

Bee balls

Resources needed:

- 1 spoonful of wildflower seeds
- 4 spoonful of peat-free compost
- 1 spoonful of clay or powdered clay and water

Recommendations for the soil ratios vary, so adjust as needed to make nice balls that stick together well.

Which seeds? As well as wildflower mixes, you might like to try some wild thyme, knapweed, chamomile, buttercups, lettuces, sunflower seeds.

Instructions:

- Mix, roll to marble-sized, leave to dry.
- Throw onto
 - Soil, especially churned up soil
 - NOT
 - Industrial sites, roadside verges, grassy wastelands, trampled playgrounds
 - Overgrown spots
 - Very shaded areas or too close to a fence
 - Very puddly places
 - Fertile farm fields

Farm fields contain fertilisers, rich in nitrogen and phosphorus. This helps grasses and nettles grow - why might grasses and nettles make it hard for wildflowers to grow there too?



Early years,
Key stages 1-4
Resources needed
Moving
20 mins

Image: Pixabay

<https://pixabay.com/vectors/honey-bee-flying-insect-honeybee-311047/>

Instructions from:


<https://www.envchemgroup.com/resources.html>

Key Stages 3-4:

Neonicotinoids or "neonics" are pesticides sprayed on food crops to poison pests. However, they harm other, non-target species, including bees. Bees pollinate 87.5% of food crops including, so without them we could face a food crisis, and the natural ecosystem could be disrupted. In particular, chocolate could be affected.

Making wildflower seed balls and sowing them in the right soil can help support bees.

Sites that are very bare, like industrial sites, tend to lack the chemical nutrients in the soil to grow wildflowers. They might even suffer from **chemical pollution**, which can directly harm the seeds or **microorganisms** in the soil.



It is hard for wildflowers to grow in places where the soil has been **compacted**. Can you think why?

Early years,
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Removing pollutants from the soil is **challenging**: like removing salt from seawater. How might you go about cleaning up polluted soil? Design an experiment to remove dissolved chemicals from wet soil.

Instructions:

Positive result:

Negative result:

What is the pH of your soil?

Resources needed:

pH paper or universal indicator

Instructions:

Wildflowers grow best in neutral (pH 7) soil. Take a sample of soil from your chosen site, mix with water, and test to see how acidic it is. Record your result:

Early years,
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More reading:

<https://www.envchemgroup.com/neonicotinoids-updated.html>