

NETTLE TIP: If you're harvesting nettles and find a curled-up leaf, it may be home to a caterpillar, so do leave them behind!

Science

Plant ID keys: KS2 + KS3

Use branching keys to compare stinging nettle and dead nettle, and other similar looking plants – the photo shows nettle on the right, and garlic mustard on the left. These plants' flowers are very different, but their leaves and habits are similar.



[LINK to Phil's ID pages here and to ID Games for any leaves.](#)

Nettle as a soil indicator: KS3

Investigation question:

- Why do nettles grow here and not there?
- Nettles indicate soil high in phosphates and nitrogen. Set up an investigation testing soils for their pH and NPK levels at various points around the school grounds or other testing site. Plot these on a plan of the site used and compare the readings at each nettle location.

Food chains – ladybird / butterfly: KS2

Nettles are an important link in the food chain, supporting aphids, some butterflies, ladybirds and then spiders and birds such as blue tit, too. This website contains more information about why nettles are vital to wildlife:

<http://www.nettles.org.uk/>

Count the number of ladybirds and ladybird larvae that you find in a nettle patch compared with a rose bush and hard ground. Choose an appropriate way of recording the data:

- Why are there more ladybirds in nettles (look for aphids as a clue)?



Growing and eating

Fair testing: KS2 + KS3

Chopped nettles can be used as an activator to speed up decomposition in a compost heap. Set up an experiment to test the different decomposition rates of heaps with and without added nettles. For a fair test, each heap must have the same type and volume of material added.



Nettles compost heap

Nettle water as plant food: KS2

Make plant food from nettles to feed your allotment beds. To make a fair test, plant the same seeds and then compare the rate of growth in the beds fed with nettle water compared to beds not fertilised at all, or fertilised with purchased plant food.



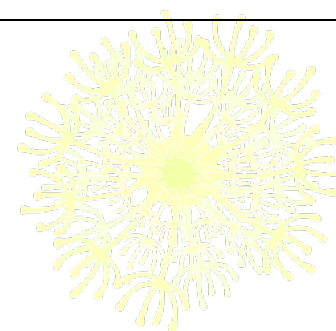
Nettle plant food

Nettle recipes: KS2 + KS3

Nettle makes an excellent substitute for many green, leafy vegetables. Try it in pesto, deep fried in tempura batter, in savoury scones or in a soup.



Nettle recipes



Science

Mordants and dyeing: KS3

Plants have long been used to create dyes - nettles in particular, due to their sheer abundance. A mordant is required to ensure the dye 'fixes' to the fabric.

Rebecca Desnos' blog has lots of information about using nettles to dye a range of different fabrics. Experiment with different fabrics and mordants to explore the range of colours you can achieve with nettles: <https://rebeccadesnos.com/blogs>

<https://botanicalcolors.com/how-to-mordant>

This website includes lots of information about mordants.



Nettle dye



Plant dye mordant

Plant adaptations: KS3 + KS4

Why do nettles sting and can dock leaves really help?

- In brief, nettle hairs contain histamines; dock leaves contain antihistamines. Visit the Science and Plants for Schools website www.saps.org.uk and search for 'why do nettles sting'. The site has many resources to help this investigation.



Why do nettles sting

Maths

Measuring irregular shapes: KS2

Making nettle cordage is a satisfying process. Traditionally, plant cordage had many uses – check out the Play Springboards for more ideas.

- Make nettle cordage - or use lengths of any long-stemmed climbing plant (such as honeysuckle or ivy) stripped of its leaves.

Measure the cordage, and cut it into 50cm and 1m lengths, and use to measure the diameter of irregular objects, such as tree trunks.



Literacy

Poetry: KS2 + KS3

Acrostic poem example:

Nutritious

Edible

Tasty

Tricky

Lush

Excellent

Stinging nettles!

Explore the poem Nettles, by war poet Vernon Scannell:

My son aged three fell in the nettle bed.

'Bed' seemed a curious name for those green spears,

That regiment of spite behind the shed:

It was no place for rest. With sobs and tears

The boy came seeking comfort and I saw

White blisters beaded on his tender skin

We soothed him till his pain was not so raw...

Ladybirds are loved wherever they are found and are sometimes believed to bring good luck and are given special protection. There are many rhymes about ladybirds – for example:

Ladybird, ladybird

Fly away home,

Your house is on fire

And your children all gone;

All except one

And that's little Ann,

And she has crept under

The warming pan.



Nettles by Vernon Scannell

Descriptive language – an insect's eye view: KS2

Describe a nettle patch in the form of an Estate Agents' particulars, focusing on a nettle patch as an ideal location for a butterfly to lay her eggs. Examine food chains and soil conditions to add richness to the prose.

Etymology the roots of words): KS3

Common name: nettle

Scientific name: *Urtica dioica*

Scientific names are commonly italicised, and sometimes known as 'Latin' names, even though not all are rooted in Latin. Nettle's scientific name is rooted in Greek:

- Urtica* – sting
- dioica* – of two houses