

# How to Grow a Rainbow

## Science Experiment

Did you know that you can grow your own rainbow?

You will need a scientific process called the **capillary action**. This action happens when a liquid moves up through a hollow tube or into a spongy, solid material. It happens when three forces work together: **cohesion**, **adhesion** and **surface tension**.

Water molecules like to stick to each other - this is called **cohesion**. They also like to stick to solids in a process called **adhesion**.

In this experiment, you are going to use kitchen roll. The fibres in kitchen roll have lots of little holes. Water is **absorbed** through the kitchen roll because when the first water molecule **adheres** to it and begins to move upward, it pulls the next water molecule up with it, like a chain.



### Words To Learn:

- capillary action
- adhesion
- cohesion
- absorbed

### You will need:

- Kitchen roll/paper towel
- Felt-tip pens
- Two small bowls of water
- Paperclip
- Thread

### What To Do:

1. Cut the kitchen roll into the shape of a rainbow.
2. At each end, use the felt-tip pens to colour a rainbow about 2cm up from the bottom. Remember the order of the colours: red, orange, yellow, green, blue, indigo, violet.
3. Attach the paperclip to the top of the rainbow and tie a piece of thread to it. This will allow you to hold your rainbow.
4. Add water to the two bowls.
5. Hold the rainbow with both ends slightly submerged into each bowl of water and watch your rainbow grow.

