

Year 6 Classification Help Sheet



Reminders

[What is Classification?](#)

[Carl Linnaeus](#)

[Classifying and grouping plants](#)

[Different types of leaves](#)

Activity 1: Observing leaves and learning how to describe them

You will need 4–6 different leaves; look at leaves on trees, plants and bushes in your garden, or while you are out for your daily exercise. If you are not able to access any plants, use the leaves on the next page. Look closely at each leaf, in particular at:

• colour • shape • size • veins • leaf edge • surface • leaf tip • leaf stalk • comparison of upper and lower sides of leaf

Sketch them in your books, both the upper and the lower side, annotating the drawings with what you have carefully observed. Can you identify each leaf?

What colour is your leaf?

What is the shape of the leaf?

Describe the leaf edge

Describe the leaf tip

What size is the leaf?

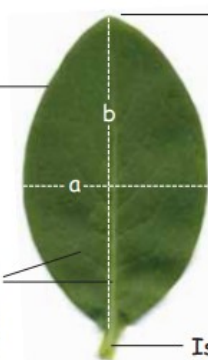
Measure:
a – the widest point of the leaf
b – the length of the leaf

Describe the arrangement of the veins. Sometimes these are easier to see on the lower side of the leaf

Is there a leaf stalk?
If there is, measure its length

Is the lower side different from the upper side?




What is the surface of the leaf like?



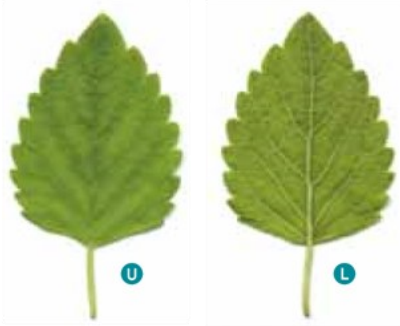
Challenge:

Try describing one of the leaves to someone in your family. Can they guess which one you are describing?

Vocabulary suggestions

Colour	green, brown, yellow, red
Leaf edge	smooth, toothed, wavy, prickly
Leaf surface	smooth, rough, wrinkly, dull, glossy, hairy, furry, not hairy
Leaf tip	pointed, rounded
Leaf stalk	present, absent
Veins	<div>  <p>one main vein with branches</p> </div> <div> <p>several veins starting from the bottom of the leaf and coming together again at the tip</p> </div> <div>  <p>several main veins spreading out from the bottom of the leaf</p> </div> <div>  </div>

Describing leaves



Lemon balm



White clover



Bugle



Pelargonium



Stargazer lily



Sorrel



Periwinkle

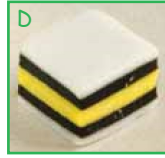


Spear thistle

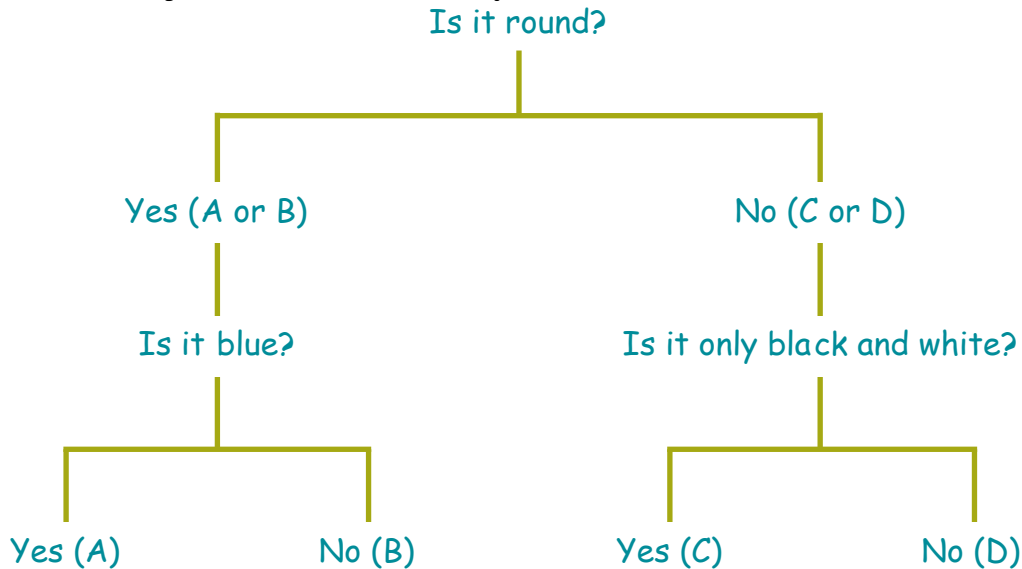


Lamb's tongue

A simple classification key: Liquorice allsorts



Using these four sweets, a simple key can be created. Ask a YES/NO question such as 'Is it round?' The answer is YES for A and B, but NO for C and D. The YES sweets can be grouped together, separate from the NO sweets. Find a question that can separate A and B, and another question that can separate C and D. Possible questions for A and B – "Is it blue?", or for C and D – "Is it only black and white?" Using these questions, the key could look like:

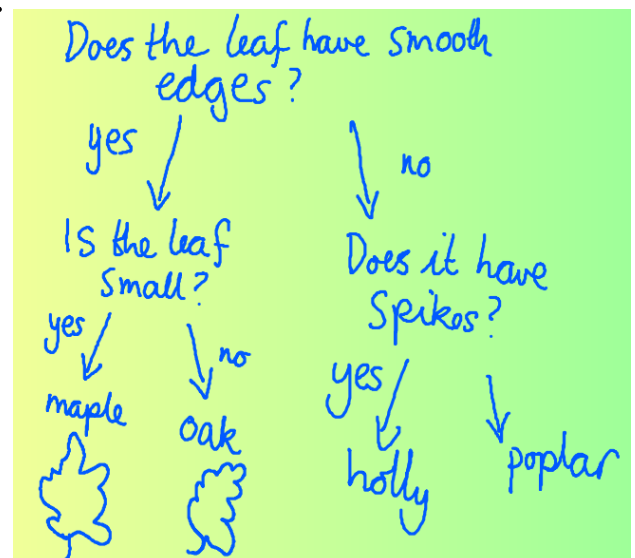
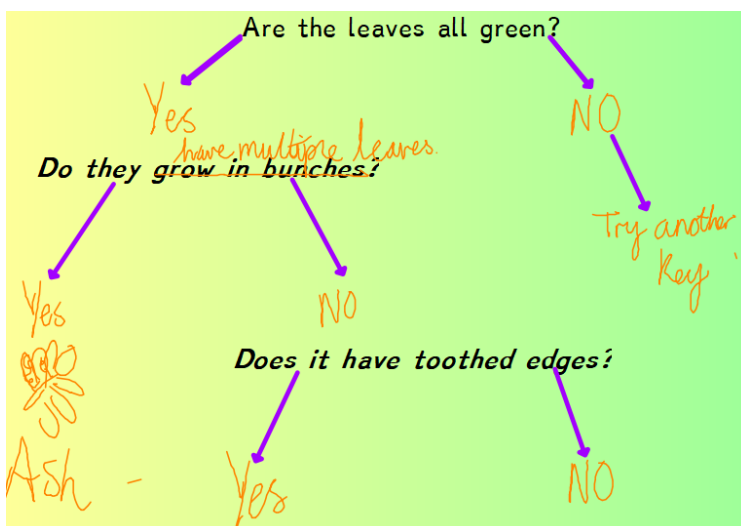


Activity 2: Making a key—using leaves

Choose 4 of the leaves that you observed in Activity 1. You are going to make a simple classification key to help someone looking that those 4 leaves identify which is which. Look at the observations you made in Activity 1 and answer the questions on the next page for each leaf. Draw your key in your books.

- Decide on your starting question to help you sort the leaves into two groups, making sure that the answer is YES or NO; for example, 'Do the leaf edges have prickles or teeth?' or 'Does the leaf have one main vein?'
- Then decide on two subsequent YES/NO questions that you could ask that further sorts those two groups into the individual leaves.

A couple of examples of keys that have been made in the past.



Leaf fact file

Look at your leaf and answer **yes** or **no** for each question.

1. Is the leaf lobed?



2. Do the leaf edges have teeth or prickles?



3. Are the leaf edges smooth or slightly wavy?



4. Does the leaf have one main vein
(running from the stalk to the leaf tip)?



5. Does the leaf have more than one main vein
(running from the leaf stalk to the leaf edges)?



6. Do the side veins mostly come off the main veins in pairs?



7. Do the side veins all come off the main vein one at a time?



8. Is the leaf stalk longer than 1 cm?
(You will need a ruler to answer this question)

9. Does the leaf stalk have small bumps on it? (These are glands)



10. Is the leaf stalk red?

11. Is there anything else interesting about your leaf? _____

Have a look at the Tree Identification Guide for an example of a much more complex classification key. Can you follow the questions to find any of the leaves on there?