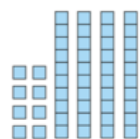


St Michael's Year 2 Maths Parent Information

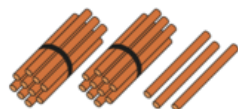
A two digit number is made up of **tens** and **ones**.



4 tens and **8** ones

40 and **8**

48



2 tens and **3** ones

20 and **3**

23



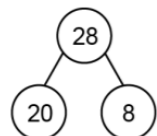
3 tens and **6** ones

30 and **6**

36

2 NPV-1

A two digit number can be partitioned into **tens** and **ones**.



28	
20	8

A two digit number can be written as addition and subtraction equations.

$$20 + 8 = 28 \quad 28 - 20 = 8$$

$$8 + 20 = 28 \quad 28 - 8 = 20$$

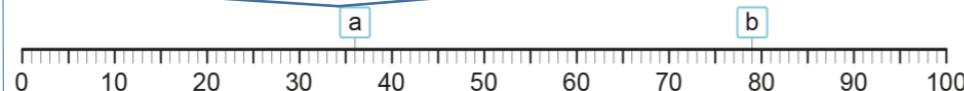
$$28 = 20 + 8 \quad 8 = 28 - 20$$

$$28 = 8 + 20 \quad 20 = 28 - 8$$

2 AS-1

Use marked numbers on the number line to identify unmarked numbers

a is 36 because it is one more than the midpoint of 35 and 40.



b is 79 because it is one less than 80.

Two digit numbers are in between 2 multiples of 10.
"54 is in between 50 and 60."

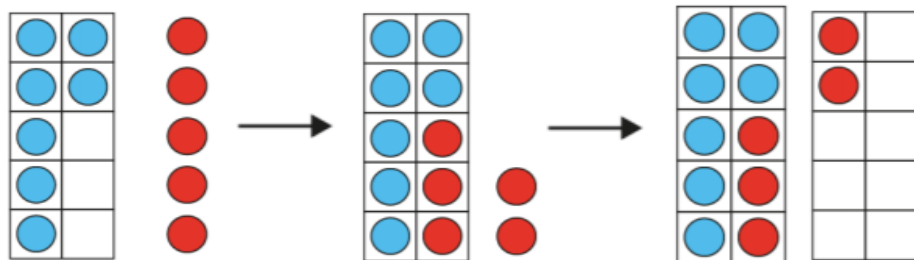
Estimate the position of two digit numbers on an unmarked number line.



60 is about here on the number line because it's just over half way

2 NPV-2

When adding, if the total will be more than 10, make 10 first.

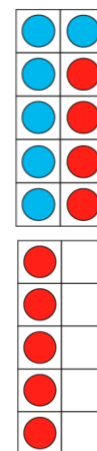


$$7 + 5 = 7 + 3 + 2 = 10 + 2$$

$$7 + 5 = 12$$

When subtracting, if the result will be less than 10, you can -

- go back to 10 first and then subtract the rest



$$15 - 9$$

$$\begin{array}{r} 15 \\ - 9 \\ \hline 5 \end{array}$$

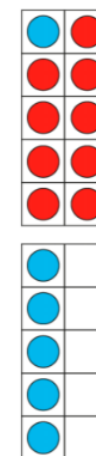
$$15 - 5 = 10$$

$$10 - 4 = 6$$

so

$$15 - 9 = 6$$

- or, subtract from 10 first and then combine what is left.



$$15 - 9$$

$$\begin{array}{r} 15 \\ - 9 \\ \hline 10 \end{array}$$

$$10 - 9 = 1$$

$$1 + 5 = 6$$

so

$$15 - 9 = 6$$

Finding the difference means finding how many more or how many fewer.

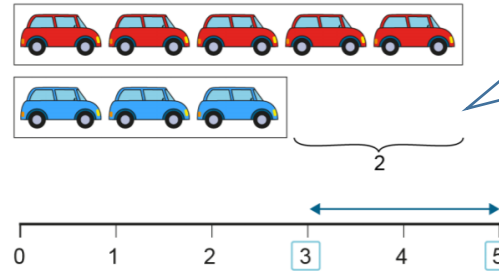
Use subtraction or addition to find the difference in missing number problems.

$$5 - \square = 3$$

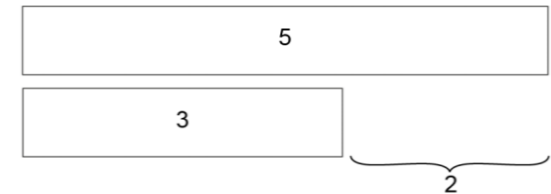
$$3 + \square = 5$$

$$5 - 3 = 2$$

$$5 - 3 = 2$$

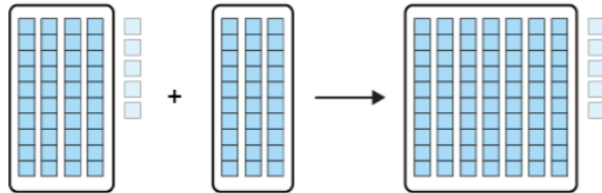


What is the difference between the number of red cars and the number of blue cars?



2 AS-2

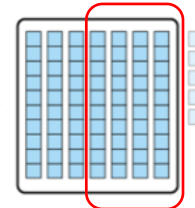
Use what is known about adding one digit numbers to add larger numbers.



$$\begin{array}{rclcl} 4 & + & 3 & = & 7 \rightarrow \text{Adding ones} \\ \text{so } 40 & + & 30 & = & 70 \rightarrow \text{Adding two multiples of ten} \\ 45 & + & 30 & = & 75 \rightarrow \text{Adding a multiple of ten to a two digit number} \end{array}$$

2 AS-3

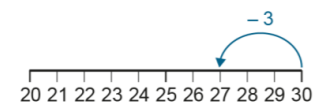
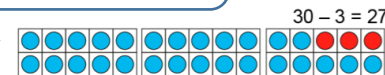
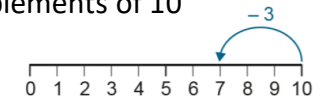
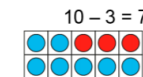
Use what is known about subtracting one digit numbers to subtract larger numbers.



$$\begin{array}{lcl} 7 - 4 = 3 & \rightarrow & \text{subtracting ones} \\ \text{so } 70 - 40 = 30 & \rightarrow & \text{subtracting multiples of ten} \\ 75 - 40 = 35 & \rightarrow & \text{subtracting a multiple of ten from any two digit number} \end{array}$$

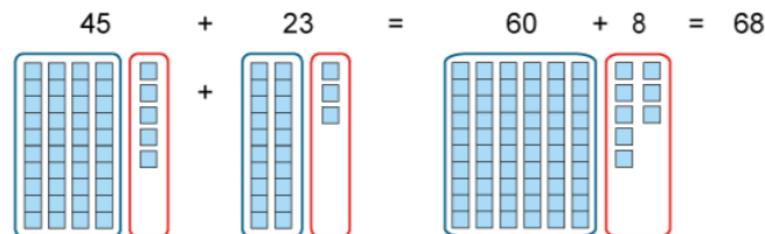
Subtract ones from a multiple of ten, by using complements of 10

10 minus 3 is equal to 7. So 30 minus 3 is equal to 27.



Add 2 two digit numbers by partitioning. Add the multiples of ten, add the ones, then recombine to find the total.

First I partition both numbers. Then I add the tens. Then I add the ones. Then I combine all of the tens and all of the ones.



$$\begin{array}{l} 40 + 20 + 5 + 3 = 60 + 8 = 68 \\ 40 + 5 + 20 + 3 = 60 + 8 = 68 \\ 45 + 23 = 60 + 8 = 68 \end{array}$$

Try partitioning one addend instead of both.

$$\begin{array}{l} 45 + 23 = 45 + 20 + 3 \\ = 65 + 3 \end{array}$$

When subtracting, partition only the subtrahend.

45 - 23 = ?
minuend difference
 subtrahend

$$\begin{array}{l} 45 - 23 = 45 - 20 - 3 \\ = 25 - 3 \\ = 22 \end{array}$$

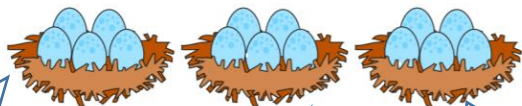
Subtract the tens and the ones.

It doesn't matter if you subtract the ones first, or the tens first.

$$\begin{array}{l} 45 - 23 = 45 - 3 - 20 \\ = 42 - 20 \\ = 22 \end{array}$$

2 AS-4

Recognise and describe equal and unequal groups

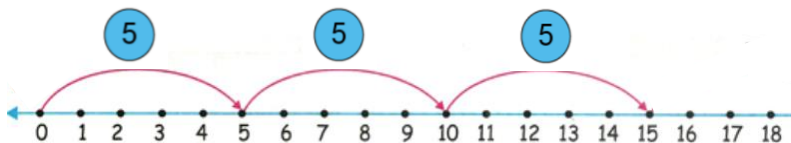


There are 3 equal groups of eggs.

There are 3 groups of 5

There are 5 eggs in each group.

The picture can be represented using the equations $3 + 3 + 3$ and 3×5 . Find how many eggs there are in total by counting in fives.



The 3 represents the number of groups

$$3 \times 5 = 15$$

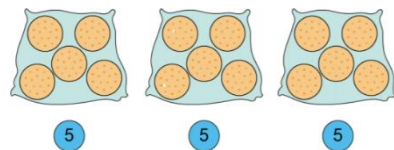
The 15 represents the total number of eggs

2 MD-1

The 5 represents the number of eggs in each group

2 MD-2

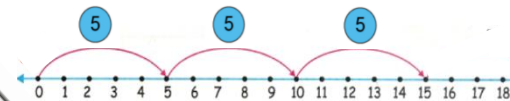
Use multiplication to find missing values.



There are 15 biscuits. If I put them into bags of 5, how many bags will I need?

$$\square \times 5 = 15$$

Use skip counting to find missing value.



Use division to find missing **quotient**.

$$15 \div 5 = \square$$

dividend

divisor

quotient

The 15 represents the total number of biscuits

The 5 represents the number of biscuits in each bag

Use the same strategies to solve division problems represented only by numbers.

$$60 \div 10$$

I can skip count in tens to find the quotient.

$$15 \div 5 = 3$$

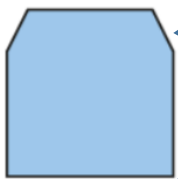
15 divided into groups of 5 is equal to 3

The 3 represents the number of bags

I know that 6×10 is 60. I can use this to work out the quotient.

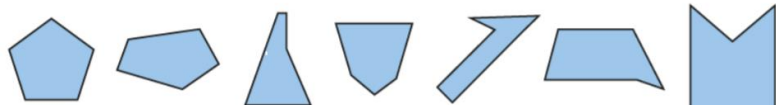
A **polygon** is a 2D shape which has only **straight sides**. Find out what kind of polygon a shape is by counting its sides.

- 3 sides – triangle
- 4 sides – quadrilateral
- 5 sides – pentagon
- 6 sides – hexagon
- 7 sides – heptagon
- 8 sides – octagon

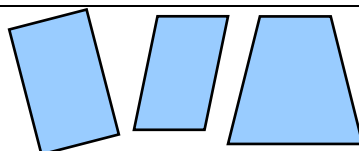


This shape is a hexagon because it has exactly six straight sides

A vertex is where 2 sides meet. This hexagon has 6 vertices.

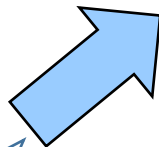


These shapes are all pentagons. They all have exactly five straight sides.

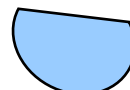


Shapes with 4 straight sides are quadrilaterals. A rectangle is one type of quadrilateral.

This arrow has seven straight sides so it is a heptagon



Shapes with **curved** sides are **not polygons**.



3D shapes have **faces**, **edges** and **vertices**.

2 G-1

Vertices are where **edges** meet.

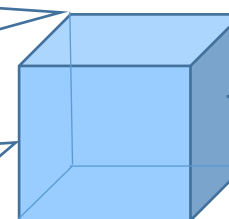
Faces can be **flat** or **curved**.

This cube has eight **vertices**.

The cube has twelve **straight edges**.

Edges can be **curved** or **straight**.

The cylinder has 2 **curved edges**.



The cube has 6 **flat faces**

The cylinder has no **vertices**



The cylinder has one **curved face** and two **flat faces**.