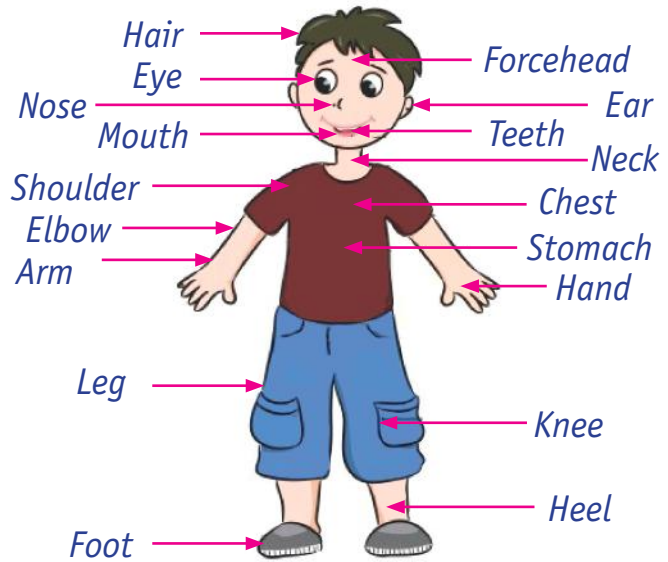


Our body is the most wonderful and perfect machine in the universe. It is the only living machine. It can do many things which a machine cannot. It can see, smell, hear, taste, feel, move, grow, breathe and reproduce.

The human body is made up of a large number of small units known as **cells**. Cells are of the same kind join of together to form a **tissue**. Tissues join together to make an organ. A few organs together carry out one major function for the body. They form an **organ system**.

Different organ systems together make it possible for the body to work, play, learn, grow etc.



SYSTEMS OF HUMAN BODY

System means some organs together doing one major work for the body. Human body has a **skeleton system**, a **muscular system**, a **nervous system**, a **digestive system** and a **respiratory system**.



Skeleton system

Do You Know ?

A baby has more than 300 bones at the time of birth. Later on, some of these fuse together form 206 bones in adult.

The Skeleton System

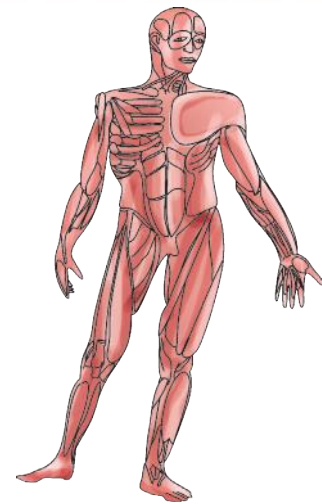
Our body is made of **206 bones**. These form the framework for the body called **skeleton**. Skeleton gives form, shape and support to the body.

The Muscular System

There are about 600 muscles in our body. Muscles help us to move about and do different kinds of work.

The Nervous System

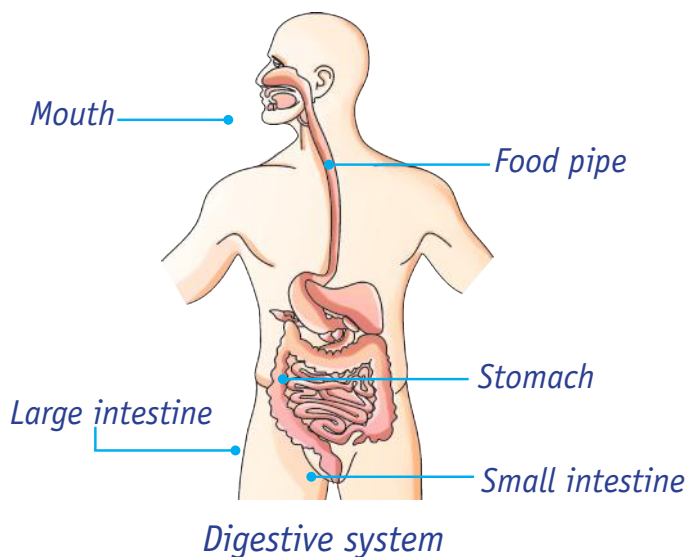
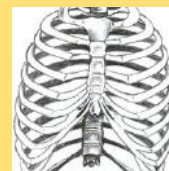
It is the most important system in our body. It consists of the brain and the nerves. It receives messages from the sense organs and sends orders to the motor organs.



Muscular system

Test your Self

- Draw lines to join the pictures to the matching bones on the skeleton :



The Digestive System

Starting from the mouth, the digestive system includes stomach and intestines. It is the system which digests food eaten by us. In the mouth, the food is chewed by the teeth. Then it goes to the stomach and gets mixed with various juices in the liver and stomach. Then it goes to

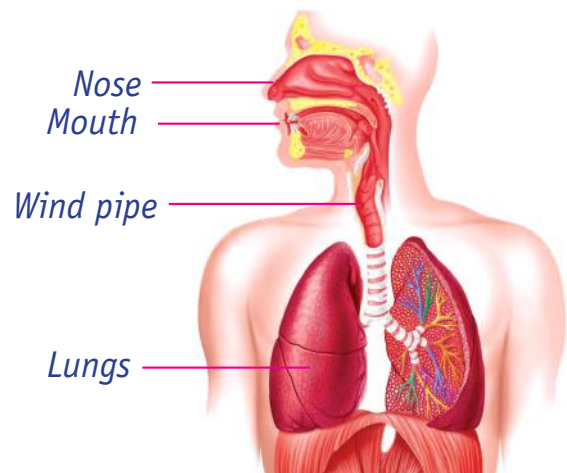
the small intestines, where the fine part is sucked by the blood and taken to all parts of the body. The indigested food goes to the large intestines, from where it is sent out through the anus.

Do You Know ?

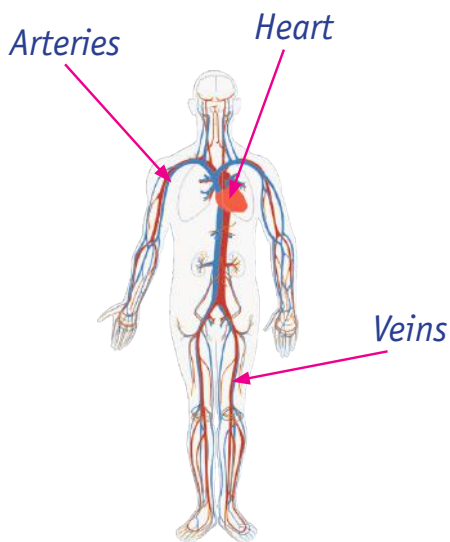
The human heart pump over 13,640 litres of blood per day. Your heart keeps pumping as long as you live.

The Respiratory System

In respiration, the fresh air is led into the wind pipe through the nose. From there, it goes to the lungs. In the lungs, the blood sucks oxygen from the air. Oxygen helps to burn food in the body which gives us energy to perform activities. Our lungs gives out carbon-di-oxide which is impure. We must keep our windows open to get in fresh air. We must breathe only through the nose.



Respiratory system



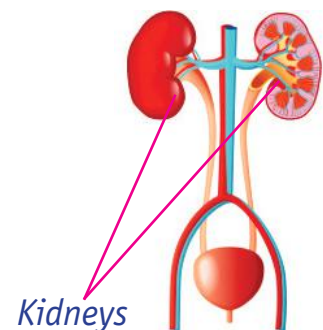
Circulatory system

The Circulatory System

The circulatory system circulates blood in the body. It consists of **heart** and **blood vessels**. The heart pumps blood to the different parts of the body, through the blood vessels. The blood supplies food, oxygen and other materials to all parts of the body. Arteries bring impure blood to the heart. Veins take pure blood to different parts of the body.

The Excretory System

We have two kidneys. Kidneys are bean shaped. Blood passes through the kidneys to be purified. The kidney's throw out waste matter in the form of urine. Excretory system removes waste matter from the body.



Excretory system

The Reproductive System

It helps to produce babies by the matching of male and female.

CORRECT BREATHING HABITS

- Always breathe through your nose.
- Do not wear tight-fitting clothes.
- Always try to breathe in fresh air. Keep the doors and windows open.
- Do not cover your face while sleeping as the same air should not be breathed in, over and over again.
- Always do some exercise in fresh air.



Correct Breathing Habits

Test your Self

- *Keep your hand very close to your nose and breathe fast. You will be able to feel the air released out of your nose. This is the used air, rich in carbon dioxide which is thrown out of the nostrils.*



OUR SENSE ORGANS

The sense organs make us feel or sense the things around us.

Sense organs are five : eyes, ears, nose, tongue and skin. All these tell us about the world around us.



The Eyes

Our eyes record the pictures and send messages to the brain. The brain reads the messages and tells us about the things we see.

The Nose

Our nose records the smell and sends messages to the brain. The brain recognises the smell and tells us about the things.





The Ears

Our ears record the sound and send messages to the brain. The brain recognises the sound and tells us about it.

The Tongue

Our tongue records the message and sends it to the brain. The brain recognises it and sends messages about it.



The Skin

Through the skin, we feel pleasure, pain and differences. Different pores of skin give us different feelings. Different spots on the skin make us feel heat and cold. All this requires contact of the skin with the brain.

Thus, all our sense organs work with the help of the brain. Different parts of the brain receive messages from different sense organs.

Know the Keywords :

Skeleton	: A structure of bones.
Tissue	: A group of special cells performing the same function.
Nerve	: A bundle of fibres carrying messages to any body part from the brain.
Blood Vessels	: Tubes that carry blood to different parts of the body.
Breathing	: The process of taking air into our lungs and releasing it out through nose or mouth.

Point to Remember

- The human body is a fascinating machine.
- It is made up of cells, tissues, different organs and organ systems.
- The sense organs make us feel or sense the things around us.
- The skeleton system gives shape and supports to the body.
- Muscles along with bones, help the body and its parts to move.
- The digestive system makes the food ready for us by the body.
- The breathing system supplies oxygen to all parts of the body.

- The circulatory system carries blood to all parts of the body.
- The nervous system sends messages from the brain to the rest of the body.
- The excretory system removes waste matter from the body.
- The reproductive system helps us to produce babies.
- We must learn to adopt correct breathing habits.

EXERCISE TIME

A. Multiple choice questions (MCQs).

Tick (✓) the correct option :

1. We breathe out _____.

- a. Oxygen b. Carbon-di-oxide
 c. Nitrogen

2. _____ is our sense organ.

- a. Eye b. Heart c. Blood

3. _____ pumps the blood to various parts of the body.

- a. Heart b. Brain c. Skin

4. _____ give shape and support to the body.

- a. Bones b. Skin c. Nose

B. Tick (✓) the correct and cross (X) the incorrect ones :

1. The muscular system gives shape and support to the body.
2. The food we eat is in a simple form.
3. The brain receives messages from all parts of the body.
4. We should always breathe through our mouth.

C. Fill in the blanks with the given words :

Stomach, Kidney, Heart, Lungs, Mouth

1. We eat through our _____.

2. The food we eat goes to _____.
3. _____ purifies our blood.
4. _____ pumps blood to all parts of body.
5. _____ suck oxygen from the air.

D. Match the following :

- | | |
|---------------------------|--|
| 1. The breathing system | a. helps in digestion |
| 2. The digestive system | b. helps in breathing |
| 3. The circulatory system | c. helps in circulating the blood. |
| 4. The excretory system | d. helps in throwing wastes from the body. |

E. Answer the following questions :

1. How many bones do you have in your body?
2. How many muscles do you have in your body?
3. What is the function of the skeleton system of the body?
4. What is the function of the muscular system of the body?
5. What is the function of nervous system in our body?

 **Creative Work**

- Name the senses working in the following pictures :





