

Putting Plants To The Test

KS1

National curriculum objectives



- working scientifically: performing simple tests using observations and ideas to suggest answers to questions
- find out and describe how plants need water, light and a suitable temperature to grow and stay healthy

Resources (you will need):

Plant pots (clear plastic cups are great for planting as you can often see the roots growing), soil, seeds (cress or radish seeds grow quickly), cardboard, resealable clear plastic bags.



30 MINUTE ACTIVITY

Split the class into small groups with at least one group each from the following:

Group A - Light. Fill two pots with damp soil and put a few seeds in each. Cover one pot with a long, thick cardboard tube (or sellotape some cardboard around the pot). This means it still has air but very little light. Place both pots in the same warm, light place.

Group B - Water. Fill pot one with damp soil and pot two with dry soil (that you have ideally left out in the sun or pre-baked in the oven). Put a few seeds in each. Place both pots in the same warm, light place.

Group C - Temperature. Fill two pots with damp soil. Put a few seeds in each. Place one in a warm, light place and the other in a cold, light place outside.

Group D - Air. Fill two pots with damp soil and put a few seeds in each. Place one pot in a resealable, clear plastic bag and seal it. Place both pots in the same warm, light place.

Explain that apart from Group B, all groups are to water both of their pots evenly. This will not need to be every day (make sure to explain 'overwatering' and the damage it can do). Group B must only ever water pot one.

Class reflection

Discuss predictions. The seeds placed in the disadvantaged pots (with no water, cold, covered or with no open air) may well still germinate (as most seeds have a store of food inside them) but if they do they will produce pale/mouldy, unhealthy plants which will die off quickly if conditions are not changed. It is really important that we look after our environment so that plants can thrive and grow healthy.

Have time for a literacy link?

Make small booklets to record findings and then present them, together with conclusions, at the end of the experiment.

Philosopher question

How are we similar to plants?

