


248. Pod and Dusty Explain

PDFs - information texts from the PPTs to enlarge and use for shared reading.

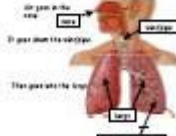
Why do humans have lungs? By Dusty the Robot

Lungs have a very important job to do. On Earth, all humans breathe. Their lungs help them breathe. As they breathe in, their ribs move up and out and air rushes in to fill their lungs. Then they breathe out and their ribs drop back. That forces all the air out again.




The air that a human breathes is sucked up their nose or into their mouth. Then it goes down their windpipe into their lungs.


There are lots of tubes in human lungs and at the end of the tubes there are bunches of air sacs. The air sacs fill up with air like balloons then, oxygen from the air goes through the air sac walls into the human's blood.



While the oxygen is mixing with food and travelling round the human's body making energy, humans breathe out. All the used, waste air in their lungs is squeezed out ready for new air to be breathed in again. The waste air has carbon dioxide in it that humans don't need.



Lungs are very important because they help humans to take oxygen into their bodies. Oxygen helps to give them enough energy to do all the things they want to do and helps their bodies to work properly. Humans can live for several days without food and water but they can live only a few minutes without breathing air and taking in oxygen.




That's why they need their lungs!

Why do some people find it hard to breathe?

Sometimes people find it hard to breathe because they are **allergic** to things they breathe in, such as dust, pollen, feathers or pet hairs. An **allergy** happens when a person's body fights ordinary things as if they were germs. This causes a rash, wheezing or tummy ache.

Hay fever can be caused by an allergy to pollen. When someone has hay fever their eyes become watery and itchy and they sneeze a lot. Others have asthma. Asthma can be caused by an allergy. It makes it hard for people to breathe air into their lungs so they wheeze and cough.

When someone with asthma breathes air into their lungs, the air goes along tubes called **bronchioles**. Asthma makes the bronchioles narrower so less air can get through.



Breathing in medicine from an inhaler helps to open up the bronchioles again so that it's easier to breathe. Most people who have asthma carry an inhaler with them for times when it's hard to breathe.

Step 1 When people use an inhaler they have to take off the cap and give the inhaler a good shake.

As they breathe out through their mouths, they put the inhaler between their lips and start to breathe in slowly.

Step 2 At the same time they push down once on top of the inhaler so they breathe a spray of medicine. Then they hold their breath and count slowly to 10.

After that, they wait for one minute and do it all again.


It's hard to avoid things that cause people to have an allergy but doctors have medicines, like the medicines in an inhaler, that can help.

Why do we need explanations?

Explanations tell us **how** something happens.

Explanations tell us **why** something happens.

Explanations tell us **how or why** something works.



Explanations explain the way things are.

How should I start?

How do you write an explanation text?

First of all, choose something to write about that you understand and can explain to others.

There are lots of things to think about!

What is it that you want to explain?

What order do things happen?



What causes them to happen?

What effect does it have?

You need to think of an **introduction**.

You could make a **flowchart** to help you get started.

A **flowchart** can help you to plan, step-by-step, what you want to say.

How ears work


Ears help people and animals listen for sounds. They know where a sound comes from because they have two ears. The ear closest to the sound hears it a little louder and slightly before the other one so they can tell which direction the sound is coming from.

The **outer ear** catches the sound and moves it down the **ear canal** to the **eardrum**.

The sound reaches the **eardrum**. The eardrum is very thin. It vibrates easily. Even very soft sounds can make the eardrum move.

Tiny **bones** touch the **eardrum**. When it moves, they move.

The tiny **bones** push on the **inner ear**. The inner ear has lots of **nerve** in it. They sense the pushing and send signals to the brain.



What happens next?
People and animals hear the sounds!

check sheet - A4
and copies of text

low quality samples only