Capillary Action

Plants take in water by a process called 'capillary action'. Water naturally climbs up very small spaces such as the tiny tubes in the roots and stems of plants. Follow the instructions below to see how this process can make water travel 'uphill'!

You will need:

- two glasses or clear beakers
- water
- food dye
- kitchen roll

Fill one of the glasses with water.

Add food dye to the water (roughly 1-2 teaspoons) until it is brightly coloured.

Take a piece of kitchen roll (2-3 squares in length) and gently twist it to make a 'rope'.

Use some old books or boxes to raise the empty glass. If you want the capillary action to happen more quickly, only raise the empty glass a few millimetres above the full glass.

Place either end of your kitchen roll 'rope' fully into each glass. The liquid will begin to rise up through the paper due to capillary action! What do you think will happen eventually?