Maths Overview

Collective Vision Trust uses the White Rose Maths Scheme as the basis of its mathematics curriculum.

White Rose is a carefully sequenced scheme that builds up childrens' mathematical knowledge through clear explicit teaching. It makes good use of developing mathematical knowledge through using concrete apparatus to pictorial representation and, then, to abstract thinking. It is designed to support the development of reasoning and problem solving alongside fluency to support challenge and ambition.

We have used this curriculum to draw out the crucial knowledge that is the foundation of mathematical learning that gives children the fundamental building blocks to develop their mathematical understanding and progress. We have ensured that we build in lots of opportunities for children to recap their knowledge, in order to ensure it is firmly embedded and, that, their learning is part of their long term memory.

Curriculum Intent

White Rose Maths scheme has a clear rationale for the sequence of the topics. Maths learning requires some things to be learned before others, for example place value needs to be understood before working with addition and subtraction. Similarly, addition needs to be learnt before looking at multiplication. White Rose, quite rightly, puts the emphasis on number skills first in all year groups. Number is the crucial building block for all areas of mathematics and, so, must be prioritised.

For some topics (e.g. shape and statistics) the order is not crucial – they need to come after number, but don't depend on each other, and, so, they can be taught in any order. The sequencing of these is planned to give as wide a variety of topics for pupils as possible in each term and year.

Recap

Planned, quality recap is an essential feature of the curriculum. Teachers will incorporate recap into their daily and weekly plans. In addition, the following is worthy of note:

- On the spot accurate assessment is the key to good recap.
- Teachers will quickly move to longer recap of topic areas that pupils have not remembered.
- Differentiation of learning must be applied to recap work – some pupils will need more recap than others, which needs to happen without holding back the learning of the rest of the class.
- The first week in a half term is always a recap week. No new concepts are taught in recap weeks.
- Topic specific recaps are also in the White Rose plans.
- Teachers will also plan additional ongoing recaps as part of their weekly plans

	Autumn	Spring	Summer
Year 1	− Recap - Reception − Number: Place Value (within 10) − Number: Addition and Subtraction (within 10) − Geometry: Shape − Recap - Autumn Term	− Recap – Autumn Term − Number: Place Value (within 20) − Number: Addition and Subtraction (within 20) − Number: Place Value (within 50) − Measurement: Length and Height − Measurement: Mass and Volume − Recap - Spring Term	− Recap – Autumn and Spring Term − Number: Multiplication and Division − Number: Fractions − Geometry: Position and Direction − Number: Place Value (within 100) − Measurement: Money − Measurement: Time − Recap – Year 1
Year 2	− Recap – Year 1 − Number: Place Value − Number: Addition and Subtraction − Geometry: Shape − Recap – Autumn Term	− Recap – Autumn Term − Measurement: Money − Number: Multiplication and Division − Measurement: Length and height − Measurement: Mass, capacity and temperature − Recap – Spring Term	− Recap – Autumn and Spring Term − Number: Fractions − Measurement: Time − Statistics − Geometry: Position and Direction − Recap – Year 2
Year 3	− Recap – Year 2 − Number: Place Value − Number: Addition and Subtraction − Number: Multiplication and Division − Recap – Autumn Term	− Recap – Autumn Term − Number: Multiplication and Division − Measurement: Length and Perimeter − Number: Fractions − Measurement: Mass and Capacity − Recap – Spring Term	− Recap – Autumn and Spring Term − Number: Fractions − Measurement: Money − Measurement: Time − Geometry: Properties of Shape − Statistics − Recap – Year 3
Year 4	− Recap – Year 3 − Number: Place Value − Number: Addition and Subtraction − Measurement: Area − Number: Multiplication and Division − Recap – Autumn Term	− Recap – Autumn Term − Number: Multiplication and Division − Measurement: Length and Perimeter − Number: Fractions − Number: Decimals − Recap – Spring Term	− Recap – Autumn and Spring Term − Number: Decimals − Measurement: Money − Measurement: Time − Geometry: Properties of Shape − Statistics − Geometry: Position and Direction − Recap – Year 4
Year 5	− Recap – Year 4 − Number: Place Value − Number: Addition and Subtraction − Number: Multiplication and Division − Number: Fractions − Recap – Autumn Term	− Recap – Autumn Term − Number: Multiplication and Division − Number: Decimals and Percentages − Measurement: Perimeter and Area − Statistics − Recap – Spring Term	− Recap – Autumn and Spring Term − Geometry: Properties of Shape − Geometry: Position and Direction − Number: Negative numbers − Measurement: Converting units − Measurement: Volume − Recap – Year 5
Year 6	− Recap – Year 5 − Number: Place Value − Number: Addition, Subtraction, Multiplication and Division − Number: Fractions A − Number: Fractions B − Measurement: Converting Units − Recap – Autumn Term	− Recap – Autumn Term − Number: Ratio − Number: Algebra − Number: Decimals − Number: Fractions, Decimals and Percentages − Measurement: Perimeter, Area and Volume − Statistics − Recap – Spring Term	− Recap – Autumn and Spring Term − Geometry: Properties of Shape − Geometry: Position and Direction − *Recap and application, including SATs preparation* − *Recap and application, investigations and preparations for KS3*

Number: Place value	This is the most important part of maths – all other topics will use the knowledge that you learn here.
Number: Addition and subtraction	These two topics build upon your knowledge of place value.

Number: Multiplication and division	
Number: Fractions	These topics build upon your place value knowledge and will use and develop your addition, subtraction, multiplication and division skills.
Number – Decimals	
Number – Percentages	
Number – Ratio	
Number – Algebra	This is the final skill in 'number' that you will learn about. You will need all the other crucial knowledge in order to learn this.
Measurement	In this part of maths we apply our number knowledge to all the different things we 'measure'
Geometry – Shape	These topics are all to do with shapes – you will still need your number knowledge though.
Geometry –Position and Direction	
Statistics	This is the final part of maths. It looks at how we use maths to show information. Your number skills are still needed for this.

| **Number: Place value** | **Number: an amount**
• A number is an amount of something.
• It can be shown in words, digits, symbols or pictures to show that amount. E.g. six   6   VI   ……
• We use numbers to count an amount.
• odd numbers are amounts which cannot be split equally (in whole numbers) between two
• even numbers are amounts which can be split equally between two
• A number must be a whole number to be odd or even.
• The ones (unit) digit show whether a number is odd or even.

Digit: a numeral 0 to 9
• There are ten digits that we use.
• A digit is any one of these symbols: 0 1 2 3 4 5 6 7 8 9
• The number 23 is written with two digits; 2 and 3.
• Digits can be used to identify (show) something – like a telephone number or house number.

Place value: placement of digit
• Each digit holds a value.
• The value of a digit depends on where it is within a number.
• For example: 3 is   ⬭ ⬭ ⬭
• In 37 the three has a value of 30
• In 307 the three has a value of 300

An **estimate** means to find a value close/near to the actual by making an observation or using some information we already know

Rounding:
• When the digit on the place value in question is 5 or above - round up
• When the digit on the place value in question is 4 or below – round down

Negative numbers:
• A real number that is less than zero.
• Often used to show a cold temperature
• Negative numbers are shown with a negative sign before the number. Eg. -5 |

|	

Extended	**Number line**: a line with numbers placed in their correct position.
	
	• Useful for:
	• Adding
	• Subtracting
	• Finding one more or one less
	
	Roman Numerals
	  1 = I 50 = L
	  2 = II 100 = C
	  3 = III 500 = D
	  4 = IV 1000 = M
	  5 = V
	  6 =VI
	  7 = VII
	  8 = VIII
	  9 = IX
	  10 = X

Number: Addition and subtraction	**+ addition: put together** • Adding is bringing two or more things together – they will make a new amount. • Addition can be used to count (adding one or more each time). • When adding the answer will always be greater than the parts being added **- subtraction: taking away** • Subtraction is taking away from an amount. • The answer is always smaller than the original amount. • Subtraction can be used to count backwards. • Subtraction shows the difference between two values eg. 10 – 4 = 6 therefore the difference between 10 and 4 is 6. **Total: the final amount or answer** • Can relate to all calculations **Number bonds: two numbers that make a set amount** • (7 + 3 = 10, 9 + 1 = 10, 4 + 6 = 10) • Number bonds are used in addition and subtraction **= (often called equals)** • This symbol means 'same as'. • It is usually used to show an answer. > greater than

	• The larger amount is placed by the larger opening and the smaller amount by the tip where the lines meet. **< less than** • The smaller amount is placed where the lines meet and the larger amount by the larger opening where the lines are furthest apart. **Column addition and subtraction:** Numbers are written in place value columns underneath one another • Start adding or subtracting the column on the right and work across to the left • When adding, this can be done in any order (ie smallest or largest first) • For subtraction the number you are taking away must go underneath the number you are starting
Extended	Other words for **addition** include: • altogether • sum • in total Other words for **subtraction** include: • difference • take away • how many left • minus An **inverse** reverses the effect of another. • Addition is the inverse of subtraction • Subtraction is the inverse of addition • Inverse operations can be used to check answers Eg. 20 – 4 = 16, so 16 + 4 = 20
Number: Multiplication and division	**X multiplication: groups of** • Multiplication is sometimes called multiplying. • It is 'groups of', the same as repeated addition. • 5 x 3 or 5 + 5 + 5 **÷ division: splitting into parts** • Splitting in to equal parts is also 'fair sharing'. • For example: • 12 treats between 3 dogs is

- $12 \div 3 = 4$
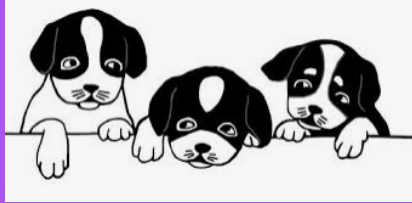
- They have 4 treats each.
- Sometimes there may be an amount that is 'left over' this is called a 'remainder'

Multiplication tables: multiplication facts for a given number
- Multiplication tables start with 1x the number and finish with 12 x the number
- Multiplication tables can be used to answer both multiplication and division questions

Double: is adding the same amount again
- Double 2 is 2 + 2

Half: is sharing equally by 2
- Half of 6 is 6 shared by 2

Partition: means to split into smaller parts

Factors are numbers that divide into another number equally without anything left over.
- They usually come in pairs (1 and 12, 2 and 6, 3 and 4 are all factors of 12)

Multiples are the result after multiplying
- 12 is a multiple of 2 as 6 x 2 = 12

Prime Numbers:
- only have two factors - itself and 1
- 1 is not a prime number

Square numbers are when a number is multiplied by itself to make a square
- One row and one column would make one square (or 1 x 1 = 1, so 1 is a square number)
- Two rows and two columns would make four squares (or 2 x 2 = 4, so 4 is a square number)
- Three rows and three columns would make 9 squares (or 3 x 3 = 9, so 9 is a square number)

Cube numbers are when a number is multiplied by itself three times to make a cube.

- length x height x width eg 3 x 3 x 3 = 27, so 27 is a cube number

Brackets show that things go together

Calculate: solving
We can use + - x ÷ to calculate (solve) maths questions and problems.

Method is a way of doing something

Reasoning: to make sense
- Reasoning is making sense of maths by using maths skills and knowledge.
- Think about the information given and the maths skills you already know to find an answer (solution).

E.g.
  - If two pens cost 20p, one pen must cost 10p
  - *I know there are two pens and the total cost is 20p.*
  - *If I separate the pens into singles, I have two groups of pens with one pen in each group.*
  - *If I separate the money in the same way – I separate the 20p in to two groups, I will have two 10ps, so each pen costs 10p.*

Extended	**Array:** things (objects or numbers) are arranged in rows and columns.

Array: things (objects or numbers) are arranged in rows and columns.

Rows are something going across

Columns are something going down

Multiplying by 10 moves all the digits in a number one column to the left, eg 53 x 10 = 530

Multiplying by 100 moves all the digits in a number two columns to the left, eg 53 x 100 = 5300

Dividing by 10 moves all the digits in a number one column to the right, eg 5300 ÷ 10 = 530

Dividing by 100 moves all the digits in a number two columns to the right, eg 5300 ÷ 100 = 53

Multiplying by 1 does not change the number, eg 53 x 1 = 53

Multiplying by 0 always gives an answer of 0, eg 53 x 0 = 0

Dividing by 1 does not change the number, eg 53 ÷ 1 = 53

Dividing by the number itself always gives an answer of 1, eg 53 ÷ 53 = 1

Indices (powers) tell us how many times to use the number in a multiplication.
- Eg. 8^3 = 8 x 8 x 8

Order of operations is the rule to say which calculations we should do first. The rule is **BIDMAS**:
- **B**rackets
- **I**ndices
- **D**ivision
- **M**ultiplication
- **A**ddition
- **S**ubtraction

| **Number: Fractions** | **Fraction: part of a whole (½ , ¾)** |

Fraction: part of a whole (½ , ¾)
- The bottom number (denominator) is the total number of parts.
- The top number (numerator) is how many parts being used (looked at).
- Some fractions can be the same (equivalent) to other fractions. E.g. 2/4 = ½

Adding fractions:
- Only add the top number (numerator).
- *If the bottom number is the same, it stays the same.*

$$\frac{2}{8} + \frac{4}{8} = \frac{6}{8}$$

- If the bottom number isn't the same, find a new number that relates to both denominators.

$$\frac{1}{3} + \frac{1}{4} = \frac{4}{12} + \frac{3}{12} = \frac{7}{12}$$

Subtracting fractions:
- Only subtract the top number (numerator).
- *If the bottom number is the same, it stays the same.*

$$\frac{4}{8} - \frac{2}{8} = \frac{2}{8}$$

- If the bottom number isn't the same, find a new number that relates to both denominators.

$$\frac{1}{3} - \frac{1}{4} = \frac{4}{12} - \frac{3}{12} = \frac{1}{12}$$

Multiplying fractions:
- Multiply the top number (numerator) **and** the bottom number (denominator)

$$\frac{2}{3} \times \frac{1}{4} = \frac{2 \times 1}{3 \times 4} = \frac{2}{12}$$

Dividing fractions:
- **Keep** the first fraction, **change** the divide to a multiply, **flip** the second fraction

	• For example $\frac{2}{3} / \frac{1}{4} = \frac{2}{3} \times \frac{4}{1} = \frac{8}{3}$

Extended	A **half** is when a whole has been split into two equal parts. One of the parts is a half.
	
	A **quarter** is when a whole has been split into four equal parts. One of the parts is a quarter.
	
	A **third** is when a whole has been split into three equal parts. One of the parts is a third.
	
	A **unit fraction** is one equal part of a whole.
	   • The numerator in a unit fraction is always 1.
	
	Fractions are **equivalent** (equal to) if they show the same part of the whole.
	   • Eg ½ is equivalent to $^2/_4$
	   •
	
	You get **tenths** when you split one whole one into 10 equal parts. Each part is one tenth or $^1/_{10}$.
	
	You have a **whole one** when the numerator (top number) is the same as the denominator (bottom number).
	
	An **improper fraction** is a fraction where the numerator (top number) is bigger than the denominator (bottom number). The improper fraction is worth more than one whole.
	
	A **mixed number** is where you have a whole number and a fraction combined. Eg 1 ½ - one and a half.
	
	You can find a **fraction of an amount** by dividing the amount by the denominator and multiplying this answer by the numerator.

Number – Decimals	**Decimals**: smaller than one
	   • A decimal is a value smaller than one
	   • A decimal is shown to the right of a decimal point
	   • A decimal point is a dot showing that a value smaller than one is to follow
	   • For example: 0.42 shows four tenths and two hundredths
	   • Tenths are ten parts of one whole.
	   • Hundredths are one hundred parts of one whole.
	   • A decimal point **never** moves.

	Ones	Tenths	Hundredths	Thousandths

Extended

Fractions can be written as **decimals**.

- ½ is 0.5 as a decimal
- ¼ is 0.25 as a decimal
- $^1/_{10}$ is 0.1 as a decimal
- $^1/_{100}$ is 0.01 as a decimal

Number – Percentages

Percentage: - part of a 100
- Percent means out of 100
- % - this symbol means percent
- 40% means 40 out of 100
- 11% means 11 out of 100

Percentages can be written as **fractions** or **decimals**.
- Eg 41% = $^{41}/_{100}$ = 0.41
- 50% = ½ = 0.5
- 25% = ¼ = 0.25
- 20% = $^1/_5$ = 0.2
- 40% = $^2/_5$ = 0.4
- 10% = $^1/_{10}$ = 0.1
- 1% = $^1/_{100}$ = 0.01

To find **10%** of an amount you divide by 10.
To find **1%** of an amount you divide by 100.

Number – Ratio

Ratio: compare values

- Ratio compares values (numbers) in a set order.
Example:
- The ratio of dogs to cats is.
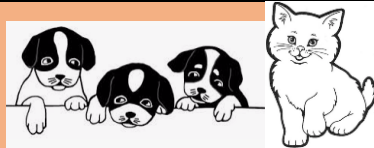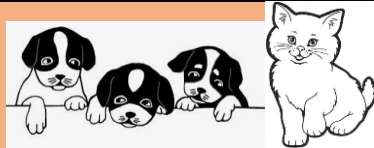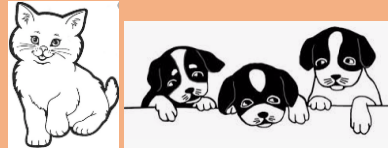
	 3:1 or The ratio of cats to dogs is. 1:3 This symbol is used to separate the values in a ratio
Extended	**None**
Number – Algebra	**Algebra**: showing a number - Using a letter or symbol to show a number y + 3 = 10 so here y = 7 - To solve algebra inverse (opposite) instructions are used - Inverse means the opposite - Inverse of + is − - Inverse of − is + - Inverse of x is ÷ - Inverse of ÷ is x
Extended	An **expression** are a group of numbers letters and operations. Examples: - x + 3 4y 2x − 5 **Substitution** is putting values (numbers) where letters are. A **formula** is a rule written with mathematical symbols. - Eg. P = 2l + 2w An **equation** says that two things are equal Eg. 4
Measurement	**Measure: the size of something** To find out the size or amount of something.
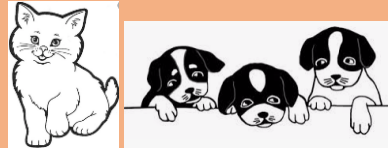
- We can measure: distance, area, time, mass and volume.
- Distance is the space between points in a straight line
- We often use a ruler to measure a length or height

Length is long
Width is wide
Height is tall

Weight, volume and capacity
- Weight is often used to describe the mass of an object – how heavy something is
- Volume is the amount of space within something.
- Capacity is how much something holds
- Capacity is usually a measure of liquid or gas

Money
- Money tells us how much something costs
- We use pounds (£) and pence (p)
- 100p is the same amount of money as £1

Time
- Time is how long something takes.

Measurement – Mass, capacity and temperature
- Mass is how heavy an object is
- It is similar to weight
- Capacity is how much something holds
- Capacity is usually a measure of liquid or gas
- Temperature is how hot or cold something is

Perimeter is the length all the way around the edge of a shape
- You can find a perimeter by adding the lengths of all of the sides of the shape together

Area
- **Area** is measurement of a flat space.
- Area is the number of **squares** inside a shape

Converting units
- Converting units means changing from one unit to another
- You need to know the facts of how units are related to one another

Volume
- Volume is the amount of space within something

	• Volume is the number of cubes inside something
Extended	We use a **ruler** to measure a length in centimetres (**cm**)
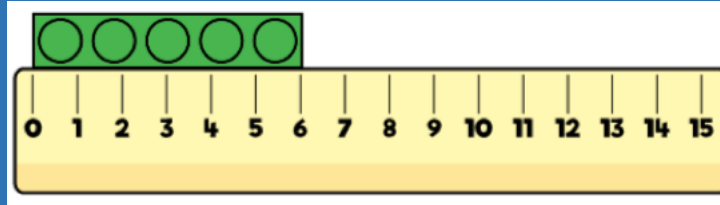
The block is 6cm long

We measure lengths, widths and heights in mm, cm, m and km.

Coins we use are: 1p, 2p, 5p, 10p, 20p, 50p, £1, £2
Notes we use are £5, £10, £20 and £50

There are **7** days of the week: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday and Sunday.
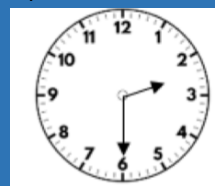
There are **12** months of the year: January, February, March, April, May, June, July, August, September, October, November, December.

On a clock the **hour hand** is the **shorter** hand, and the **minute hand** is the **longer** hand. Some clocks also have a **second hand**, this is also a longer hand, but you can see it move more quickly than the others.

Eg. Two o'clock   half past two

There are **24 hours** in **1 day.**

There are **60 minutes** in **1 hour.**

There are **60 seconds** in **1 minute.**

Years:
  • All years (except for leap years) have 365 days.
  • A leap year has 366 days
  • Leap years happen every 4 years |

Twelve hour clock is where time is told using the twelve ours from midnight to midday (**am** times – **a**fter **m**idnight) and the twelve hours from midday to midnight (**pm** times – **p**ast **m**idday).

Twenty four hour clock is where time is told using the full 24 hours in a day

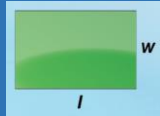We measure **mass** in **grams (g)** and **kilograms (kg)**
- There are **1000g in 1 kg**

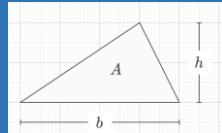We measure **capacity** in **millilitres (ml)** and **litres (l)**
- There are **1000ml in 1 l**

We measure **temperature** in **degrees Centigrade (°C)**

To calculate the area of rectangles, triangles or parallelograms you use the **formula** for the shape:

Area of rectangle = length (l) x width (w)

Area of triangle = half x base (b) x height (h)

Area of parallelogram = base (b) x height (h)
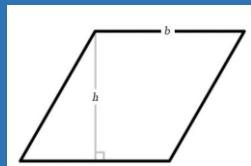
**100cm** is the same as **1m**
There are **10mm** in **1 cm**
There are **1000m** in **1 km**

|	**5 miles** is roughly equivalent to **8 km.**
Geometry - Shape	• Shape is an outline or form of an object. • Dimension is a measurement • 2D (two dimensions) is a shape that has two measurements (e.g. width and height). It can't be picked up. • 3D (three dimensions) is a shape that has three measurements (width, height, depth). It can be picked up. **Symmetry** is when a shape is exactly like another shape when it is moved: rotated (turned) or flipped Some shapes have **names** **Properties** are things that all shapes with the same name have in common An **angle** is a space where two lines meet A **compound shape** is two or more shapes put together to make one shape. **Regular** means all the same A regular shape means all sides the same **Irregular** means not the same. An irregular shape means all sides are not the
Extended	Names of **2D** shapes: • **Rectangle** • **Square** • **Triangle** • **Circle** 2D shapes have **sides** and **vertices**. • a **side** is each line on the shape • a **vertex** is a point where two lines meet A **polygon** is a **closed** shape with straight sides. An **equilateral triangle** is a triangle with all three sides the same length. All the angles in an equilateral triangle are 60°.
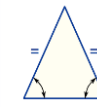
An **isosceles triangle** is a triangle with two equal sides. The angles opposite the equal sides are also equal.

A **scalene triangle** is a triangle with all sides of different lengths. The angles are different too.

A **quadrilateral** is a four sided shape. Some quadrilaterals have special names:
- **square** has all of the sides the same length and all of the angles 90° (right angles).
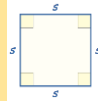
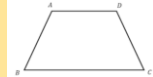- **rectangle** has opposite sides the same length and all of the angles are 90° (right angles).

- **rhombus** has all sides the same length. The angles are **not** right angles. Opposite angles are equal.

- **parallelogram** has opposite sides the same length. The angles are **not** right angles. Opposite angles are equal.
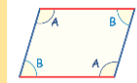
- **trapezium** has one pair of sides parallel.

A **circle** is made by drawing a curve that is always the same distance from the centre. Some parts of a circle have special names:
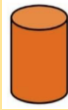
- **radius** is the distance from the centre of a circle to the edge
- **diameter** is the distance across the circle, passing through the centre
- the **diameter** is always 2 x **radius**
- **circumference** is the distance all the way around the curved edge of the circle.

Names of **3D** shapes:

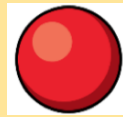- **Cube**

- **Cylinder**

- **Cuboid**

- **Pyramid**

- **Cone**

- **Sphere**

3D shapes have **faces, edges** and **vertices**.
- a **face** is each flat surface on the shape
- an **edge** is a line from one corner to another
- a **vertex** is a point where two edges meet (a corner)

A **net** is a pattern that you can cut out and fold to make a model of a 3D shape.

A **prism** is a 3D shape with flat faces. The two end faces are the same.

A **right angle** is a quarter turn
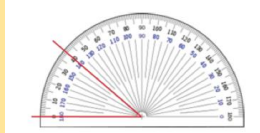
An **acute angle** is smaller than a right angle

An **obtuse angle** is larger than a right angle

We measure angles using **degrees (º).**
- A **right angle** is 90º.
- An **acute angle** is more than 0º but smaller than 90º.
- An **obtuse angle** is more than 90º but smaller than 180º.

- A **straight angle** is 180°
- A **reflex angle** is more than 180° but smaller than 360°.

We use a **protractor** to measure angles

Two right angles will make a **straight line** or 180°.
Angles that make a straight line will always add up to **180°**.

Four right angles will make a **full turn** or 360°.
Angles that make a full turn will always add up to **360°**.

Two lines that make a right angle are called **perpendicular.**

Horizontal lines go from side to side.

Vertical lines go from up and down.

Lines are **parallel** if they are always the same distance apart.

Geometry –Position and Direction

Position is where something is.

Direction tells you how to get to a position

Reflection is when a shape flips to a mirror image
- It is identical in form but reversed like in a mirror

Translation moves a shape. It can move up, down or to the side
- It never changes its form or shape in any way

Grid **co-ordinates** are a way to find a position.
- They must always be given in the following order:
- The x axis (row) is always shown first, followed by the y axis (column)

Extended

A **full turn** is moving something around all the way in a circle . It is in the same position as it started at the end of the full turn.

A **half turn** is moving something around a half circle.

A **quarter turn** is moving something a quarter of a circle. It is at right angle to where it started from at the end of a quarter turn.

Clockwise is turning in the same direction as the hands of a clock.

|	**Anti-clockwise** is turning in the opposite direction as the hands of a clock.
Statistics	**Statistics** is looking at data • **Data** is information. • **Statistics** is collecting and showing information (data) so that we can talk about it. • A **table** is list to record the information collected. • A table has rows (go across) and columns (go down) • A **graph** is a picture to show the information (data).
Extended	A **tally chart** is used to collect data. | Fruit	Tally
Banana	⁤卌 ⁤I
Grape	⁤IIII
Pear	⁤卌 III
Apple	⁤III | A **pictograph** shows data by drawing pictures. A pictograph has a **key** that tells you how much each picture represents. | Animal	Number on farm
Pigs	★★★★★★
Sheep	★★★★☆
Horses	★
Chickens	★★★☆
Cows	★★★★★★★ | ★ = 10 animals **Block diagrams** use blocks to show data

A **bar chart** shows data in bars. It uses a **scale**, which is the equal amounts that the data goes up in.
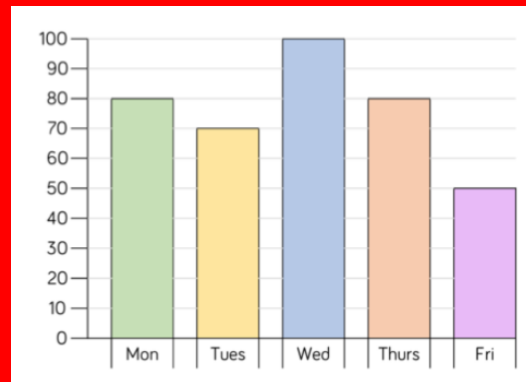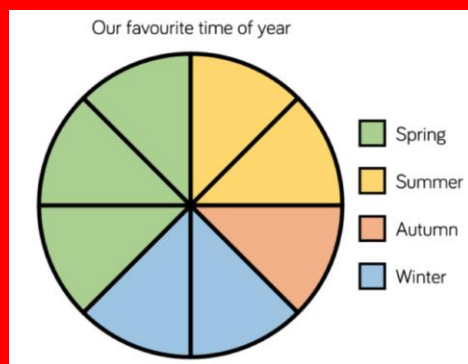
The scale on the left shows the data going up in 10s.

A **line graph** is a graph with points connected by lines to show how something changes in value.

Playground Temperature
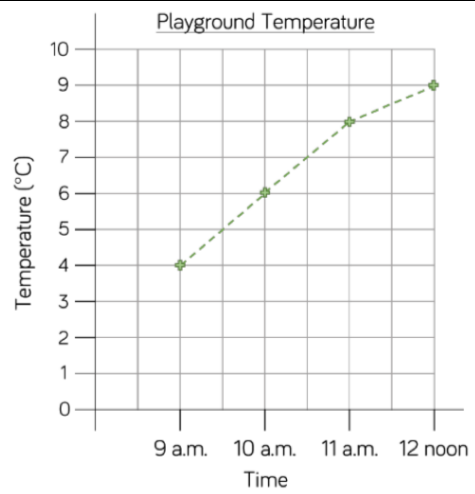
A **pie chart** shows data in sectors of a circle.

Our favourite time of year

Spring
Summer
Autumn
Winter

The **mean** (average) is a calculated "central" value of a set of numbers.

To calculate it:
- add up all the numbers,
- then divide by how many numbers there are.