



## LEAF INVESTIGATION

Leaves are 'food making factories' for plants. They absorb sunlight energy to turn water and carbon dioxide into sugar that is then used to help plants to grow. Go on a hunt around your garden or neighbourhood to complete the following challenges and learn more about leaves.

### CHALLENGE 1 – Create a leaf collector.

Cut 3cm slots along the edges of some card – the side of a cereal box would work well. Wrap some string or wool around the card, using the slots to create a grid or web-like pattern that will hold any leaves that you find. The string will stop them from blowing away in the wind.

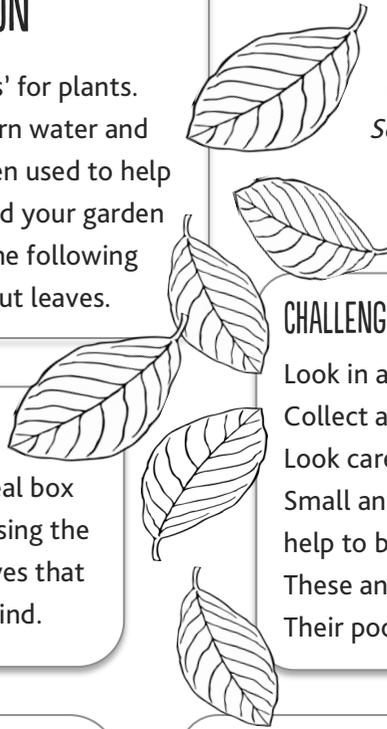
### CHALLENGE 2 – How many different shaped leaves can you find?

Investigate different leaf sizes, shapes and textures. Do any match these leaf silhouettes? Draw any other shapes below.



### CHALLENGE 3 – Look for leaves you could weave with.

Harakeke, tī kōuka (cabbage tree) and nīkau palm leaves can be used to make lots of useful things e.g. kete (baskets). How many other things could you make using woven leaves?

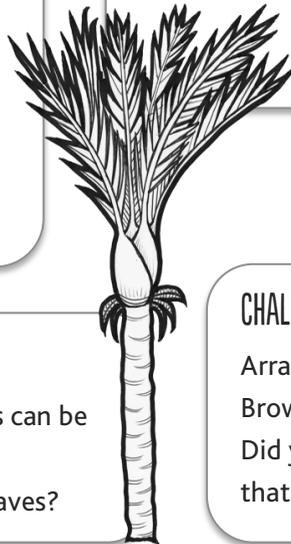


### CHALLENGE 4 – Discover how old leaves are turned into soil.

Look in a pile of leaves that have fallen under a tree. Collect a green leaf, a brown leaf and a very old leaf. Look carefully at the differences between them. Small animals e.g. worms, ants, slaters and beetles help to break down the leaves. Can you spot any? These animals are called decomposers. Their poop helps to make new soil!

### CHALLENGE 5 – Create a leaf rubbing.

Use coloured crayons or pencils to create a leaf rubbing on the back of this page. Your rubbing will reveal a pattern of veins on the leaf. The veins carry water into the leaf and sugars away to the rest of the plant to help it grow.



### Did you know?

The Māori word for leaf is rau.

### CHALLENGE 7 – Create a leaf rainbow.

Arrange the leaves you find by colour: Browns - pinks - reds - oranges - yellows - greens. Did you find any other coloured leaves or ones that are a mixture of colours?

### Did you know?

Most leaves are green because they contain the green pigment chlorophyll. Chlorophyll absorbs light energy that is needed by plants to make their own food. Some trees lose all their leaves in winter to help them save energy during the colder, darker months. Before the leaves drop off, the chlorophyll in them breaks down, revealing other red, orange and yellow pigments underneath.



### CHALLENGE 6 – Look under leaves.

Lots of different animals rely on leaves for their food. Some can be pests in a garden e.g. slugs, snails, caterpillars and aphids. Can you spot any living under leaves?



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