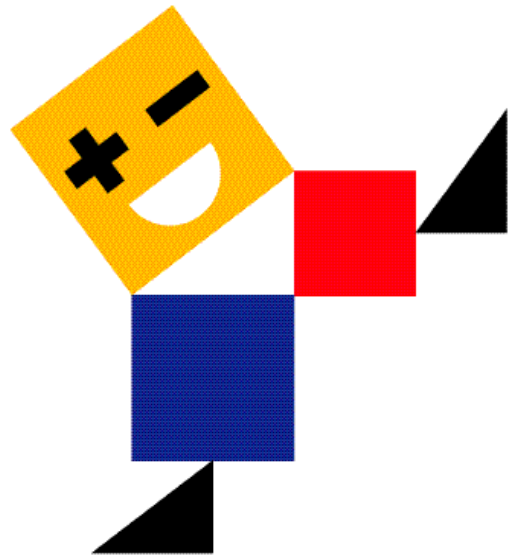




Milton Primary School

*Guidance on
calculation
approaches for
parents*



Multiplication

Milton Primary School – Guidance on calculation approaches for parents.

This booklet has been written in order to help you understand how the four operations of addition, subtraction, multiplication and division are taught in our school and to give you some ideas of how to help your child with their work.

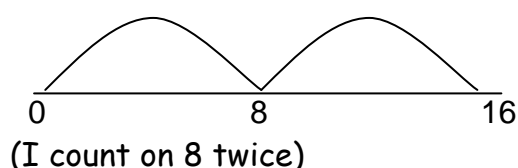
One of the most valuable things you can do with your child is talk to them about mathematics, when out shopping, playing games involving numbers, cooking etc. Talk, particularly linked to everyday situations, is central to encouraging good mathematical understanding. Above all, listen to your child explaining the approach that he or she selects. Avoid leading your child to an approach you remember from school, however tempting this may be, and instead try to keep in mind the progression that is set out in this document.

It is also worth mentioning that the different stages in the progression are developmental, so children move through the stages based on their individual progress. Moving a child too rapidly to the final compact approach, before the child is ready, can impede progress rather than be supportive.

Progression in written multiplication

Concepts of multiplication begin with doubling and are illustrated using a rectangular arrangement of dots, otherwise known as arrays. Arrays, number lines alongside number sentences will be the initial methods of recording.

 $8 \times 2 = 16$



Once pupils begin to multiply one-digit by two-digit numbers this will be by using partitioning. Pupils will be unlikely to have used brackets at this stage and it is best to let them record without brackets but with a clear understanding of what they are doing, based on an understanding of arrays.

Or

X	60	6	
30	1800	180	1980
4	240	24	264
			2244

In Years 5 and 6 this is extended to larger numbers and decimals.

73.5 x 17

X	70	3	0.5	
10	700	30	5	
7	490	21	3.5	
	1190	51	8.5	

$$\begin{array}{r} 1190.0 \\ + \quad \quad 51.0 \\ \hline 1249.5 \\ \hline \end{array}$$