



# Learning in your forest

## Forests & Climate Change

Although climate change has been happening for thousands of years, it has never happened at the **speed** we are seeing now. Find out more by printing this activity sheet and taking it to a forest near you. Try to answer the questions to discover why trees and forests are so important in slowing down climate change.

### Why is climate change happening?

Scientists believe that we are causing the climate to change because we are releasing more greenhouse gases (such as carbon dioxide) into the atmosphere, by burning more fossil fuels (coal, oil and gas).



**Think about...**

When and why do you use coal, oil or gas? e.g. driving your car. What changes could you make, so that you use less fossil fuel? e.g. walk to school instead of driving.

### What can forests do to help?

Trees help to slow down climate change because, as they grow, they take in carbon dioxide (one of the main greenhouse gases), storing the carbon in their trunks, twigs and leaves.

**Try this...**



Look closely at a tree. Name as many different parts of it as you can. Look for new buds or leaves growing on the twigs and branches.

### So is it bad to cut down trees?

No! As long as you plant new trees to replace them, which is what the Forestry Commission does in all its woodlands in England.



And using the wood to make things is good too, because the carbon stays stored in the wood. Even your wooden pencil is a tiny carbon store!

**Try this...**

Can you find anything around you in the forest that has been made using wood?

### What about burning wood? Isn't that bad

Coal, oil, gas AND wood all give off carbon dioxide when they burn, but unlike the others, wood can always be replaced by planting more trees.



**Try this...**

Search for the smallest tree you can find. Then search for the biggest (fattest or tallest) tree.

Can you think of a way of heating your home/water that doesn't involve burning any fuel at all?

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## New trees for the future

The Forestry Commission (Forest Research branch) studies trees and forests, to find tree species that will be better suited to a wetter and warmer climate in the future.



**Try this...**

Can you identify any of the trees that are growing in this forest now?

Sweet chestnut



Oak



Scots pine



Beech



## Forests for people

Forestry Commission woodlands are great places to enjoy fresh air, exercise and beautiful scenery, whatever the weather!



**Think about...**

How many different ways have you seen people enjoying the forest today?

## Forests for wildlife

Forests are great places for birds and animals to live, but scientists think that some species will be affected by climate change in the future.



**Try this...**

Look carefully on the forest floor; Use a small stick to move any fallen leaves. Can you find any tiny forest creatures? Do you know what they are?

## Sustainable forest management

The Forestry Commission manages all its woodlands sustainably. This means that new trees are planted to replace ones that have been cut down.

In some parts of the world, large areas of forest are cut down and not replaced (deforestation), which causes climate change.

Planting more trees soaks up more carbon, and helps to reduce the effects of climate change.



**Try this...**

Come back (or visit a different forest) in the autumn to look for a tree seed you can take home and plant. It will be your own very small carbon store as it grows!