



Forestry England

Be a Tree Explorer

Activity pack

Keep connected with forests and nature with fun activities you can do both inside and out, as well as some tree-mendous facts

Discover how Forestry England look after forests for people, wildlife and timber.



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Leaf-tastic!

Different trees have different leaves
Learn more about some of them here!

If you're lucky enough to have a garden why not go hunting and see if you can find any of these leaves, or look next time you are at your local greenspace?

Holly

Waxy, prickly leaves with red berries

Silver birch

Small fluttery leaves with silver-white bark.

Sycamore

Grey, flaky bark, clusters of yellow flowers.

Pine

Scaly, orange-brown bark, long green needles

Oak

Lobed leaves, lumpy bark, catkins & acorns

Ash

Several small leaves stems, clusters of keys.

Sweet chestnut

Long, narrow leaves with jagged edges

Beech

Smooth grey bark, nuts in prickly cases.

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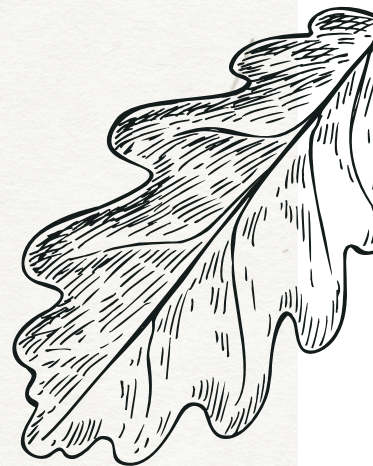
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Make a leaf rubbing!



You will need...

- Some paper
- Wax crayons or pencils
- Leaves

How to create your picture

- Collect as many leaves as you can from **your garden or local greenspace**
- Take your first leaf and place it with its bottom side up
- Place a piece of paper over the leaf
- Use your pencil or crayon to rub over the leaf
- Then do the same with the next leaf - perhaps overlap each one to create a lovely picture

Have a go at making your own leaf rubbing



Take a picture of your leaf artwork and share it using **#TreeExplorer**

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Be a wildlife ranger

Try our tree home activity.
Could you be a wildlife ranger?

Print & cut out the pictures on page 5 - where do you think the animals might live?



Tree homes...

The English oak tree is well known for being **big and strong**. Its timber was used to build the big masts on ships and today we use it for building homes and furniture. An oak tree can live to **over 800 years old** and will be home to over 250 different insects.

Our wildlife rangers are out and about in the woods everyday.

They carry out bird, bat and butterfly surveys, keep an eye on how the trees are growing, and so much more.

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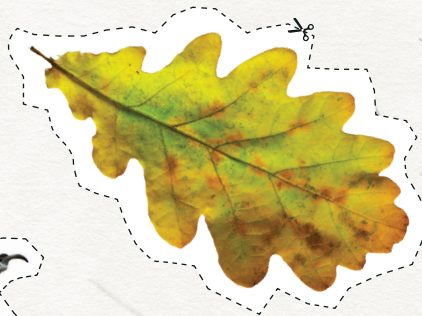
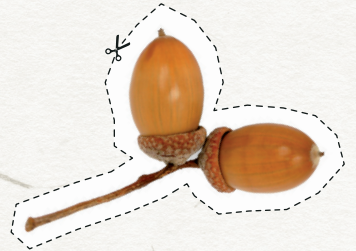
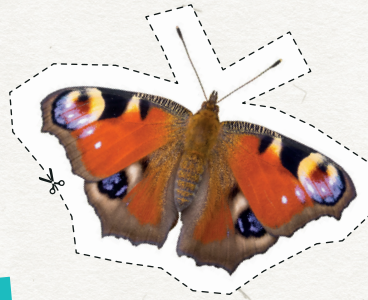
Be a wildlife ranger

Try our tree home activity.
Could you be a wildlife ranger?

Instructions

Print & cut out the pictures, then have a go at placing them on page 4 where you think they would live on the tree.

For example: butterflies live in the canopy, fungus live on the trunk, woodlice live on the ground.



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Be a forester

What is a forester's job?

Foresters are responsible for looking after our trees. They follow forest management plans to make sure forests are managed sustainably.

A forester will consider how people might use wood and what the wildlife living there needs. They also know that people like to spend time in the forest so will make sure they plan their forestry work around this too. They will also think about the thinning and cutting down of trees to make the forest healthy and provide a valuable source of timber.

Measurements

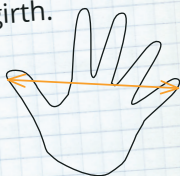


Age of a tree

A forester needs to estimate how old a tree is so that they know the best time to cut it down to provide the best timber.

Before you can give a tree an age, you need to measure the tree's girth.

Calculate the girth of a tree with your hand



1. At chest height, how many hand spans does it take to go around the trunk? (a)
2. Using the ruler along the edge of the activity sheet, measure how wide your hand span is. cm (b)
3. Using your hand span measurement, estimate how big the girth of the tree is. (a) x (b) = cm

Have a go at our activities to find out if you can be a forester!

Calculate the age of a tree

All trees grow at different rates but on average you can say a tree's girth will grow 2.5cm per year. Use this calculation to measure the approximate age of your tree.

Take the girth size (in cm) and divide by 2.5cm

Example

$$125\text{cm (girth)} \div 2.5\text{cm} = 50 \text{ (age)}$$



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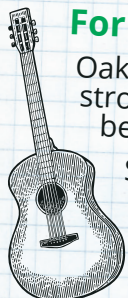
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Be a forester



How tall is that tree?

A forester will use the height of a tree to calculate how much timber it might produce. What the timber is used for will depend upon the tree species.



For example

Oak is slow growing and produces strong timber which is great for making beams, flooring and furniture.

Sitka spruce is very fast growing which produces a soft flexible wood that can be used to make violins and guitars.

Foresters use lots of special gadgets to help measure the height of a tree but there is another great way of doing it... simply by bending over.

Follow the next steps to find out how

Measuring a tree

1. Choose a tree and slowly walk away from it.



2. Bend over and look at the tree from between your legs.



3. Walk away from the tree carefully until you can just see the top and bottom at the same time.

4. Stand up. The distance between you and the tree is its height.



5. Measure the distance from where you are standing to the base of the tree - use a tape measure or by counting your paces (one adult pace is roughly 1m).





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Be a tree scientist

What do plants need to grow?

Forestry England is part of the Forestry Commission family and the Forestry Commission has a research department called Forest Research. Forest Research carry out lots of experiments and surveys to learn more about trees.

Our scientists and tree specialists keep an eye out for new pests and diseases that may enter the country and harm our trees. They also think about how climate change might affect how trees grow and look at different ways to manage our forests.



Grow your own tree

Next time you're spending time in the garden or go for a walk in your local greenspace see if you can find a seed or two. Or you could use a pip inside an apple?

To carry out your own experiment why not plant two seeds and put the second pot in a dark, cool place. Then take notes on how it grows in comparison to the seed in the warm sunny spot.



Write your findings here:

Have a go at our activities and find out if you can become a tree scientist in your own home!

Growing needs

Have a look around the base of a tree in your garden or local greenspace

What is the soil like? Sticky, crumbly, sandy? Different trees grow well in different kinds of soil. Some like it wet, some like it dry.

Light to make food.

Look around you, are any trees or plants growing towards the sunlight? Can you think why this might be?

