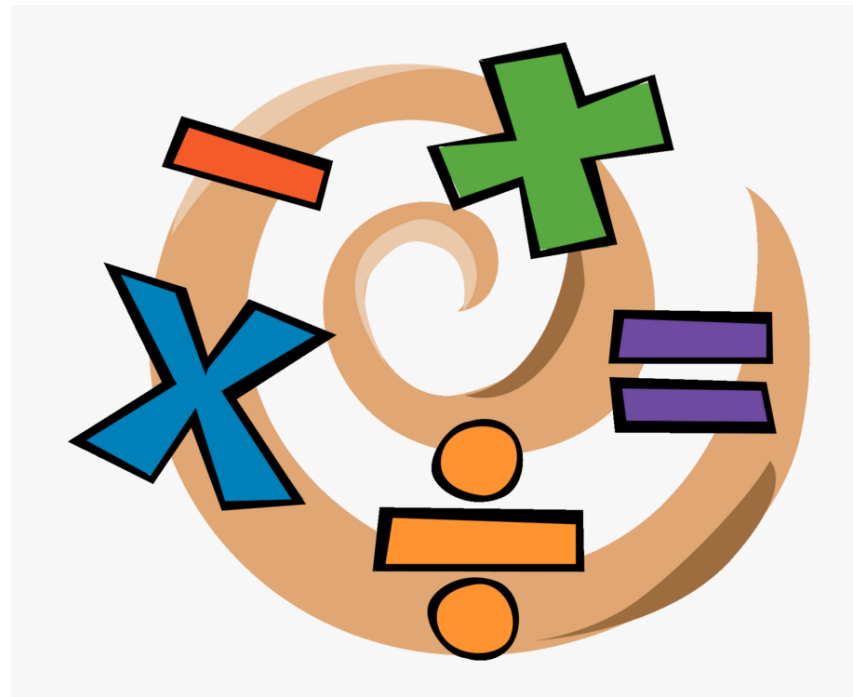


Year 2 maths





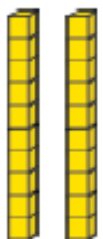

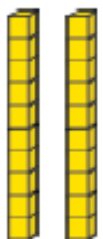

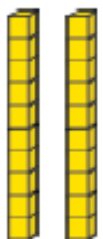

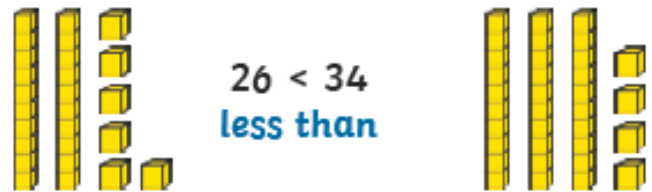
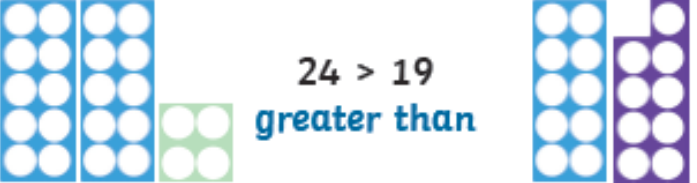
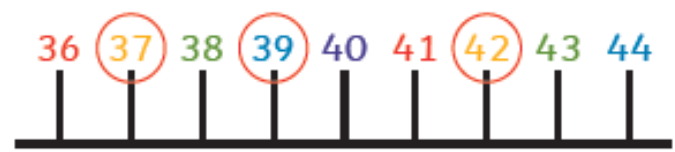

Dear Parents/Carers,

Welcome to this guide to Maths in Year 2. In this booklet you will find knowledge organisers for every Maths topic covered in Year 2 and then some extracts from our calculation policy showing the methods taught. The knowledge organisers include the key vocabulary the children will come across in each topic as well as the key objectives taught and models and images used.

We hope you find these useful and that they will help show you what is being taught in school this year.

Year 2 Team

Place Value

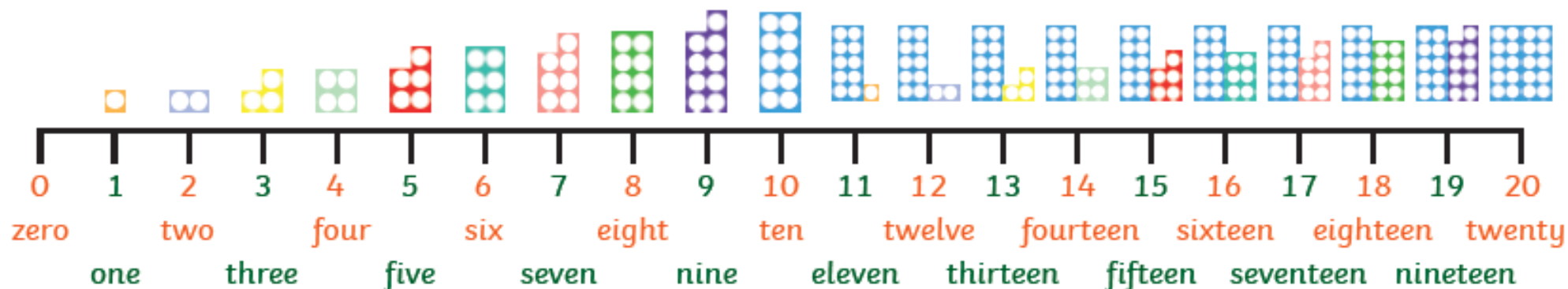
Number and Place Value		Knowledge Organiser																	
Key Vocabulary	2-Digit Numbers	Compare Numbers																	
hundreds	26	<table border="1"> <tr><th>Tens</th><th>Ones</th></tr> <tr><td>●●</td><td>●●</td></tr> <tr><td>●</td><td>●●</td></tr> <tr><td></td><td>●●</td></tr> </table>	Tens	Ones	●●	●●	●	●●		●●	<table border="1"> <tr><th>Tens</th><th>Ones</th></tr> <tr><td>●●</td><td>●●</td></tr> <tr><td>●</td><td>●●</td></tr> <tr><td></td><td>●●</td></tr> </table>	Tens	Ones	●●	●●	●	●●		●●
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●●	●●																		
●	●●																		
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tens	<table border="1"> <tr><td style="text-align: center;">twenty</td><td style="text-align: center;">six</td></tr> <tr><td></td><td></td></tr> <tr><td style="text-align: center;">20</td><td style="text-align: center;">6</td></tr> </table>	twenty	six			20	6	$36 = 36$ equals											
twenty	six																		
																			
20	6																		
ones			$26 < 34$ less than																
zero			$24 > 19$ greater than																
place value																			
greater than																			
less than																			
order																			
partition																			
digit																			
	Counting	Order Numbers																	
	Counting in 2s 0 2 4 6 8 10 12 14 16 18 20																		
	Counting in 3s 0 3 6 9 12 15 18 21 24 27 30	$37 < 39 < 42$																	
	Counting in 5s 0 5 10 15 20 25 30 35 40 45 50	<table border="1"> <tr><td>45</td><td>48</td><td>52</td><td>53</td><td>61</td></tr> <tr><td>smallest</td><td></td><td></td><td></td><td>greatest</td></tr> </table>		45	48	52	53	61	smallest				greatest						
45	48	52	53	61															
smallest				greatest															
	Counting in 10s 0 10 20 30 40 50 60 70 80 90 100																		
																			

Number and Place Value

Knowledge Organiser

Read, Write and Represent Numbers to 100

14	fourteen	one ten four ones			<table border="1"> <thead> <tr> <th>Tens</th> <th>Ones</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>	Tens	Ones			
Tens	Ones									
29	twenty-nine	two tens nine ones			<table border="1"> <thead> <tr> <th>Tens</th> <th>Ones</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>	Tens	Ones			
Tens	Ones									
42	forty-two	four tens two ones			<table border="1"> <thead> <tr> <th>Tens</th> <th>Ones</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>	Tens	Ones			
Tens	Ones									



Addition and Subtraction

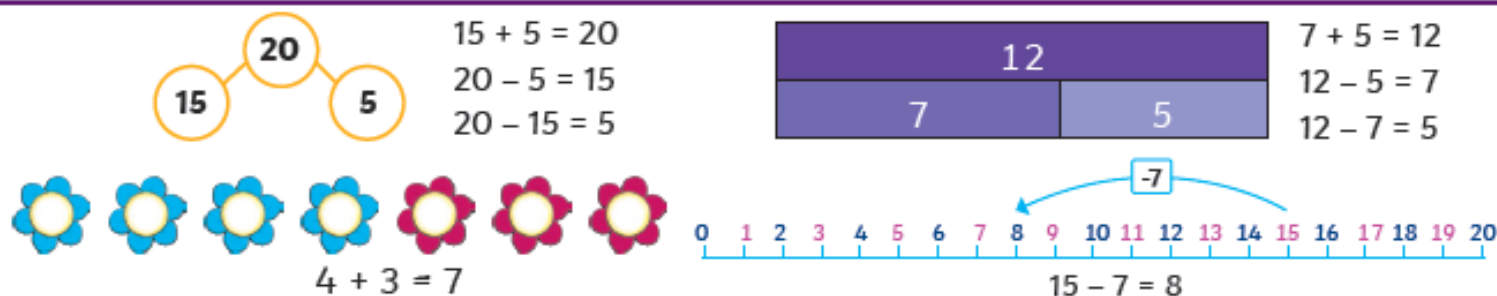
Addition and Subtraction

Knowledge Organiser

Key Vocabulary

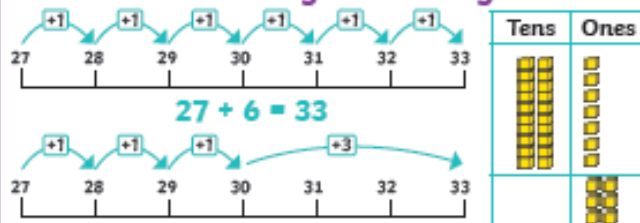
- Add
- Total
- Make
- Plus
- Sum
- More
- Altogether
- Difference
- Leave
- Subtract
- Difference between
- Less
- Minus
- Take away
- Mentally, Orally
- Column Addition
- Column Subtraction
- Estimate
- Inverse operation
- Solve problems
- Number facts
- Place Value

Addition and Subtraction Bonds to 20

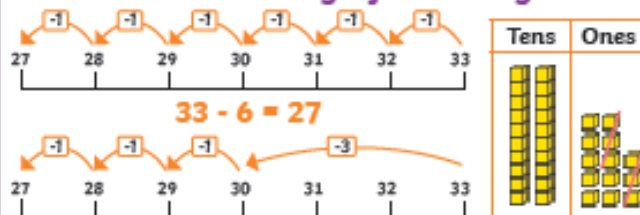


Methods

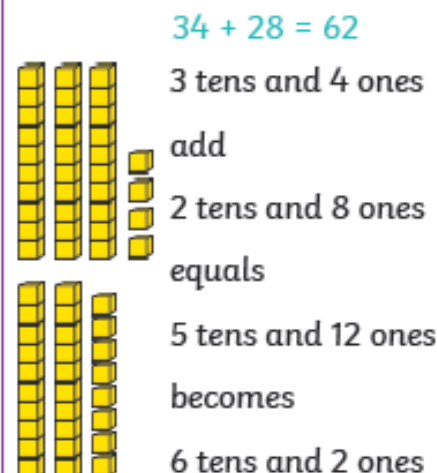
Add 2-digit and 1-digit



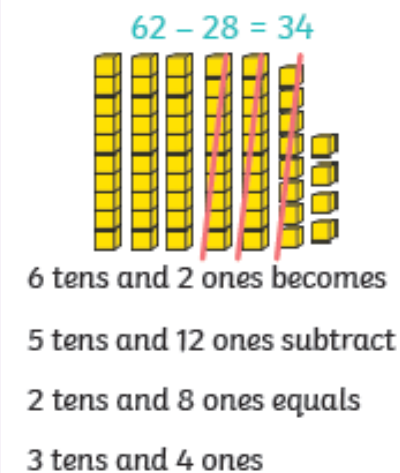
Subtract 1-digit from 2-digit



Add 2-digit numbers

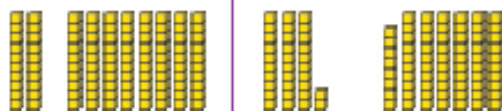


Subtract 2-digit numbers



Addition and Subtraction Bonds to 100

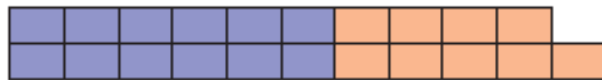
$2 + 8 = 10$
 so $20 + 80 = 100$



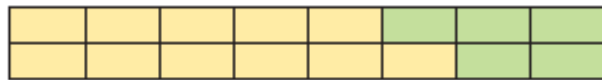
$32 + 68 = 100$
 3 tens and 2 ones + 6 tens and 8 ones
 = 9 tens and 10 ones = 10 tens = one hundred

Mental Methods

Compare Number Sentences



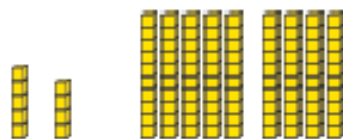
$$6 + 4 < 6 + 5$$



$$5 + 3 = 6 + 2$$

Related facts

$$5 + 4 = 9 \text{ so } 50 + 40 = 90$$



Add 3 1-digit numbers



$$9 + 5 + 3 = 17$$

More or Less/ Add and Subtract 1s and 10s

Add and subtract 1s

$$24 + 1 = 25$$

$$24 + 2 = 26$$

$$24 + 3 = 27$$



$$37 - 1 = 36$$

$$37 - 2 = 35$$

$$37 - 3 = 34$$



There are 7 flowers in a vase. One more is added.

Now there are 8 flowers.



10 More or Less

30	40	50	60	70	80
----	----	----	----	----	----

47	57	67	77	87	97
----	----	----	----	----	----

The ones digit stays the same.

10 less	Number	10 more
1	11	21
34	44	54

Take care when crossing hundreds:

86	96	106	116
----	----	-----	-----

Add and Subtract 10s

10	30	50	70	90
----	----	----	----	----

3	33	63	93
---	----	----	----

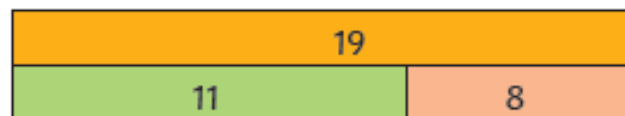
Tens	Ones	
		27
		+ 40
<hr/>		67

Tens	Ones	
		72
		- 30
<hr/>		42

Crossing hundreds:

74	94	114	134
----	----	-----	-----

Check Calculations



$19 - 8 = 11$ can be checked using $8 + 11 = 19$

$32 + 5 = 82$ x Spot that 5 tens have been added not 5 ones

$28 - 26 = 12$ x Spot that 28 and 26 are very close together, so difference won't be 12.

$37 - 4 = 41$ x Spot that if subtracting 4 the answer will be smaller.

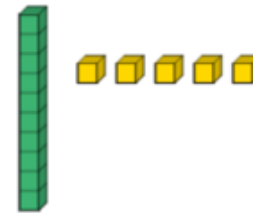
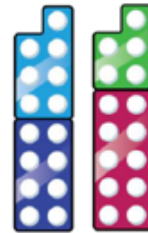
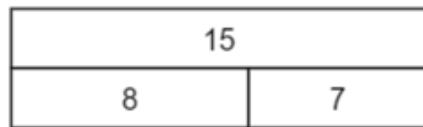
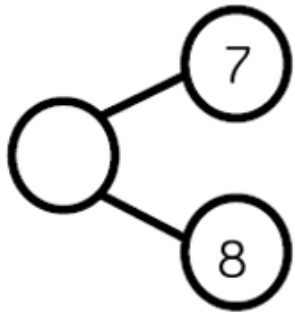
$68 - 40 = 64$ x Spot that 4 ones have been subtracted and not 4 tens.

Written Methods and Visuals

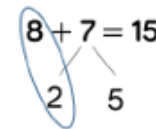
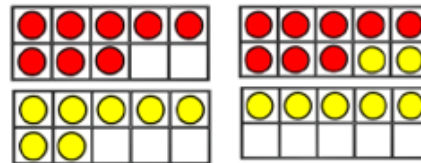
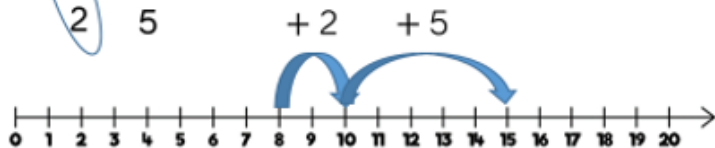
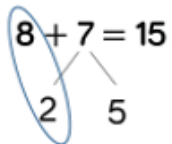


Skill: Add 1 and 2-digit numbers to 20

Year: 1/2



$$8 + 7 = 15$$

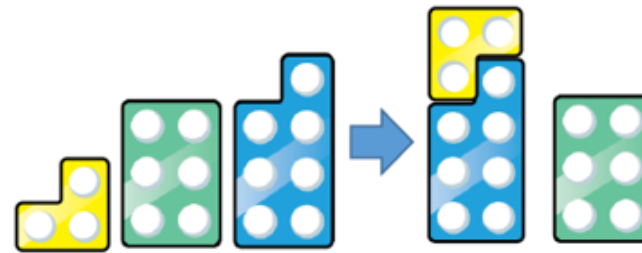
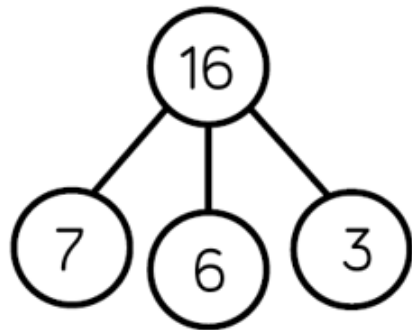


- When adding 1-digit numbers that cross 10, it is important to highlight ten ones equaling one ten.
- Different manipulatives can be used to represent this exchange. Use concrete resources alongside number lines to support children in understanding how to partition their jumps.

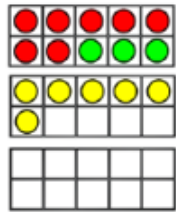
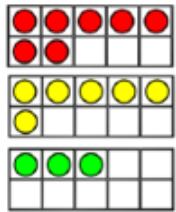


Skill: Add three 1-digit numbers

Year: 2



$$7 + 6 + 3 = 16$$



$$7 + 6 + 3 = 16$$

10

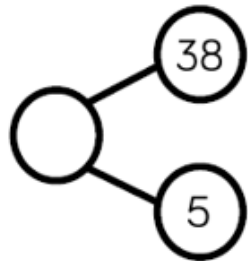
16		
7	6	3

- When adding three 1-digit numbers, children should be encouraged to look for number bonds to 10 or double to add the numbers more efficiently.
- This supports children in their understanding of commutativity.
- Manipulatives that highlight number bonds to 10 are effective when adding three 1-digit numbers



Skill: Add 1-digit and 2-digit numbers to 100

Year: 2/3



$$38 + 5 = 43$$

43	
38	5



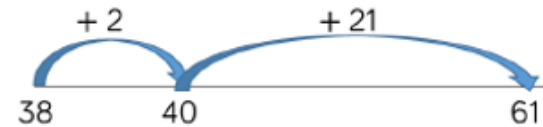
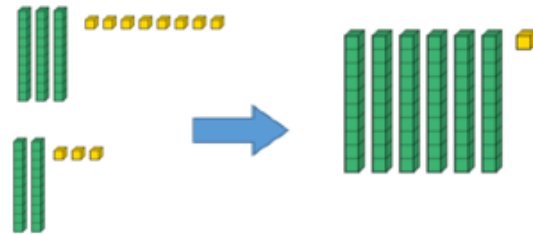
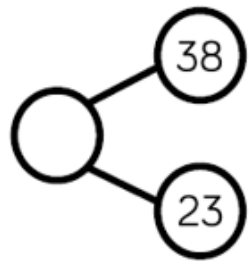
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

- When adding single digits to a 2-digit number, children should be encouraged to count on from the larger number.
- They should also apply their knowledge of number bonds to add more efficiently, e.g. $8+5=13$ or $38+5=43$
- Hundred squares and dienes can support children to find the number bond to 10.



Skill: Add two 2-digit numbers to 100

Year: 2/3



61	
38	23

$$38 + 23 = 61$$

Tens	Ones

$$\begin{array}{r} 38 \\ + 23 \\ \hline 61 \\ 1 \end{array}$$

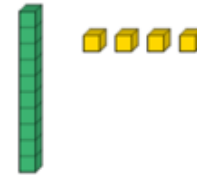
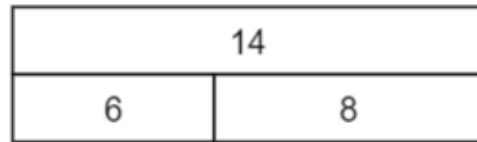
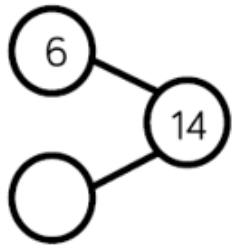
Tens	Ones

- At this stage, encourage children to use the formal column method when calculating alongside dienes or place value counters.
- Children can also use a blank number line to count on to find the total. Encourage them to jump in multiples of 10 to become more efficient.

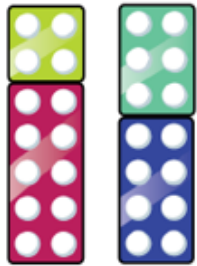


Skill: Subtract 1 and 2-digit numbers to 20

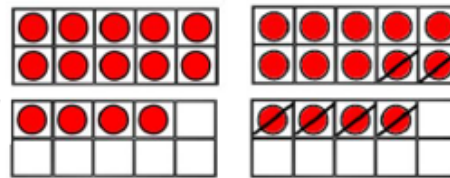
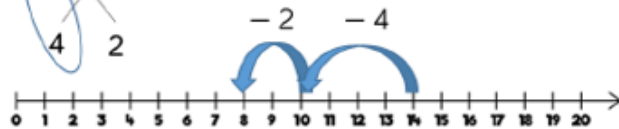
Year: 1/2



$$14 - 6 = 8$$



$$14 - 6 = 8$$



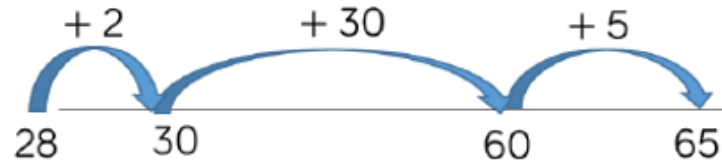
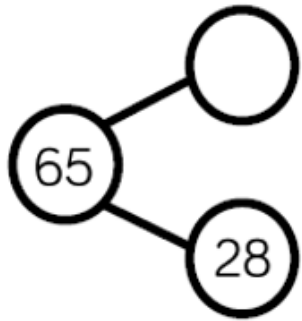
$$14 - 6 = 8$$

- When subtracting 1-digit numbers that cross 10, it is important to highlight ten ones equalling one ten.
- Children should be encouraged to find the number bond when partitioning the subtracted number. Ten frames, numicon and number lines are particularly useful for this.



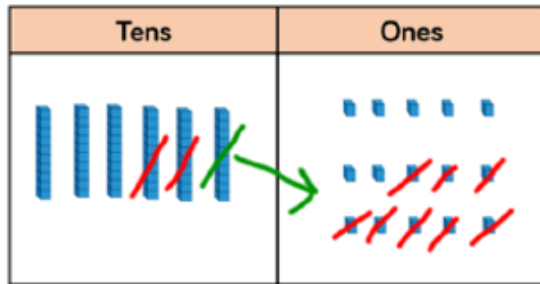
Skill: Subtract 1 and 2-digit numbers to 100

Year: 2

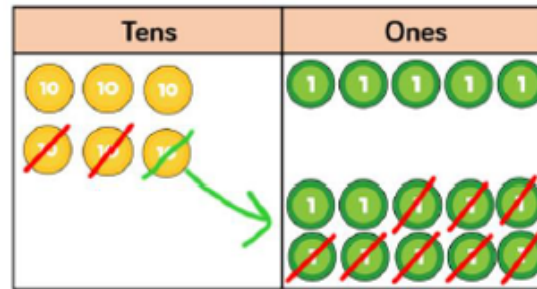


65	
28	37

$$65 - 28 = 37$$



$$\begin{array}{r} 5 \ 1 \\ 65 \\ - 28 \\ \hline 37 \end{array}$$



- At this stage, encourage children to use the formal column method when calculating alongside dienes or place value counters.
- Children can also use a blank number line to count on to find the difference. Encourage them to jump to multiples of 10 to become more efficient.

Multiplication and Division

Knowledge Organiser

Multiplication and Division

Key Vocabulary

Recognise Equal Groups

Make Equal Groups

groups



5 equal groups with 3 in each group

equal groups



Make 4 equal groups.



lots of



arrays

2 equal groups with 4 in each group

repeated addition



4 equal groups of 10

multiplication

Add Equal Groups



$2 + 2 + 2 + 2 = 8$ apples

The Multiplication Symbol



$$4 \times 2 = 8$$

$$2 \times 4 = 8$$

8 apples

times tables



6 equal amounts of 5 pence



$$2 \times 5 = 10$$

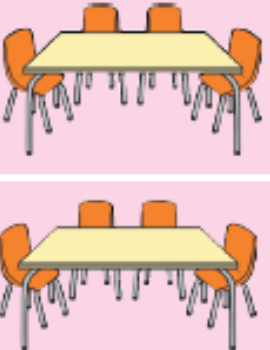
$$5 \times 2 = 10$$

10 cookies

Multiplication from Pictures



4 lots of 2 = 8



2 lots of 4 = 8

Use Arrays



4 rows of 10 = 40
10 columns of 4 = 40

The 2 Times Table



6 lots of 2 = 12

2	4	6	8	10	12	14	16	18	20	22	24
---	---	---	---	----	----	----	----	----	----	----	----

The 5 Times Table



9 lots of 5 = 45

5	10	15	20	25	30	35	40	45	50	55	60
---	----	----	----	----	----	----	----	----	----	----	----

The 10 Times Table



7 lots of 10p = 70p

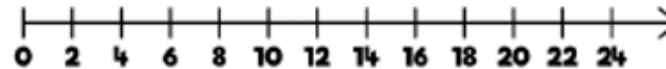
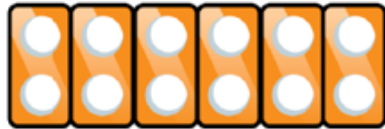
10	20	30	40	50	60	70	80	90	100	110	120
----	----	----	----	----	----	----	----	----	-----	-----	-----

Written Methods and Visuals

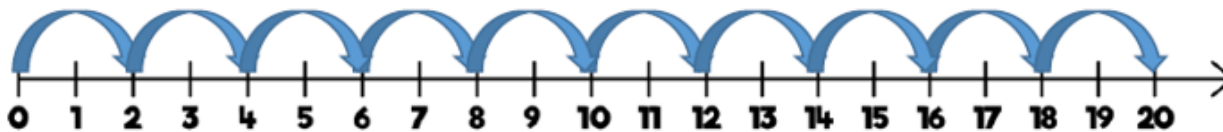
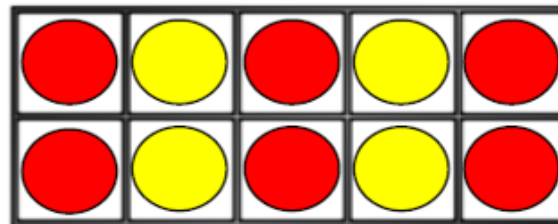


Skill: 2 times table

Year: 1/2



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50



- Encourage daily counting in multiples both forwards and backwards. This can be supported using a number line, counting stick or hundred square.
- Look for patterns in the two times table, using concrete manipulatives to support. Notice how all the numbers are even and there is a pattern in the ones.
- Use different models to develop fluency.

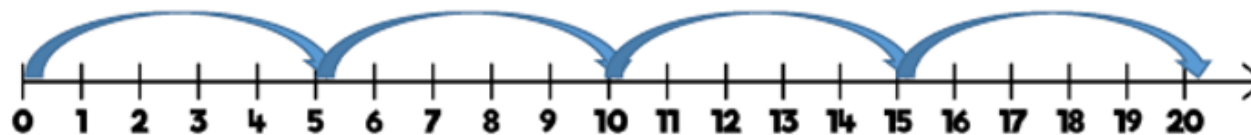
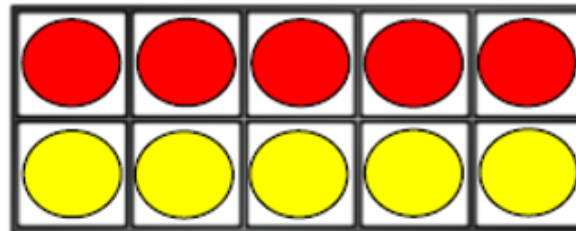
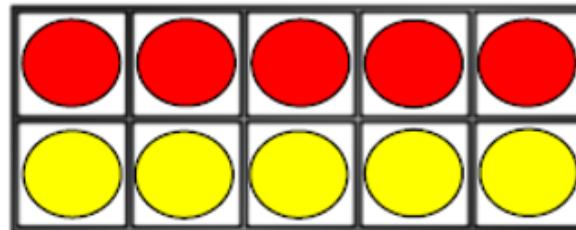
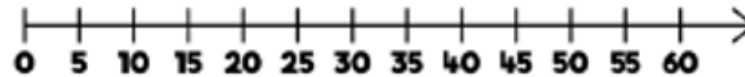


Skill: 5 times table

Year: 1/2



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

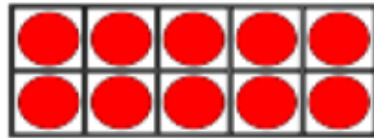
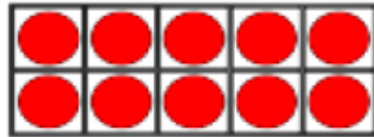
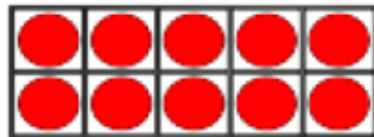


- Encourage daily counting in multiples both forwards and backwards. This can be supported using a number line, counting stick or hundred square.
- Look for patterns in the five times table, using concrete manipulatives to support. Notice the pattern in the ones as well as highlighting the odd, even, odd, even pattern.



Skill: 10 times table

Year: 1/2



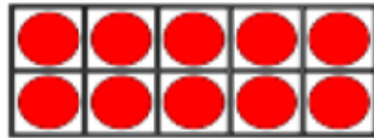
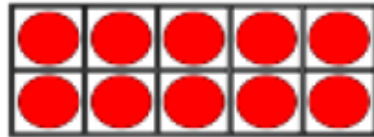
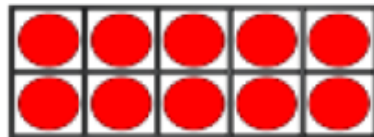
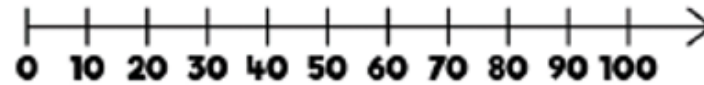
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

- Encourage daily counting in multiples both forwards and backwards. This can be supported using a number line, counting stick or hundred square.
- Look for patterns in the ten times table, using concrete manipulatives to support. Notice the patterns in the digits – the ones are always 0 and the tens increase by 1 each time.



Skill: 10 times table

Year: 1/2



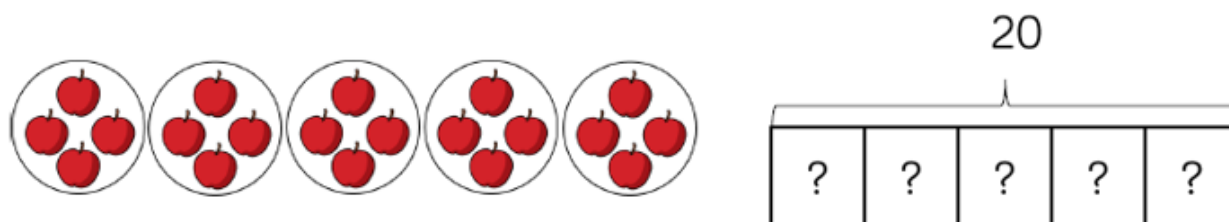
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

- Encourage daily counting in multiples both forwards and backwards. This can be supported using a number line, counting stick or hundred square.
- Look for patterns in the ten times table, using concrete manipulatives to support. Notice the patterns in the digits – the ones are always 0 and the tens increase by 1 each time.

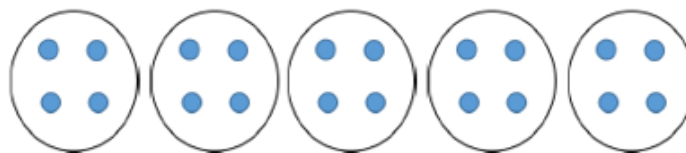
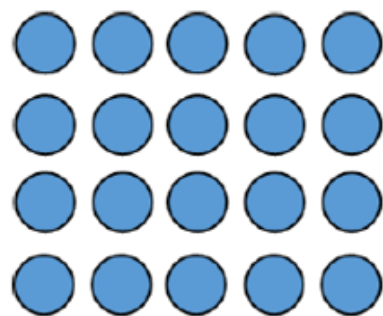


Skill: Solve 1-step problems using division (sharing)

Year: 1/2



There are 20 apples altogether.
They are shared equally between 5 bags.
How many apples are in each bag?



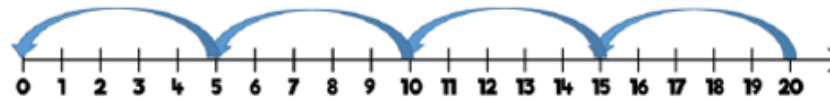
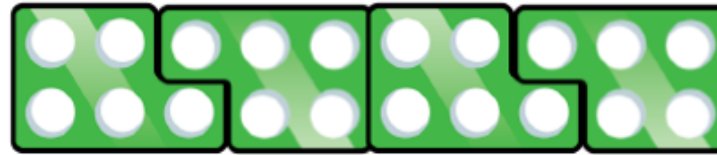
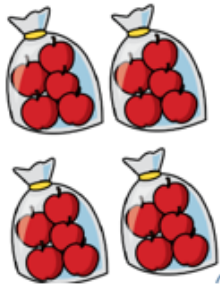
$$20 \div 5 = 4$$

- Children solve problems by sharing amounts into equal groups.
- In Year 1, children use concrete and pictorial representations to solve problems. They are not expected to record division formally.
- In Year 2, children are introduced to the division symbol.

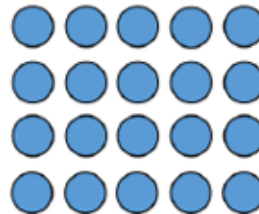
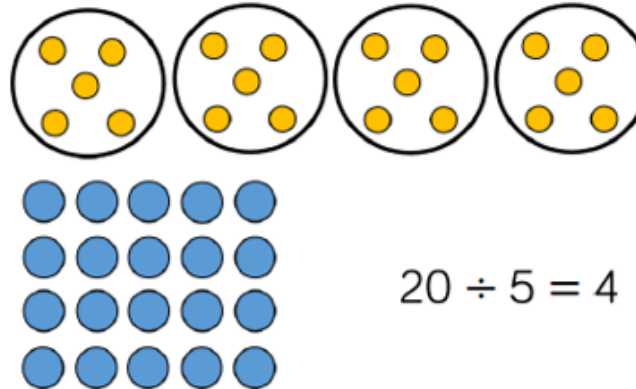
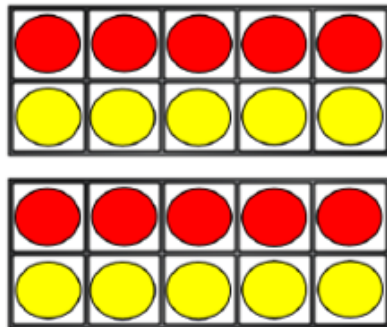


Skill: Solve 1-step problems using division (grouping)

Year: 1/2



There are 20 apples altogether.
They are put in bags of 5.
How many bags are there?








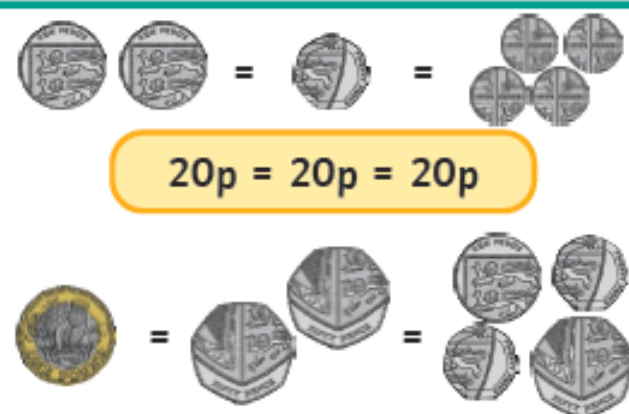

$$20 \div 5 = 4$$

- Children solve problems by grouping and counting the number of groups. Grouping encourages children to count in multiples and links to repeated subtraction on a number line. They can use concrete representations in fixed groups such as number shapes which helps to show the link between multiplication and division.

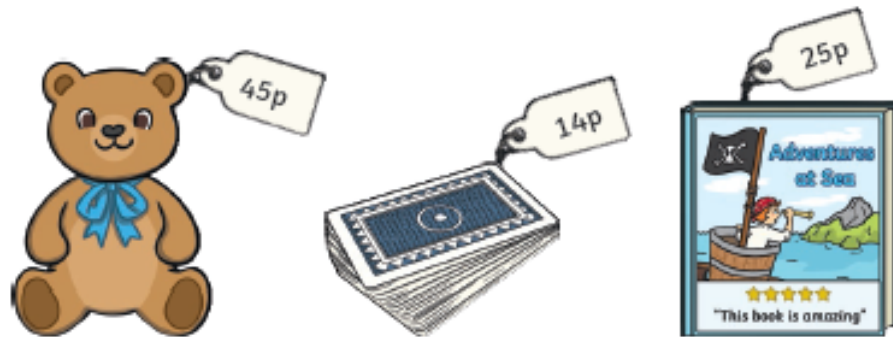
money

Money

Knowledge Organiser

Key Vocabulary	Pence	Pounds	Pounds and Pence
pence	 <p>1p 2p 5p</p> <p>1 penny 2 pence 5 pence</p>	 <p>£1 £2 £5</p> <p>1 pound 2 pounds 5 pounds</p>	<p>Pounds and Pence</p> 
pound	 <p>10p 20p 50p</p> <p>10 pence 20 pence 50 pence</p>	 <p>£10 £20 £50</p> <p>10 pounds 20 pounds 50 pounds</p>	
coin	<h3>Equal Amounts</h3>  <p>20p = 20p = 20p</p> <p>£1 = £1 = £1</p>		<h3>Compare Amounts</h3>  <p>75p > 74p</p> <p>£9 and 50p < £10</p>
note			
total			
amount			
change			
difference			
price			
cost			
pay			
owe			

Find the Total



Lucy bought a teddy bear and some playing cards.



$$45p + 14p = 59p$$

Timek bought two books.

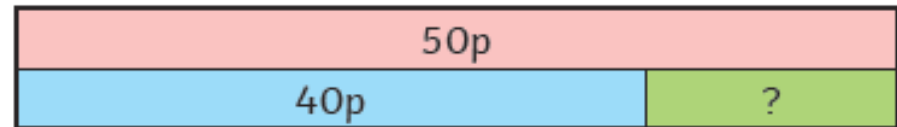


$$25p + 25p = 50p$$

Find the Change

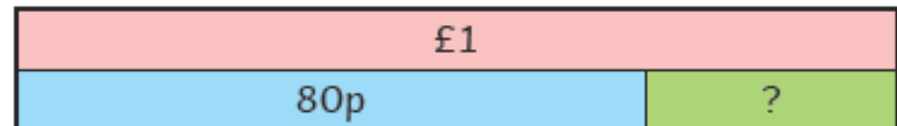
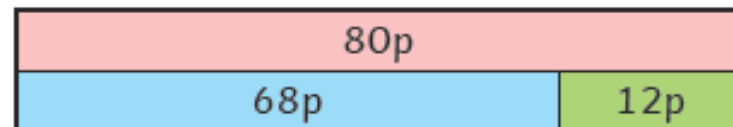


Lucy bought a jigsaw with a 50p coin. How much change did she get?



$$50p - 40p = 10p$$

Timek bought a plant and a toy car. He paid with a £1 coin. How much change did he get?



$$£1 - 80p = 20p$$

Fractions

Fractions

Key Vocabulary

fraction

part

whole

equal

share

half

quarter

third

equivalent

numerator

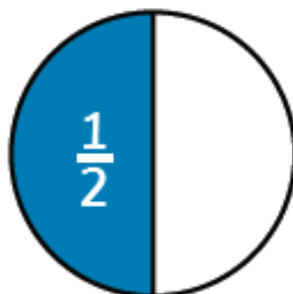
denominator



Recognising Unit Fractions

Half

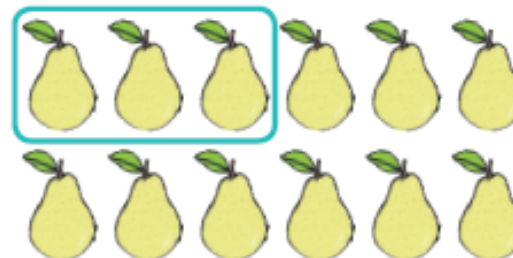
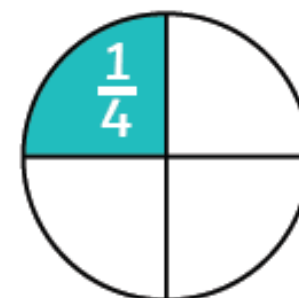
A whole split into two equal parts.



$$\frac{1}{2} \text{ of } 8 = 4$$

Quarter

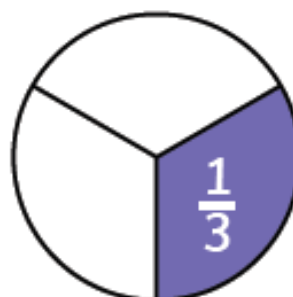
A whole split into four equal parts.



$$\frac{1}{4} \text{ of } 12 = 3$$

Third

A whole split into three equal parts.



$$\frac{1}{3} \text{ of } 6 = 2$$

Non-unit Fractions

$\frac{2}{3}$

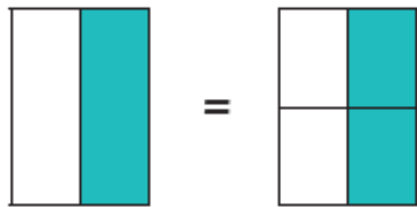


$\frac{3}{4}$



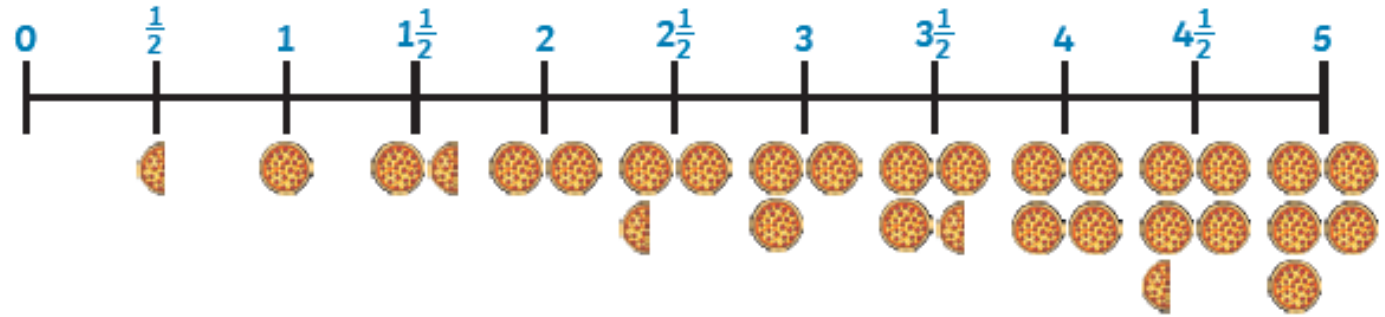
Equivalent Fractions

$$\frac{1}{2} = \frac{2}{4}$$

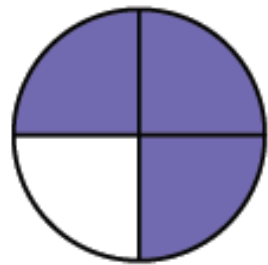


Counting in Fractions

Halves



Numerator and Denominator

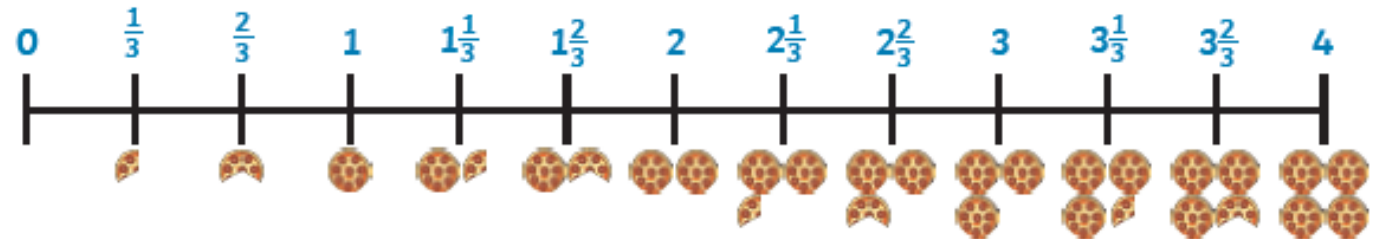


$$\frac{3}{4}$$

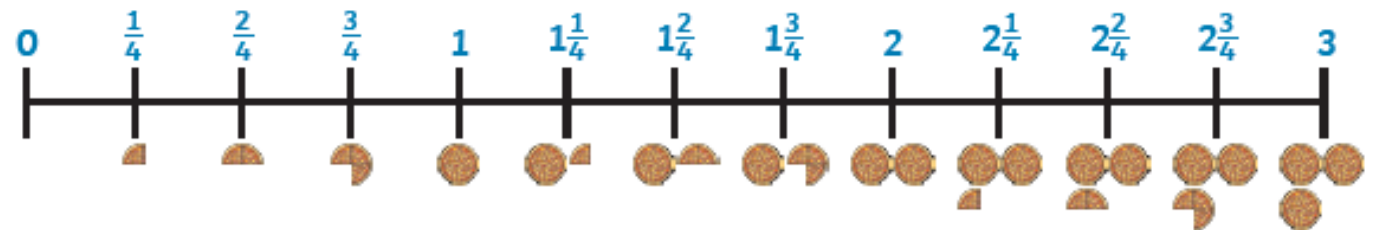
Numerator
How many equal parts of the whole are needed?





















Denominator
How many equal parts are in the whole?

Thirds



Quarters



Time	O'Clock and Half Past							
Key Vocabulary								
time	half past twelve	one o'clock	half past one	two o'clock	half past two	three o'clock	half past three	four o'clock
clock								
hours								
minutes								
hand								
o'clock								
half past								
quarter past	half past four	five o'clock	half past five	six o'clock	half past six	seven o'clock	half past seven	eight o'clock
quarter to								
five minutes								
duration	Past and To							
shorter								
longer								
								
	o'clock	quarter past	half past	quarter to				

Time

Knowledge Organiser

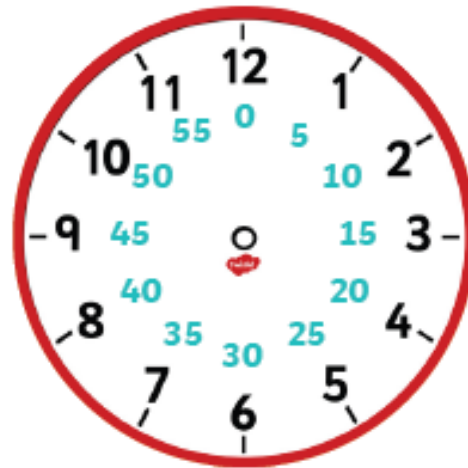
Telling Time to 5 Minutes



Hour Hand
The short hand points to the hour. If this hand is pointing between hours, it is either past the earlier hour or to the later hour.

Minute Hand
The long hand points to the minutes past or to the hour.

O'Clock and Half Past

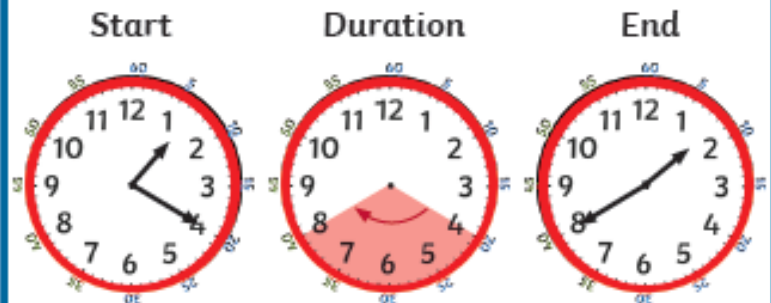


There are **60 minutes** in an hour.



There are **24 hours** in a day.

Find Durations of Time



20 minutes has passed.

Compare Durations of Time



30 minutes

A swimming lesson



2 hours

A visit to the cinema



1 second

The time it takes to do 1 star jump



20 minutes

A favourite TV programme



3 hours

A nice long walk



5 days

A week at school

Compare the time using the vocabulary 'longer' and 'shorter'.

Length and Height

Length and Height

Knowledge Organiser

Key Vocabulary

length

long

short

height

tall

measure

ruler

tape measure

metre stick

centimetre (cm)

metre (m)

compare

order

Measuring in Centimetres

Measure from zero.



This ruler measures in **centimetres (cm)**. The paintbrush is 8cm long.

This ruler is to scale.

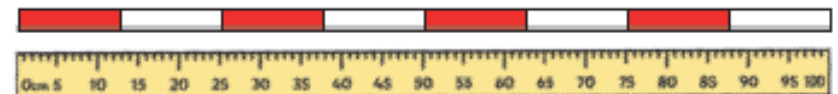
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Measuring in Metres



We can measure the length or height of larger objects in **metres (m)**.

The girl is 1m and 20cm tall.

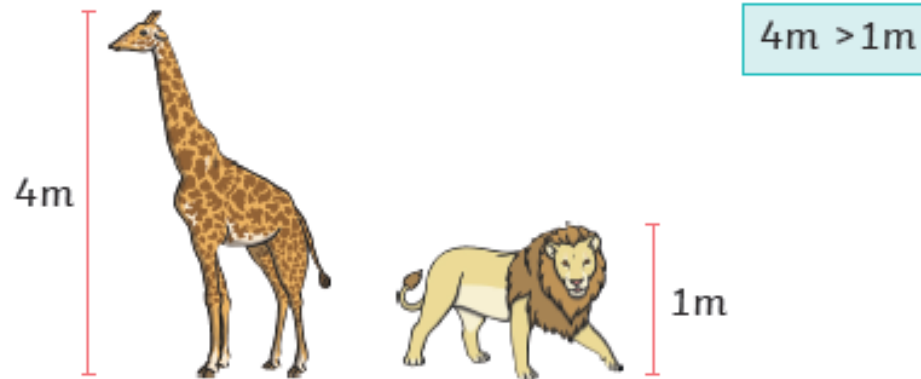


We can use metre sticks, trundle wheels or tape measures.

1 metre = 100 centimetres

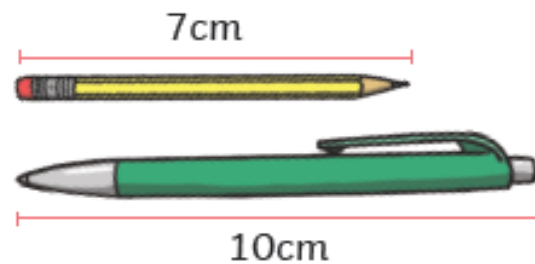
Comparing Height

The giraffe is **taller** than the lion.
The lion is **shorter** than the giraffe.



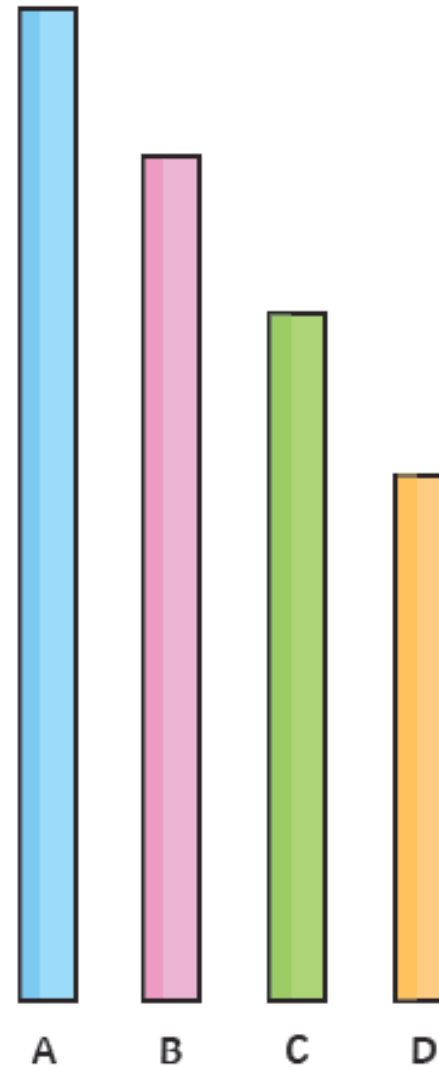
Comparing Length

The pencil is **shorter** than the pen.
The pen is **longer** than the pencil.



$7\text{cm} < 10\text{cm}$

Ordering Length



The straws are in order from **longest** to **shortest**.

A is the **longest**.
D is the **shortest**.
B is **longer** than C.
C is **shorter** than A.

Statistics

Knowledge Organiser

Statistics

Key Vocabulary

data

interpret

key

tally chart

pictogram

block diagram

table

total

compare

symbol



Tally Charts

Tally marks look like this:



The fifth mark goes across diagonally, like a gate.

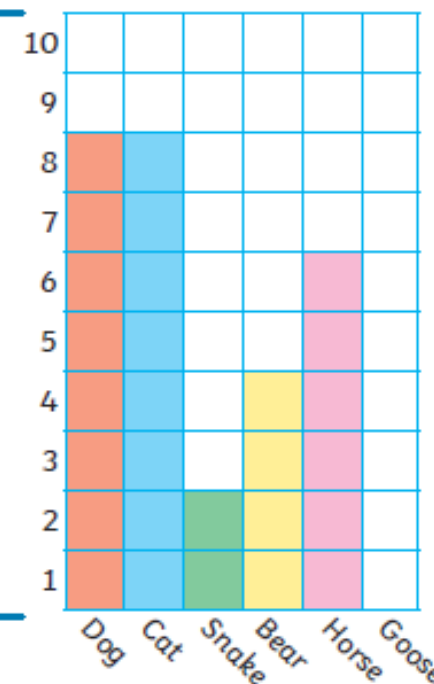
A tally chart is one way of collecting data using tally marks.

Eye Colour	Tally	Total
brown		6
blue		8
green		3
grey		4
hazel		5

Block Diagram

A block diagram represents data using blocks. One block represents one item.

In this block diagram, the **y-axis**, which is vertical, shows the number of items.



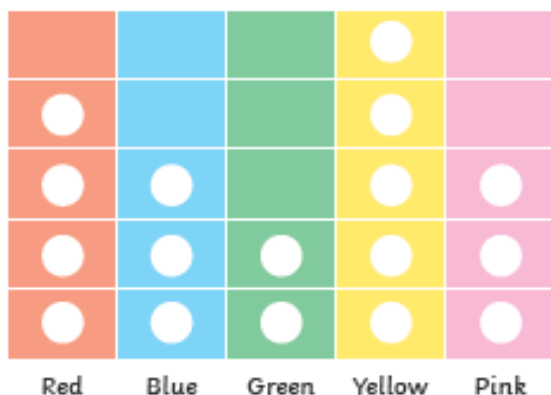
In this block diagram, the **x-axis**, which is horizontal, shows the types of items.

The blocks can go vertically or horizontally.

Pictograms

Pictograms use pictures or symbols to represent data. Each picture or symbol can represent one item or more than one. The key shows what each symbol represents.

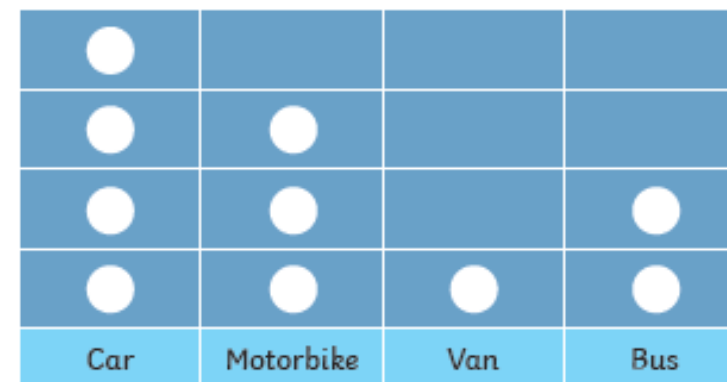
Favourite Colour



Key
 ● = 1 child

Here is an example of a pictogram with a different scale.

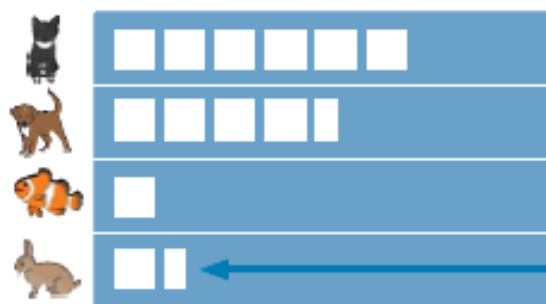
Traffic Survey



Key
 ● = 5 vehicles

This pictogram uses one symbol to represent 2 pets.

Class 1's Pets

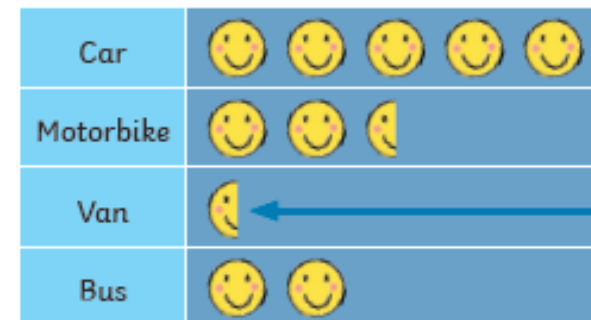


Key
 □ = 2 pets

To represent 1 pet, a picture of half a square is used.

This pictogram has one symbol to represent 10 children.

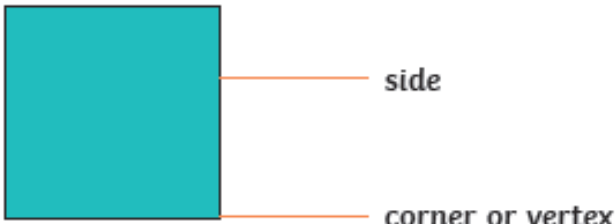
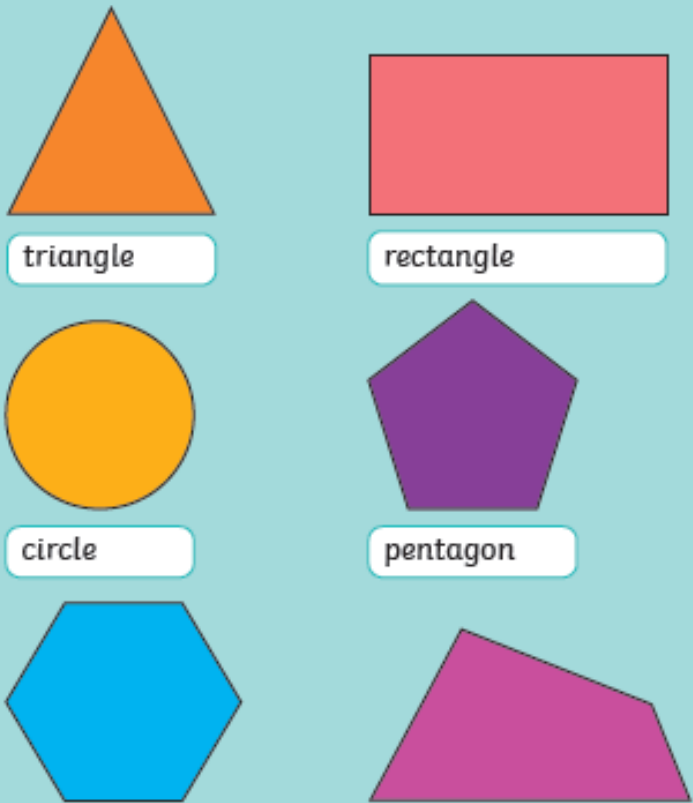
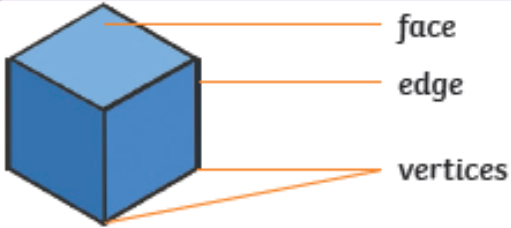






Ways of Travelling to School



Key
 😊 = 10 children

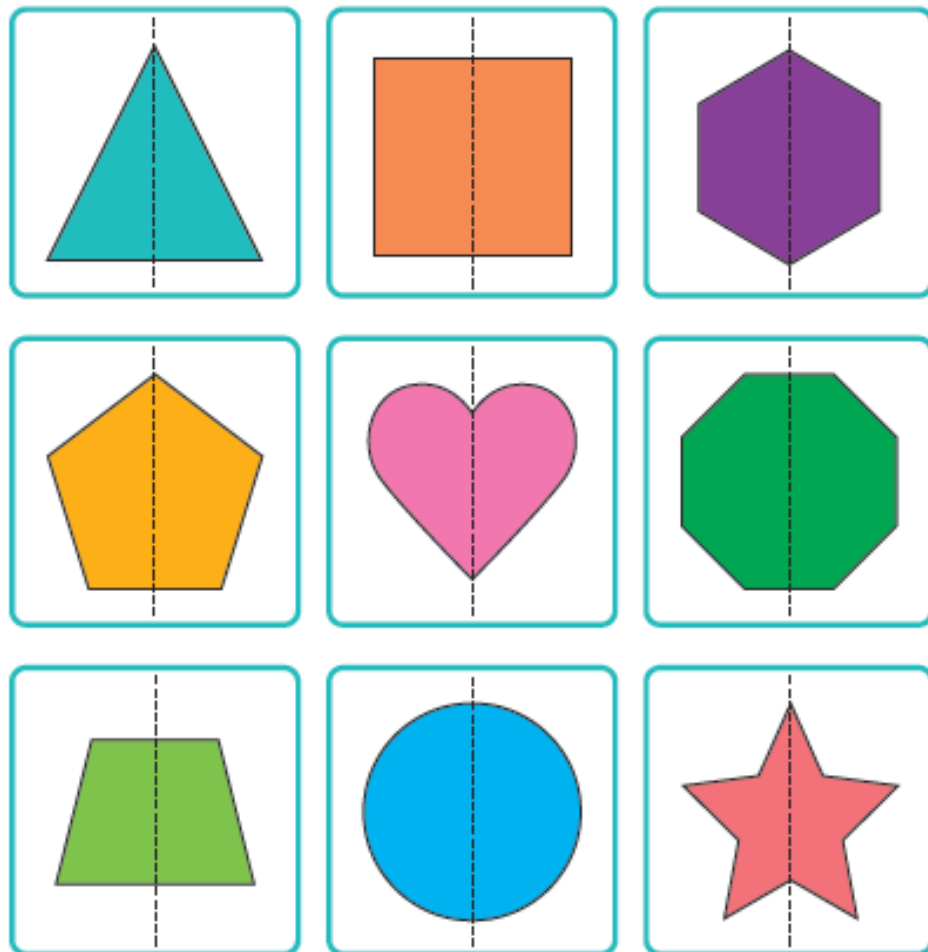
To represent 5 children, a picture of half a face is used.

Properties of shape

Geometry: Properties of Shape		Knowledge Organiser
Key Vocabulary	Recognise and Describe 2D Shapes	Recognise and Describe 3D Shapes
two-dimensional (2D)	 <p>square</p>  <p>triangle</p> <p>rectangle</p> <p>circle</p> <p>pentagon</p> <p>hexagon</p> <p>quadrilateral</p>	 <p>cube</p>
three-dimensional (3D)		 <p>cuboid</p>
flat		 <p>cone</p>
solid		 <p>sphere</p>
corner		 <p>cylinder</p>
apex		 <p>triangular prism</p>
vertex		 <p>square-based pyramid</p>
vertices		
side		
edge		
face		
curved		
straight		
round		
line of symmetry		
vertical		
pattern		

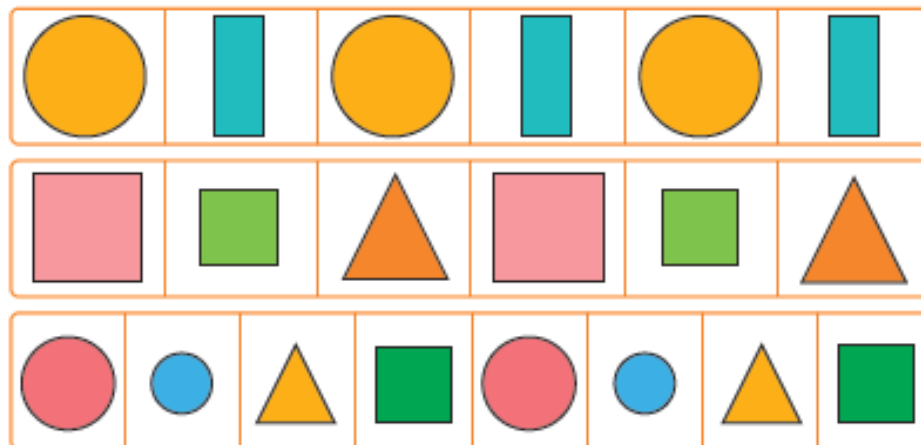
Lines of Symmetry

These 2D shapes have a vertical line of symmetry.

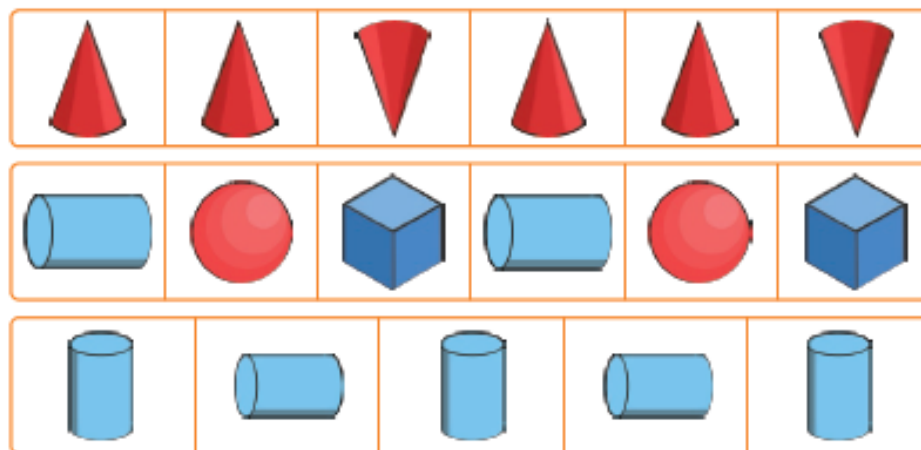


Repeating Shape Patterns

2D Patterns



3D Patterns



Mass, Capacity and Temperature

Mass, Capacity and Temperature

Knowledge Organiser

Key Vocabulary

mass

gram

kilogram

lighter

heavier

capacity

volume

millilitre

litre

temperature

Celsius

degrees

twinkl visit [twinkl.com](https://www.twinkl.com)

Mass



We use scales to measure **grams**.

A gram is a small unit of measurement that we use to measure how heavy or light something is.

We can write gram as **g**.

We measure the following using grams:



15g > 10g

We also use scales to measure **kilograms**.

A kilogram is a larger unit of measurement that we use to measure how light or heavy something is.

We can write kilogram as **kg**.

We measure the following using kilograms:



1kg < 3kg

Capacity

Capacity is the amount of liquid a container can hold.

Volume is how much liquid is in the container.

Millilitres



We can use a measuring cylinder to measure very small volumes.

We measure these in millilitres.
We write this as ml.

$$1000\text{ml} = 1\text{l}$$



Litres



We can use a jug to measure larger volumes.

We measure these in litres.
We write this as l.

$$1000\text{ml} = 1\text{l}$$



quarter full



half full



full

$$25\text{ml} < 250\text{ml} \quad 10\text{l} > 2\text{l}$$

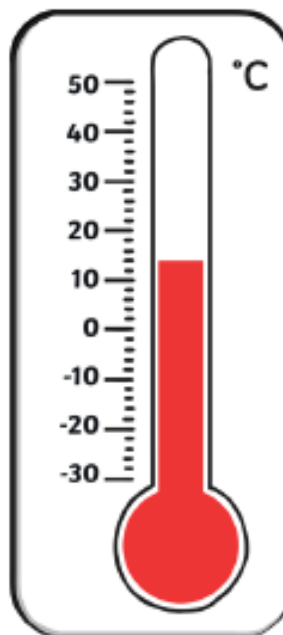
Temperature

Temperature is a measure of heat.

Thermometers are used to measure temperature.

We usually measure temperature in **degrees Celsius ($^{\circ}\text{C}$)** but some parts of the world use degrees Fahrenheit ($^{\circ}\text{F}$).

We can measure the temperature of air, liquids or objects using a thermometer.



Most thermometers have small tubes and a bulb of liquid at the bottom. The hotter the temperature, the higher the liquid from the bulb rises in the tube. There are markings along the side of the glass tube that show the temperature.



Position and Direction

Knowledge Organiser

Position and Direction

Key Vocabulary

forwards

backwards

left

right

north

south

east

west

quarter turn

half turn

three-quarter turn

clockwise

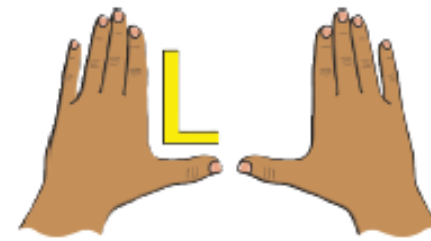
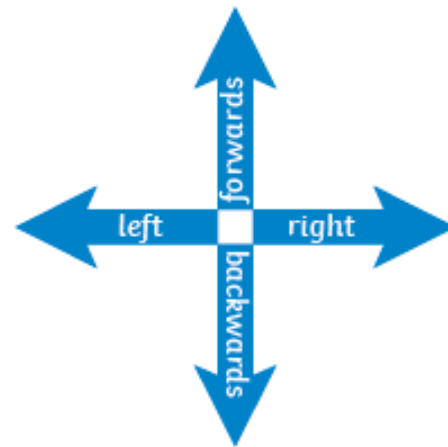
anticlockwise

pattern

sequence

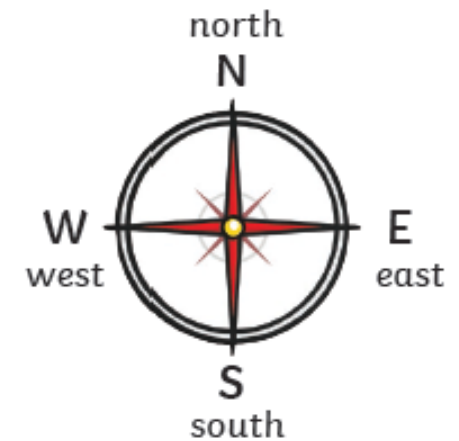


Describing Straight-Line Movement



Left and Right

The hand that makes an L shape is the **left hand**.



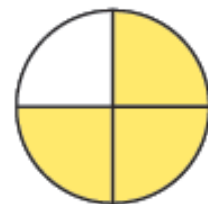
Describing Turns



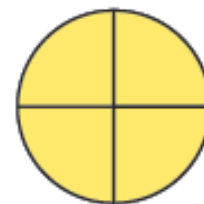
quarter turn



half turn



three-quarter turn



full turn

clockwise



anticlockwise



If the turn is in the same direction as the hands of a clock, it is **clockwise**.

If the turn is in the opposite direction to the hands of a clock, it is **anticlockwise**.