

# How to make a wormery



The scientist Charles Darwin (1809–1882) believed that, without worms, life on earth would be impossible. They make soil richer, encouraging healthy plant growth, and reduce the amount of plant waste in the environment. The instructions here tell you how to breed worms, which you can then release into your garden or local park.

## Materials

- 2-litre plastic drinks bottle
- plant pot filled with soil or compost
- black paper, cardboard or material
- crushed chalk – school chalk will do (or pea gravel can be used instead)
- sand
- soil or compost
- dead leaves
- earthworms (see 'How to hunt for worms', below)
- a marker pen



Always wash your hands after handling soil.

## Instructions

- 1 Cut the top and bottom off the plastic bottle, leaving a tall cylinder.
- 2 Put about ten earthworms into the soil in the plant pot.
- 3 Place the cylinder made from the bottle on top of the soil and fill it with alternate layers of soil, sand and crushed chalk or gravel if you are using it. (The sand and chalk or gravel layers need only be thin.)
- 4 Mark the levels of the layers of soil, sand and chalk/gravel on the cylinder with the marker.
- 5 Place some dead leaves on top – preferably broken up into smallish pieces.
- 6 Cover the cylinder with the black paper, cardboard or material to keep out the light.
- 7 Keep everything damp – not wet – and leave for several days. Lift the cover and observe what has happened.

## Notes

There should be roughly 85 per cent soil and 15 per cent other materials in the wormery. The wormery needs to be kept somewhere cool and once set up can be left for one or two weeks. If you leave it any longer than this, the worms are in danger of dying. The worms can be released where they were caught. After another week or so, the wormery can be set up again.

## How to hunt for worms

**Method 1 – Habitat hunt** Turn over stones and dead wood, look under leaf litter and dig in bare earth.

**Method 2 – Stamping up and down** Worms are attracted to the surface by vibrations.

**Method 3 – Soaking** Thoroughly wet an area of grass, cover it with black plastic and wait for 30 minutes. The water floods the worms' burrows and unless they come to the surface they will drown.

**Method 4 – Twanging** Put a garden fork into an area of grass and rock it backwards and forwards for 15 minutes.

1 Look at the instructions for making a wormery, numbered 1 to 7. What is similar about the first word in each instruction?

1 mark

2 Some words are in coloured print. What is the reason for this and how does it help the reader?

1 mark

3 Which material may be used as an alternative to chalk?

1 mark

4 How do you create a cylinder from a bottle?

1 mark

5 The wormery's thickest layers will be made of what?

1 mark

6 What sort of leaves do you need?

1 mark

7 Why do you think it is necessary to keep out the light?

1 mark

8 How long can you keep a wormery without any worms dying?

1 mark

9 Why do you think you should leave it 'another week or so' before setting up another wormery?

1 mark

10 Which methods of finding worms require no tools or equipment?

1 mark

11 a) What is the name of the method that involves rocking a garden fork to and fro?

1 mark

b) How long does this method take?

1 mark