

MAKING SPACE FOR NATURE

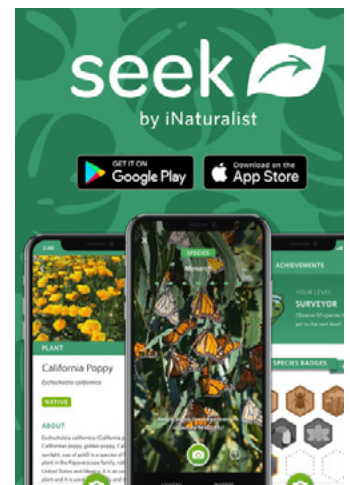
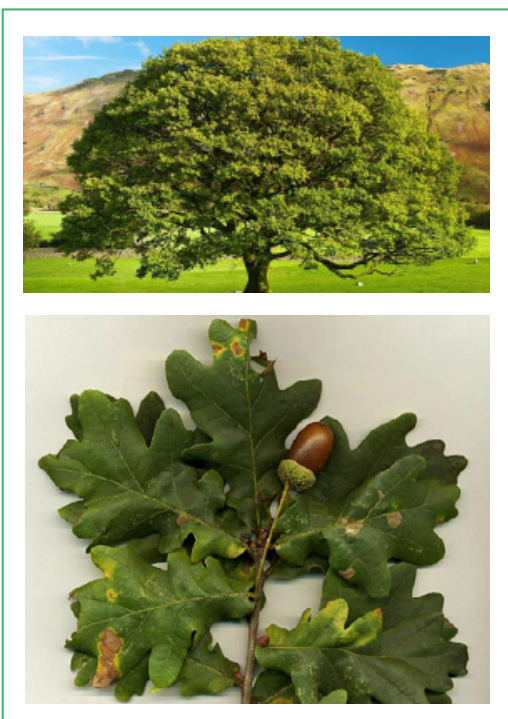
'Making Space for Nature' includes indoor and outdoor activities for pupils to enjoy engaging with the nature on their doorstep. This will inspire pupil creativity whilst encouraging outdoor learning and well-being as they explore their own naturehood.

Activity 3: I see a tree... what do you see?

In this activity, you will take a closer look at tree species, age and height.

Read through the whole activity before beginning to ensure you fully understand the instructions and take what you need. You may want to do Tasks 2 and 3 on two separate outings.

Task 1: Can you name these two trees by their shape and leaf?



Answers at end of activity sheet

To identify a tree, you will either use the SEEK app (which you used in Activity 2 – Natural Treasures) or the leaf ID sheet accompanying this activity.

Use the camera function in the app to **photograph and identify five different species of tree by photographing the leaf. Write the species on the activity sheet on page 4.**

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Activity 3: I see a tree... what do you see?

Task 2. How can you measure a tree without climbing up it?

Watch this video to learn how. <https://www.youtube.com/watch?v=F6fltSqlmFM>

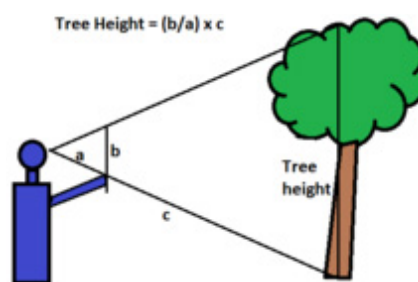
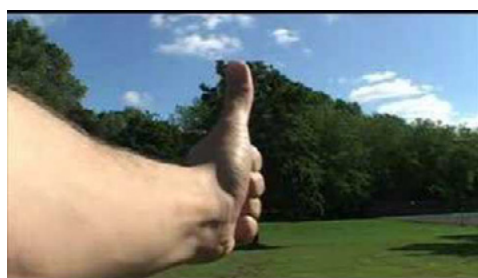
YOU WILL NEED:

- Activity sheet on page 4 (or a notebook) and pen/pencil
- Mobile smartphone with SEEK app (or leaf ID sheets)
- A tape measure



HOW TO MEASURE THE HEIGHT OF A TREE USING YOUR THUMB

- Stand away from the tree at a distance so you can see the top and bottom of the tree without moving your head.
- Ask your friend to stand at a distance to the left or right of the tree.
- With your arm stretched straight out, with a clenched fist and thumb pointed upwards, put the tip of your thumb in line with the top of the tree and move forward or backward until the bottom of your hand appears at the base of the tree.
- Then rotate your arm 45 degrees towards where your friend is standing so your thumb is horizontal making sure the bottom of your hand is still at the base of the tree.
- Use your friend as a marker where the tip of your thumb appears to be and measure that distance. You may have to ask your friend to move left or right. Your friend should be about the same distance from the tree as you are. That distance will be the height of the tree.



- Use a tape measure to measure the distance between your friend and the tree.
- If you don't have a tape measure, then pace by counting how many steps from you to the tree. Then estimate or measure the length of your pace and multiply it by the number of paces taken and that will give you the height of the tree (length of pace X number of paces).
- Is your measurement in centimetres (cm) or metres (m)? Can you convert the cm measurement to find out the height in metres? (Remember 1cm = 1m.)

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Activity 3: I see a tree... what do you see?

Task 3. How can you work out the age of a tree without chopping it down?



You probably know that you can find out the age of a tree by counting the dark rings across its trunk, but we're not going to chop down any trees!

TO MEASURE THE AGE OF YOUR TREE YOU WILL NEED:

- Activity sheet on page 4 (or a notebook) and pen/pencil
- A tape measure.

HOW TO WORK OUT THE AGE OF A TREE.

You can calculate the rough age of trees by measuring its circumference.

- Measure 1 metre from the ground against the tree trunk (or estimate it at your height).
- Then, measure the circumference of the trunk (measuring to the nearest cm). This is the circumference (or girth) of the tree.
- Approximately, every 2.5cm of circumference represents about one year's growth. So, to estimate the age of a living tree, divide the circumference by 2.5. For example, a tree with a circumference of 40cm will be sixteen years old.

$$40\text{cm} \div 2.5 = 16 \text{ years old}$$


$$(\text{Circumference cm} \div 2.5 = \text{age of tree in years})$$



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Activity 3: I see a tree... what do you see?

Complete the chart below.

Tree species 	Circumference (to the nearest cm)	Age (divide the circumference by 2.5)	Height (to the nearest metre)

What age was your oldest tree? _____

What was the difference in age between the oldest and the youngest tree you measured?

Extension activity:

What changes do you think your oldest tree has seen in your area? Imagine the tree could talk and write a short story about all the things that tree has seen throughout its life. (Use your imagination to describe changes to buildings, people, wildlife, parks, spaces and trees around it!)

Answers to Task 1: Left = Oak Right = Common Beech

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Activity 3: I see a tree... what do you see?

Well done - you are 'making space for nature'!

If you're interested in other nature activities, you'll find some here:

- www.goingwild.net
- <https://www.facebook.com/goingwild/>
- <https://twitter.com/goingwildnet?lang=en-gb>
- <https://wildlifetrusts.org/>
- <https://www.backyardnature.org/resources/>
- <https://www.wwf.org.uk/things-to-do-home>
- <https://mailchi.mp/johnmuirtrust.org/wildinside>
- <https://woodlandtrust.org.uk/search/?q=children&p=1>
- <https://rspb.org.uk/fun-and-learning/>