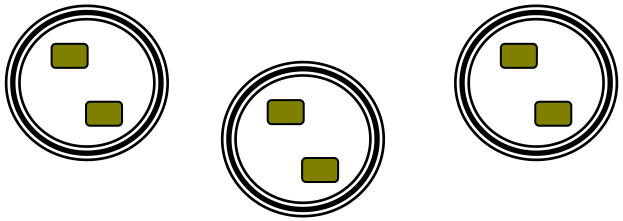
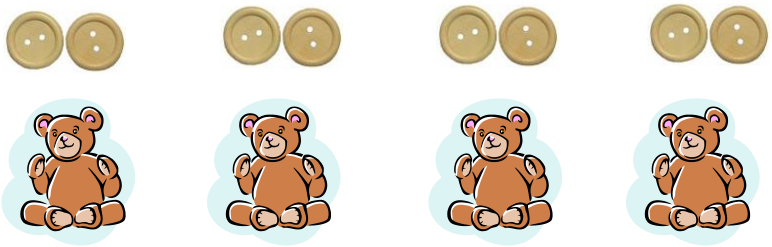
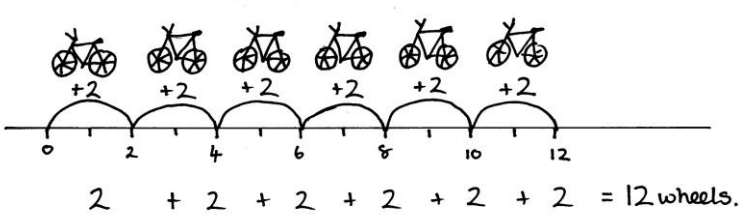
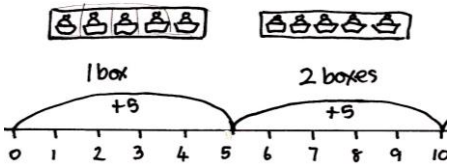
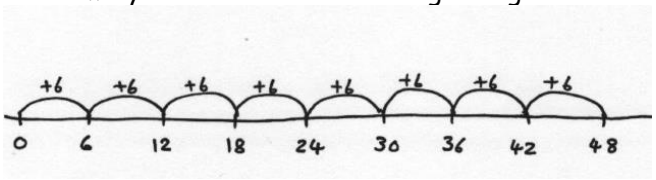
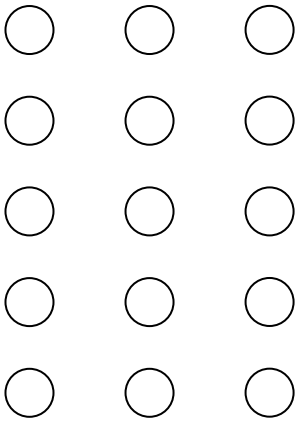
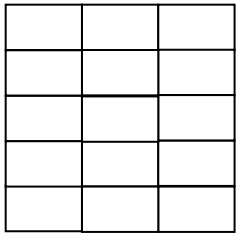
Multiplication strategies

Strategy	Examples	Vocabulary
Groups or 'lots of' with concrete materials Practical examples and use of role play	3 plates, each with 2 biscuits. How many biscuits are there altogether?  2 biscuits and 2 biscuits and 2 biscuits is 6 biscuits	Altogether, lots of, groups
Grouping and 'lots of' with concrete materials and recording using pictures	Each teddy has two buttons. Draw the buttons on the teddy bears. How many buttons is that altogether?  2 buttons and 2 buttons and 2 buttons and 2 buttons is 8 buttons	Group, lots of, altogether
Pre-multiplication Understand the idea of arrays	Noticing arrays in everyday objects, e.g. cake tray. Using the language of arrays 2 rows of 3 eggs  2 rows of 3 eggs 	Rows of, arrays, columns

Multiplication strategies

Strategy	Examples	Vocabulary
Pre-multiplication Understand counting forwards in equal steps or jumps 2+2+2+2+2+2=12	There are six bicycles, how many wheels?  	Counting forwards, equal steps, equal jumps
Understand whole number multiplication as repeated equal jumps, 5 + 5 **5** x 2 **5** multiplied by 2 2 lots of **5** Know the above all mean the same	There are five cakes in a box, how many cakes in two boxes?  5 x 2 = 10 There are 10 cakes in two boxes.	Counting forwards, equal steps, equal jumps
Understand multiplication as 'groups of'	There are six carrots in a bag. How many carrots are there in eight bags?  6 x 8 = 48 There are 48 carrots altogether.	Groups of, altogether,

Multiplication strategies

Strategy	Examples	Vocabulary
Understand that **5** x 3 can be represented as **5** multiplied by 3 3 lots of **5** 3 rows of **5** Know how the above are represented in an array.	Apples are packed in trays of five. There are three trays of apples, how many apples are there altogether?  5 x 3 = 15 There are 15 apples altogether.	Array, lots of, rows of
Understand that 3 x 5 can be represented as	3 5 	Array, grid