

## Strategies for solving the 4 operations

### Addition (+)

Other words: plus, altogether, add, sum, make

1. For smaller numbers children are encouraged to calculate the answers mentally - e.g. by putting the first number in their head and counting on to add the second.

e.g.  $15 + 6$  - start from 15 and count on 6

2. When adding 2-digit numbers:

#### Strategy 1 - sticks (Tens) and dots (units)

eg  $24 + 13 =$

$11 \therefore 1 \therefore$

$111 = 30$

$\therefore \therefore = 7$

$30 + 7 = 37$

#### Strategy 2 - column method

Tu ← add  
units  
column  
first.

$$\begin{array}{r} 24 \\ + 13 \\ \hline 37 \end{array}$$

### Subtraction (-)

Other words: take away, minus, less, left

1. Like with addition, for smaller numbers children are encouraged to calculate the answers mentally - e.g. by putting the first number in their head and counting back to subtract the second.

e.g.  $17 - 5$  - start from 17 and count back 5

2. When subtracting 2-digit numbers:

#### Strategy 1 - sticks (Tens) and dots (units)

$36 - 14 =$

$111 \therefore \therefore$

$1 \therefore \therefore$   
(subtract these from the first by crossing out)

$\cancel{1}1 \therefore \therefore \triangle$

22

#### Strategy 2 - column method

Tu ← subtract  
units  
column  
first.

$$\begin{array}{r} 36 \\ - 14 \\ \hline 22 \end{array}$$

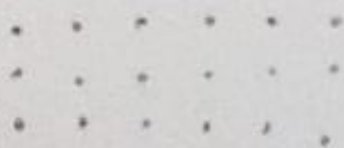
### Multiplication (x)

Other words: times, lots of, groups of

1. Children are encouraged to know their x2, x5 and x10 timestables in Year 2 so when multiplying these numbers children may be able to calculate them mentally.
2. To multiply numbers that children cannot do mentally we encourage children to use an array:

$$6 \times 3 =$$

(6 groups of 3)



So add up all the dots to find the answer.

### Division (+)

Other words: share, divide

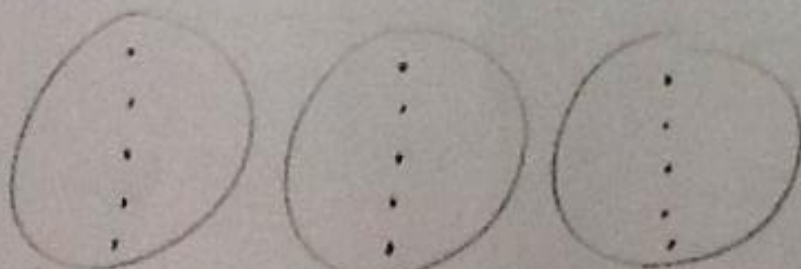
1. For timestables children know, again, they may be able to calculate questions involving these mentally e.g.  $20 \div 5 =$

The would use their x5 timestables to count in 5's until they get to 20.

2. To divide numbers that children cannot do mentally we encourage children to do 'sharing':

$$15 \div 3 = 5$$

↓                      ↓  
number of objects to share      number of groups



5 in each group