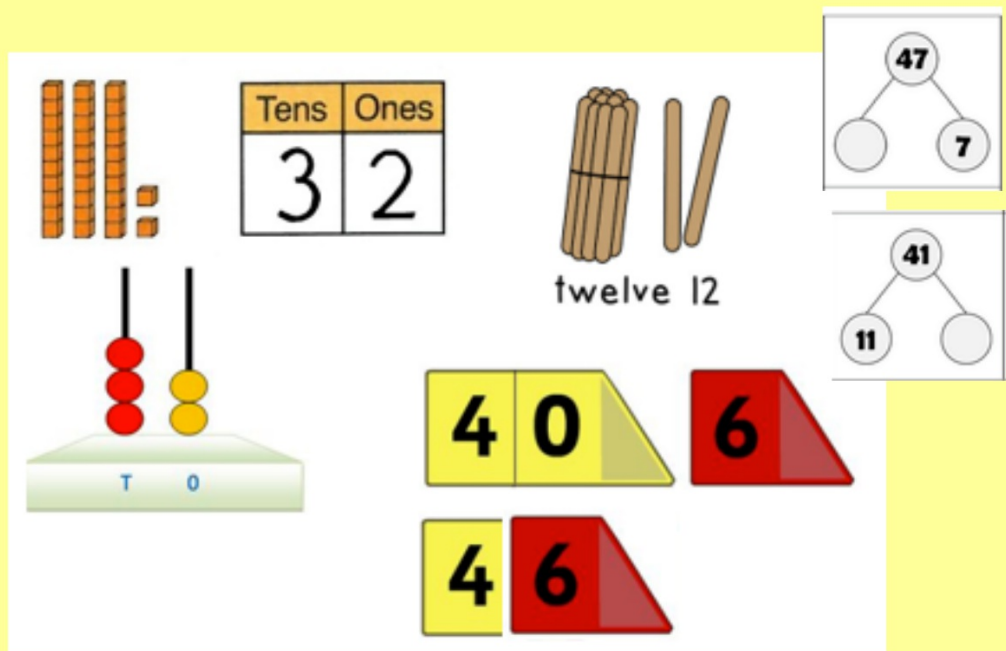


**Working at Year 2 expectations**

The pupil can:

- Partition any two-digit numbers into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus
- Add and subtract any 2 two digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus (e.g.  $48+35$ ;  $72-17$ )
- Read the time on a clock to the nearest 15 minutes
- Recall all number bonds to and within 10 and use these to reason with and calculate bonds to and within 20, recognising their associated additive relationships
- Name and describe properties of 2-D and 3-D shapes, including number of sides, vertices, edges, faces and lines of symmetry.
- Recall multiplication and division facts for 2,5,10, to solve simple problems, demonstrating understanding of commutativity as necessary
- Identify  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{2}{4}$ ,  $\frac{3}{4}$  of a number or shape, and know that all parts must be equal parts of a whole
- Use different coins to make the same amount
- Read scales in divisions of 1s, 2s, 5s and 10s

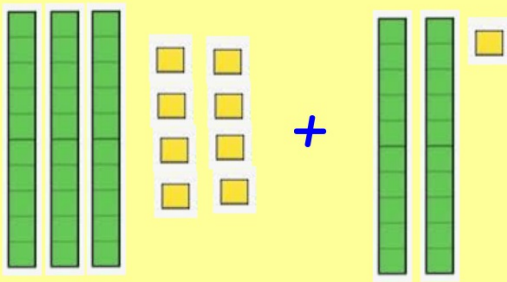
# Place Value



*tens, ones, digits, partitioning*

# Addition

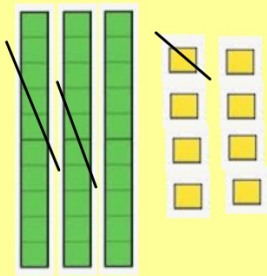
$$38 + 21 =$$



*dienes!*

# Subtraction

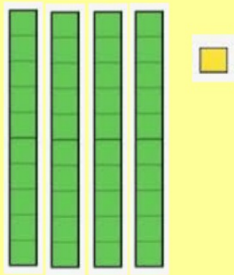
$$38 - 21 =$$



*dienes!*

## Subtraction (crossing the tens)

$$41 - 19 =$$



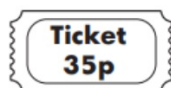
# Addition and subtraction word problems

Ben has **90p**.

He buys **2** tickets.

Each ticket costs **35p**.

How much money does Ben have **left**?



Ben has **63** beads.

He gives **37** beads away.

How many beads does Ben have **left**?

beads

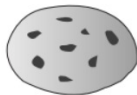
Ajay's plant was **11** centimetres tall.

It grows **7** centimetres taller.

How tall is the plant now?



cm



biscuits  
**20p** each



cakes  
**25p** each

Sam buys **3** biscuits and **1** cake.

How much does Sam spend **altogether**?

There are **100g** of chocolate chips in the bag.

Sita uses **25g**.

Ben uses **35g**.

How many grams of chocolate chips are **left** in the bag?



## Missing number sentences



*Bar model*

$$6 + 2 = 8$$

$$2 + 6 = 8$$

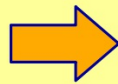
$$8 - 6 = 2$$

$$8 - 2 = 6$$

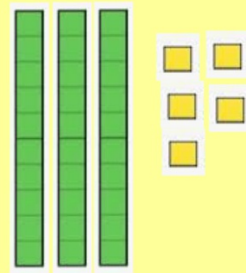
## Missing number sentences

$$35 - \square = 15$$

35	
15	



$$35 - 15 =$$





# Expanded Method

			H	T	O
				6	7
		+		5	6
$7 + 6 =$				1	3
$60 + 50 =$			1	1	0
TOTAL:			1	2	3

The 'expanded' method allows children to see the value of the numbers they are adding.

In this example, children see that the digits in the 'tens' column represent 60 and 50.

Children are taught to add the 'ones' first as this prepares them for 'carrying' when they move to the contracted method.

*This is only introduced towards the end of Year 2!*

## Expanded Method

$$92 - 47 =$$

			T	O
			8	2
			<del>9</del>	12
		-	4	7
				5
			4	0
			4	5

12 - 7 =

80 - 40 =

ANSWER:

The 'expanded' method allows children to see the value of the numbers they are subtracting.

Children learn to 'exchange' when a calculation is not possible. In this example, 7 cannot be subtracted from 2 so '10' is borrowed from Tens column.

*Children find this really tricky!  
It is introduced at the end of Year 2.*