

Hello Trees Resource Sheet



What to look for outdoors in Summer

Tree identification: Silver birch



'Pupils should be taught to **identify and name** a variety of common wild and garden plants, including **deciduous and evergreen trees**.'

The National Curriculum Year 1 Science programme of study, Plants, Statutory requirements



Have a magnifying glass in your pocket.



This is a good tree to practice tree identification: there are lots of them around, they have a distinctive shape and their bark is easy to recognise.



There are 6 clues to tree identification: we have **buds, branching and bark** (all 'b's) and **flowers, leaf and fruit** (each has an 'f' somewhere).

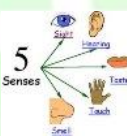


Let's look for a silver birch tree.



Silver birch bark

The silver (white, really) **bark** is a give-away clue.



Feel how smooth the white bark is and how rough the black bark is at the bottom of the trunk.

I think the rough black markings look like long moustaches around places where branches used to be.

Diamond shaped rough black markings at the base of the tree confirm that our birch is a native silver birch.



The botanical name of our native silver birch is *Betula pendula*.

'Pendula' means 'hanging down'. We talk of a 'pendant' (something hanging from a chain).



What is 'hanging down' on a birch tree?



Yes, the **branches** are hanging down.



A silver birch in summer and in winter



Whether they are covered in green leaves, yellow leaves or bare of leaves, we can see the delicate branches of the birch tree dangling down and swaying in the breeze.

We have done **bark** and **branching**. What about **buds**?

Can you spot the **buds**?



They will be at the leaf axils: where the leaf stem meets the twig.



birch buds

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How would you describe the buds: their size, colour, shape – and anything else about them?

The tree identification manuals say that

on a mature *Betula pendula* the buds are:

* 4mm long

* Shiny green

* Conic ovoid (egg-shaped with pointed end)

on a young *Betula pendula* the buds are:

* 3mm long

* Dull purple-brown

* Blunt ovoid (egg-shaped, no point)



Based on this information, is your birch tree mature or young?

Mine is young – as you can see from my photo of its buds.



Let's look at silver birch **leaves** next.



How would you describe their shape? I find that some are like a triangle and some more like a diamond.

And they all have more of a point at the tip than either a triangle or a diamond.



The text-book description of the *Betula pendula* leaf shape is 'rounded-triangular' – but don't expect to use that description in your maths lessons!

Turn your leaf over and look at the veins.



Action Count the veins branching out from the centre on either side of the central vein.

Are there the same number on either side?

There are 6 pairs of branching veins on my silver birch leaf. Is yours the same?

Follow the line of one of the branching veins until it reaches the edge of the leaf.



Can you see a spike, larger than spikes next to it, sticking out of the edge of the leaf?

Is there a larger spike at the end of each of the other veins?

Can you see smaller spikes in between the ones at the end of each vein?

Wow! You are doing detailed observation. Now you will have something to show grown ups.

I bet they haven't noticed the different size of serrations (spikes) along silver birch leaves.

Whoops! We have not covered silver birch **flowers** and **fruit** and we are nearly out of space.

Silver birch flowers and fruit are both in the form of catkins.



There are always catkins to be seen on a birch tree.

But which are which? And which ones change into what?



Silver birch catkins



And more silver birch catkins

Let's do a separate proper job on [silver birch catkins](#): fun things to find out about them and fun things to do with them.