

Our Living Landscape



Soil Topic Activity Guide: How to Love Worms

Aim of activity

To understand the importance of worms and how to look after them.

Note: This activity could be easily combined with our *How to get into soil* activity.

Resources

Area of the school garden or playing field, where digging can be done (and ideally with worms in the earth)

Garden fork

Hand forks or trowels for the children to use

Live worms*

Paper and pencils for drawing worms (optional)



Delivery of activity

We recommend teachers prepare for delivering this activity by watching our video '**How to Love Worms**' [[click here](#)]. *Worms are more likely to be near the surface if it has rained recently. If it has been very dry or the earth at school is poor, you may wish to consider bringing in some worms from home or ordering some online. If anyone has a compost heap at home, you will usually find some there!

A Step by Step Guide:

1. Introduction

Introduce the activity with a few facts which will grab the children's attention, e.g.:

- There are 26 different types of earthworm in the UK
- Earthworms have five hearts
- Earthworms don't have nostrils, lungs or gills – they breathe through their skin
- Earthworms are both male and female at the same time: they are hermaphrodites

2. Key points to get across during the activity

- Worms play an important role in making nutrient-rich soil for plants to grow in.
- Earthworms like to feed in healthy, moist soils which have plenty of organic matter. When they eat they break down and recycle the organic matter, which helps fertilise the earth.
- Earthworms improve the structure of the soil: they burrow through the earth leaving spaces so water can drain away from the surface and be stored down below.
- Earthworms can be divided in to three groups: surface dwelling (epigeic), shallow burrowing (endogeic) and deep burrowing (anecic).

3. Instructions - Outside on a Dry Day

- Invite the children to share a word which they think describes a worm or use the sentence stem 'I like/don't like worms because they are.....'. Discuss whether the words are positive or negative and why that might be.
- Lead the children over to the area identified for digging.
- If the ground is a bit hard, it may be useful to start part of the digging for them, using your garden fork.
- Encourage the children to dig up some large clods of earth and look for worms. Encourage them to touch and handle the earth and any worm/s they might find.
- Note that when handling worms they prefer to be kept damp so you could have a plant sprayer handy. Also they don't like the sun...remember they live underground.
- Children could be asked to draw a worm and label the different sections including the saddle, head, tail and where the hearts are.
- **Remember to return the worms to the earth where they came from at the end of the session.**
- Invite the children to choose a word to describe a worm now they've learnt about what they do.



4. Ask the group to consider the following questions...

How can you tell which is the front end of the worm?

An earthworm always moves forward with its head first. Adult earthworms have what looks like a bank of extra skin: this is called the saddle (clitellum) and the end of the worm which is closer to this is the head end. Juvenile worms do not yet have a saddle.

Is it true that if you cut an earthworm in half you get two worms?

No! You are most likely to get a dead worm in two pieces. An earthworm may survive if their tail end is cut off but will not survive if the front part of their body between the head and the saddle is cut as this is where their major organs are.

Additional Activities and Further Information

- Ted Hughes nature poems: Worm, Worms, available at: <https://www.fwagsw.org.uk/Pages/FAQs/Category/ted-hughes-poems>
- Worms Acrostic: <https://www.fwagsw.org.uk/Handlers/Download.ashx?IDMF=bf00891e-417c-4c69-ac6b-c2b7322c7674>
- Wild about worms: https://www.wildaboutgardens.org.uk/sites/default/files/2021-01/WORMS%20WAG%202018%20-%20Booklet%20Digi_0.pdf
- Videos of worms and other soil creatures: <https://www.soilassociation.org/causes-campaigns/save-our-soil/meet-the-unsung-heroes-looking-after-our-soil/>
- How to make a mini-wormery: <https://schoolgardening.rhs.org.uk/Resources/Activity/Mini-wormery>
- How to create homes for worms: <https://www.earthwormwatch.org/conservation-activities>
- Soil Science Factsheets: <https://soils.org.uk/education/downloads/>

