Foulford Early Years Numeracy and Maths Approaches

Numeracy and Maths through Play

At Foulford we offer children a mathematically rich environment. Your child is learning Maths concepts all the time through a wide variety of play experiences. Play is an effective way for children to explore concepts and develop positive attitudes to Maths. Play is the natural way in which children learn. It is the process through which children explore, investigate, recreate and come to understand their world. Play is an activity in which everything that a child knows and can do is practised or used to make sense of what is new. At Foulford we learn through play.

Fife's Numeracy and Maths Curriculum

The Numeracy and Maths curriculum is set out in three parts:

- Number, Money and Measure e.g. counting, addition, money, time and weight
- Shape, Position and Movement e.g. 2D and 3D shape, directions and positions and symmetry
- Information Handling e.g. pictograms, simple graphs and charts

Children will be given experiences which will support and challenge them in these three areas.

Fife's Conceptual Maths Approaches

Conceptual understanding requires children to experience using real objects and concrete materials to explore concepts, and then explain what they have done/discovered. This then helps them to create pictures in their minds which will help them understand abstract/procedural ideas. For example:

When we say a child "knows their numbers" what we often mean is that they can recite the names of numbers in ascending order. Children need to come to know what the number system really means. They can be helped to do this through play.

One of the first things they have to learn is conservation of number e.g. 3 is always 3 no matter how it is arranged or presented, whether it is the number 3, the letters for three, 3 bricks, 3 buttons on a coat or 3 Billy Goats Gruff. Before a child can understand numbers for things that can be seen -3 miles, 3 years old - they need real objects which can be seen and handled with a chance to check that the count is right each time.

CONCEPTUAL









CONCEPTUAL

I have two teddies and my friend gives me one more.





PROCEDURAL

2+1

Maths is Everywhere

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In the street	Doing the washing	<u>Time</u>
Recognising bus numbers Number plate hunt. Who can find a 7? Add the numbers up. Comparing door numbers Counting – how many lampposts on the way to school?	Counting in 2s – matching shoes Sorting by colour and size. Matching/pairing up socks. Find four shoes that are different sizes. Can you put them in order?	What day is it yesterday, today, tomorrow? Use timers, phones and clocks to measure short periods of time. Count down 10/20 seconds to get to the table/ into bed etc. Recognising numbers on the clock. If you cover a number, what number was missing?
Food & Cooking	Games	<u>Shapes</u>
Can you cut your toast into 4 pieces? Can you cut it into triangles? Setting the table. Counting the right number of plates etc. How many more do we need? Helping with the cooking by measuring and counting ingredients. Setting the timer. Positional language at dinner time: what is on the rice, where are the carrots etc. <u>Going shopping</u>	Jigsaws (you can make your own by cutting up a magazine picture) Snap (matching pairs) or Happy Families (collect 4 of a kind) Snakes and ladders or other simple dice games. Adding numbers on two dice. Bingo, with numbers or shapes Hopscotch <u>Number Rhymes and Songs</u>	Cut out shapes from coloured paper/ newspaper and arrange into pictures. Shape hunt: Can you find a square in your house (windows etc), a circle. <u>Tidying toys</u>
Reading price tags Counting items into the basket Finding and counting coins Comparing weights – which is heavier? Talk about the shape of packets, tins etc	Eg: 5 little monkeys jumping on the bed One fell off and bumped his head Mummy called the doctor and the doctor said "No more monkeys jumping on the bed!" 4 little monkeys jumping on the bed <u>http://www.nurseryrhymes4u.com/NURSERY</u> <u>RHYMES/COUNTING.html</u>	Sort them into different sizes and colours. Develop mathematical language e.g. first, second, third, how many are blue, which is largest/smallest or heaviest/lightest?
Gardening	Books and Rhymes	Useful Websites
By planting seeds you can help to develop your child's understanding of time and the life cycle of plants. Watch as the plants grow and even measure your plant – develop language such as taller.	Enjoy stories and rhymes with your child that has a mathematical element, e.g. "One-two, Buckle my Shoe". Let your child count out items in the books: how many animals are on the page, how many items are blue?	https://education.gov.scot/parentzon e/learning-at-home/supporting- numeracy https://www.nationalnumeracy.org.u k/family-maths-toolkit https://www.topmarks.co.uk/parents