

# Helping Your Child Become a **Mental Magician!**

Children learn in a variety of different ways and learning experienced through all senses enhances memory, learning and understanding. Below are a range of fun activities to help learn their arithmetic facts.

## Arithmetic is a Part of Real Life

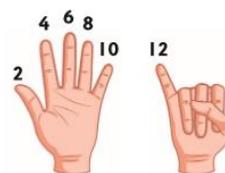
Real things, especially fun or enticing things, bring maths to life and help children to learn using touch and even taste and smell, as well as sight and sound. Family life can give loads of opportunities to make arithmetic real.

We want to give 3 children 2 strawberries each. How many strawberries will we need altogether?

My food shop cost £12 and so far I've counted out £11.21. How much more money do I need?

## Using Fingers to Count in Steps

If fingers help, use them! Children can use fingers to help them count in steps: they can hold up the number of fingers they are multiplying by and count in steps across those fingers. So, for  $6 \times 2$ , children can hold up 6 fingers and wiggle each finger in turn as they recall 2, 4, 6, 8, 10 and 12.



## Using Objects

Using any objects that you have around the house can be a brilliant way for the children to visualize their arithmetic facts.

For example: Using toy cars to show the two times table...

Or number bonds to 10...



$$2+8=10$$



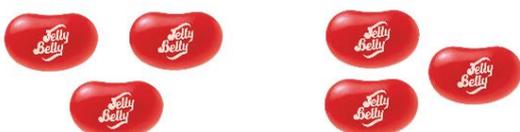
Objects are also brilliant for children to physically explore the corresponding subtraction and division facts.



$$4 \times 3 = 12$$



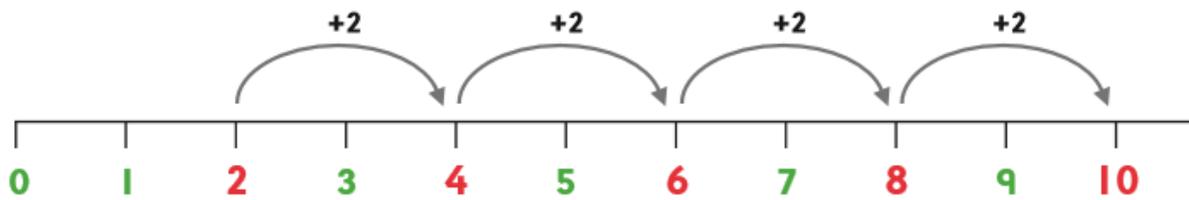
$$12 \div 4 = 3$$



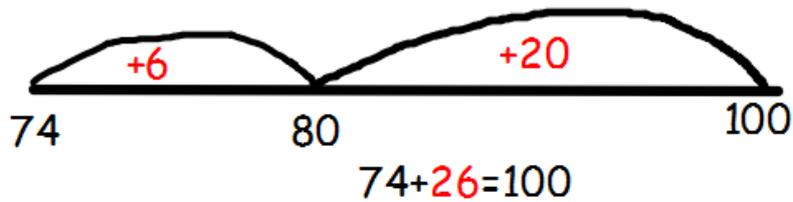
Number Line



Number lines are also used to help children to multiply by adding on and counting in steps:

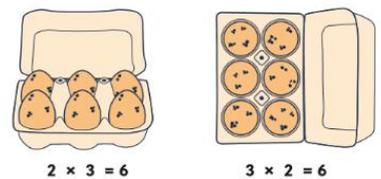


They can also support children with their number bonds:

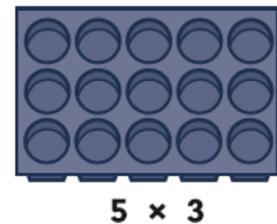
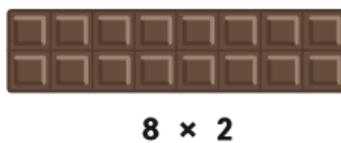
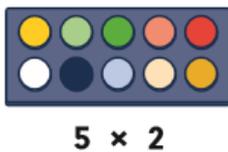


### Arrays

An egg box is an example of an array. An array is a set of objects arranged into rows and columns. Each row has the same number of objects as the other rows; each column has the same as the other columns. The arrays that we find in our daily lives help children to visualize and understand multiplication.



They can also bring home to children an important multiplication fact: multiplication can be done in any order – the answer will still be the same.



### Language and Times Tables

There are many different ways to say the tables and they're all correct. It is important to use a wide variety so that children are able to make connections between the language.

For example:  $3 \times 8 =$

- three times eight is...
- three multiplied by eight is...
- three eights are...
- three lots of eight is...

### Singing and Chanting

These “old-fashioned” strategies still help. Say the multiples as you go up the stairs – e.g.: 3, 6, 9, 12.... Time how quickly they can do it. Can they run up the stairs? Can they do it backwards when they come back down? (Please walk forwards though we don’t want to be responsible for any A&E trips! 😊)

Catchy songs can be found online and on [www.youtube.com](http://www.youtube.com)

### **Writing Them**

Children could:

- Make a poster for their bedroom wall
- Write their arithmetic facts in different shapes and colours
- Write their arithmetic facts in weird, memorable ways

### **Speed Writing**

How quickly can you write all the facts? Can you beat your time? Race your friends and family!

### **Rhymes and Patterns**

Create rhymes to help children remember facts.

- $8 \times 8 = 64$  (I ate and I ate and was sick on the floor,  $8 \times 8$  is 64)
- $8 \times 7 = 56$  ( $56 = 7 \times 8$ ) (the numbers in this times table fact are in order 5, 6, 7, 8!)

### **Games**

Use board games, playing cards and memory games to create visual patterns, such as Snap, Dominoes and Bingo.

There are also numerous websites that have fun games on that are great for learning and practising mental arithmetic! These include:

<https://www.topmarks.co.uk/>

<http://mathszone.co.uk/>

<https://www.timestables.co.uk/games/>

<https://www.bbc.co.uk/education>

Also many different apps you can download onto iPhones and iPads too!