### What is Making Space for Nature?

What? 'Making Space for Nature' includes weekly indoor and outdoor activities for you to enjoy engaging with the nature on your doorstep.

Why? 'Making Space for Nature' invites pupils to be part of the wonderful green spaces, waterways and lakes in their surrounding area.

How? We invite you to join other school pupils to become part of Making Space for Nature's network of children exploring their own 'naturehood', sharing activities and entering our weekly competitions.

## 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 on your phone (which you used in Activity 2 – Natural Treasures) or the leaf ID sheet accompanying this activity.

Take your phone with you and 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.













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:**

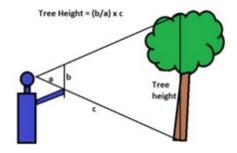
- Activity sheet on page 4 (or a notebook if you're unable to print it out) and pen/pencil
- Mobile smartphone with SEEK app (or leaf ID sheets)
- A tape measure.



#### HOW TO MEASURE THE HEIGHT OF A TREE USING YOUR THUMB

- a) Stand away from the tree at a distance so you can see the top and bottom of the tree without moving your head.
- b) Ask your friend to stand at a distance to the left or right of the tree.
- c) 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 backwards until the bottom of your hand appears at the base of the tree.
- d) 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.
- e) 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.





- f) Use a tape measure to measure the distance between your friend and the tree.
- g) 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).
- h) Is your measurement in centimetres (cm) or metres (m)? Can you convert the cm measurement to find out the height in metres? (Remember 100cm = 1m.)













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 if you're unable to print it out) and pen/pencil
- A tape measure.

#### **HOW TO WORK OUT THE AGE OF A TREE.**

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

- a) Measure 1 metre from the ground against the tree trunk (or estimate it at your height).
- b) Then, measure the circumference of the trunk (measuring to the nearest cm). This is the circumference (or girth) of the tree.
- c) 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.

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

(circumference cm  $\div$  2.5 = age of tree in years)













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 tre			e you measured?
what was the difference in ag	ge between the oldest a	ind the youngest tree	e you measureu:

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













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

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

Please send to your teacher:

Your completed activity sheet (page 4)

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://action.wildlifetrusts.org/page/57739/petition/1
- https://www.backyardnature.org/resources/
- https://www.wwf.org.uk/things-to-do-home
- https://mailchi.mp/johnmuirtrust.org/wildinside
- https://www.woodlandtrust.org.uk/blog/2020/05/nature-activities-for-kids-to-do-at-homepart-6/









