



Leaf Adaptations

For Teachers

Age: 7 - 14 year olds ⌚ Minimum time needed: 1 hour

Curriculum links:

Science

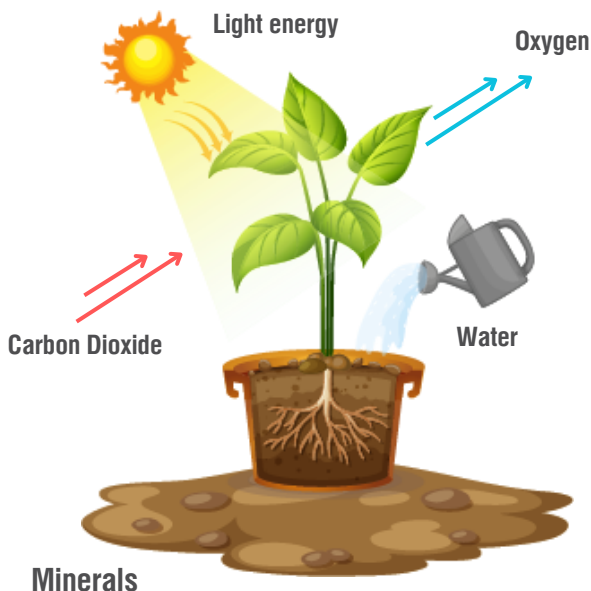
- Recognise that living things can be grouped in a variety of ways. Explore and use classification keys to help group, identify, and name a variety of living things in their local and wider environment.
- Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including microorganisms, plants, and animals. Give reasons for classifying plants and animals based on specific characteristics. Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.
- The adaptations of leaves for photosynthesis. The reactants in, and products of, photosynthesis, and a word summary for photosynthesis. Differences between species.

Compare different leaves to see how they are adapted to carry out photosynthesis. Use leaf features to create a way to group (classify) them for identifying trees.

Get Ready

- Example of a classification 'dichotomous' key
- Tree identification books or charts
- Clipboard, paper and pencils
- Camera

Dichotomous key:
An identification method
where groups of
organisms are divided into
two groups repeatedly



Get Set

- Recap on photosynthesis and what is needed for it to take place.

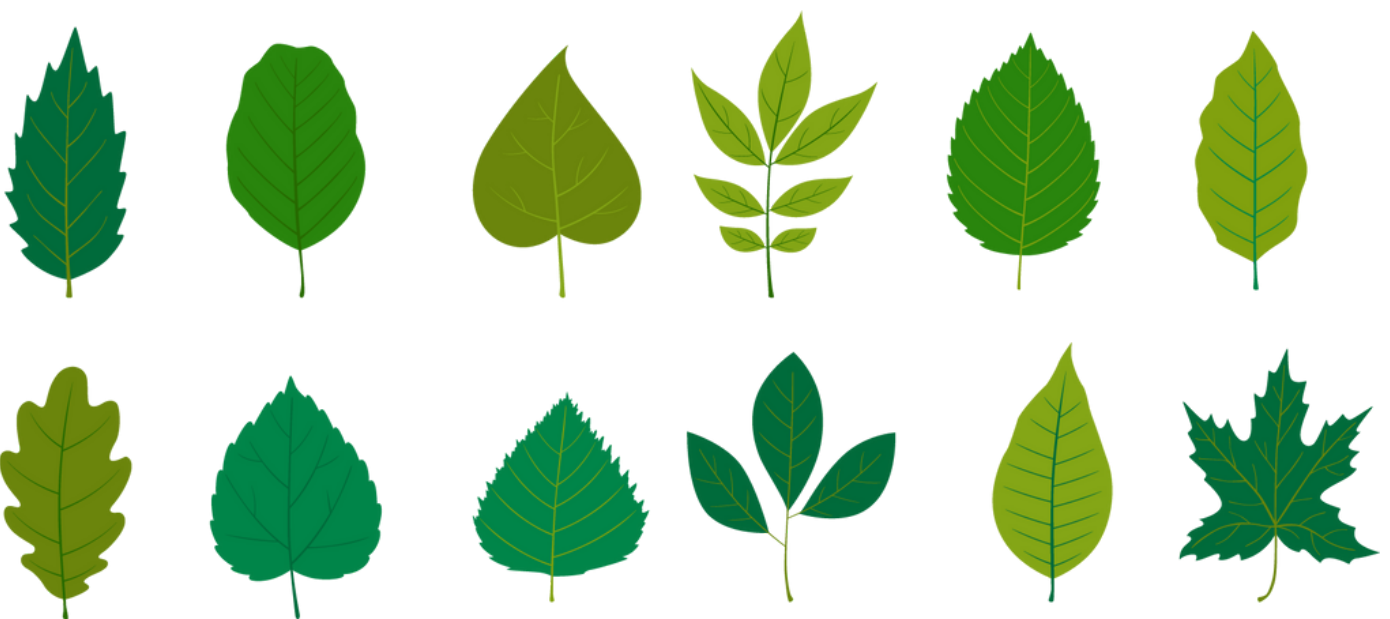
 **Go**

In groups, look for leaves on the forest floor, choosing four or five different shaped leaves.



Discuss: How are the different leaves adapted to photosynthesis?

- Look at examples of dichotomous keys and discuss how they are used to identify organisms?
- Create a 'key' for leaves, using the main visual features.
- Use books and tree charts to identify any leaves they can't already recognise and add the names to the keys they created.

 **Go Beyond**

Research other types of leaves from different habitats and ecosystems. Think about how they are adapted to where they live and how they could modify their keys to include them. You could use photos of all the leaves to create and print out a key for a display.