

Year 2 - Addition

+ = signs and missing numbers

Continue using a range of calculations as in Year 1 but with appropriate, larger numbers up to 100.

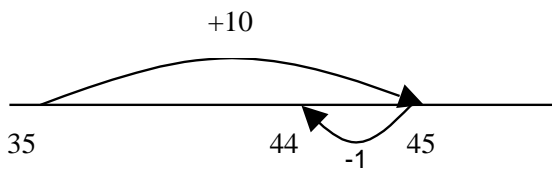
$$84 + 5 = 10 + \square$$

and adding three numbers

$$32 + \square + \square = 100 \quad 35 = 1 + \square + 5$$

Add 9 or 11 by adding 10 and adjusting by 1

$$35 + 9 = 44$$



Partition into tens and ones and recombine remembering to add the units first then the 10'S

$$12 + 23 = 10 + 2 + 20 + 3$$

$$= 30 + 5$$

$$= 35$$

refine to partitioning the second number only:

$$23 + 12 = 23 + 10 + 2$$

$$= 33 + 2$$

$$= 35$$

Move onto simple formal column addition by end of Y2 with more able carrying tens.

$$\begin{array}{r} 5 \quad 3 \\ + \quad 4 \quad 2 \\ \hline 9 \quad 5 \end{array}$$

$$\begin{array}{r} 8 \quad 3 \\ + \quad 4 \quad 2 \\ \hline 1 \quad 2 \quad 5 \end{array}$$

Year 2 - Subtraction

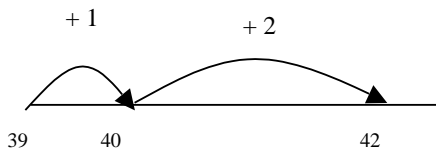
- = signs and missing numbers

Continue using a range of calculations as in Year 1 but with appropriate numbers.

Extend to $14 + 5 = 20 - \square$

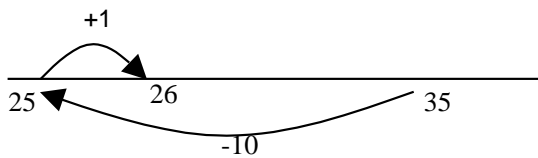
Find a small difference by counting up

$$42 - 39 = 3$$



Subtract 9 or 11. Begin to add/subtract 19 or 21

$$35 - 9 = 26$$

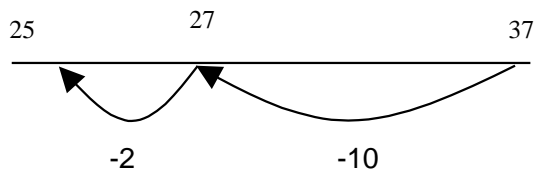


Use known number facts and place value to subtract (partition second number only)

$$37 - 12 = 37 - 10 - 2$$

$$= 27 - 2$$

$$= 25$$



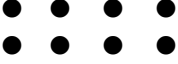
Towards the end of year 2 introduce column subtraction (without exchanging) using numbers up to 100.

$$\begin{array}{r} 9 \quad 7 \\ - 4 \quad 2 \\ \hline 5 \quad 5 \\ \hline \end{array}$$

Year 2 - Multiplication

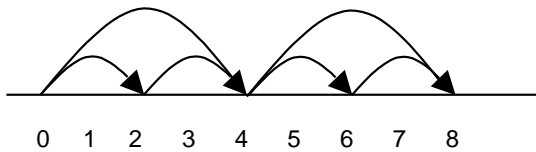
Solve one step multiplication problems in context.

Moving towards independent use arrays and repeated addition

 4×2 or $4 + 4$
 2×4

or repeated addition

$$2 + 2 + 2 + 2$$



Doubling multiples of 5 up to 50

$$15 \times 2 = 30$$

$x =$ signs and missing numbers

$$7 \times 2 = \square \quad \square = 2 \times 7$$

$$7 \times \square = 14 \quad 14 = \square \times 7$$

$$\square \times 2 = 14 \quad 14 = 2 \times \square$$

$$\square \times \nabla = 14 \quad 14 = \square \times \nabla$$

Recognise and use inverse relationships.

$$(2 \times 3 = 6, 3 \times 2 = 6, 6 \div 2 = 3, 6 \div 3 = 2)$$

Understanding multiplication of two numbers can be done in either order.

Learn multiplication facts, with emphasis on 10, 5 and 2 times tables. Introduction of HCPS timetables card to encourage learning of tables. Including recognising odd and even numbers. Extend for more able.

Calculate mathematical statements for within the multiplication tables and write them using the multiplication (\times) and equals ($=$) signs.

Children are encouraged to use jottings to help them solve problems;

Eg there are 3 sweets in a box. Sam has 2 boxes. How many sweets does he have?



$$2 \text{ lots of } 3 \text{ or } 2 \times 3 = 6$$

Year 2 - Division

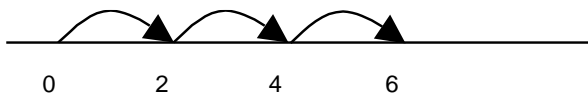
Understand division as sharing and grouping

Sharing – 6 sweets are shared between 2 people. How many do they have each?

$6 \div 2$ can be modelled as:



Grouping – There are 6 sweets. How many people can have 2 each? (How many 2's make 6? Making connections with the inverse operation)



Write mathematical statements for division using equals (=) and division (\div) symbols.

\div = signs and missing numbers

$$6 \div 2 = \square \quad \square = 6 \div 2$$

$$6 \div \square = 3 \quad 3 = 6 \div \square$$

$$\square \div 2 = 3 \quad 3 = \square \div 2$$

$$\square \div \nabla = 3 \quad 3 = \square \div \nabla$$

Relate to inverse operation when ready.

Children able to use recall of 2, 5 and 10 times tables to provide division facts. ($2 \times 3 = 6$, $3 \times 2 = 6$, $6 \div 2 = 3$, $6 \div 3 = 2$)

Introduction of remainders

Children introduced to concept of remainders. Linking to the difference between odd and even numbers. Especially the concept of sharing an odd number of objects between two people. 13 sweets \div 2 children. The two children would receive 6 each and then have 1 left over.