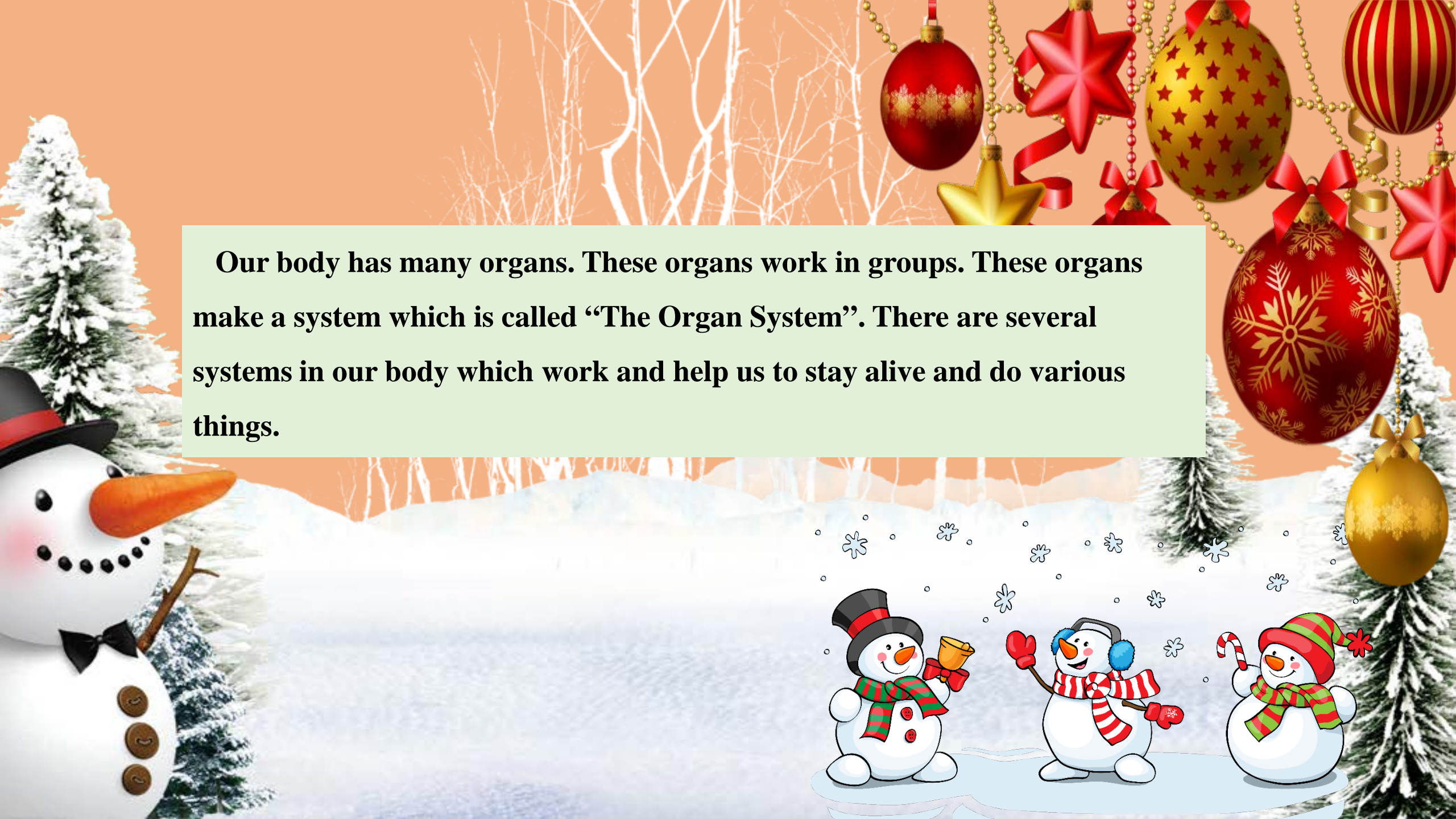



Chapter- 1
Organ System
Class 4
E.V.S.





Our body has many organs. These organs work in groups. These organs make a system which is called “The Organ System”. There are several systems in our body which work and help us to stay alive and do various things.



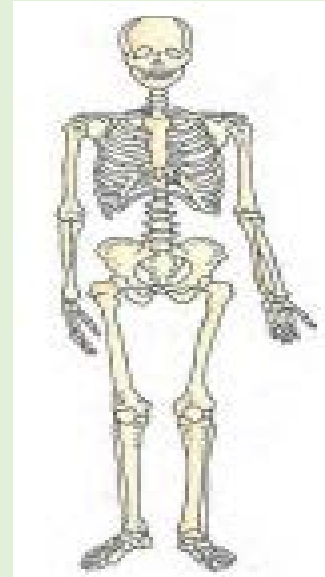


Our body has eight major organ systems. These are the skeletal system, muscular system, digestive system, circulatory system, respiratory system, nervous system, excretory system and the reproductive system.

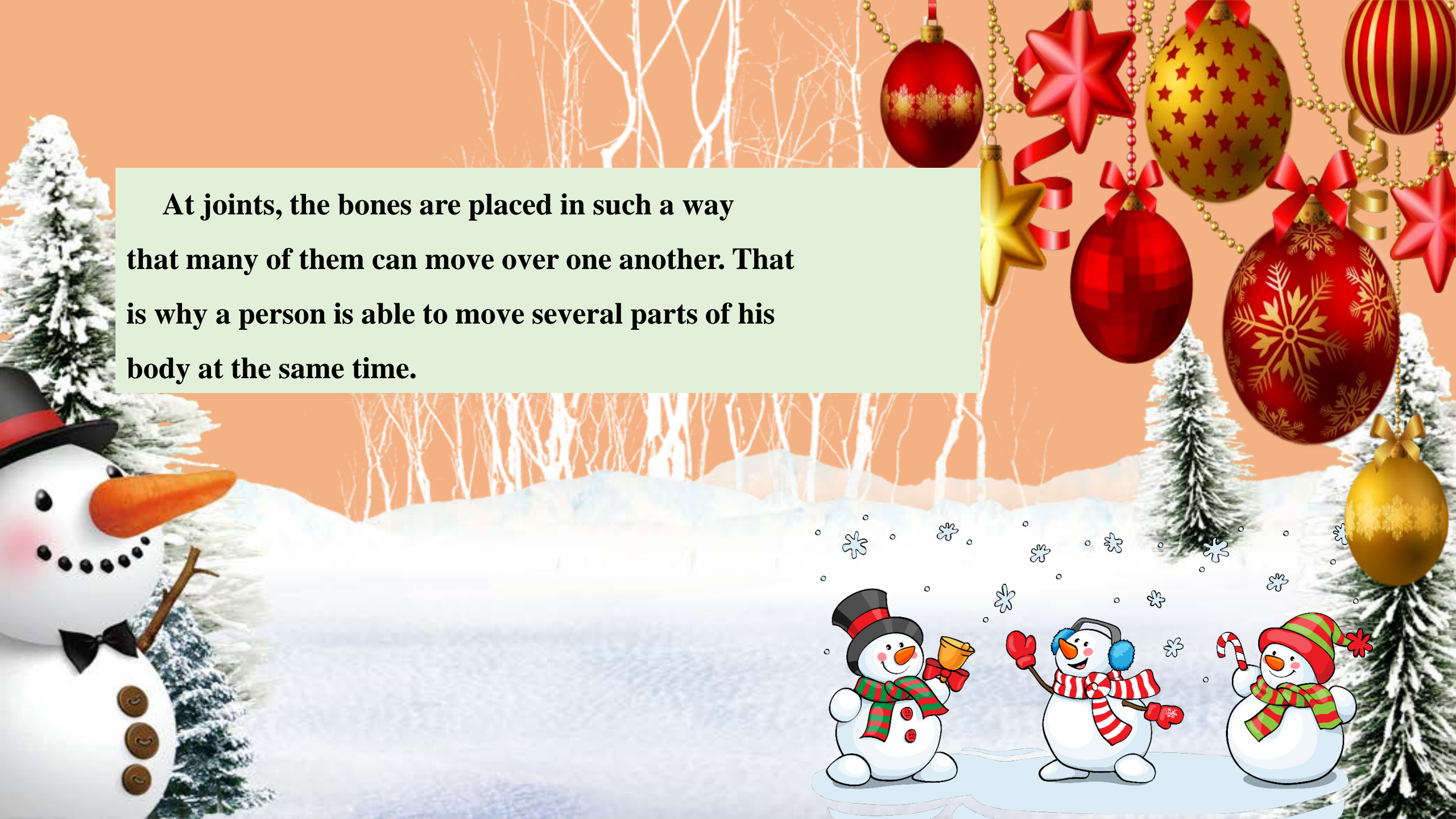
Let us read about these organ systems in details.

SKELETAL SYSTEM

Skeletal system is made of bones. Human body is made of 206 bones. These bones together form a framework known as skeleton. The skeleton gives shape to our body. Without the skeleton the body will collapse like a heap of flesh. Skeleton also protects all the soft organs of the body.

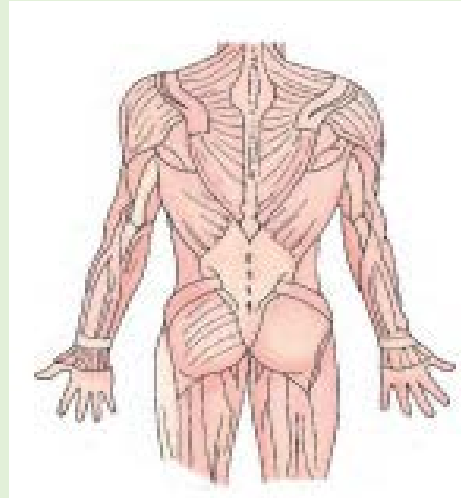


At joints, the bones are placed in such a way that many of them can move over one another. That is why a person is able to move several parts of his body at the same time.



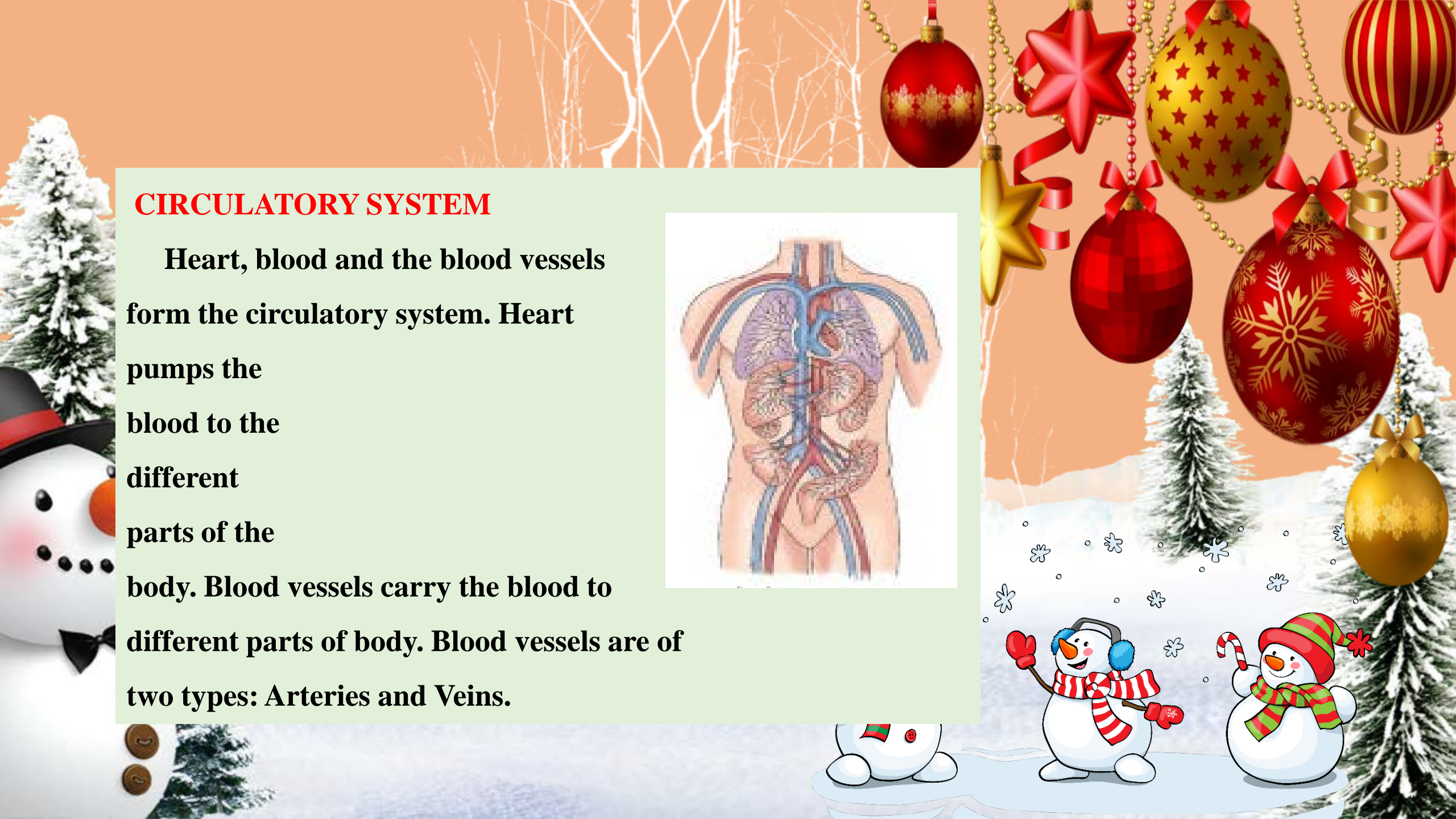
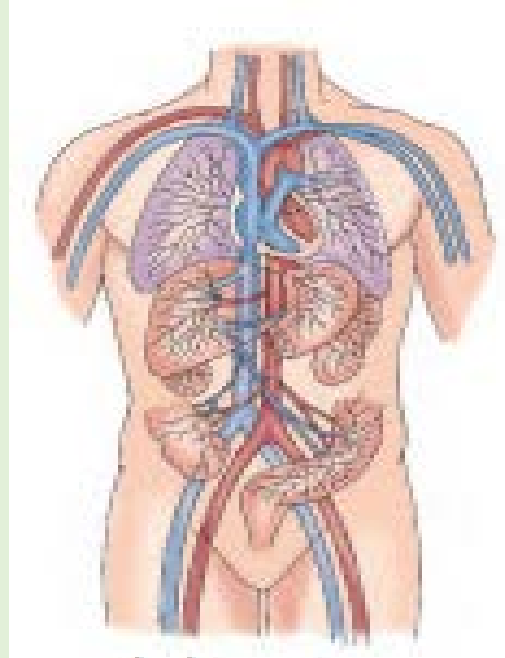
MUSCULAR SYSTEM

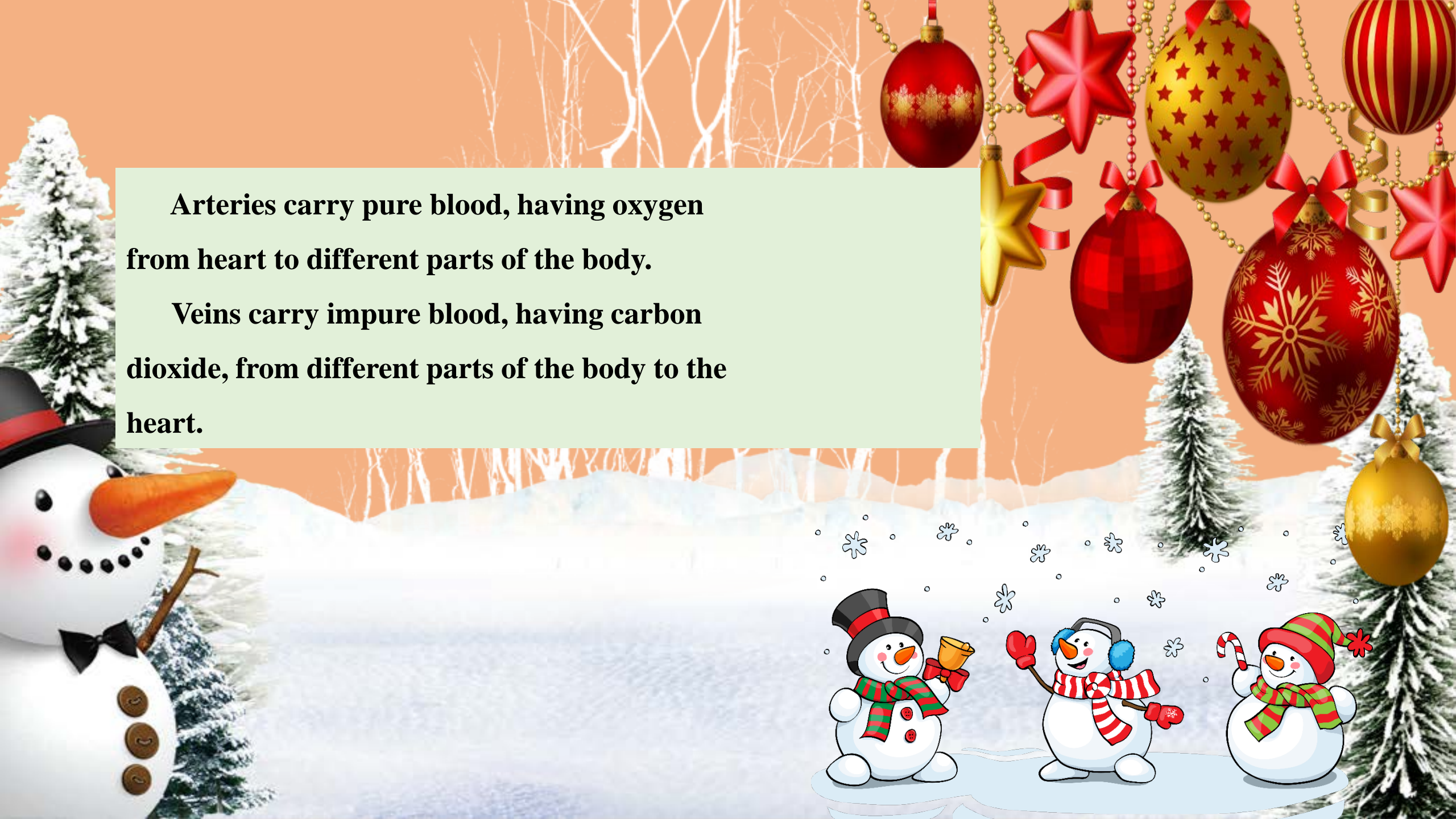
It consists of muscles attached to the bones. There are about 650 muscles in our body. Muscles along with the bones help the body and its parts to move.



CIRCULATORY SYSTEM

Heart, blood and the blood vessels form the circulatory system. Heart pumps the blood to the different parts of the body. Blood vessels carry the blood to different parts of body. Blood vessels are of two types: Arteries and Veins.

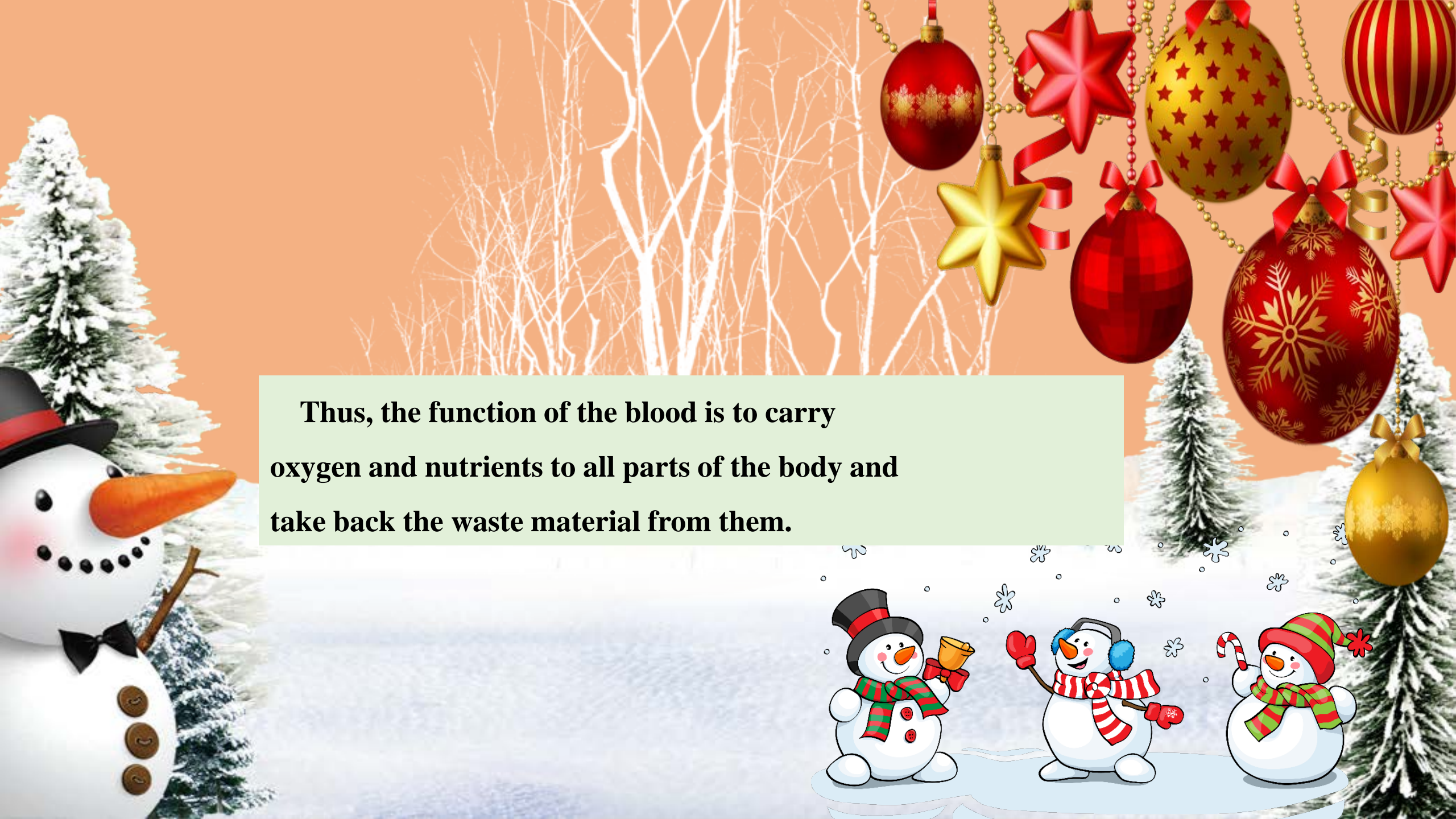




Arteries carry pure blood, having oxygen from heart to different parts of the body.

Veins carry impure blood, having carbon dioxide, from different parts of the body to the heart.





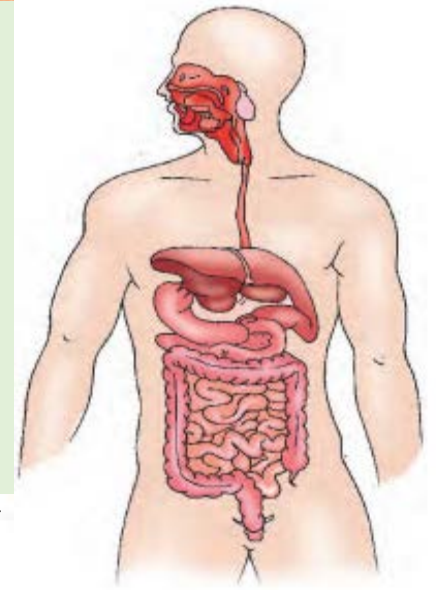
Thus, the function of the blood is to carry oxygen and nutrients to all parts of the body and take back the waste material from them.

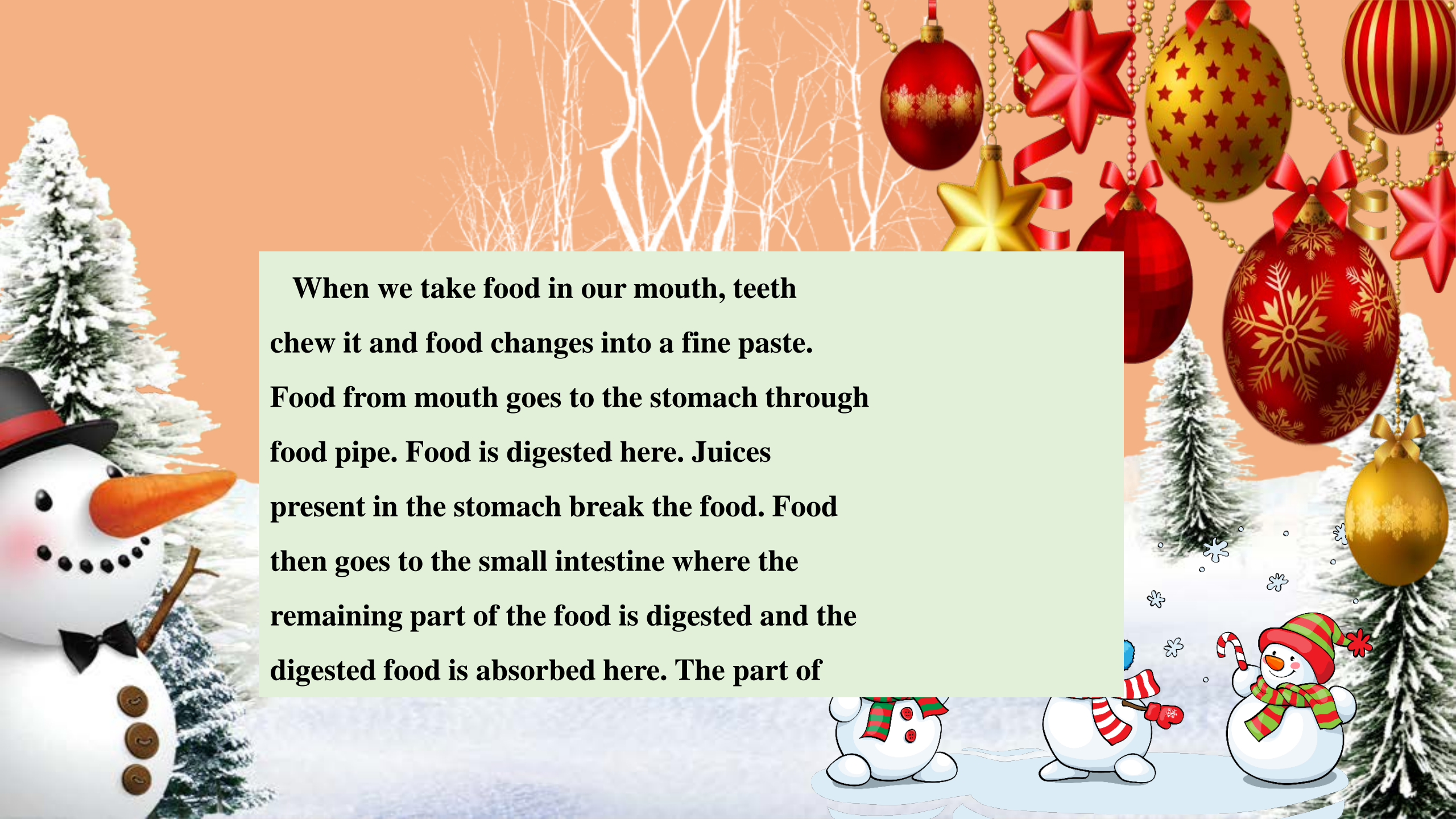


DIGESTIVE SYSTEM

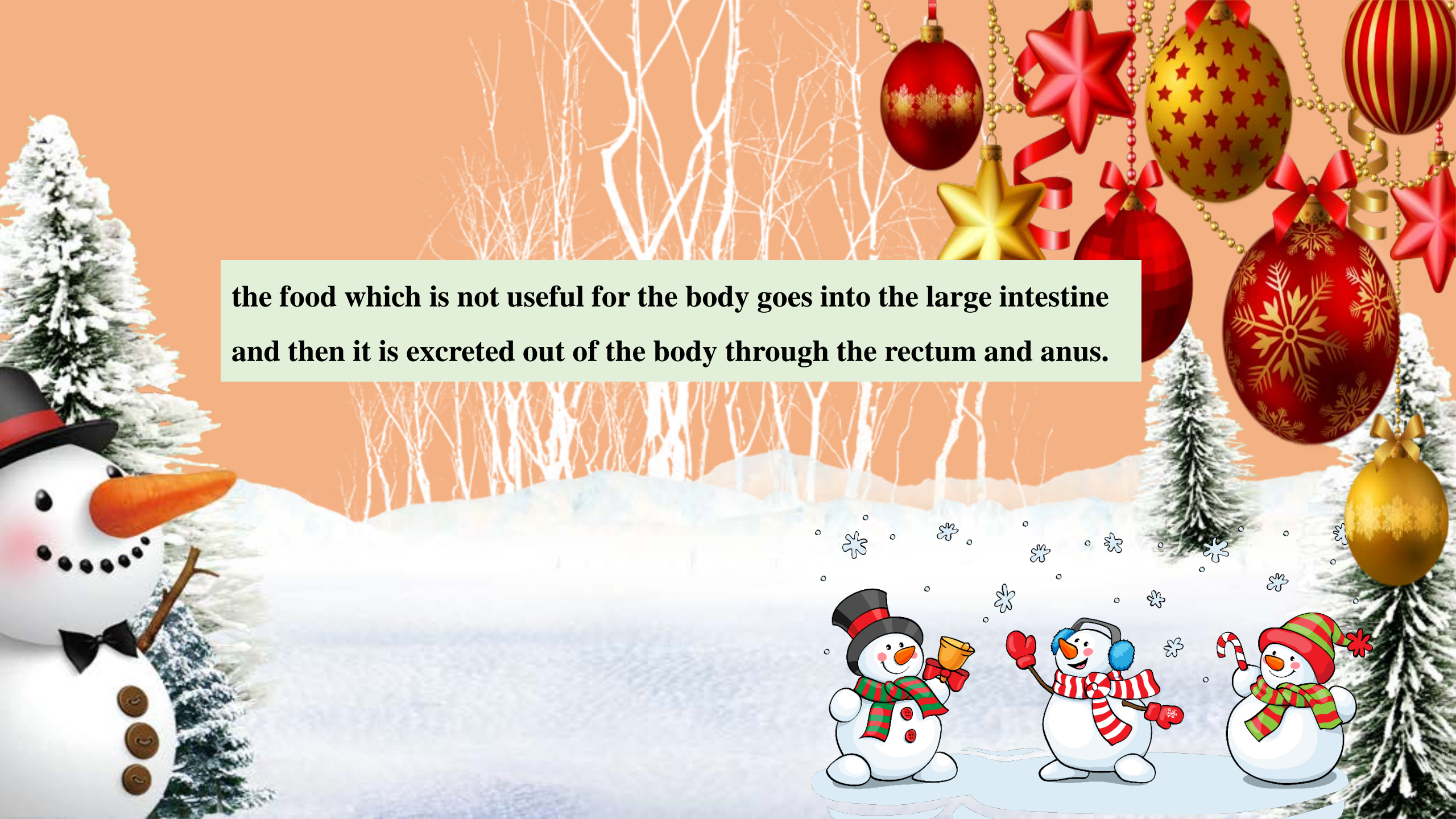
This system helps in the digestion and absorption of food. The process of breaking down of food into very small pieces so that it get digested

and the necessary nutrients can be absorbed by the body is called Digestion. The absorbed nutrients provide energy to the body. Food is digested by a group of organs that form the digestive system.





When we take food in our mouth, teeth chew it and food changes into a fine paste. Food from mouth goes to the stomach through food pipe. Food is digested here. Juices present in the stomach break the food. Food then goes to the small intestine where the remaining part of the food is digested and the digested food is absorbed here. The part of

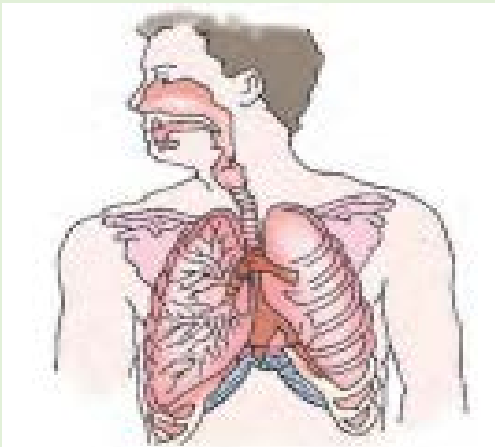
The background of the slide is a festive winter scene. On the left, a large snowman with a black top hat, orange carrot nose, and black buttons is partially visible. Behind it is a snow-covered evergreen tree. The center background features a snowy landscape with white, bare trees under a light orange sky. On the right, several Christmas ornaments hang from the top: a red one with gold snowflakes, a gold one with red stars, a red one with gold snowflakes, and a gold one with red stars. There are also red and gold stars and ribbons. In the bottom right corner, there is a small evergreen tree and a gold ornament.

**the food which is not useful for the body goes into the large intestine
and then it is excreted out of the body through the rectum and anus.**



RESPIRATORY SYSTEM

The organs of this system help us to breathe and supply oxygen to all parts of the body through blood. The organs include nose, windpipe and lungs. We breathe through our nose. The hair present in our nose

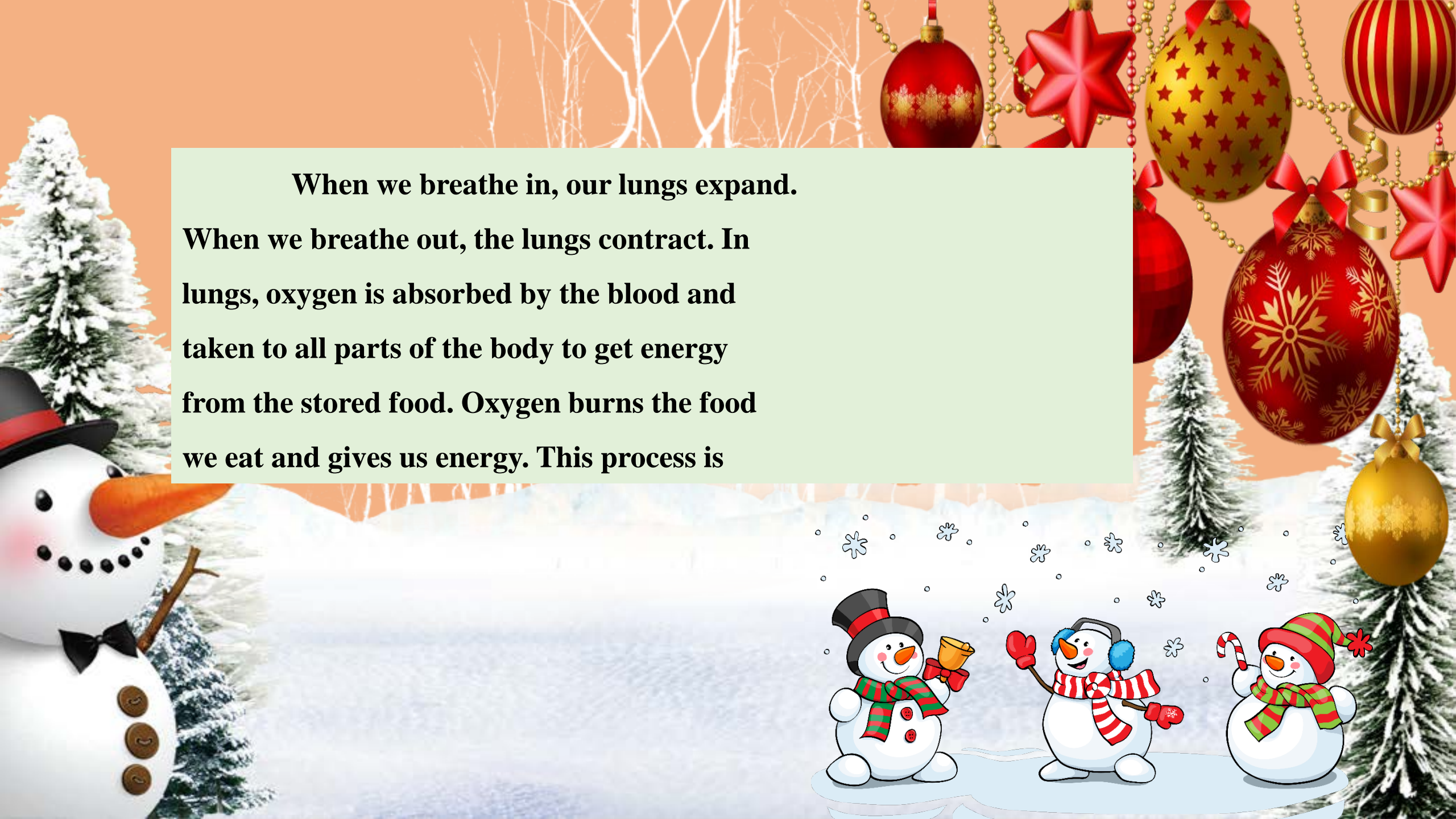


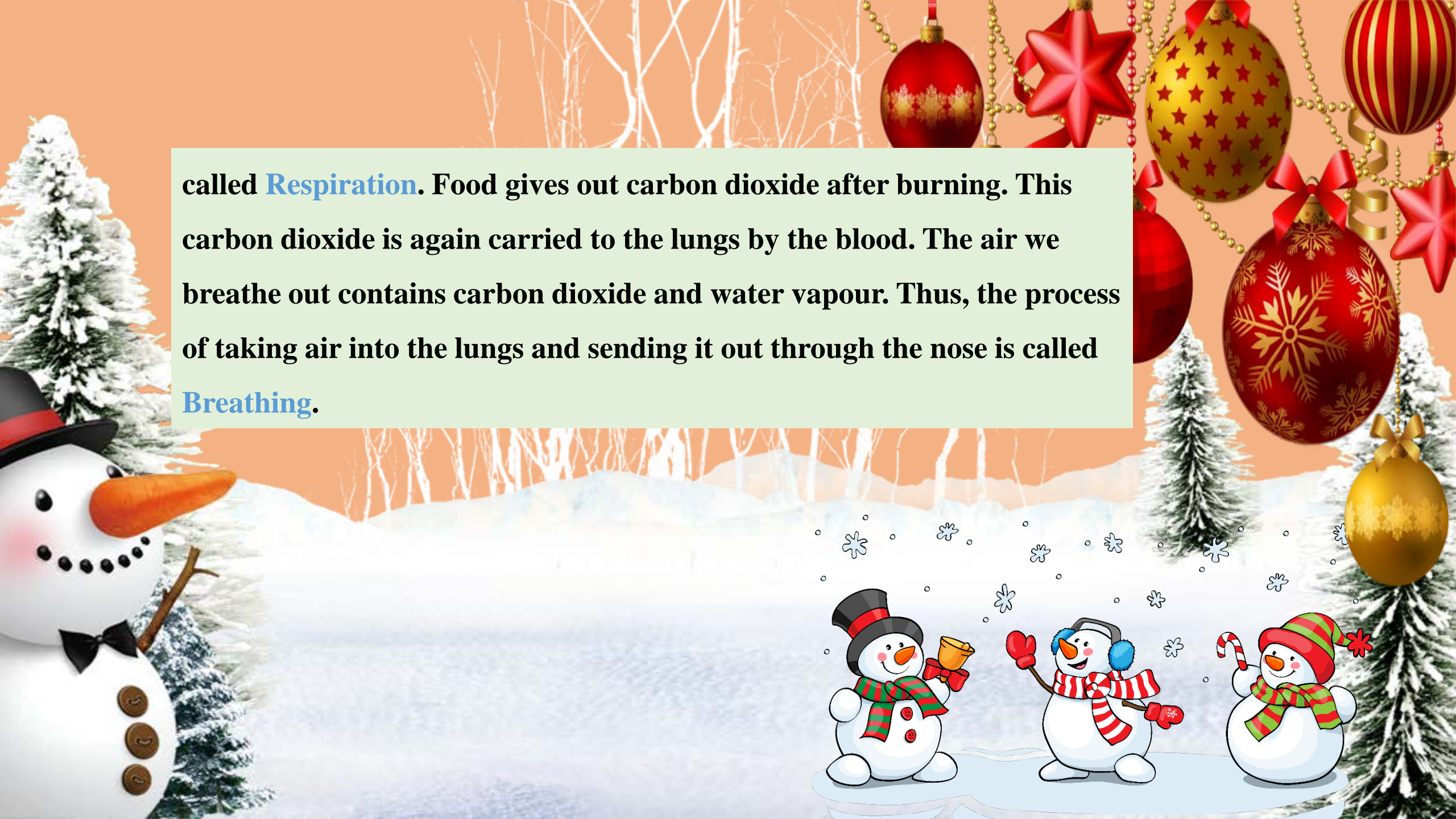
clean the air by catching germs and dust particles. From the nose, air reaches the lungs through windpipe. Thus, it is always adviced to breathe through nose and not through mouth.



When we breathe in, our lungs expand.

When we breathe out, the lungs contract. In lungs, oxygen is absorbed by the blood and taken to all parts of the body to get energy from the stored food. Oxygen burns the food we eat and gives us energy. This process is

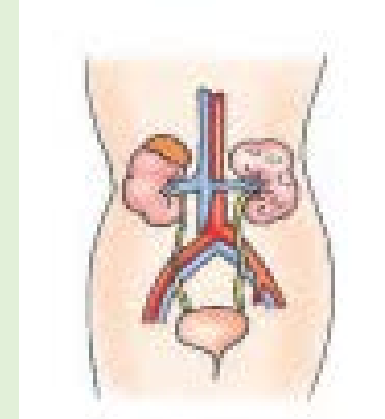




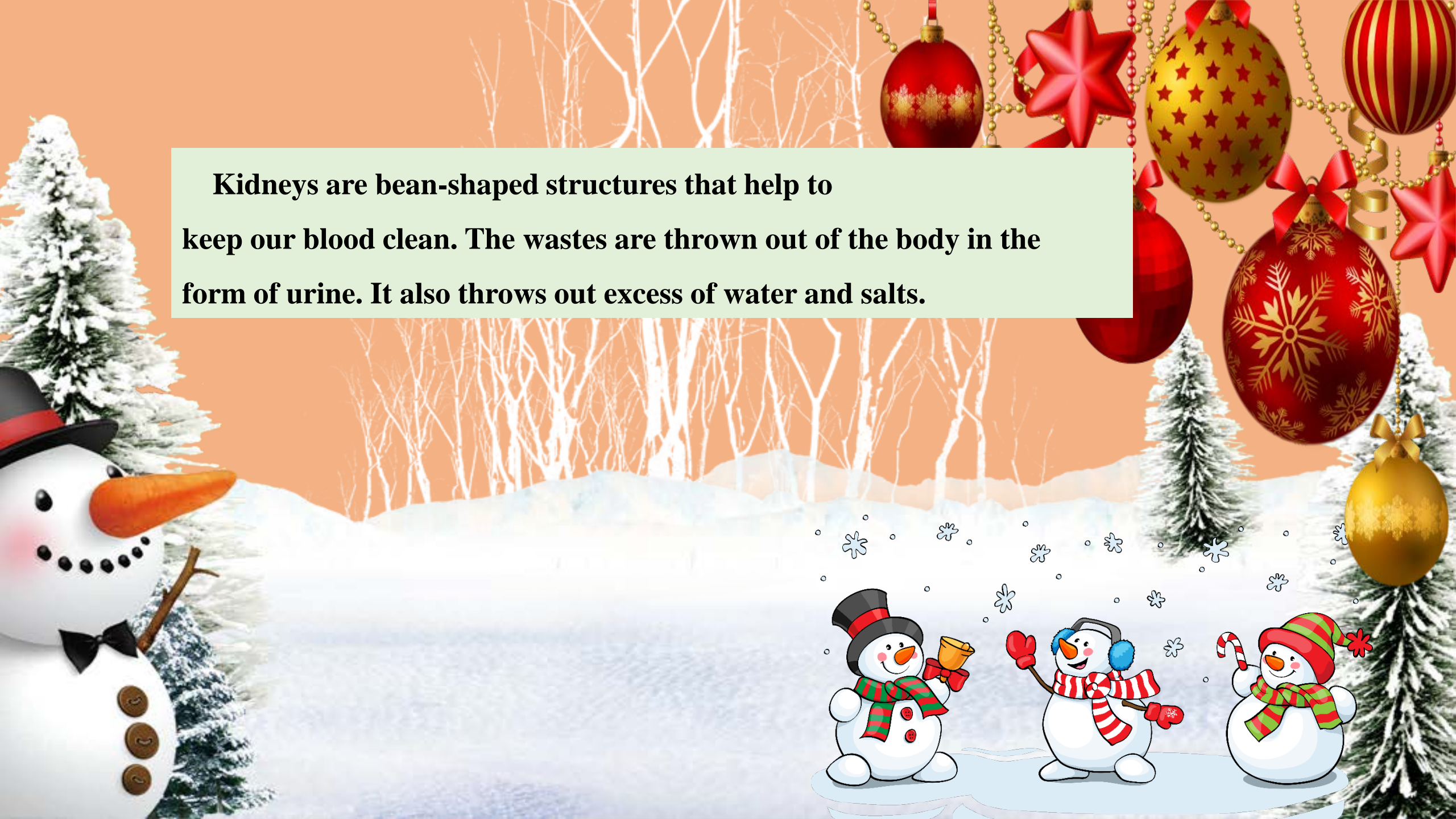
called **Respiration**. Food gives out carbon dioxide after burning. This carbon dioxide is again carried to the lungs by the blood. The air we breathe out contains carbon dioxide and water vapour. Thus, the process of taking air into the lungs and sending it out through the nose is called **Breathing**.

EXCRETORY SYSTEM

There are many things going on inside the body which leads to the production of waste materials. These waste materials have to be removed out of the body or we may fall sick. Excretory system helps to remove these various waste materials from the body. The main organs of this system are the kidneys, skin and lungs.

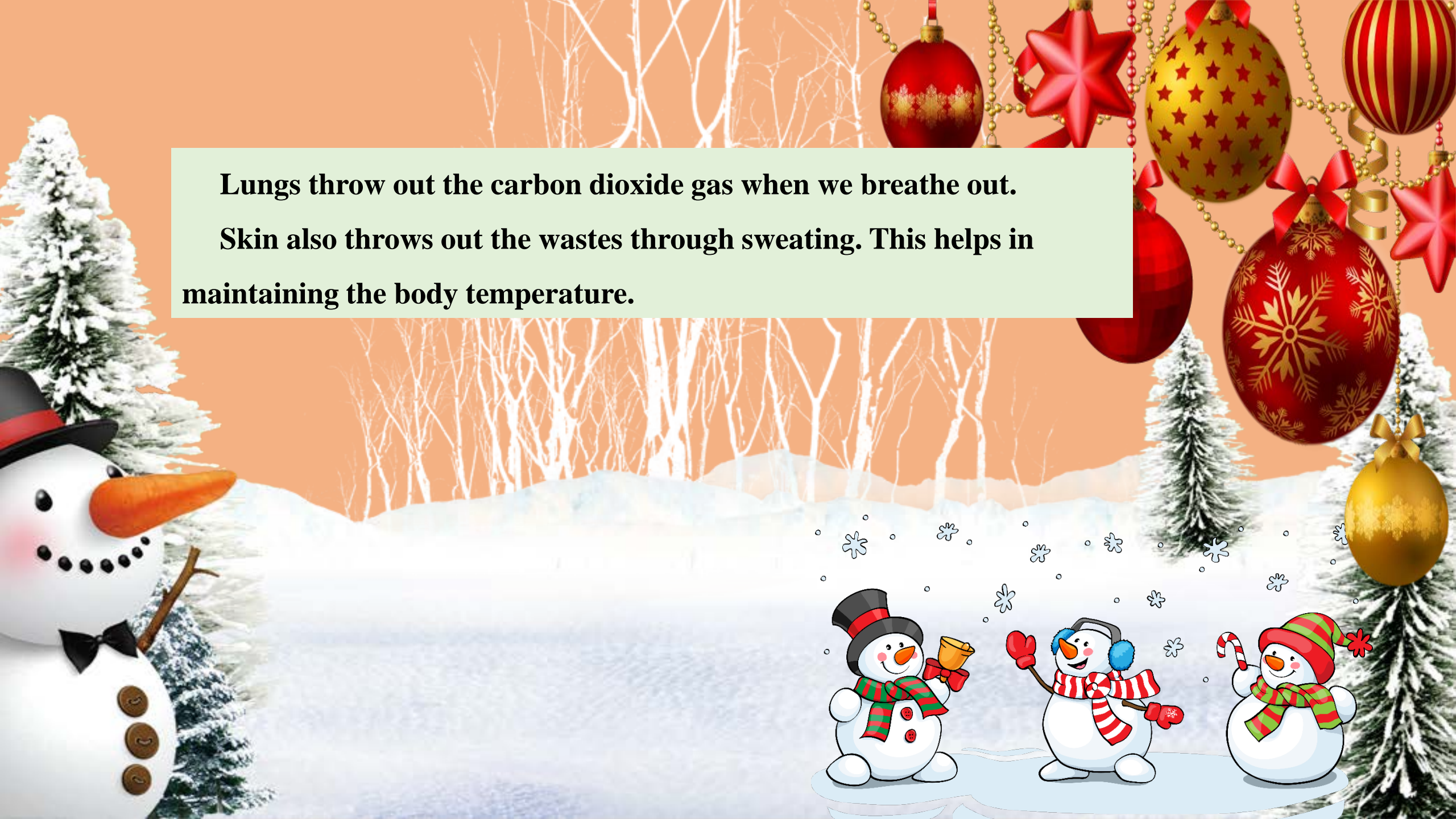


Kidneys are bean-shaped structures that help to keep our blood clean. The wastes are thrown out of the body in the form of urine. It also throws out excess of water and salts.



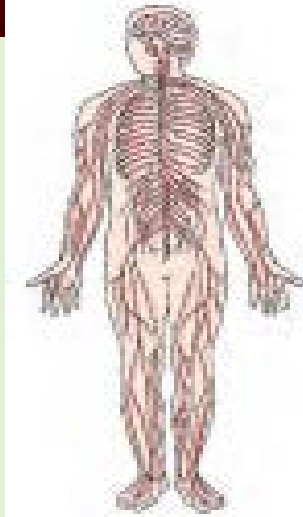
Lungs throw out the carbon dioxide gas when we breathe out.

Skin also throws out the wastes through sweating. This helps in maintaining the body temperature.

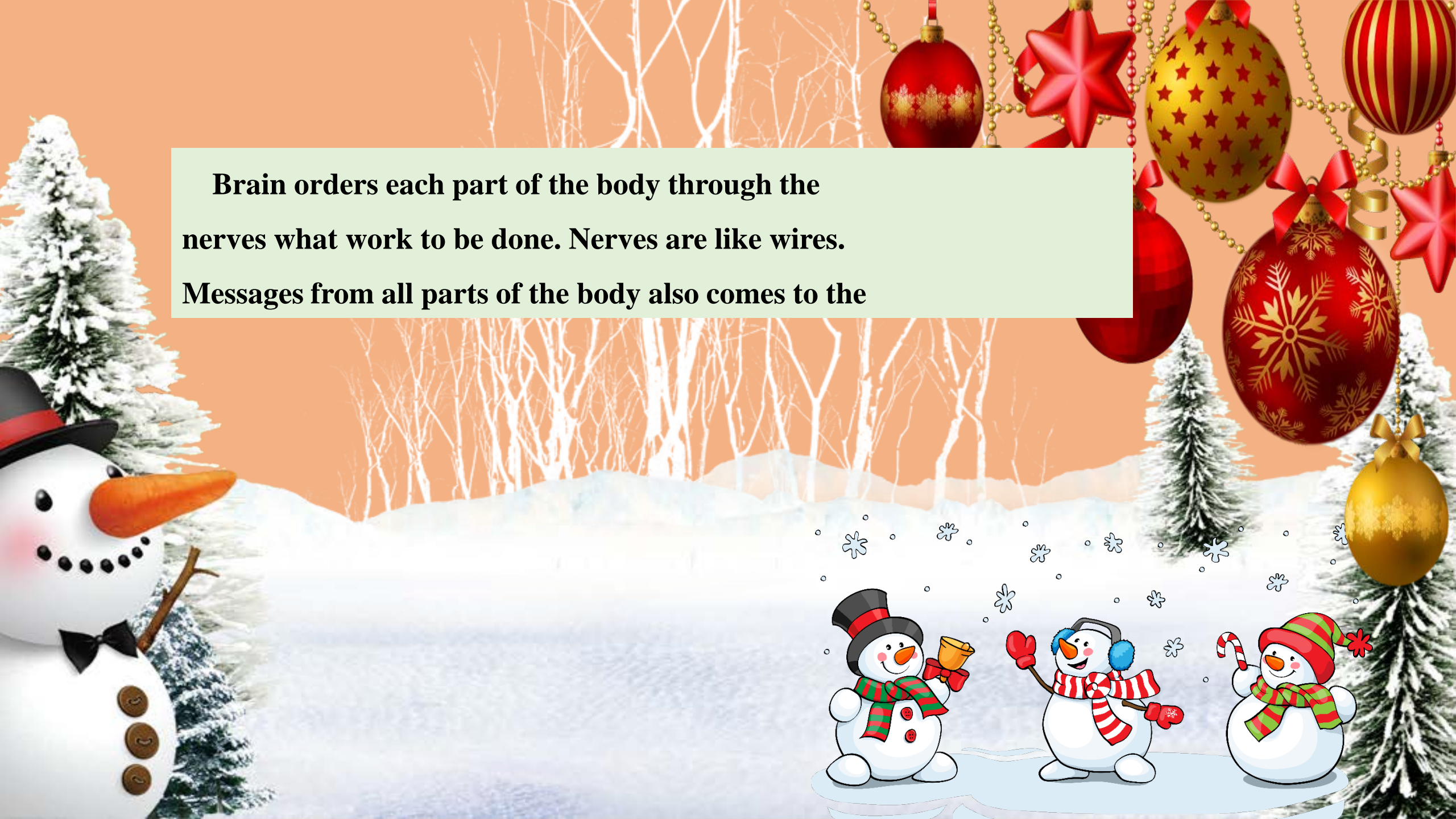


NERVOUS SYSTEM

We know that there are many systems inside our body. They all have to work together to keep us alive. Who tells them what work they should do? Who controls them? Yes, the brain.



Brain orders each part of the body through the nerves what work to be done. Nerves are like wires. Messages from all parts of the body also comes to the



brain through the nerves.

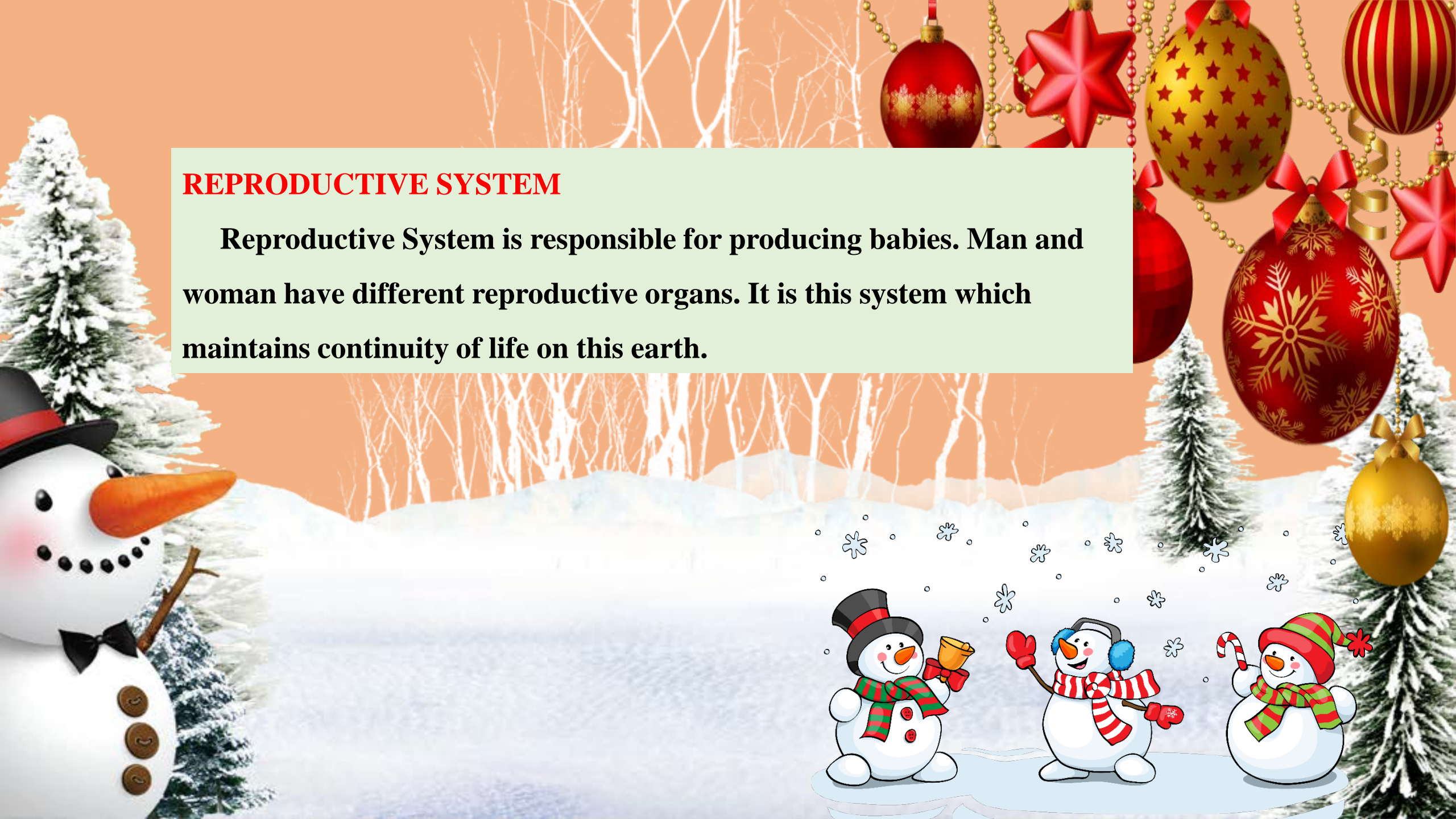
**When your eyes see a
ferocious dog running
towards you, it
immediately sends
message to the brain.**

**Brain immediately orders
your legs to run fast.**



REPRODUCTIVE SYSTEM

Reproductive System is responsible for producing babies. Man and woman have different reproductive organs. It is this system which maintains continuity of life on this earth.





Check Your Knowledge

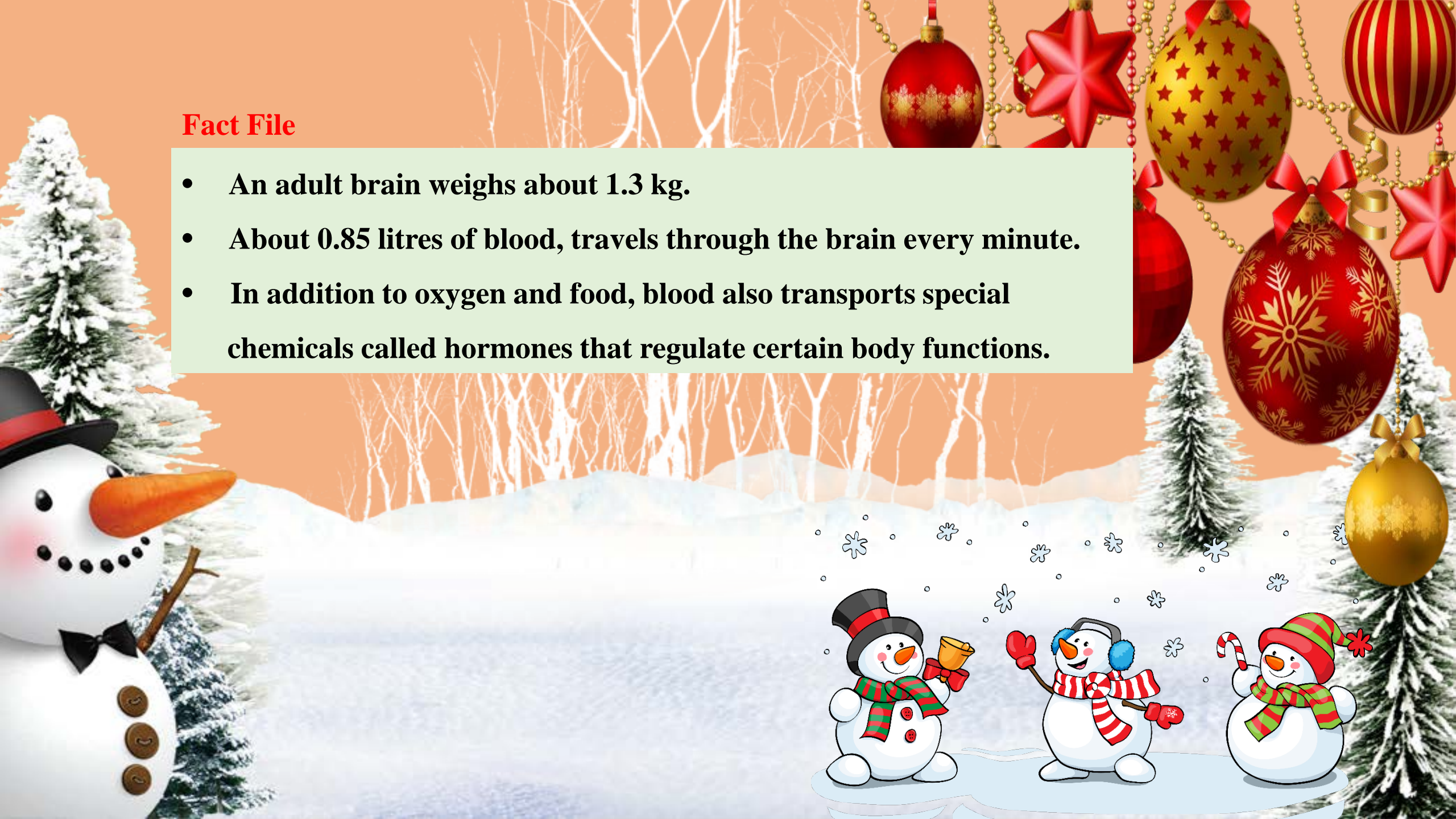
Fill in the blanks.

1. Human body is made of _____ bones.
2. Messages are carried through the _____.
3. Kidney and skin are the part of _____ system.



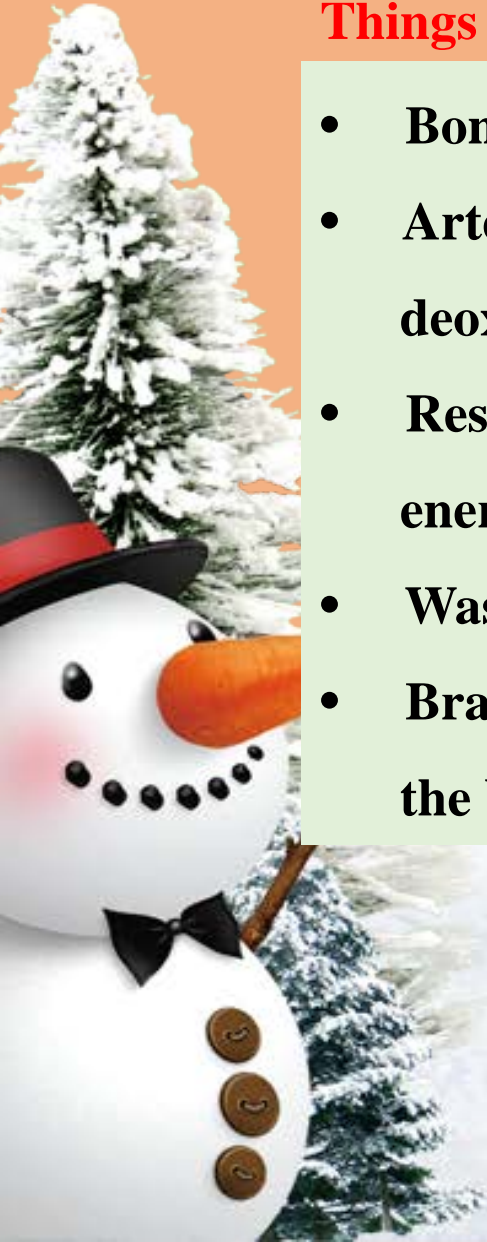
Fact File

- **An adult brain weighs about 1.3 kg.**
- **About 0.85 litres of blood, travels through the brain every minute.**
- **In addition to oxygen and food, blood also transports special chemicals called hormones that regulate certain body functions.**



Things to Remember

- **Bones together form a framework called the skeleton system.**
- **Arteries carry pure oxygenated blood while veins carry impure deoxygenated blood.**
- **Respiration is the process in which the oxygen burns food to give energy.**
- **Waste is thrown out of the body in the form of urine and sweat.**
- **Brain controls the functioning of all the other organ systems of the body.**



Thank
you

