## Maths - Year 4

## Calculating 12: Developing fluency with the short written method

## of multiplying

Key Vocabulary		Mathematical Skills - Derive multiplying sentences from parts of an array and add those to find the total product	
Array	A rectangular arrangement of objects or numbers in rows and columns.	<ul> <li>Record balancing multiplying sentences using brackets to separate the parts being multiplied.</li> </ul>	
Factor	A number that divides into another number exactly, e.g. 4 is a factor of 8.	<ul> <li>Use knowledge of place value and recall of multiplying facts when partitioning and multiplying numbers.</li> <li>Describe the steps involved in the short written method of multiplying.</li> <li>Multiply to solve measure and money problems.</li> </ul>	
Multiple	The product of 2 whole numbers larger than one e.g. 15 is a multiple of 3 and 5.		
Partition	Splitting a number in different ways, usually to help with calculating, e.g. 27 can be partitioned into 2 tens (20) and 7 ones (7)		
Mathematical Methods			
- Multiplying in parts e.g. $(3 \times 5) + (3 \times 2) = 3 \times 7$ . Or Or $4 + 4 \times 10 = 40$ 4 + 10 = 40 4 + 10 = 52 1 - 3 2 - 1 3 - 2 3 -			
- Developing fluency with the short written method of multiplying.			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			
<ul> <li>A context for multiplying TO x O (Tens and ones x ones)</li> </ul>			
3       6         ×       7         2       5       2         4       4			
- Multiplying in a measuring context introducing HTU x O e.g. a banana weighs 124g. What is the mass			
of 6 bananas?			
	100         20         4         1           6         600         120         24         7	2 4 6 6 4 4 2 -	

- Developing fluency and accuracy with the short written method of multiplying.



## Can you..?

- The rectangle shows how many pieces of fruit were sold. What different number sentences could you write to show how many pieces of fruit were sold?



- A pair of shorts costs £4.75. How much would five pairs of shorts cost?

- A carton of orange juice costs 49p and a bottle of apple juice costs 65p. Which costs more, 9 cartons of orange juice or 3 bottles of apple juice?