Children learn best when they are engaged in meaningful maths opportunities, that are also to do with real life and solving problems...... for example learning to measure out ingredients in order to cook, negotiating the physical space in the garden when cycling in order to avoid obstacles or turn a corner, dividing equally the fruit, one for each friend and one for me!

Maths is about everyday life. We cannot do such things as shopping, cooking, telling the time, fitting flat pack

furniture together, etc without using our mathematical skills and knowledge. Maths is everywhere and it does not happen just at school.

There are opportunities for children's mathematical development everywhere:

- * In the home
- In the garden
- ***** At the shops
- * On the way to school
- * At the park



Maths is fun!

We want the children to develop a positive attitude to maths by making it fun and providing real opportunities for numbers to have meaning to the children. This can be as simple as:

- * Counting the steps we go up and down
- Looking at the numbers on houses and buildings as we
 Walk or travel about in the car or on the bus
- * Match pairs of socks
- * Sing number songs and nursery rhymes
- Playing with water toys, cups and jugs in the bath

We have provided further ideas in this booklet for you to have fun with maths at home with your child and at the same time support their learning. Most of the activities involve using common household items. In the kitchen...

* Bake with your child. Even the simple box cake

 $\ensuremath{\mathsf{mixtures}}$ involve counting, numbers and measures.

* What shape is the cake?



cake? How many candles are needed for the birthday cake?

* Setting the table - Count out 4 knives, 4 forks, 4 spoons. How many knives forks, spoons do we need for everyone? Can you count how many altogether?

* What size pan do we need for the vegetables?

* Make sandwiches - cut the bread in half, how many sandwiches do we have?



Books...

* Talk about the sequence of events, what happens. Stories such as The Very Hungry Caterpillar involve counting and the days of the week as part of the story.

* Is this the beginning, middle or end? What happened before/after?



Where is the front/back of the book?

Water...

Use old plastic bottles, sieves, bowls, cups, jugs in the bath.
 Fill and empty between the containers. How many cupfuls fill the jug?



* Talk about empty, full, half full, nearly empty, nearly full.

* Sort mugs, plates, cutlery when washing and drying up or emptying the dishwasher.

Shopping ...

* Is your bag heavier than mine?

* Compare different sizes of the fruit and vegetables - which is the biggest/smallest/same . Can you spot one bigger/smaller than this one?

- * Count the apples into the bag.
- Read the numbers for the weight or price of the items.

* Let you child have the opportunity to handle money and pay for an item at the shop.



Gardening...

* Count how flowers in the bed, pot, garden.

Is this hole big enough to plant this seed/plant?

Talk about tallest/shortest, taller/shorter when comparing heights of plants, trees and bushes.

* Look for worms, pick up sticks - compare longest and shortest.



* Look for patterns, shapes and colours - can you see

the diamonds in the fence? Find different shapes in the garden on the buildings eq. rectangles on the wall, circular flower bed/pot.

Clothes

- Talk about clothes being too big/too small/just the right size.
- Match pairs of shoes, read sizes.
- Count buttons on coats and cardigans.
- Point out numerals on clothes and labels.
- Talk about shapes, colours and patterns.
- Sort the washing

Songs...

- 1,2,3,4,5 once I caught a fish alive...
- * 5 little monkeys jumping on the bed...
- 10 fat sausages sizzling in a pan...
- 5 currant buns in a bakers shop...
- 1,2 buckle my shoe...

Dates and times on the calendar...

- Count how many sleeps until...
- Cross off the days of the week

The power of role modelling

- Share the daily mathematical problems you encounter with your child; how many plates, how much milk is it the carton, how many tins do we need?
- Dictate shopping lists.
- Let your child sort and put the shopping away.
- * Look at bus timetables and talk about how long journeys take to reach the place you want to go.
- * DIY and gardening are other activities you can model and share and are rich in mathematical opportunities.

CYFS Maths Event for Parents



Why is maths important?

We live in an age where we need to read and write and to calculate, understand numbers and solve problems in our daily lives, both at home, at work and whilst out and about eq. at the supermarket, catching the bus, driving the car.

The most important idea with regard to number in the early years, according to research, is to develop 'number sense'. This involves understanding the meaning of numbers, eq. knowing 'the threeness of three', or the 'nineness of nine' or their cardinal values and this gradually increases to numbers up to 20 and then above 20. This needs to be linked to counting, for instance, by asking children to 'give me nine things', and seeing whether they stop counting at nine, because they realise that the last number they say shows how many they have. Children who do not understand cardinal values will carry on blithely counting. According to research, another important characteristic of successful learners is understanding written numbers in terms of cardinal values. Parents/carers can easily encourage children to match everyday numerals with a number of fingers and using their fingers to count and represent numbers eq. show me 6 fingers (5 and 1 more) 9 fingers (1 less than 10). These two big ideas are great for parents/carers to focus on when supporting their child at home, along with aspects like time and money, which are more readily experienced at home. Later stages involve the sequence of numerals and recognition without meaning eq. numbered skittles - the children say which number they have knocked down. Since, for instance, '6' on a skittle will refer to only one object, this is more likely to confuse children than to help them understand 6 as representing six things, and to develop their familiarity with 'sixness'.

Many key aspects of number understanding are hidden amongst many others, without emphasis and it is important to make sure that all children understand numbers to 10, before they are asked to calculate with them in school. We also encourage children to be confident to then work with numbers to 20 to extend this understanding of number and be confident using.

For further information look at EYFS on the school website and the document

- What to Expect When A Parents Guide by 4 Children

