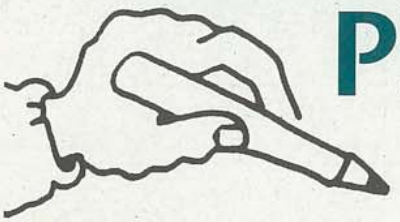
How Plants Grow

KS 2/3



Plants are amongst the most brilliantly coloured of all living things. They play an important role in feeding ourselves and many other animals.

If we pollute the air, water or land, plants may not grow.

Plants need sunlight, soil and water to grow well. A plant gets almost all its water from the soil. This is moved up from the roots in a process called Transpiration. The water moves through the stem and into the leaves, where it is used to make food for the plant to grow.

TRANSPIRATION

This experiment shows that water in the stem of a plant can carry other substances with it. The experiment also shows that water in different parts of the stem is kept separate as it moves upwards.

YOU WILL NEED

- 2 glasses
- Pale coloured flower
- Food dye
- Sticky tape

1. Fill the glasses with equal amounts of water. Add some food dye to one glass, and stir well.

2. Slice the flower's stem in two, lengthways, stopping when you have reached about halfway.

3. Fasten some tape at the end of the cut, to stop the stem splitting further.

4. Put each half of the stem into a glass.

Write down what happens.

Design an experiment to work out the rate water moves up the stem of a plant.