

# Number strategies



It's important to remember that no single number strategy is necessarily right when faced with a particular problem. There is no single 'right' way for a student to answer a question. Their approach will depend on several factors, not least their own learning style. To find out more about learning styles, please refer to the Learning styles PDF.

## Rounding up – to nearest 10's

$$148 + 148$$

$148 + 148$  is  $150 + 150 - 4$

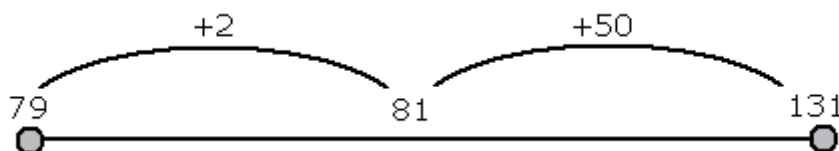
## Doubling or halving – students practise their doubles and halves in school

$$224 \div 4$$

$224 \div 4$  is 224 half it makes 112 then half again to get 56

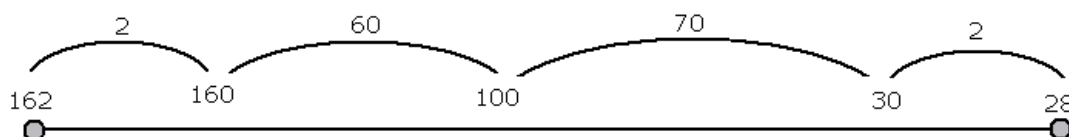
## Use a number line – this is also called partitioning

$$79 + 52$$



$$79 + 52 = 79 + 2 + 50 = 81 + 50 = \mathbf{131}$$

$$162 - 134$$



$$162 - 2 = 160 - 60 = 100 - 70 = 30 - 2 = \mathbf{28}$$

## Counting up – how much do I add?

Many people find counting up a useful way of taking away. ("How much do I have to add on to get my target?")

Start at 28: add 2 then 70 (getting to 100 is easier) then 60 then 2 TOTAL 134

## Multiplication facts

Students do learn their MULTIPLICATION FACTS. However, we can use the strategies to help them if they get stuck. Here are two ways to do  $8 \times 7$ :

- Double 7 gives you 14, double 14 gives 28 and then double 28 to give you 56
- $5 \times 8 = 40$  plus  $2 \times 8 = 16$  TOTAL 56

Amazingly, most people remember that  $7 \times 8$  is 56 and they remember that  $7 \times 8$  is the same as  $8 \times 7$ .

Often a number problem (adding or multiplying only!) is easier the other way round.