

Trees and Plants KS2

Activity How-To Guide – Clockwise Trail

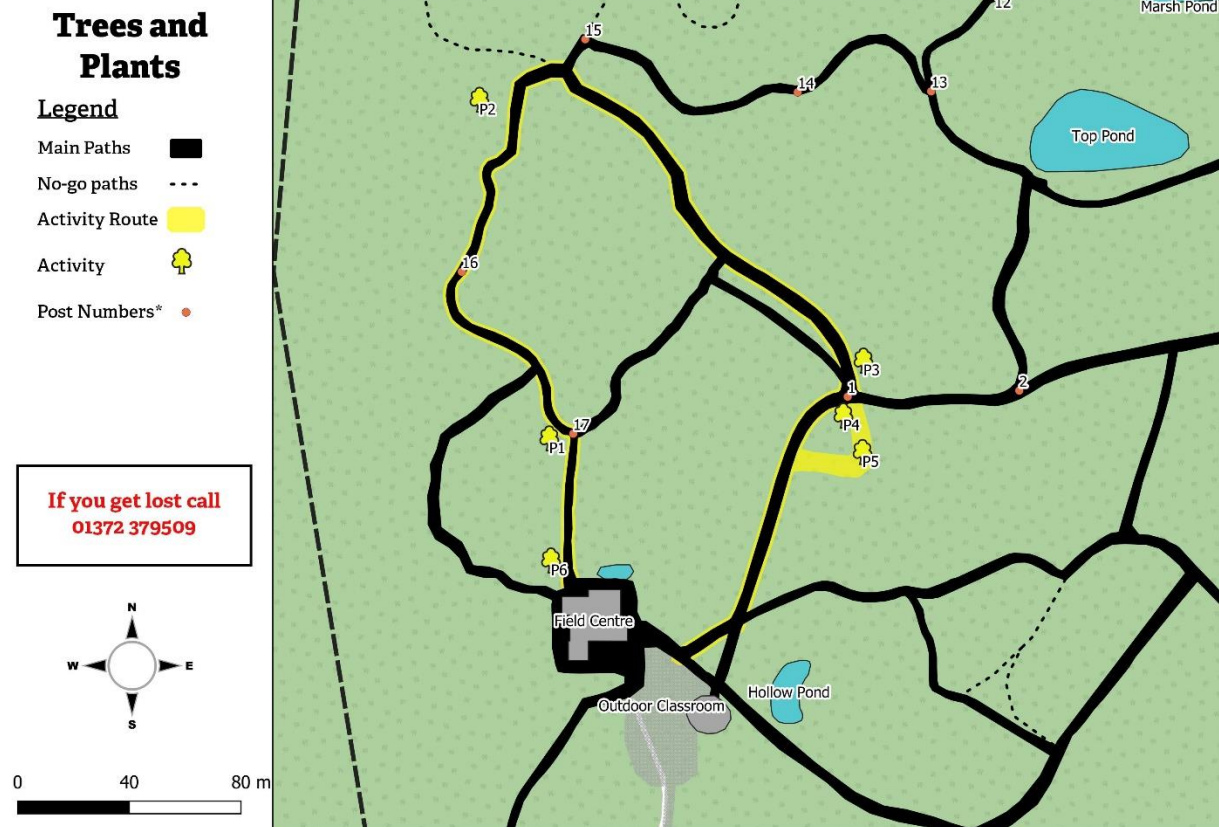
Session Outline

50 Minute Session Plan

Time	Travelling clockwise	
	Location	Activity
5 mins	Centre	Introduction
5 mins	P1	Holly
5 mins	P2	Hazel
5 mins	P3	Beech
5 mins	P4	Scots Pine
15 mins	P5	Recipe for Soil
10 mins	P6	Plenary

Route

This session follows a marked trail through the woods, guided by yellow coloured bands on posts placed at intersections.



Equipment

You will be able to borrow the equipment required on the day:

- Sticky strips (card with double sided tape) – one for each child
- Canvas bags – three per group of 15
- Water bottle – one per group of 15
- Tree identification guides – three per group of 15
- Laminated tree pictures and pins – one set per group of 15
- Pencils – one for each child

Remember to ensure the right walk group leader has the medication for the children in their group.

Key Points

Short reminders for the key points of each activity. Please read on for full descriptions.

Activity	Key Points
Introduction	A circular trail with six trees to identify and two games along the way.
At each tree	Collect a leaf and add it to the sticky strip to create your own identification guides. Make sure you collect the discarded tape strips to avoid accidental littering.
Build a plant	Spread the cards face down in the centre of the space. In teams, the children run a relay race to collect as many cards as possible. Then they use their cards to build a diverse array of plants and add the name and function labels.
Recipe for soil	In three groups the children fill their bags with the ingredients for soil, before jumping on the bags to change it into soil. After turning out the contents and seeing that it didn't work, discuss the need for fungi, animals like worms and lot more time – and how precious soil is as a resource.
Plenary	Place the tree labels around the space and ask key questions – the children must run to the correct answer. You can find a list of suggested questions at the end of this guide.

Introducing the Trail

This session guides you on a circular walk around the woods which stops at 6 marked trees to identify and collect a leaf from. There are also some games to stop and play along the way!

As a small starter, you could ask the children to see how many types of plant or tree they can name as you walk to the first location.

When you are ready, head to **location P1** on the map to find your first tree.

Holly

At location P1.

Your stop here should take around 5 minutes.

Equipment

- Sticky strips
- Pencils
- Tree identification guides

Identifying a holly tree

- Holly trees are evergreen have dark green waxy leaves
- The leaves have prickles to stop herbivores eating them
- In early summer they have small white flowers
- Unlike most plants, holly trees are either male or female – only the females have berries in autumn and winter
- The seeds are dispersed by animals like birds which eat the berries and poo the seeds out somewhere else

Making your Sticky Strip

At each tree the children will collect a leaf and add it to their sticky strip to create their own identification guide.

1. Holding up a sticky strip, peel away a short section of the double-sided tape. It is important not to expose the whole strip as it will lose its stickiness.
2. Find a *small* leaf from the tree you have stopped at (from a branch or the ground) and stick it on to the very far left of the strip, leaving room for more leaves as you go along.
3. Write the name of the tree next to the leaf.

Make sure adults collect the discarded tape strips from the children so that no one accidentally drops them in the woods – and don't forget to put your own names on them too!

When you have all collected and labelled a leaf from this tree, move on to **location P2**.



Your sticky strips will look something like this at the end of the trail.

Hazel

At location P2.

Your stop here should take around 5 minutes.

Identifying a hazel tree

- Hazel trees are deciduous and lose their leaves in the winter
- The leaves are round with toothed edges and a pointed tip
- You might find hazel nuts on the twigs or the ground
- The bark is smooth with little flecks
- The twigs grow with a slight zig-zig shape
- Hazel trees have lots of stems shooting up from the ground
- They are often used for coppicing which is where people chop the stems for wood and lots of new stems grow back
- The seeds are dispersed by animals like squirrels which collect the nuts and bury them for later, the forgotten nuts grow!

Beech

At location P3.

Your stop here should take around 5 minutes.

Identifying a beech tree

- Beech trees are deciduous but young trees will hold their leaves over winter, even after the leaves are dead
- The leaves are oval shaped and have wavy edges
- The bark is smooth and grey and wrinkles around joints like elephant skin
- In the spring before the leaves open, the buds are long sharp points like spears
- Beech nuts grow in rough brown cases that open like little pixie hats
- The seeds are dispersed by animals similar to the hazel trees

Top Tip: As you walk look for bluebells, bracken, ferns, oak trees and honeysuckle. There is a bingo sheet available with pictures of these plants on the website

Scots Pine

At location P4.

Your stop here should take around 5 minutes.

Identifying a Scots pine tree

- Scots pine trees are evergreen and lose leaves all through the year, rather than all in one go in the winter
- The leaves are long and thin and called needles
- The leaves grow in pairs like a V shape and are slightly twisted
- The bark is very chunky and looks like camouflage patterns
- The bark at the top of the tree is orange and it gets darker nearer the ground
- This tree's seeds grow inside cones – look on the floor for pine cones
- When the pine cones ripen, the scales open and the seeds are wind dispersed

Recipe for Soil

At location P5, just off the main track.

This activity should take around 15 minutes.

Equipment

- 3 canvas bags
- One water bottle

Instructions

The aim of this game is to learn what soil is made from, how it is formed and how precious it is as a resource.

1. Divide the children into three groups and give each group a canvas bag.
 2. Ask what ingredients they think are needed to make soil?
 3. Collect leaves, twigs, pebbles, organic matter and add a little water from the squirty bottle. Soil also contains a lot of air, so add a breath or two.
 4. Then the children take turns to jump on the bag, crushing, stamping and mixing the ingredients to create soil! Go wild!!
 5. Once everyone is done, empty their bags out onto the ground. Is it soil? No! (It probably looks much the same as it did at the beginning.)
 6. Why didn't it work? Soil needs fungi and creatures to break down the organic matter as well as lot more time. Thank goodness for worms!
- The soil type in an area determines the plant communities that can grow: i.e. dry sandy soils are great for pine trees and heather but not wetland plants.
 - In general soil is made of 45% mineral (rocks), 25% water, 25% air and only 5% organic matter (dead plants/animals) – that means around 50% of what's under our feet is water and air!
 - It takes 200-400 years to create 1cm of soil! And 3000 years to make enough to grow crops in! Yet it can be destroyed so quickly by erosion and poor care.

When you finish, collect the empty bags and follow the trail back **to the centre**.

Trees and Plants Plenary

At **location P6** by the centre you should find benches for the children to sit on in front of an open area for playing games.

10 minutes should be spent on this activity.

If you had split your class of 30 into two groups of 15 and followed the trail in opposite directions, you will now meet in this area for the plenary together. If one group arrives later than the other, the game is very simple and they should be able to join in without much difficulty.

Equipment

- A3 laminated tree pictures
- Pins

Instructions

1. Ask the children which trees they remember from the trail. As each tree is named, hold up the card and give it to one of your adults to hold.
2. The adults are going to stand around the edges of the games playing area holding one tree each and the children will stand in the middle.
3. You might need to pin one or more cards to trees around the area too if you don't have enough adults.
4. You are going to call out questions and the children will need to run to stand by the adult holding the card with the answer on before you read the answer.

Example Questions:

- Can you find a tree which is evergreen? (Holly or Pine)
- Can you find a tree which is deciduous? (Hazel or Beech)
- Which tree has seeds inside cones? (Pine)
- Which tree has red berries in the winter? (Holly)
- Which tree has needle-like leaves? (Pine)
- Which seeds have a spiky shell? (Beech)
- Which tree has smooth grey bark? (Beech)
- Which tree has V shaped leaves? (Pine)
- Which tree has nuts? (Beech or Hazel)