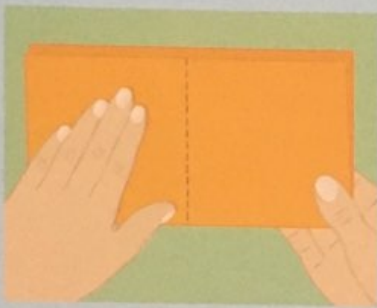
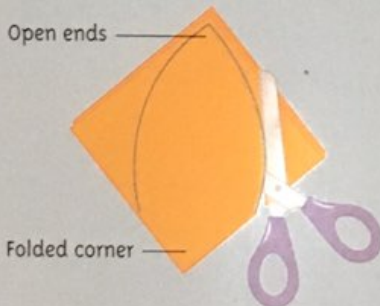


Floating flowers

When paper gets wet, the thin wood fibres it's often made of absorb the water. This makes the paper swell and expand a little. With this experiment, you can see how this works and amaze your friends.



1. Cut out a square of paper about 15cm x 15cm (6in x 6in). Fold it in half one way and then in half again.



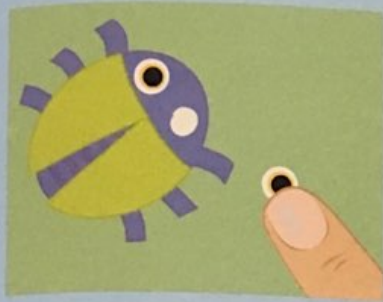
2. Draw a petal shape outwards from the folded corner. Cut around the shape to make the petals.



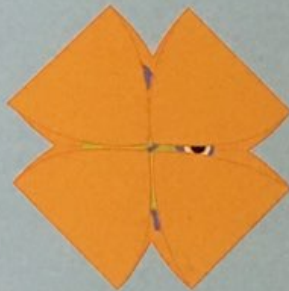
3. Open out the paper. Fold the tip of each petal to the middle point – the place where the creases cross.



4. To make a beetle to hide in the flower, draw an oval body on bright paper, add six little legs and cut it out.



5. Cut out two wing shapes and two eyes in different-coloured paper and glue them onto the body.



6. Put the beetle inside the flower. Fold down the petals. Fill a sink with water and lay it on top. What happens?



7. You could make more flowers from different types of paper and float them. Do some open faster than others?

You could make lots of different creatures to hide inside the flowers.

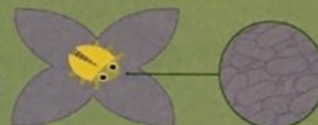


What's going on?

As the fibres in the paper soak up water, they swell and the paper expands. As this happens there is a slight movement which makes the flower open up. Different types of paper soak up water at different speeds. Thin paper, such as newspaper, absorbs water very quickly. This makes the flower open up immediately. Other papers have thicker fibres, so it takes longer.



The paper lies flat when it's dry.



As the fibres swell, they push the paper outwards and the petals open.



For a link to a website where you can find more experiments to do with paper, go to www.usborne-quicklinks.com