	Staff Name: **Zone:** Bushcraft **Ability Range:** NC Level 1-4 **Target Group:** BESD Students	**Date:** **Lesson Reference:** Week 1 'Tree Recognition'

Learning Objectives:

- To recognise a number of different trees.
- To be able to select, from a range, a number of commonly found trees that have parts that are safe to eat and those which have medicinal properties.
- To be able to recognise those trees which pose a danger to man.

Learning Outcomes: To recognise a number of safe, medicinal and dangerous trees.

Challenge: To correctly select, and also reject, those trees that are safe and those that are dangerous to us.

Differentiation: Teaching assistant to support during practical and written activities where appropriate.

Development of Skills/Cross Curricular Links:

LITERACY/COMMUNICATION

Reinforcement of key words, development of discussions through describing tasks and group activities.

ENTERPRISE

Communication, team work, using initiative.

PSHE

Development of environmental awareness.

NUMERACY

Estimation and calculation for tree survey.

STARTER ACTIVITY

Register the group and share the learning objectives with them.

Give students 'Parts of a Tree' worksheet to determine prior knowledge.

MAIN PART OF LESSON

Indoor Activity (30 mins): Students to use available resources (internet, library etc.) to research the following:

- a tree that is useful to use and safe to handle.
- a tree that has medicinal properties.
- a tree that is dangerous to humans at all times and should be avoided.

Outdoor Activity: Students to be given a range of 'Tree Outlines' and 'Twig Identification' sheets to support them in identifying the various trees around the school grounds. (worksheets from the Woodland Trust, Nature Detectives resources on www.naturedetectives.org.uk).

In pairs, students to pick one particular tree and carry out the tree survey using the survey sheet.

PLENARY

Pairs to share information about the tree that they have surveyed with the rest of the group.

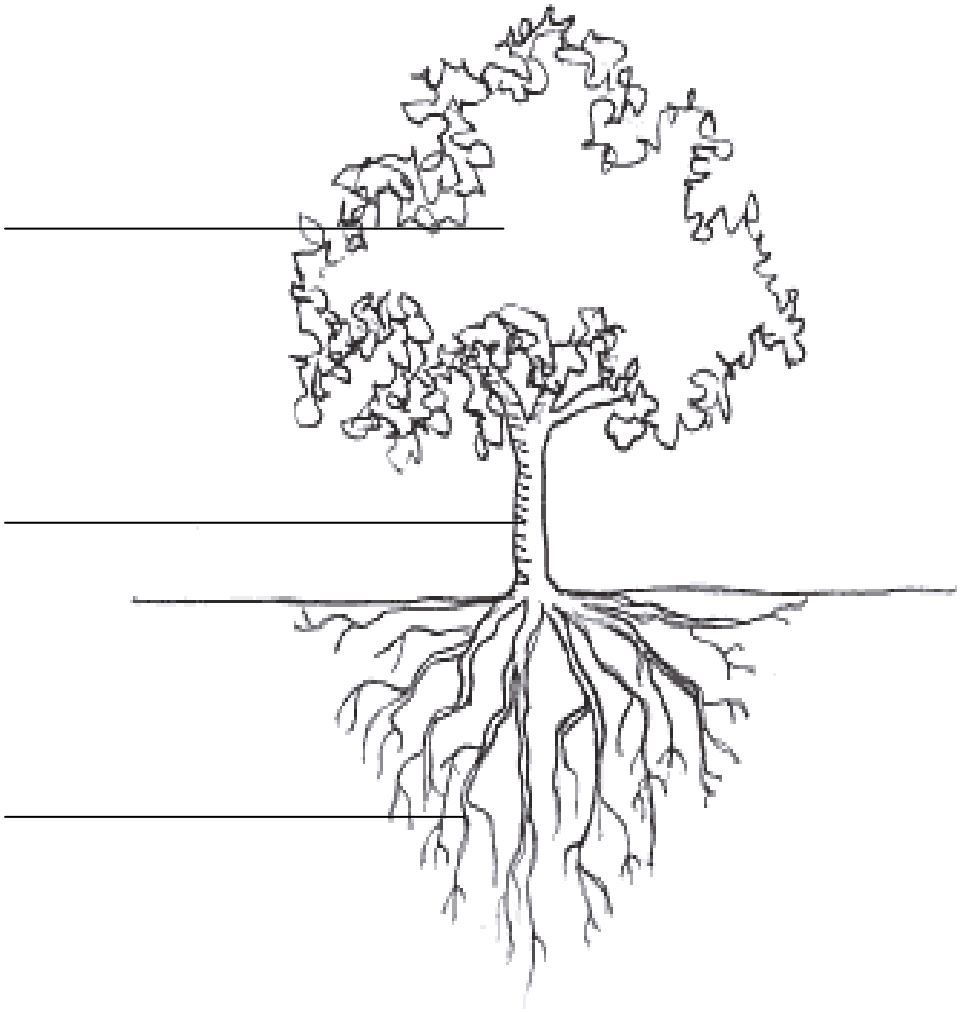
Extension Tasks: Production of a poster/leaflet outlining information about the properties of trees.

Risk Assessment: Teacher in charge to ensure correct and appropriate risk assessments are carried out to ensure the health and safety of all of the students.

VISUAL	**Tree identification.**
AUDITORY	**Direct teaching /explanation.**
KINAESTHETIC	**Tree survey.**
SKILLS	**Research skills using secondary sources.**
SEN	**At an appropriate level.**
REWARDS	**Links to school reward system.**

Name:……

Parts of a Tree



Crown **Roots** **Trunk**

Function	Part of Tree
Anchors the tree into the ground.	
Makes food for the tree.	
Carries food and water up and down the tree.	

Tree Survey

Name of Surveyor:…….

Location of Site:……

What does the tree look like? (draw/photo)	What do the leaves look like? (draw/stick down/photo)
What does the bark look like? (do a bark rubbing)	Do you know what type of tree it is? (use your tree I.D. cards)
Does it have any seeds or fruit? (draw/stick/photo)	Do any animals/minibeasts live in the tree? (draw)
What is the height of your tree?	

Activity Instructions

How old is the tree?

Trees grow approximately 2.5 cm fatter every year.

Calculate the age of the tree by measuring around the middle of the tree approximately 1.5m from the ground. ……..cm

Now divide this result by 2.5cm to calculate the approximate age.

……. years old

Leaf Mould

See the link below for a fully descriptive clip on making leaf mould.

http://www.videojug.com/film/how-to-make-leaf-mould

Step 1 'Collect Together Equipment' – Collect together the appropriate equipment to make the leaf mould. This includes a leaf rake, clap hands, wheel barrow, garden fork and bin bags with air holes.

Step 2 'Selection'– Identify a range of trees in the area where leaves can be collected. It is best to select deciduous leaves from a variety of tree species as this will create a mould rich in nutrients.

Step 3 'Collection' – Rake the identified leaves after rainfall, or when damp, as this will aid the decaying process. Place leaves in a wire cage or bin bags with holes to help air to circulate.

Step 4 'Decomposition' – The leaves will take about a year to fully decompose, during this time the pile of leaves will need to be turned several times to ensure an even leaf mould is created.

Types of Trees

What are Deciduous Trees? Deciduous trees are those tree species that lose all of their leaves and are barren for a part of the year. They are classified into types such as 'Oak', 'Birch', and 'Maple' based upon seed structure, although the shape of the leaves, the pollen and the appearance of the bark is also taken into account.

What are Evergreen Trees? Evergreen trees retain some or all of their foliage throughout the year, growing new leaves before the old ones fall off. There exist both needle-bearing and broadleaf evergreens.

Trees, Their Leaves and Their Seeds

Oak

Holly

Ash

Leaves

Seeds

Hazel

The flower in spring (Catkin)

The rounded leaf and spiked husk

The hazel nut once removed from the shell

Sycamore

Sycamore leaves

Sycamore seeds (Helicopters)