

SCIENCE EXPERIMENT! HOW TO MAKE A RAINBOW

When King Alonso and his crew come across the magical feast in the enchanted glade, the weather is good-blue skies and sunshine. However, as the Harpy comes down the weather turns quickly-rain and thunder descend! When there is sunshine and rain you will often be able to see a rainbow.

Make your own rainbow-following this simple experiment.

Background/Scientific context

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 need to use kitchen roll or thick paper towel. 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.

YOU WILL NEED!

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

METHOD:

- 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.

ARE THERE ANY OTHER WAYS YOU CAN MAKE A RAINBOW?

SEND YOUR CLASS TEACHER OR US A PHOTO OF YOUR RAINBOW!