How to help your child at home:

Spontaneous play offers valuable opportunities to explore this area of mathematics in personally meaningful ways. Different materials and resources including bricks and blocks; dens, role-play and small world play; train layouts; sand and water; play outdoors and dance all provide rich opportunities for children to explore shape and space, position, movement and direction. Junk modelling and free play with construction sets and malleable material such as clay also provide invaluable contexts for young children to investigate.

-Measure for a purpose, such as finding out whether a teddy will fit in a bed.

-Demonstrate the language for shape, position and measures in discussions, e.g. *'sphere', 'shape', 'box', 'in', 'on', 'inside', 'under', long, longer', 'longest', 'short', shorter', 'shortest', 'heavy', 'light', 'full' and 'empty'.*

- Encourage children to talk about the shapes they see and use and how they are arranged and used in constructions.

-Play games involving children positioning themselves *inside, behind* and so on.

- Provide rich and varied opportunities for comparing length, weight, capacity and time.eg measuring and cooking, ordering events during the day.

-Cooking / washing up with children is a great opportunity for them to explore measures and the capacity of different containers

How to help your child at home continued:

-Provide materials and resources for children to observe and describe patterns in the indoor and outdoor environment and in daily routines.

- Provide a range of natural materials for children to arrange, compare and order.

-Be a robot and ask children to give you instructions to get to somewhere. Let them have a turn at being the robot for you to instruct.

-Introduce children to the use of mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and the mathematical terms to describe shapes.

-Encourage children to use everyday words to describe position, e.g. when following pathways or playing with outdoor apparatus.

-Get the children to describe their day by talking about what you did first, second and third etc.

- Play peek-a-boo, revealing shapes a little at a time and at different angles, asking children to say what they think the shape is, what else it could be or what it could not be.

-Provide open-ended resources such as cardboard boxes, cylinders and other containers; tapes, glue and string and other 'junk modelling' materials (clean, empty packaging) for children to explore.

Early Years Foundation Stage

Shape, Space and Measure

WEDDINGTON PRIMARY SCHOOL

Every child, every chance, every day

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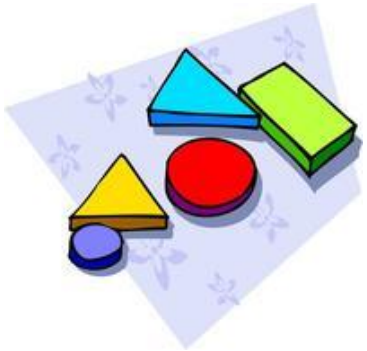
Introduction

Shape, Space and Measure is about how, through talking about, exploring and manipulating shapes and quantities, and developing appropriate vocabulary, children use their knowledge to develop ideas and solve mathematical problems.

As soon as children are born they naturally start to explore their world through space and shape. They appear to have an inbuilt ability to investigate objects and their environmental surroundings. They do this at first through touch and exploring objects with their mouths. Babies and young children will explore the mathematical properties of 3-D and 2-D shapes and space, position, movement and direction through a personal exploration of their environments. These first-hand explorations allow them to use their senses, playing with natural and everyday resources in their home and Early Years settings.

The shapes and spaces of the child's world increasingly open up as they begin to crawl and move in many different ways. Tunnels or arches, small spaces, dens and boxes all offer particular interest and enjoyment. We therefore aim to provide a wide range of opportunities both inside and outside for children to explore space on different levels and in different ways.



Everyday language of shape and space

A child's use of everyday mathematical language should be accepted and valued. Adults can gradually introduce the mathematical language of shape and space, position, movement, direction, pattern, symmetry and measurement in contexts that are meaningful to the child. The naming of shapes can be less important than hands-on exploration and should be introduced to the children during play experiences.

Measures: Time

Daily routines, ordering events, predicting what comes next and recalling what they have done earlier during the natural course of events will help young children become increasingly aware of time. Talking about activities in natural contexts such as the time left before snack-time; discussing how long some cakes need in the oven; how many bedtimes until a child's birthday etc will all help link concepts of time and its language.

Measuring and comparing lengths:

Children need to be provided with a range of interesting materials and different lengths of ribbon or string, including real measuring devices to explore with. Some children may be interested in filling and containing (investigating ideas of capacity and volume) and will benefit from having different-sized containers to investigate with. Including real measuring equipment such as measuring tapes; calibrated measuring jugs; analogue and digital clocks; timers, etc when playing at home is very useful. For example, children could use kitchen timers to help them organise turn taking.

Skills the children will be covering during Reception:

-Sorting or matching objects and talking about sorting
- Match some shapes by recognising similarities and orientation.
-Describes shapes in simple models, pictures and patterns
- Show awareness of symmetry.
-Talk about, recognise and recreate simple patterns
-Use everyday words to describe position
-Use language such as 'circle' or 'bigger' to describe the shape and size of solids and flat shapes
-Use language such as 'smaller', 'heavier' or 'lighter', to compare size or weights.
-Uses mathematical language to describe solid (3D) objects and flat (2D) shapes
- Order two items by weight or capacity.
- Find items from positional or directional clues.
-Sort familiar objects to identify their similarities and differences, making choices and justifying decisions.
-Describe solutions to practical problems, drawing on experience, talking about own ideas, methods and choices.
-Use familiar objects and common shapes to create and recreate patterns and build models.
-Use everyday language related to time; order and sequence familiar events, and measure short periods of time with a non-standard unit, for example, with a sand timer.
-Count how many objects share a particular property, presenting results using pictures, drawings or numerals.