



Woodland/Hedge Survey (KS2)



Find out more about the trees in your woodland or hedgerow and come up with some questions of your own!



What is that tree? How tall? How wide? There are many questions about trees in woodlands that we wouldn't be able to answer without using special techniques to survey them. Learn how to find out the answers!

What you'll need

- Tree ID Guide (download from the City of Trees' website)
- Worksheet (Appendix 1)
- Tape measure, trundle wheel or string
- Clipboard
- Pen / pencil
- Canes for marking out

Subject

Science, Mathematics & Geography

Learning Objectives:

- Observe, measure, and record physical features
- Calculate in real-life situations
- Measure and find area.

Lesson Plan:

Warm-up/introduction

Play a game of 'Survival.' Create some tokens with water, space and light and hide them around your outdoor area (make sure there are not enough for a set each). Children have two minutes to find tokens, and return. How many have the full set and have therefore survived as a tree? For 30 seconds allow the children to swap and trade tokens to let a few more 'survive.'

You could also have what else a tree needs to survive (nutrients, temperature, air/carbon dioxide etc.)

Stimulus

Discuss estimation; challenge children to stride 10 meters and check using the trundle wheel. These are methods they can use today to estimate/guess.

Main Learning

How do people check a woodland is healthy and monitor the trees?

Split the children into groups of 4 or 5 and give each group the survey worksheet (Appendix 1). Ask the children what they need to complete their survey?

How do you know if a tree is dead or alive? Check to see if there are any leaves or if no leaves make a small scratch on the stem. If you see green on the scratch, then it is alive.

They will need a tree ID guide and measuring equipment (you can download City of Trees' Tree ID spotter sheet for our website to help with identification). Look at the leaves to identify a tree but if you can't find the correct shape in your tree ID guide, draw a picture and look in other books or on the internet to find the right species.

GOOD TIP:

To make tree ID easier, complete this survey during Spring, Summer or Autumn when the leaves are present on the trees

Get the children to find an area they would like to work in. Explain to the children that they will need an area that is at least 5 meters by 5 meters. If you are surveying a hedge, you will need a 5-meter strip of hedge for each group to survey.

Circumference: This is the distance all around the trunk of the tree. Wrap the tape measure around the tree trunk at around chest height. If there is more than one trunk, measure these as well!



Height of a tree: If your tree is too high to measure with a tape measure, you're able to estimate the height by looking back between your legs! Carefully, walk away from the tree you are measuring in a straight line. Look between your legs at the tree every few steps until you can just see the top of the tree. Measure the distance between you and the tree, where this is roughly the tree's height.

Plenary

Challenge children to each think of one important finding from their survey and one thing they want to do next. Take this opportunity for the children to share what they found in their survey area. How can your woodland area be used? Get the children to think about what they use their woodland for and future plans they have.

Some examples:

- Creating habitats for wildlife
- Finding ways to help protect trees such as an assembly, posters, and signs
- Make a plan of the ground and keep the results of the survey and check again in a year's time
- Research the ways they can use their trees

We would love to see your children learning more about trees! Share your photos with us on Instagram or twitter /cityoftreesmcr



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Appendix 1: worksheet

Team members: _____

Name of woodland location: _____

Survey Area: width(m) x length(m) = area(m²)
 _____ m x _____ m = _____ m²

Tree Number	Alive or Dead (tick)		Species	Circumference	Height
	Alive	Dead			
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
Total number of trees					
Total number of alive trees					
Total number of dead trees					
Widest tree (circumference)					
Tallest tree (height)					

Use this box to make any questions of your own and create a table to record your answer!

E.g. How many trees have seeds or fruit on them? How many trees have more than one trunk? How many trees are taller than 3 metres?