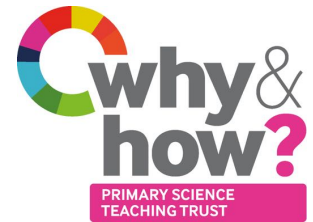


SCIENCE FUN AT HOME



Have some fun at home with these science activities from **Science Sparks** and the **Primary Science Teaching Trust**



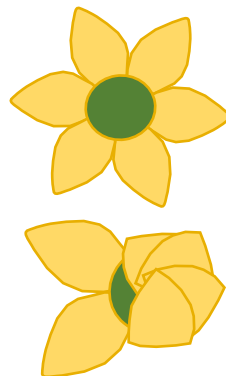
BEFORE YOU START! Please read through this with an adult:

- * Make sure you have read the 'IMPORTANT NOTICE' on the back of this page.
- * If you have a space outside that you can use safely, then you can do the 'Try this outdoors' activity outside. Don't worry if not as you could still do it indoors.
- * Talk to your adult about sharing the science you have done and if they want to share on social media, please tag **@ScienceSparks** and **@pstt_whyhow** and use **#ScienceFromHome**

SCIENCE FLOWERS

1 TRY THIS INDOORS ... FLOWER POWER

Draw and cut out some paper flower shapes. Gently fold each petal into the centre so they overlap, and then float the flower in the bowl of water. Watch what happens! Experiment to find out what happens with different sizes of flower and types of paper or card. Can you time how long different flowers take to open?



You will need

- * Different kinds of paper and card
- * Scissors
- * Bowl of water
- * Other liquids, e.g. milk, cooking oil (optional)
- * Sketch book and pencil
- * Magnifying glass (optional)

WHAT DO YOU NOTICE?

Things to talk about ...

Why do you think the paper flowers open when you put them into water? What happens when you use thicker or thinner paper, or with different sized flowers? Does it still work if you use a different liquid like milk or cooking oil?



2

TRY THIS OUTDOORS ... FLOWER SAFARI

In your garden or local park look for as many different flowers as you can. Each time you find a flower look at it carefully (with a magnifying glass if you have one) and draw a picture of it. Count how many petals it has. Observe the flowers for a few minutes to see if insects, like bees, visit the flowers.

WHAT DO YOU NOTICE?

Things to talk about ...

Why are flowers often colourful? Why do they often have a nice scent? Do different flowers have different numbers of petals? Are some flowers visited by more insects than others?



3

WHAT IS THE SCIENCE?

Paper is made of lots of fibres. The spaces between the fibres can absorb water and when this happens, the paper expands which is why the flower opens up. The fibres and the sizes of the space between them vary from paper to paper which is why some flowers open faster than others. When water flows into narrow spaces in this way, often against gravity, it is called **capillary action**. Another example of capillary action is water moving through the roots of a plant and into the stem and leaves.

Plants often have coloured flowers and/or a nice scent to attract insects like bees. While the insect is collecting nectar for itself from the flower, it might **pollinate** the flower (transfer **pollen** from one flower to another). After pollination has occurred, the plant can produce seeds which in turn could grow into new plants.

4

MORE ACTIVITIES YOU COULD TRY

MAKE COLOURED FLOWERS - <https://www.science-sparks.com/changing-colour-flowers-with-transpiration/>

BUILD A BIOME - <https://wowscience.co.uk/resource/build-a-biome/>

MAKE A PINE CONE WEATHER STATION - <https://www.science-sparks.com/pine-cone-weather-station/>

TAKE A SCIENCE SELFIE! Maybe you could show other people what you have been doing?

IMPORTANT NOTICE: Science Sparks and The Primary Science Teaching Trust are not liable for the actions or activity of any person who uses the information in this resource or in any of the suggested further resources. Science Sparks and The Primary Science Teaching Trust assume no liability with regard to injuries or damage to property that may occur as a result of using the information and carrying out the practical activities contained in this resource or in any of the suggested further resources.

These activities are designed to be carried out by children working with a parent, guardian or other appropriate adult. The adult involved is fully responsible for ensuring that the activities are carried out safely.