

# Helping your child with mental maths and making it fun!!

It's important children learn number bonds to 10 eg  $4 + 6 = 10$  and number bonds to 20 eg  $14 + 6 = 20$  by heart.

Play 'ping pong' to practice components with your child. You say a number and they reply with how much more is needed to make 10, 20, 100 or 1000. Encourage your child to answer quickly without counting or using fingers. Eg make 100 you shout 40 they shout 60

Throw two dice. Ask your child to find the total of the numbers (+), the difference between them (-) or the product (x).

Use a set of playing cards (without the picture cards). Turn over two cards and ask your child to add or multiply the numbers. If they answer correctly, they keep the cards. How many cards can they collect in two minutes?

Play 24 with a pack of playing cards using all of them. You need 4 players each puts a card down and first one to make 24 using any or all of the 4 operations and using all or some of the cards. First one to make number keeps all the cards. Eg you put down a Jack, 2 hearts, 7 spades and 2 clubs. You could say  $2 \times \text{Jack} + 2 \text{ hearts}$ .

Play Bingo. Each player chooses five answers (e.g. numbers to 10 to practice simple addition, multiples of 5 to practice the five times table etc). Ask a question and if a player has the answer, they can cross it off. The winner is the first player to cross off all their answers.

Give your child an answer. Ask them to write as many number sentences as they can with this answer. You could just ask for addition sentences or any type of calculation.

Give your child a number fact - eg  $5 + 8 = 13$ . Ask them what else they can find out from this fact -  $50 + 80 = 130$ ,  $8 + 5 = 13$ ,  $13 - 8 = 5$ ,  $130 - 50 = 80$  etc

Look out for car number plates. What is the number on the plate? What is this to the nearest 10 or 100 or 1000? How many more would you need to reach the next multiple of 10, 100 or 1000?

Make up rhymes together to help your child remember tricky times tables.

Play board games, such as Snakes and Ladders, children count up and back.

# Real Life Problem

Go shopping with your child to buy two or three items. Ask them to work out the total amount spent and how much change you will get.

Buy items with a percentage extra free. Help your child to calculate how much of the product is free.

Plan an outing during the holidays. Ask your child to think about what time you will need to set off and how much money you will need to take.

Use a bus or train timetable. Ask your child to work out how long a journey between two places should take. Go on the journey. Do you arrive earlier/later than expected? By how much?

Help your child to scale a recipe up or down to feed the right amount of people.

**Getting children involved in real situations where they are using mathematical skills is motivating and stimulating.**

# Times tables

A good knowledge and quick recall of times tables is essential to children's mathematical progress. The children are taught up to  $12 \times 12$ . The target is for all children to know their tables by the end of year four. It is very important that children practice their times tables daily at home.

When learning their tables, children are taught to look for patterns such as odd and even number answers, or patterns made by adding together the separate digits in the answers.

Children are also taught to recognise the reversible effect so that they know  $6 \times 2$  is the same as  $2 \times 6$ . They are also taught the relationship with division so that knowing  $6 \times 2 = 12$  means they also know that  $12 \div 2 = 6$  and  $12 \div 6 = 2$ . For each known times table fact, they also know three others:

$6 \times 7 = 42$  so they know that

$$7 \times 6 = 42$$

$$42 \div 6 = 7$$

$$42 \div 7 = 6$$

To help children with their multiplication, one of the ways we use is to find all the factors that are used to make up a number. For example the factors of 18 are 1, 18, 2, 9, 6, 3 because  $18 \times 1$ ,  $1 \times 18$ ,  $3 \times 6$ ,  $6 \times 3$ ,  $9 \times 2$ ,  $2 \times 9$  all equal 18.

# Shape and Measure

Choose a shape of the week. Look for this shape in the environment. Ask your child to describe the shape to you.

Play 'guess my shape'. You think of shape. Your child asks questions to try to identify it but you can only answer 'yes' or 'no'.

Hunt for right angles around your home. Can your child spot angles that are bigger or smaller than a right angle?

Look for symmetrical objects. Help your child to paint or draw symmetrical pictures/patterns.

Make a model using different boxes/containers of different sizes. Ask your child to describe their model to you.

Practise measuring the lengths and heights of objects in metric measurements. Help your child use different rulers or tape measures correctly. Encourage them to estimate before measuring. Compare measurements in metric and imperial.

Let your child help with the cooking. Help them to measure ingredients accurately. Talk about what each division on a scale represents.

Choose some food items out of the cupboard. Try to put the objects in order of weight by feel alone. Then check by looking at the weights on the packets.

Practise telling the time with your child. Use both digital and analogue clocks. Ask your child to be a 'timekeeper' - e.g. tell me when it is half past four because we are going swimming.

Use a stop clock to time how long it takes to do everyday tasks -e.g. how long does it take to get dressed. Encourage your child to estimate first.

Use a TV guide. Ask your child to work out the length of their favourite programmes. Can they calculate how long they spend watching TV each day/week? If a programme starts at a certain time, calculate the time it will finish. If it has finished at a certain time, what time did it start?