



Supporting your child at home

Mathematics

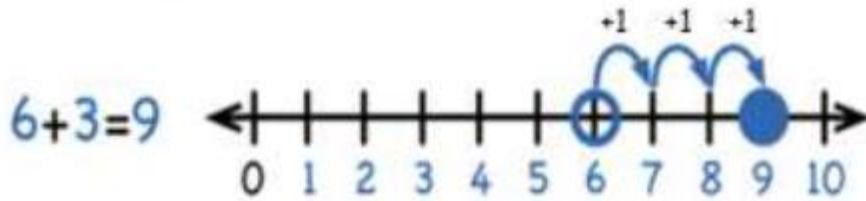
A booklet for parents

Supporting your child mathematics guidelines KS1

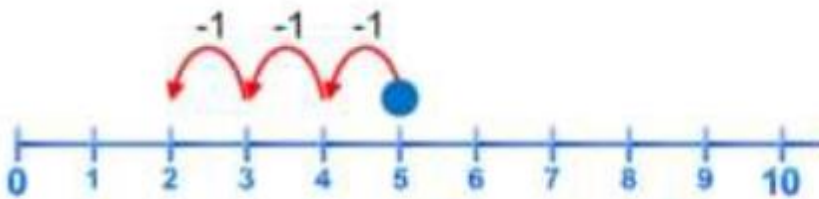
Year 1

Add with numbers up to 20.

Use a number line to add, counting on in ones, starting with the larger number



Subtract from numbers up to 20 using number lines.

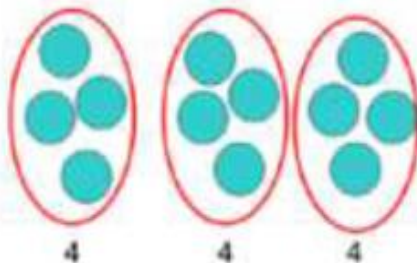


Grouping and sharing small quantities

Grouping:



Sharing:



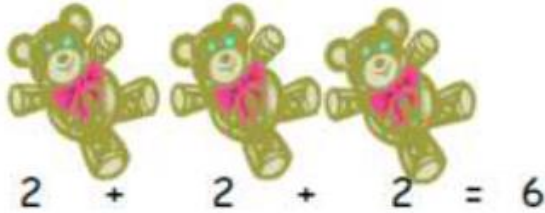
Children should solve a division problem within a context.

E.g. 5 children share 15 sweets. How many does each child get?

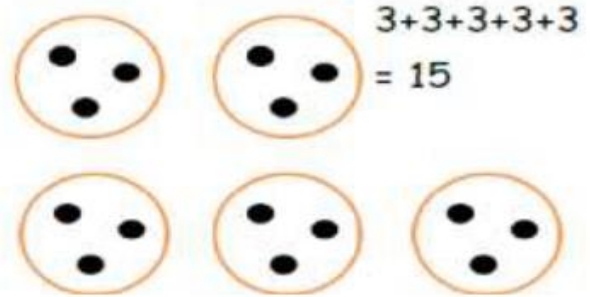
Can they solve this and write a division statement eg. 15 sweets shared between 5 children gives 3 each.

# Year 1 Multiply with concrete objects, arrays and pictorial representations

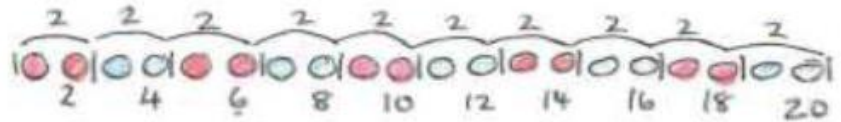
How many legs will 3 teddies have?



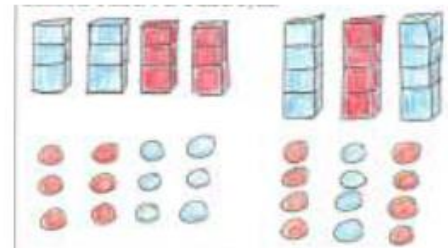
There are 3 sweets in one bag.  
How many sweets are in 5 bags altogether?



Count in 2s, 5s, 10s



Use visual and concrete arrays and 'sets of objects' to find the answers to '3 lots of 4', '2 lots of 5' etc



$$\square + \square = \begin{array}{|c|c|} \hline \square & \square \\ \hline \end{array}$$

$$\begin{array}{|c|c|} \hline \square & \square \\ \hline \end{array} + \begin{array}{|c|c|} \hline \square & \square \\ \hline \end{array} = \begin{array}{|c|c|c|c|} \hline \square & \square & \square & \square \\ \hline \end{array}$$

$$\begin{array}{|c|c|} \hline \square & \square \\ \hline \end{array} + \begin{array}{|c|c|} \hline \square & \square \\ \hline \end{array} = \begin{array}{|c|c|c|c|} \hline \square & \square & \square & \square \\ \hline \end{array}$$

Use Numicon to find doubles to double 6

Year 2- Adding 2 digit numbers and tens, 2 digits and units, two 2- digit numbers. Always using equipment first.

**Add 2-digit numbers and tens:**

$27 + 30$

+10 +10 +10

27 37 47 57

**Add 2-digit numbers and units:**

$16 + 7$

+4 +3

16 20 23

Use empty number lines, concrete equipment, hundred squares etc. to build confidence and fluency in mental addition skills.

Children move to more formal recording using partitioning method, setting out as follows:

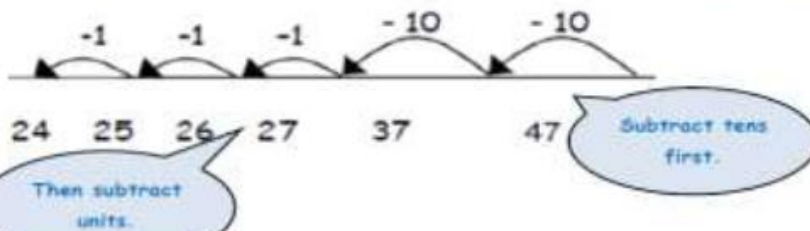
$$\begin{array}{r} 25 + 47 \\ \begin{array}{r} 20 + 5 \\ 40 + 7 \end{array} \\ 20 + 40 = 60 \\ 5 + 7 = 12 \end{array}$$

This needs to be modelled using apparatus such as Dienes and Numicon.

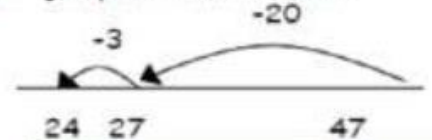


**Subtracting pairs of 2-digit numbers on a number line:**

$47 - 23 = 24$  Partition the second number and subtract it in tens and units, as below:

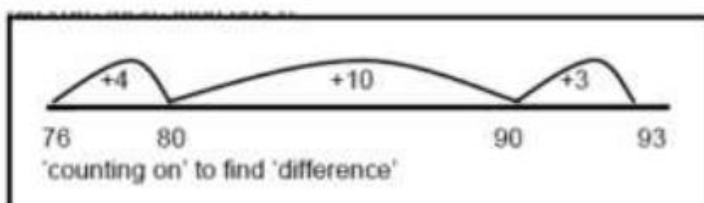
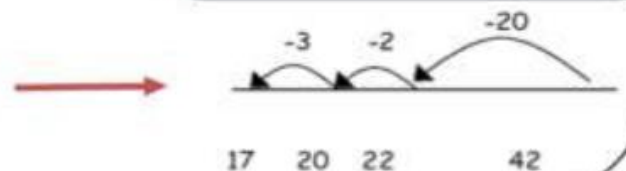


Move towards more efficient jumps back, as below:



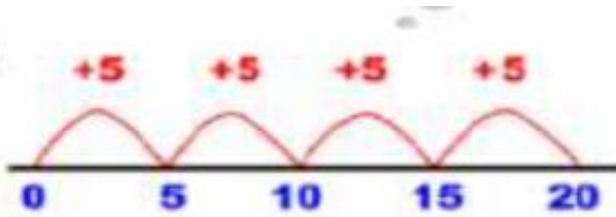
Combine methods with use of a hundred square to reinforce understanding of number value and order.

Teaching children to **bridge through ten** can help them to become more efficient, for example  $42 - 25$ :

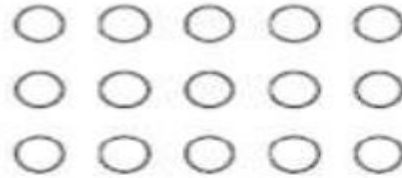


Children should also learn how to count on in order to find the difference. They should be given opportunities to explore when to count on and when to count back.

Multiplication using arrays and repeated addition (using at least 2's, 5's and 10's)



Starting from zero, make equal jumps on the number line to work out multiplication facts.



$5 \times 3 = 15$

$3 \times 5 = 15$

Use repeated addition

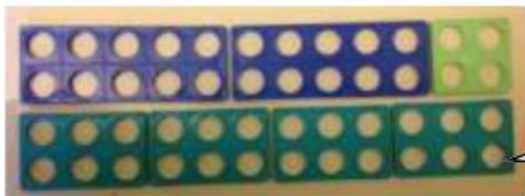
Grouping, sharing and division

**Arrays:**

$12 \div 3 = 4$

This represents  $12 \div 3$ , posed as how many groups of 3 are in 12?

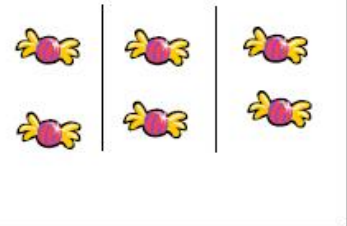
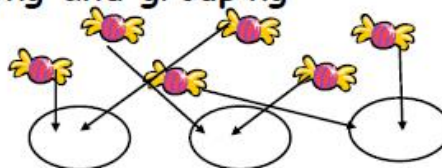
Pupils should also show that the same array can represent  $12 \div 4 = 3$  if grouped horizontally.



24 divided into groups (chunks) of 6  
There are 4 groups of 6 in 24

**Know and understand sharing and grouping**

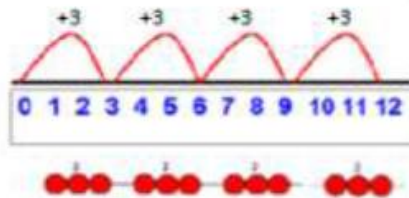
6 sweets shared between 3 people, how many do each get?



**Grouping using a number line**

Group from zero in equal jumps to find 'how many groups of \_ in \_?

Use bead-bars/strings to make link to number line.



$12 \div 3 = 4$

Pose  $12 \div 3$  as "How many groups of 3 are there in 12?"