



Trees and leaves



Trees are an important part of our world. Can you name at least 4 reasons why trees are important to us?

1. _____
2. _____
3. _____
4. _____

There are two main types of trees: *deciduous* and *evergreen*. *Evergreen* trees have leaves all year round. The leaves of *deciduous* trees change colour in autumn and fall to the ground leaving the trees with no leaves in the winter.



Go outdoors and have a look around you at the many leaves you can see. Do all the trees and plants have the same kind of leaves? What colour leaves can you see?



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Find 2 leaves from different plants (on the ground or on a plant – don't remove them).

Are the leaves the same? How are the leaves different? Think about their shape, size, colour, thickness, how they feel – and anything else that you notice.

What is the same about the 2 leaves?

How are the leaves different?

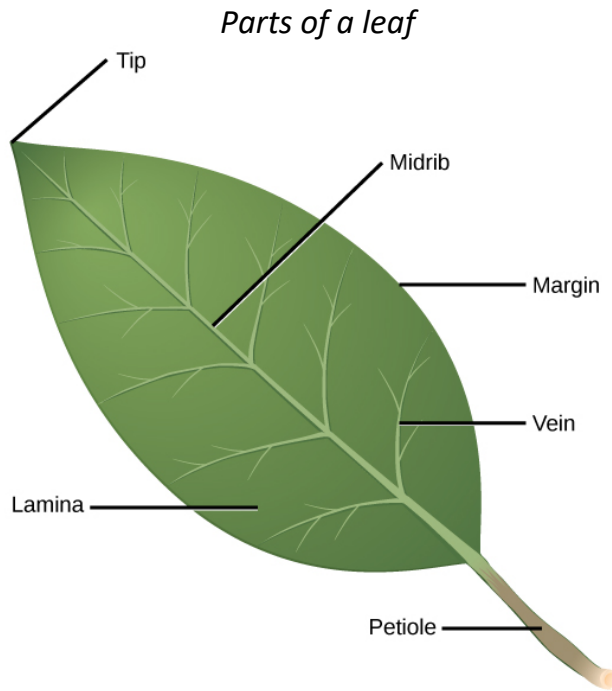
Turn your leaves over and look underneath. Are both sides the same? How are they different?



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Have a closer look at your 2 leaves and see if you can find the parts of a leaf shown here.



Sketch one of your leaves and label the parts:



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What do plants need so they can grow?

L _ _ _ _ _

W _ _ _ _ _

C _ _ _ _ _ d _ _ _ _ _



Why are leaves important to plants?

Leaves are the food factories for trees and other plants. They make food for plants so the plants can grow. Leaves contain a very special substance called *chlorophyll* -- it is chlorophyll that gives leaves their green colour. Leaves use chlorophyll to trap energy from the sun in a process called *photosynthesis*. The energy is used to combine water from the soil and carbon dioxide gas from the air to make sugar as food for the plant. Oxygen is also released back into the air during this process. The leaf acts almost like a solar panel for attracting energy from the sun.

Why do you think leaves are usually flat and thin?

Do you know why some leaves change colour in autumn?

During winter deciduous trees rest and live off the food they stored during summer. When autumn arrives and the days get shorter and shorter, leaves get less light each day and stop making food to prepare for the winter. The green chlorophyll fades and other colours in the leaves begin to show. Colours like red, yellow and orange have been in the leaves all the time. you just can't see them in the summer, because they are covered up by the green chlorophyll. The stems of the leaves will weaken (without food) and the leaves fall from the trees.