

## Watch roots and shoots

- Scrunch up some paper towels. Put them in a big jar.
- Dampen the towels with a few drops of water.
- Push some bean seeds down the sides of the jar. The towels will hold them in place.
- Put the jar on a windowsill. Check your beans daily.
- Watch roots pop out of your beans and push down, while green shoots grow up.

Roots grow downwards, and shoots grow up towards the light.

## Watch flowers drink

- Snip the stems of two white carnations, cutting them at an angle.
- Pour water in a vase and add 20 drops of red food colouring.
- Put your carnations in the vase, then wait a day.
- The flowers turn pink! They drink red water through their roots and stems, drawing it up to their petals.

Flowers draw water up their stems to reach their leaves and petals.

## Watch leaves grow

- Half-fill two cups with soil. Plant broccoli seeds in both.
- Label one cup 'light' and the other 'dark'.
- Shut the 'dark' cup inside a shoe box.
- Put your 'light' cup and shoe box in a sunny place.
- Water the soil in each cup if dry. Keep the 'dark' cup inside the box.
- Seeds should sprout in both cups, but only the seeds in the 'light' cup will grow green leaves.

All seeds sprout in dark earth, but they need light to grow green leaves.

## Watch leaves breathe

- Collect some big leaves from different kinds of tree.
- Pour warm water into a glass dish. Put it in a sunny place.
- Push your leaves under the water. Put a stone on each leaf, to keep it just below the surface.
- After a few hours, you can see tiny bubbles of oxygen form on the leaves as photosynthesis takes place.

Plants use their leaves to take in carbon dioxide, and to breathe out oxygen.