Pick a tree or tall shrub.

Day 2

What to do:

- Choose a tree. You are going to use this tree for several activities.
- You are going to a) estimate its height
  b) estimate its age
  c) look for symmetry and other patterns
- When you have collected all your data you will present your work as a leaflet (do you get it ha ha ha?) or in another way of your choosing.

How to estimate the height of a tree:

- You will need a tape measure or trundle wheel or a piece of string and a ruler.
- Stand with your back against the tree trunk.
- Walk in a straight line away from the tree.
- Every now and then stop, bend over and look at the tree through your legs.
- When you can just see the top of the tree, stop.
- Now measure how far you have walked away from the tree.
- This will tell you roughly how tall the tree is.
- You can try this for other trees or sheds or lamp posts or …

How to estimate the age of a tree:

- You will need a tape measure or metre ruler, possibly some string.
- Use your chosen tree. Measure up from the ground 1 metre.
- Use the string or the tape measure to measure around the trunk of your tree. This is called the girth of the trunk.
- A tree's girth increases roughly by 2.5cm each year.
- If you now divide your measurement of your tree's girth by 2.5 you will know its age in years.
- See the next slide for ways to divide by 2.5.

Dividing by 2.5

- Well you could use a calculator but that would be a bit boring.
- This is what I would do…I would multiply the girth measurement by 10 and then divide by 25.
- E.G. the girth measured 57.5cm. 57.5 x 10 = 575 575 ÷ 25 = 23

Looking for symmetry and patterns:



- Collect some leaves from your tree.
- Look carefully; are your leaves single or do they come in groups?
- Are your leaves symmetrical?
- Are your leaves arranged in a particular pattern?
- Could you use your leaf to make a repeated pattern or tessellation?

