

Soil Defenders Pathway

Full resources list

Session 1

- access to the internet

Optional:

- plant trays
- compost
- watering cans
- arable seeds (e.g. winter wheat)

Session 2

Per group:

- 8 level tbs of soil
- 4 small wads of cotton wool
- access to running water
- 4 measuring cylinders
- 4 funnels
- stopwatch
- a selection of weights

Optional

- cameras/iPads
- cotton reel
- metal knitting needle (which fits inside cotton reel)
- permanent marker
- rubber band
- 30cm ruler

Session 3

- oat, wheat and barley seeds
- foods made from oat, wheat and barley
- hand lens
- laptops or electronic devices for research
- paper, pencils and rulers etc.

Optional

- a small bag of wheat seeds for planting
- soil or compost
- 4 seed trays
- 30cm ruler
- large sheets of paper

Session 4

Per group:

- 5mm thick corrugated card
- 3mm skewers, dowel or straws
- seeds, beads, or marbles
- PVA glue or masking tape
- scissors
- cardboard tube
- recycled boxes
- A4 sheet of light card
- craft sticks
- rubber bands
- paper cups

Optional access to additional tools:

- glue gun
- craft knife
- cutting board

Session 5

Per group:

- computer with access to the internet
- micro:bits (note this lesson uses V2 micro:bits, but if you don't have micro:bits, or only have V1, then you can use the online simulator instead:

<https://makecode.microbit.org/>

Optional:

- servos

