

FLOATING FLOWERS

With some paper and scissors, make flowers that bloom when you place them in water.

Overview



In this activity, you'll create floating paper flowers. The folded petals of your flowers will open up and your flower will bloom when placed in water.

All you need is some paper, colour pens/pencils, and a container filled with water.

[Printable version](#)

This page will print, but looks a little funky. Click the button for a PDF version which looks a bit better. This is a stop-gap while we work on a better solution!

[More STEM at Home](#)

What you'll need

To make our blooming flower, we first needed to gather a few supplies:

- Paper
- Water
- Plastic container
- Scissors
- Colouring pens/pencils (optional)

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20-30 minutes

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Age 3 and up.

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What to do

Step 1



On a piece of paper draw a flower shape.

Your flower can be any size and will need to have petals that you can fold later.

There are lots of printable [flower shapes](#) available online that you could use for ideas.

Now carefully cut out the flowers you have drawn using scissors.

Step 2



Next you need to decorate your paper flowers. You can use felt tips or coloured pencils to decorate them.

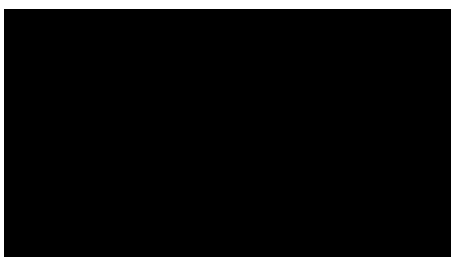
Real flowers are often brightly coloured to attract insects. You could have a look at some pictures of flowers to help you choose your own. The Woodland Trust has [a page all about British wildflowers](#) if you need inspiration.

Step 3



Fold each petal into the centre of the flower. Be gentle, if you crease the fold too tightly the petals will struggle to open.

Step 4



Fill your container with some water.
Carefully place your folded flowers onto the surface of the water, with the folded petals facing upwards.

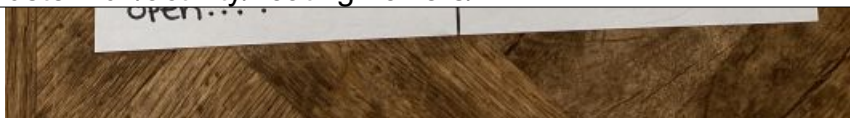
Watch and see what happens. The petals on each flower should start unfold.

You could also time each flower to see which one opens the fastest.

Does it depend on the size or the shape of the flower or the number of petals it has?

You could record your results in a table like the one below.

FLOWER	Time it takes for Petals to open.
Flower 1	10 seconds
Flower 2	15 seconds
Fastest flower to open	



Things to discuss

- Does the way you fold the petals make a difference to how it opens?
- Does the flower open in other liquids?
- Does the same thing happen if the flower is made from other types of paper or card?
- Do other paper shapes do the same thing?



How does this work?

Paper is made up of lots of fibres. There are lots of tiny spaces between the fibres. You can see these by using a powerful microscope like in these pictures: [Paper 100x magnified](#).

When you float the flower on the water, the water starts to fill the tiny spaces at the folded edges. As they fill, the paper fibres absorb the water and start to swell. This pushes open the folds on your paper flower.

This movement of water into the spaces in the paper is an example of capillary action. Real plants need capillary action to survive because it lets the water they need move up into their stalks or trunks.



Other things to try

This video shows how you can use capillary action to change the colour of flowers.

