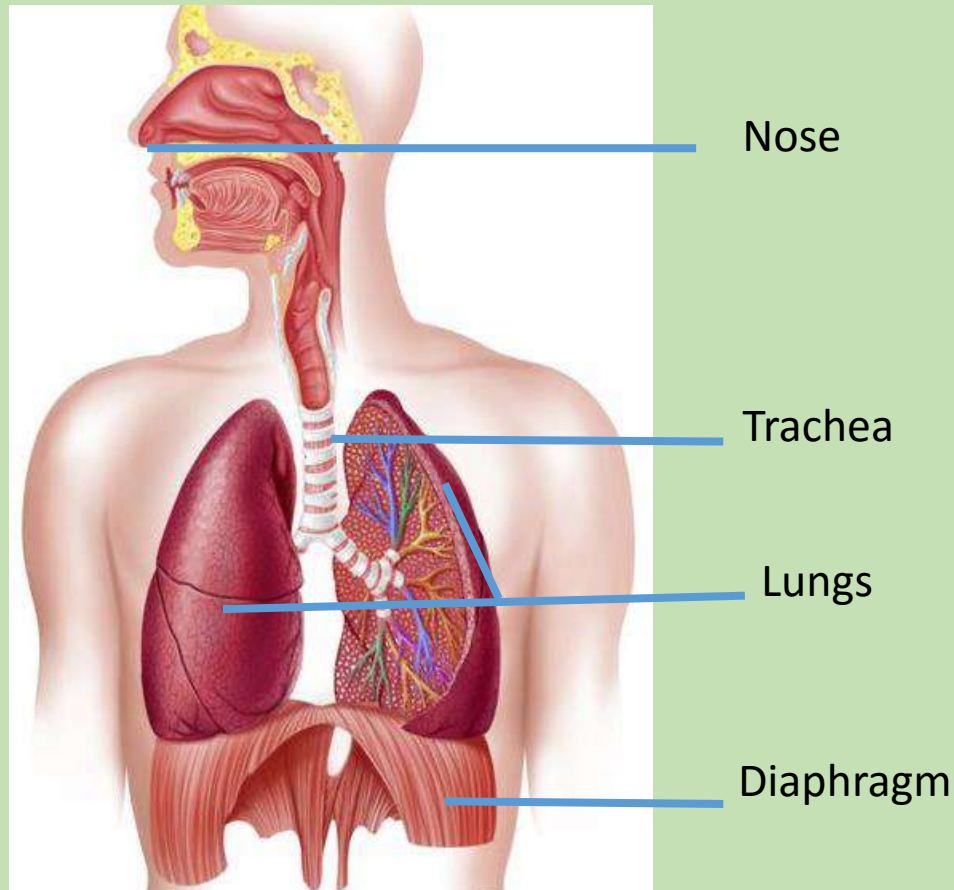


Also call **voluntary muscles**.

Skeletal muscles are typically attached to bones by tendons (stringy tissue) so we can use these muscles to move our bones, to move our bodies.

- They support and help the body to move.
- They control body temperature.
- They keep the body upright.
- They protect other organs in the body.

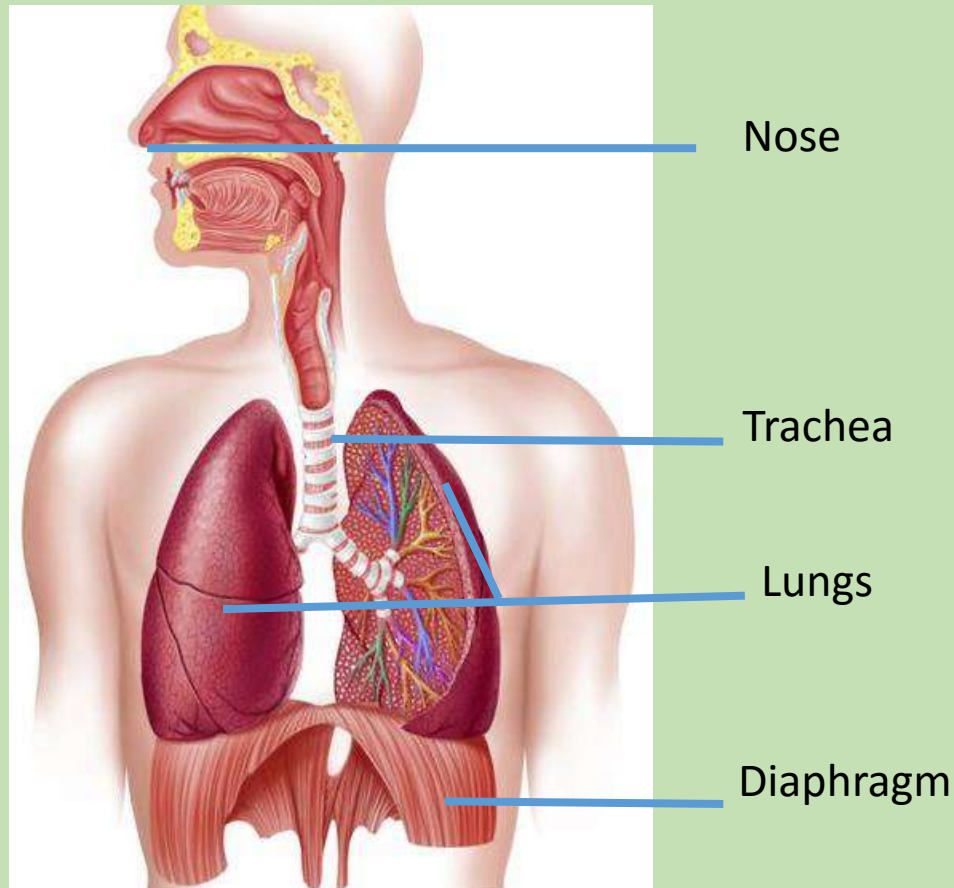
The breathing system.



Functions of the parts of the breathing system.

1. Air enters through the nose. The tiny hair in the nose traps dust, while mucus from mucus gland clean the air. The blood capillaries in the nose are used to warm the air.
2. The trachea or windpipe, receives air from the nose and passes it into the lungs.
3. The lungs take in oxygen gas in the air and lets out carbon dioxide that is not needed in the body.
4. The diaphragm helps the lungs to be filled with air by moving up and down. The diaphragm expands to let air into the lungs, and relaxes to let air out.

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Diseases of the breathing system

Tuberculosis (TB)



TB affects the lungs and is caused by a bacteria. It is spread from one person to another through sneezing, coughing or spitting.

Signs and symptoms.

- Fever
- Fatigue
- Night sweats
- Coughing blood
- Weight loss
- Coughing for 3 or more weeks
- Chest pain.

Prevention of TB

- Stay in a ventilated room
- Vaccinating infants
- Cover the mouth when sneezing
- Finish up your dosage
- Wear a mask in public places.

Similar diseases

1. Pneumonia

2. Colds

3. Coughs

4. influenza

Diseases of the breathing system

Asthma



Asthma narrows and swells the airways in the lungs, producing extra mucus.

Signs and symptoms

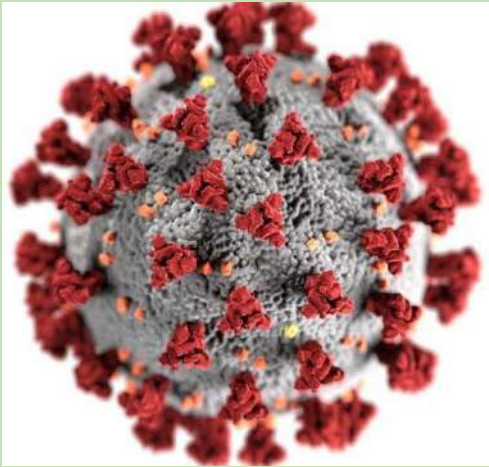
- Shortness of breath
- Chest pain
- Whistling sound when breathing
- Coughing

Prevention of COVID-19

- Getting vaccinated for influenza and pneumonia
- Identifying and avoiding asthma triggers.
- Monitoring your breath
- Treating early attacks
- Take medications as prescribed by a doctor
- Complete your dose.

Sense organs

Coronavirus (COVID-19)



Covid-19 is caused by a virus called coronavirus. The disease affects the breathing system.

Signs and symptoms

- i. Fever
- ii. Dry cough
- iii. Tiredness
- iv. Sore throat
- v. Headache
- vi. Lose of taste or smell.

Prevention of COVID-19

- Wash your hands always for about 20 seconds
- Use a handkerchief when sneezing or coughing
- Avoid touching your mouth, nose or eyes.
- Clean and disinfect surfaces and objects before using.
- Stay at home during outbreak, keep a social distance of about 2m.
- When sick, seek doctor's attention.