



What are broadleaf and conifer trees?

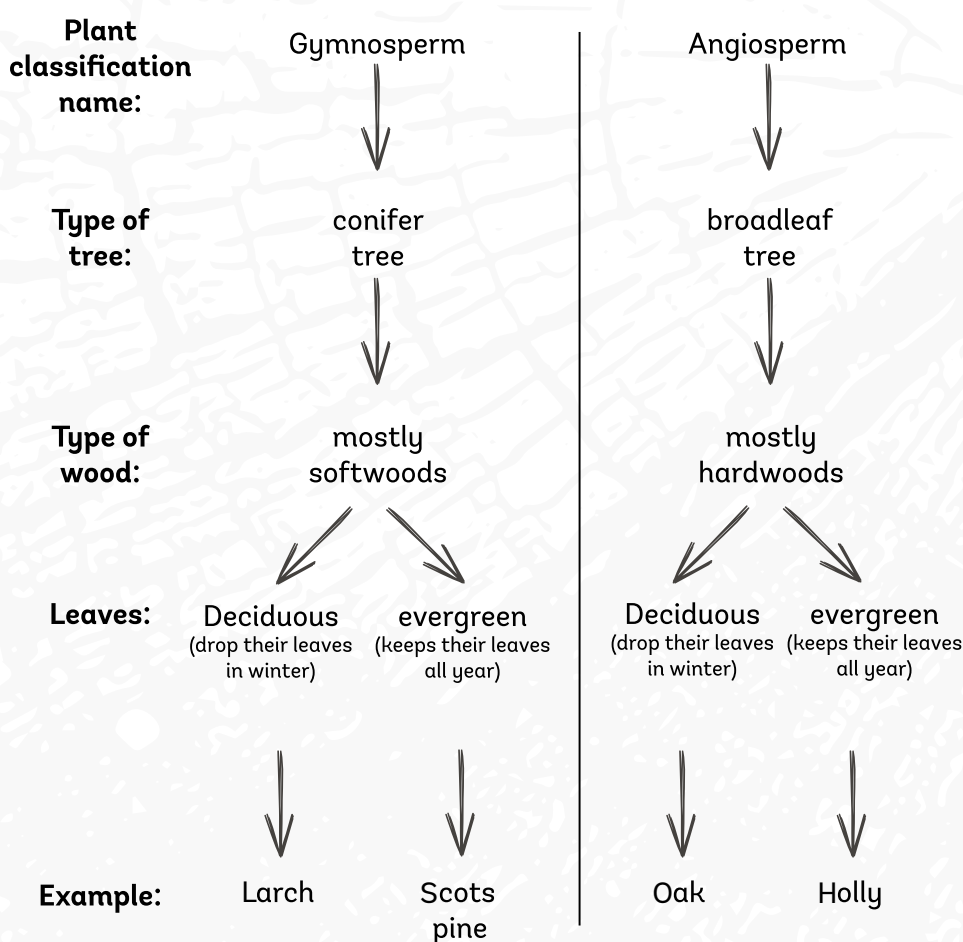
This worksheet introduces children to the correct vocabulary for classifying trees and timber.

Many people use the word 'deciduous' to describe all broadleaf trees which is incorrect. Diagram 1 shows that tree species are divided into two botanical groups: conifer and broadleaf. Trees within each group are then divided again into deciduous and evergreen depending on their leaves. So all of our trees in the UK can be divided into four categories:

Deciduous conifer trees Mostly softwoods	
Larch	Softwood used for a wide variety of outdoor uses, eg fences and boats
Evergreen conifer trees Mostly softwoods	
Norway spruce	Musical instruments and Christmas trees
Scots pine (native)	Buildings, telegraph poles, paper
Juniper (native)	Carving, (berries used in gin)
Noble fir	Christmas trees, carpentry
Douglas-fir	Flooring, aircraft and boats
Deciduous broadleaf trees Mostly hardwoods	
Oak	Buildings, furniture
Silver birch	Furniture, utensils
Rowan	Inlays on furniture
Hawthorn	Small boxes and carvings
Hazel	Hurdles, charcoal, firewood
Dogwood	Tool handles, weaving
Wild cherry	Pianos, violins, furniture

Willow	Biomass, weaving, aspirin
Field maple	Furniture, veneer
Crab apple	Small objects, boxes, handles
Dog rose	Twigs used as twine
Blackthorn	Walking sticks, bowls, spoons
Elder	Pea shooters
Evergreen broadleaf trees Mostly hardwoods	
Box	Handles, wood cuts
Holly	Inlays, firewood and Christmas decorations

Diagram 1: Tree and wood words



Activity 1: Who am I? Answer sheet

This activity should help children test their understanding of the meaning of the words introduced in Diagram 1.

1. I am a broadleaf deciduous tree. My timber is hardwood and it is heavy. I grow from a small acorn. Who am I?

- a) Douglas-fir
- b) Oak - CORRECT
- c) Scots pine

2. I have wide leaves and I keep them on my branches in winter. My leaves are spikey and people like to use my branches for Christmas decorations. Who am I?

- a) crab apple
- b) holly - CORRECT
- c) silver birch

3. I am a softwood and my leaves fall off in winter. My leaves are shaped like needles. Who am I?

- a) a deciduous conifer – larch - CORRECT
- b) an evergreen conifer – Scots pine
- c) a deciduous broadleaf – Oak

Activity 2: Be a tree detective! Comparing conifer and broadleaf trees

This activity is a chance to go outdoors and find a conifer and a broadleaf tree on your school grounds, Forest School site or nearby park or woodland area. You will need to print and laminate the identification sheets so that the children can use them to identify trees. They can also make a tree iDial. Take sketch paper, pencils and charcoal outdoors with you so the children can draw the whole shape of the trees. Leaves, cones, seeds and bark can be collected and brought back to the classroom and drawn in detail.

Choose a research method the children can use to fill in the comparative table such as internet, books, etc. You could ask a parent or local person who is a forester, biologist, or natural historian to come into the classroom and give a talk on trees.

Ask a tree surgeon or wood worker to cut you two slices of cross sections of logs; one from a broadleaf tree and one from a conifer. The children can then see the differences between the two types of wood such as the tree rings, colour and texture of the wood. They can also feel the difference in weight between the two slices

In general, because broadleaf trees are slower growing their rings are closer together than a conifer tree. This makes their wood denser, harder, stronger and more expensive. Because conifer trees are faster growing their tree rings are wider apart, which makes their wood lighter, less dense, soft and less expensive.

KS2 curriculum links:

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Design and Technology		- Generate, develop, model, and communicate their ideas through discussion, and annotated sketches.
Science	Year 3	- Plants: identify and describe different functions of plants: leaves, trunk, flowers, roots.
	Year 4	- Living things and their habitats: Recognize that living things can be grouped in a variety of ways, identify and name a variety of living things in local environment. Identify changes throughout the year.
	Year 5	- Working scientifically: Identify, classify and describe living things and materials.
	Year 6	- Living Things and their habitats: Use classification and keys to identify living things in the immediate environment.
Art and Design:		- Improve mastery of techniques including drawing with a range of materials (charcoal).