

Year 1	Multiplication Year 2	Year 3
<p>Multiplication Objectives</p> <p><b>PF-calculating</b> Solve practical problems that involve <b>combining groups of 2, 5 or 10,</b></p> <p><b>PF-knowing &amp; using number facts</b> Count on or back in ones, twos, fives and tens and use this knowledge to derive the multiples of 2, 5 and 10 to the tenth multiple</p> <p><b><u>Times Tables</u></b></p> <p><b>2 digit multiples of 2, 5 and 10</b></p>	<p>Multiplication Objectives</p> <p><b>PF-calculating</b> Represent <b>repeated addition and arrays as multiplication.</b> Use practical and informal written methods and related vocabulary to support multiplication.</p> <p><b>PF-knowing &amp; using number facts</b> Derive and recall multiplication facts for the 2, 5 and 10 times-tables and the related division facts; recognise multiples of 2, 5 and 10</p> <p><b><u>Times Tables</u></b></p> <p>x facts for the <b>2,5 and 10</b> times tables (and corresponding division facts)</p>	<p>Multiplication Objectives</p> <p><b>PF-calculating</b> Use practical and informal written methods to <b>multiply two-digit numbers</b> (e.g. <math>13 \times 3</math>)</p> <p><b>Multiply one-digit and two-digit numbers by 10 or 100,</b> and describe the effect</p> <p><b>PF-knowing &amp; using number facts</b> Derive and recall multiplication facts for the 2, 3, 4, 5, 6 and 10 times-tables and the corresponding division facts; recognise multiples of 2, 5 or 10 up to 1000</p> <p><b><u>Times Tables</u></b> x facts for the <b>2,3,4,</b> 5 &amp; 10 times tables and <b>begin to know for 6</b> (and corresponding division facts)</p>

## Year 1

### Methods

Count groups of the same size and combine groups of 2, 5 and 10.

Multiplication is related to doubling and counting groups of the same size.

Looking at columns

Looking at rows



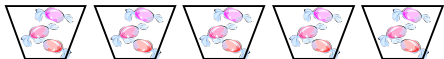
$$2 + 2 + 2 = 3 \text{ groups of } 2$$

$$3 + 3 = 2 \text{ groups of } 3$$

Combining groups

$$5 \times 3$$

There are 3 sweets in one bag.  
How many sweets are there in 5 bags?



### Numbers used

Combining groups of 2, 5 and 10

## Multiplication Year 2

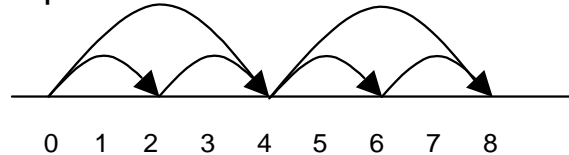
### Methods

Start with arrays and repeated addition – move on to grid method

Arrays

$$\begin{array}{cccc} \bullet & \bullet & \bullet & \bullet \\ \bullet & \bullet & \bullet & \bullet \end{array} \quad 4 \times 2 \text{ or } 4 + 4$$
$$2 \times 4 \text{ or } 2 + 2 + 2 + 2$$

Repeated addition



Grid method

X	10	5	
2	20	10	= 30

### Numbers used

UxU

Doubling TU

## Year 3

### Method

Grid method

Partition

X	30	5	
2	60	10	=70

### Numbers used

TUxU

Working with multiplications

for these tables:

2, 3, 4, 5 and 10