



Variation

Key Stage 1 Science Teachers' notes

This unit of work is based on **QCA Science Unit 2C 'Variation'** in which children are made aware of the variety of living things within their local environment and of the differences between these. It can be used alongside the other Key Stage 1 unit in this pack 'Plants and Animals'.

Learning Objectives Covered by this Work

- ◎ observe and recognise some simple characteristics of plants and animals.
- ◎ know that plants in the local environment are similar to each other in some ways and different in others
- ◎ make observations and comparisons of local plants
- ◎ make careful observations to identify similarities
- ◎ know that living things in the locality can be grouped according to observable similarities and differences.
- ◎ present results in a block graph.

Before the Visit

Revise the vocabulary learned in relation to plants and animals in previous work, for example that from QCA Unit 1B 'Growing Plants' and Unit 2B 'Plants and animals in the local environment'.

Ask the children to define the words 'plant' and 'animal'. What are the key differences between the two? Group a collection of pictures of living things into animals and plants. Are trees plants? If they are, what features would we expect them to have?

Brainstorm lists of the animals and plants likely to be seen on the woodland visit. Details of plants and animals found in the woodland can be found in the first part of this pack.

In the Woodland

Examine a tree, identifying its different parts - trunk, roots, leaves. Consider your answer to the question 'Do trees have flowers?' Many people think that they do not, but being flowering plants, they do. The most easily seen examples of tree flowers are catkins or blossom, both visible in the spring. Clarify the distinction between the parts of a plant and the whole plant.

Ask each child to choose two different plants and make drawings of them, labelling the parts. Study one woodland plant, drawing and identifying the different parts e.g. flower, stem, leaf, root or bulb (only if already visible, as it is illegal to uproot plants without the landowners permission).

Search under logs, stones, etc for woodland animals. Alternatively, set pitfall traps or potato traps (see sheet Y4.1 in 'get, set ... Grow') in advance. Identify and make quick sketches of the small animals you find.

Follow-up Work

Describe in writing how the two plants examined differ by comparing the different parts of the plants in turn.

Look again at the animal sketches made in the wood. Brainstorm other animals that might be found in the woodland and list these with the help of the teacher or another adult.

Experiment with different ways of sorting. For example, animals could be divided on the basis of;

- ◎ number of legs e.g. none, two, four, six, eight, more
- ◎ method of movement e.g. fly, walk, slither.
- ◎ colour
- ◎ the food that they eat e.g. plants, animals or both

Talk with children about their groupings and help them to make block graphs showing the number of different types of animals falling into each group. More able pupils could go on to create a key sorting their animals.

Using the pupil worksheet, decide which of the organisms and plants recorded in the woodland fit into each category. There should be some categories that all the organisms fit into (water, growth) and others that only contain some of the organisms. Some should provide some interesting discussion (movement, eating) Can you think of any other things that all living creatures do?



Key Stage 1 Science

Pupil sheet

Variation

Draw pictures of or write the names of the plants and animals in the boxes

It moves	It has got leaves
It needs water to live	It has to eat
It has roots	It has legs
It grows	It has flowers

