What is expected of children during their primary school years in England?

Part 1: The 7 strands of maths

The content of this site follows the expectations laid down by the National Curriculum, in particular the Primary Framework for Mathematics which was renewed for the 2007 school year. The Primary Framework sets out yearly teaching programmes from Reception through to Year 6. Part of these teaching programmes is a set of key objectives – in other words, key things which teachers should concentrate on during each particular year.

This series of articles will try and guide you, in layman's terms, through the key objectives for each year and give examples of the kind of maths that is meant by them. In this way you should be able to have a better understanding of what your child is (probably) being taught in school and what the Primary Framework says that they ought to be able to do.

Before we get going the first thing to realise is that the Primary Framework has divided maths into 7 separate sections, or strands, as they call them. We all know that a maths problem can cover several of these strands at one time but for the sake of clarity we will keep the strands separate, and all our material is written with particular strands in mind.

The 7 strands are:

Counting and understanding number
This strand covers topics such as place value (understanding that the 3 in 300 is ten times the value of the 3 in 30), estimating and rounding numbers, number sequences, fractions, decimals and percentages.

Knowing and using number facts
This strand concentrates on what children should know at the end of each year. 'Tables' immediately springs to mind.

Calculating
This strand includes the ability to calculate 'in your head' and using written methods. Addition, subtraction, multiplication and division are the main areas. It is very much tied in with *Knowing and using number facts* above.

Understanding shape
This strand includes everything to do with shapes: both 2D and 3D.

Measuring
Often we think of measuring just in terms of length, but of course there are also mass or weight, capacity, time, area etc.

Handling data
This strand includes graphs, tally charts, Venn diagrams etc – all ways of displaying results of surveys etc.

Using and applying mathematics
This strand covers all the other six strands as children put their knowledge and skills to use, in solving problems.

So, there we are, the 7 magic strands!