



Pattern Recognition

Why is it so important?



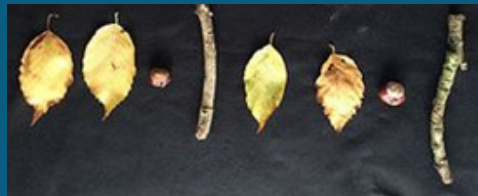
Patterns are central to maths and children have an instinctive idea of patterns. Research shows that children's ability to see patterns forms the basis of early mathematical thinking. When you teach children to become aware of patterns, they will build up the skill of spotting patterns for themselves, they will see how patterns change and notice irregularities.



Pattern awareness can vary significantly between children. Early patterning begins with matching one-to-one with objects, pictures or numbers. From birth to 3 years old you should provide patterned material and small objects to arrange in patterns.

For 3 and 4 year olds you should be introducing more pattern recognition. Talk to children about, and identify the patterns around them, so they can learn the words that describe different patterns.

As children become more confident in making patterns and seeing connections, they will be able to talk out loud about what they have noticed. Children will start to identify the mathematical relationships and connections around them in the home, your setting and outside in nature.



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Patterning supports the foundations for recall of the counting sequence and understanding number operations.



Learning about patterns and connections will help children to make their own predictions and form logical connections. It's an important foundation for later mathematical thinking and reasoning.

What can I do it home to support pattern recognition?

Patterns are all around us. Children have a natural tendency to find patterns; research shows that if you give a child a box full of cups, they will most likely stack them into a pyramid.

Here are a few ideas to try at home...

1. Stack, sort and count blocks

You can help your child to sort items before learning to recognise patterns. You can use different coloured blocks and have them stack, sort and count them. By doing this simple and fun activity, your child will begin to notice things repeat in a certain order by size, shape or colour.

2. Match socks by size and colour

This idea is a win-win for teaching your child about patterns and how to do chores at the same time! While folding the laundry, ask your child to help by matching socks by their size and colour, and then putting them into pairs. This introduces them to sorting and classifying based on pattern recognition. You can also use mittens and earrings. Count out loud by twos with them so they become familiar with the concept of skip counting.

3. Sort kitchen items by category

Unpack your pots, frying pans, kitchen tongs and utensils and have your child help you sort them by category. You can guide them to sort the items by colour, shape, texture or size. Ask your child to name the groups of each category, like 'containers', 'heavy objects' or simply 'black objects'. Sorting and classifying activities like this one encourage children to think analytically.

4. Beads on a string

Bead-making is a fun way to keep children occupied for hours, and is a great way to teach them simple sequencing and pattern creation. Whether you use paper beads or pasta beads, make sure there are at least two different shapes, sizes or colours. Label each type of bead with a letter (e.g. 'A' for purple beads and 'B' for pink beads) and ask your child to create a pattern on a string based on sequences you say aloud, for example, 'A-B-A-B'.

5. 'I spy' patterns in nature

There are so many patterns to observe in nature, from the colour of leaves to the notes of a songbird. Play a guessing game 'I spy a pattern' to encourage your child to observe and create patterns. You can start off with something simple like, 'I spy with my eye a pattern with stripes'. Your child can then take guesses by looking around while you give them more clues until they guess correctly.

