

Plants KS1

Puzzlewood is a designated ancient woodland. It is a special, important and protected place. The woodland is so old it has developed intricate communities of plants, animals and fungi.

Therefore, Puzzlewood is a unique environment for the study of plants and trees.

It is ideal for a day of developing scientific skills within an enclosed environment.

We strongly recommend that you visit the site before your visit, as there are so many varied opportunities for creative curriculum development.







National Curriculum Programs of Study:

Science

Working Scientifically

asking simple questions and recognising that they can be answered in different ways

observing closely, using simple equipment

performing simple tests

identifying and classifying

using their observations and ideas to suggest answers to questions

gathering and recording data to help in answering questions.

Plants

identify and name a variety of common wild and garden plants, including deciduous and evergreen trees

identify and describe the basic structure of a variety of common flowering plants, including trees

observe and describe how seeds and bulbs grow into mature plants

find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.

<u>Art</u>

use drawing, painting, printing and sculpture to develop and share their ideas, experiences and imagination

Maths

measure and begin to record lengths and heights (y1)

compare and order lengths, mass, volume/capacity and record the results using >, < and = (y2)

interpret and construct simple pictograms, tally charts, block diagrams and tables (y2)

English

Develop positive attitudes towards and stamina for writing by: writing narratives about personal experiences and those of others (real and fictional); writing about real events; writing poetry; writing for different purposes;

Suggested Learning Activities

Before your visit:

Identify plants and trees growing in your school grounds. Depending on the time of year plant seeds and bulbs. Look at the basic structure of plants and trees.

During your visit:

You are requested to stay on marked paths. You are welcome to use found natural objects but please do not pick leaves or flowers.

Trees

Puzzlewood contains a wide variety of trees www.puzzlewood.net/index.php/component/k2/item/2-the-trees-of-puzzlewood and provides many opportunities for learning about trees.

As you walk around the wood see how many different varieties of tree you can spot. This leaf spotter sheet can help: https://www.treetoolsforschools.org.uk/activities/pdfs/pdf leaf spotter sheet.pdf

If you are visiting in the autumn this autumn leaf spotter would be useful: https://www.treetoolsforschools.org.uk/activities/pdfs/pdf autumn leaf hunt.pdf

If you visit in winter or early spring this bud and twig spotter is very handy for identifying deciduous trees: https://www.treetoolsforschools.org.uk/activities/pdfs/pdf twig spotter sheet.pdf

Visiting in spring, autumn and winter provides an excellent opportunity to discuss deciduous and evergreen trees. Look at the beautiful yew trees on our site with their bright red berries. Discuss which animals depend on these berries in wintertime.

Make drawings and sketches of the trees in the wood. In particular, look for the trees that have their roots exposed to the air. Discuss the size of the roots and their role in anchoring the tree in the ground. Can you spot some trees that are growing in unusual places or odd angles? What is stopping them from falling over?

In small groups look at a variety of different leaves. Discuss shape, colour and texture. Make a collection of words to describe each leaf type, e.g. pointed, spiky, waxy.

Make bark rubbings (there are tree trunks in the barn that can be used for this activity) and photograph the tree trunks. Compare the different patterns on different types of trees. Why do trees have bark? What does bark provide for biodiversity in the wood? Using magnifying glasses look carefully at the bark. What can you see? Are their living things on the bark and what are they?

Many of the trees (and rocks) in Puzzlewood are covered in moss. Using magnifying glasses look carefully at the moss. Moss is distinctive from other flowering plants because it produces spores. It has leaves and stems but not true roots. Use a plant identifying App downloaded onto an iPad to see how many different types of moss you can spy in the wood.

Look around the woodland for 'dead wood'. Using magnifying glasses and bug pots looks for creatures, plants and fungi that use dead wood as an important habitat. Draw your findings.

Measure a tree (please use the trees next to the little hut for this activity). In small groups measure first by using hand spans to measure the circumference. Record the findings. Measure again using a tape measure. Record the findings. Repeat with different varieties of tree.

Sit in a quiet spot under the trees and share why trees are so important e.g. provide oxygen, store carbon, providing micro-habitats, improve health and mental-wellbeing etc. Ask the children to hug a tree and whisper a thank you message into the trunk. If trees could speak – what might they say back?

Plants

Explore the woods for wild plants. https://www.plantlife.org.uk/uk/discover-wild-plants-nature/spotter-sheets

Sketch/draw and photograph a variety of plants and flowers. Use small watercolour sets to add colour to the sketches. Use magnifying glasses to look carefully at details. Are the flowers/leaves symmetrical?

Discuss the difference between garden and wild plants. What plants are grown in your gardens at home?

Look carefully at a flowering plant. Name the different parts and describe their purpose. Draw and label the plant.

Find a quiet spot under the trees among the scowles and read 'It starts with a seed' by Laura Knowles and Jennie Webber.

In the covered barn:

Use large pieces of paper on the tables or floor to work in small groups to draw sections of the wood with its variety of trees, moss, fungi and wild plants.

Make clay plaques imprinted with leaves and found objects such as pinecones and feathers. (We are happy to store clay on site for a few days after your visit to let it dry). When dry they can be painted and varnished.

Create Hapa Zome prints using found leaves or flowers: https://www.youtube.com/watch?v=GYooM517_gl

After your visit:

Write a recount of your day at Puzzlewood.

Make a guide about the trees and plants that can be found in Puzzlewood.

Design posters about the importance of trees for combatting climate change and to encourage people to plant more trees.

Write a story using Puzzlewood as the setting.

Use the collections of words gathered during the visit to describe the leaves and plants to write descriptions of woodland or nature poetry.

Use the photographs and bark rubbings of the trees to inspire polystyrene tile or block printing.

Use the handspan data from measuring the circumference of the trees to create pictograms or bar charts.

Use the sketches and drawings of trees and plants and reproduce using different media e.g., pastel, charcoal and paint.