

Respiration – how do plants and animals breathe?

Can you swim under water? It is wonderful to swim under water like a fish. But, unlike a fish, you must soon return to the surface to fill your lungs with air. Without air you will die in a few minutes. Air contains the gas **oxygen**, which your body needs to burn your food to release energy. Using oxygen 'burn' food in your body is called **respiration**.

Humans and horses breathe in air through their noses and mouths. Air enters the **lungs**, where oxygen passes into the blood. The harder we work, the more oxygen we need.

How does a fish breathe?

Even a fish must have oxygen to breathe under water. Oxygen dissolves in water like sugar does in tea. Fish can breathe the dissolved oxygen using their **gills**. The gills take the oxygen from the air into the blood.

Plants respire too

Plants do not have mouths, noses, lungs or gills like animals, but they must take in oxygen from the air to burn their food. If a plant cannot take in oxygen, it cannot release the energy it needs to grow and stay healthy.

A plant 'breathes' through tiny holes in its leaves called **pores**. Gases enter and leave the plant through these pores.

What you have learnt

All living things must take _____ from the air to release energy from their food. This is called _____. Humans, horses and other large animals breathe air into their _____. Fish have _____ to absorb oxygen dissolved in water. A plant can take oxygen into its body through tiny holes called _____ in its leaves.