

Nature Challenge

Patterns in Nature

This notebook belongs to

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Nature's Pottery

A gourd is the hollowed fruit of different plants in the *Cucurbitaceae plant family*. These include pumpkin, squash and calabash.



Once gourds are hollowed out and dried they can be made into lots of different things: water containers, food bowls, spoons and musical instruments.



People have also used gourds to create printing stamps, which they then use to print patterns onto fabric.

Mini-challenge: Printing Stamp

Try making your own printing stamps from fruit and vegetables. Then use your stamps to create repeating patterns on paper.

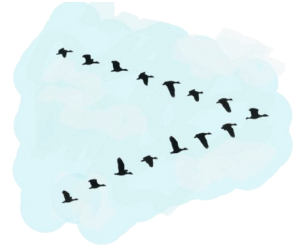
Remember to check with your grown-ups that it's ok to use the food and ask them to help you.

If you do not have any paint, you could try making your own from flour, water, salt and some food colouring.

Patterns in Nature

Patterns are everywhere in nature. A pattern is a design that is repeated over and over again. Look closely at plants, flowers and animals. Can you see any shapes that are repeated again and again?

Patterns are created by simple physical laws. Patterns in sand dunes can be created by wind and snowflakes are formed high in the clouds when water freezes. They always have six sides or arms, but no two are the same.



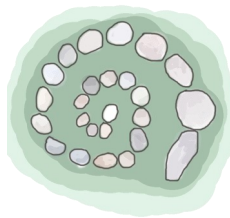
Mini-challenge: Create Your Own Pattern

Use one of the other pages in your notebook to draw your own pattern. Remember to look for inspiration from nature:

- The spots on a ladybird
- The branches of a tree
- The petals on a flower
- The stripes on a caterpillar

Mirror Mirror

Symmetry is everywhere in nature. Reflective symmetry is where one half of an object or image looks exactly like the other half - a mirror image, for example a leaf. Rotational symmetry means an object or image looks the same after being partly rotated (turned) around its centre. Think of the petals on a daisy.



Some artists have used nature as inspiration for their art but others have used nature **as** their art! It is called Land Art, because you do not use paint, crayons, glue or paper. You create a picture or a pattern from the things you find outdoors.

Mini-challenge: Create Your Own Land Art

Collect some natural art resources, like rocks, leaves, flowers and sticks. Try using rotational and reflective symmetry to create some art outdoors.

Remember to only pick flowers and leaves that are on the ground. It's a good idea to wear gloves when collecting things in your local parks. Always remember to wash your hands afterwards.