Spatial mathematics includes ideas relating to shapes, shapes within solid objects and the position of shapes and objects. Children need to develop strong images in their minds about shapes and objects and the way they can be changed, put together or pulled apart.

We also need to help children develop the language they need to describe shapes and objects.

**How do children learn about spatial ideas?**

Initially, children will learn about objects and the space around them by experimenting and playing. Young children enjoy building towers or discovering which blocks will stack or roll. While it is not until much later that children will learn the names of three-dimensional objects, we should encourage children to think and talk about the parts that make up the object.

Through early experiences, children will learn the names of simple 2-dimensional shapes, such as triangle or circle. We need to show children shapes in different positions and sizes to help build their mental images of shapes. Drawing and making shapes are key ways in which children can develop these ideas.
Parents Count Too

What can you do at home?

- Read books to your child and talk about the shapes you can see within the pictures. *The roof on the house is a triangle.*
- Look for objects inside or outside the house that are shaped like a circle, triangle, rectangle or square. Look for different sized shapes and shapes in different positions.
- Involve your child in craft activities such as making your own gift wrapping by printing painted shapes onto paper using corks, empty cotton reels or sponges.
- Make shadows on the ground or on a wall using your body or hands and talk about the shapes.
- Fold paper to make a hat or boat and talk about the shapes made as you fold the paper.
- Make your own jigsaw by cutting a magazine picture into about four or five pieces and putting it back together again. Talk about how the edges of the pieces fit together.
- Collect scrap paper or used gift wrapping and encourage your child to cut and glue pieces to make a picture.
- Play *I Spy* games and describe things by size and shape. *I spy with my little eye something that is big and shaped like a square.*
- Use boxes and containers of different sizes to play “stacking” games.
- Ask your child to help you put away the groceries and talk about which things will stack easily.
- Make biscuits using cookie cutters or make pretend biscuits from modelling dough. Talk about the shape of each biscuit.
Help your child to build a paper aeroplane and see if it can fly.

Make sand models from wet sand using cups, buckets or jelly moulds. Talk about sizes and shapes and try to stack some shapes.

Blow bubbles using wire loops or straws and a detergent solution. Talk about the shape and size of the bubbles and the effects when the wire shape is changed.

Collect wood off-cuts and let your child glue the pieces to make a model.

Collect shells at the beach and ask your child to sort them and tell you how he or she grouped them.

Build a “house” from playing cards or dominoes.

Talk about the shapes made when you cut straight through vegetables or fruit.