

# Mathematics is ....

..... the science that deals with the logic of form, quantity, and disposition.

**Or as we see it in school ....**

**Mathematics is ....**

..... central to our understanding of the world, underpinning science, technology, economics, medicine and engineering.

# Maths is not an option.

GCSE maths is a gateway qualification.



# Mathematics builds up many 'soft skills'

critical thinking

problem solving

*But I've never  
used algebra in  
my job.*

resilience

numerical awareness

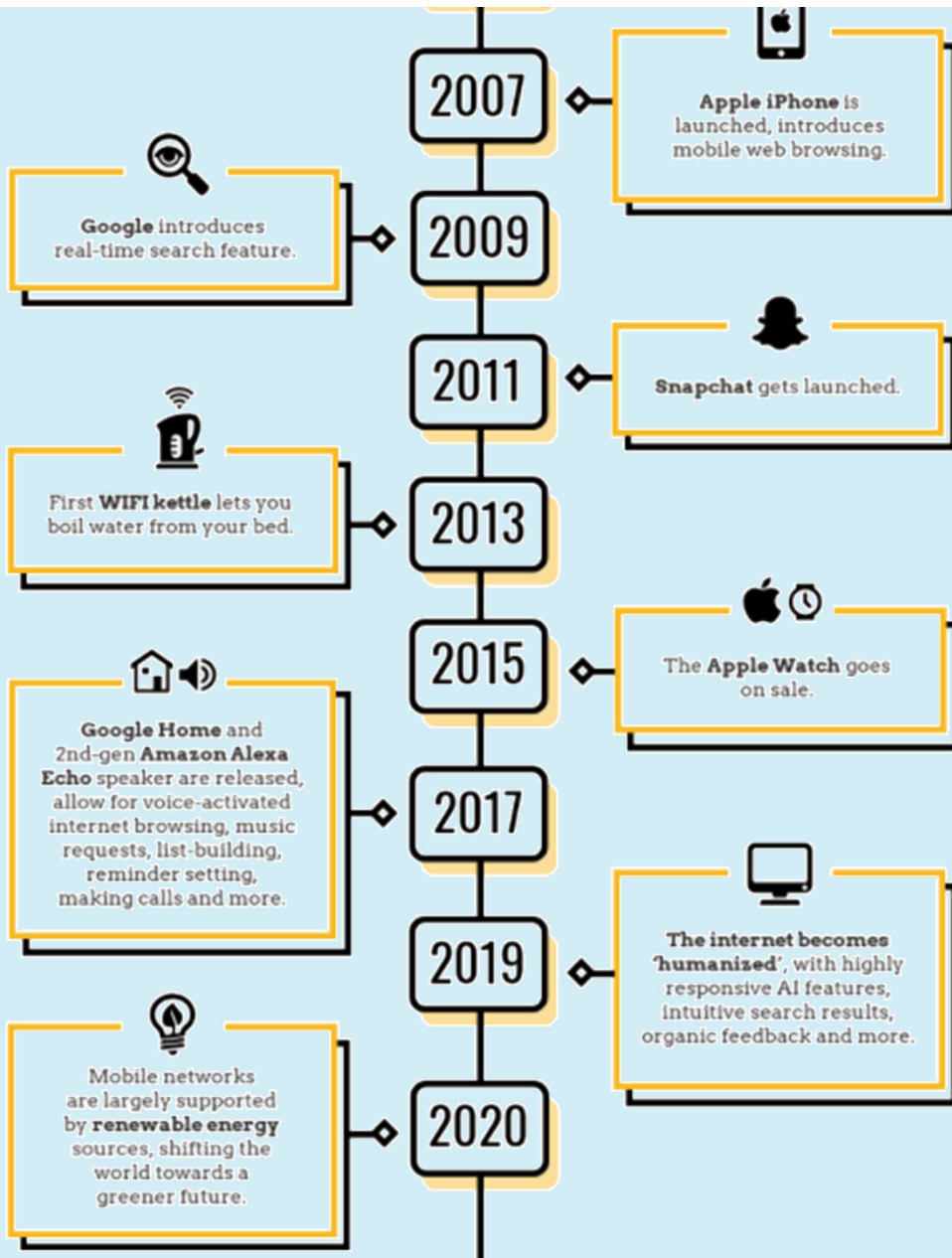


# We aim to empower our children via an accessible curriculum which challenges and stretches each individual.

Foundation Support	Foundation Core	High Foundation Extend	Foundation/Higher	Higher Support	Higher Core	Higher Extend
<p><b>5 Equations, inequalities and sequences</b></p> <p>5.1 Solving equations 1 5.2 Solving equations 2 5.4 Introducing inequalities 5.6 Using formulae (using but not rearranging) 5.7 Generating sequences 5.8 Using the <i>n</i>th term of a sequence</p>	<p><b>5 Equations, inequalities and sequences</b></p> <p>5.1 Solving equations 1 5.2 Solving equations 2 5.4 Introducing inequalities 5.6 Using formulae (using but not rearranging) 5.7 Generating sequences 5.8 Using the <i>n</i>th term of a sequence</p>	<p><b>5 Equations, inequalities and sequences</b></p> <p>5.1 Solving equations 1 5.2 Solving equations 2 5.3 Solving equations with brackets 5.4 Introducing inequalities 5.5 More inequalities 5.6 Using formulae 5.7 Generating sequences 5.8 Using the <i>n</i>th term of a sequence</p>	<p><b>5 Equations, inequalities and sequences</b></p> <p>5.1 Solving equations 1 5.2 Solving equations 2 5.3 Solving equations with brackets 5.4 Introducing inequalities 5.5 More inequalities 5.6 Using formulae 5.7 Generating sequences 5.8 Using the <i>n</i>th term of a sequence</p>	<p><b>9 Equations and inequalities</b></p> <p>9.4 Factorising quadratic expressions 9.5 Solving quadratic equations 9.1 Solving quadratic equations 1 9.2 Solving quadratic equations 2 9.3 Completing the square (basics) 9.4 Solving simple simultaneous equations 9.5 More simultaneous equations algebraically 9.6 Solving simultaneous equations 9.7 Solving linear inequalities</p>	<p><b>9 Equations and inequalities</b></p> <p>9.4 Factorising quadratic expressions 9.5 Solving quadratic equations 9.1 Solving quadratic equations 1 9.2 Solving quadratic equations 2 9.3 Completing the square (basics) 9.4 Solving simple simultaneous equations 9.5 More simultaneous equations 9.7 Solving linear inequalities</p>	<p><b>9 Equations and inequalities</b></p> <p>9.1 Solving quadratic equations 1 9.2 Solving quadratic equations 2 9.3 Completing the square 9.4 Solving simple simultaneous equations 9.5 More simultaneous equations 9.6 Solving linear and quadratic simultaneous equations 9.7 Solving linear inequalities</p>
<p><b>10 Transformations</b></p> <p>10.1 Translation 10.2 Reflection 10.3 Rotation 10.4 Enlargement (basic just of shape not from point)</p>	<p><b>10 Transformations</b></p> <p>10.1 Translation 10.2 Reflection 10.3 Rotation 10.4 Enlargement 10.5 Describing enlargements</p>	<p><b>10 Transformations</b></p> <p>10.1 Translation 10.2 Reflection 10.3 Rotation 10.4 Enlargement 10.5 Describing enlargements 10.6 Combining transformations</p>	<p><b>10 Transformations</b></p> <p>10.1 Translation 10.2 Reflection 10.3 Rotation 10.4 Enlargement 10.5 Describing enlargements 10.6 Combining transformations</p>	<p><b>8 Transformations and constructions</b></p> <p>8.1 3D solids 8.2 Reflection and rotation 8.3 Enlargement (not negative s.f.) 8.4 Transformations and combinations of transformations 8.5 Bearings and scale drawings 8.6 Constructions 1 8.7 Constructions 2</p>	<p><b>8 Transformations and constructions</b></p> <p>8.1 3D solids 8.2 Reflection and rotation 8.3 Enlargement (not negative s.f.) 8.4 Transformations and combinations of transformations 8.5 Bearings and scale drawings 8.6 Constructions 1 8.7 Constructions 2</p>	<p><b>8 Transformations and constructions</b></p> <p>8.1 3D solids 8.2 Reflection and rotation 8.3 Enlargement 8.4 Transformations and combinations of transformations 8.5 Bearings and scale drawings 8.6 Constructions 1 8.7 Constructions 2 8.8 Loci</p>
<p><b>12 Right-angled triangles</b></p> <p>Intro lesson labelling sides 12.1 Pythagoras' theorem 1 12.2 Pythagoras' theorem 2</p> <p><b>Theta 3 Unit 7 Circles, Pythagoras and areas</b></p> <p>7.3 Pythagoras' theorem</p>	<p><b>12 Right-angled triangles</b></p> <p>Intro lesson labelling sides 12.1 Pythagoras' theorem 1 12.2 Pythagoras' theorem 2</p> <p><b>Theta 3 Unit 7 Circles, Pythagoras and areas</b></p> <p>7.3 Pythagoras' theorem</p> <p><b>Delta 2 Unit 8 2D shapes and 3D solids</b></p> <p>8.7 Pythagoras' theorem</p>	<p><b>12 Right-angled triangles</b></p> <p>12.1 Pythagoras' theorem 1 12.2 Pythagoras' theorem 2 Intro lesson labelling sides and deciding on correct ratio 12.3 Trigonometry: the sine ratio 1 12.4 Trigonometry: the sine ratio 2 12.5 Trigonometry: the cosine ratio 12.6 Trigonometry: the tangent ratio 12.7 Finding lengths and angles using trigonometry</p>	<p><b>5 Angles and trigonometry</b></p> <p>5.4 Pythagoras' theorem 1 5.5 Pythagoras' theorem 2 Intro lesson labelling sides and deciding on correct ratio 12.3 Trigonometry: the sine ratio 1 12.4 Trigonometry: the sine ratio 2 12.5 Trigonometry: the cosine ratio 12.6 Trigonometry: the tangent ratio 12.7 Finding lengths and angles using trigonometry</p>	<p><b>13 More trigonometry</b></p> <p>5.6 Trigonometry 1 5.7 Trigonometry 2 13.7 Solving problems in 3D (right angled triangles only)</p>	<p><b>13 More trigonometry</b></p> <p>13.1 Accuracy 13.5 Calculating areas and the sine rule 13.6 The cosine rule and 2D trigonometric problems 13.7 Solving problems in 3D (right angled triangles only)</p>	<p><b>13 More trigonometry</b></p> <p>13.1 Accuracy 13.2 Graph of the sine function 13.3 Graph of the cosine function 13.4 The tangent function 13.5 Calculating areas and the sine rule 13.6 The cosine rule and 2D trigonometric problems 13.7 Solving problems in 3D 13.8 Transforming trigonometric graphs 1 13.9 Transforming trigonometric graphs 2</p>
<p><b>Theta 1 Unit 6 Probability</b></p> <p>6.2 Calculating probability</p> <p><b>13 Probability</b></p> <p>13.1 Calculating probability 13.2 Two events</p> <p><b>Theta 3 Unit 6 Probability</b></p> <p>6.4 Experimental probability 13.5 Tree diagrams</p> <p><b>Delta 2 Unit 8 Probability</b></p> <p>8.6 Tree diagrams</p>	<p><b>Theta 1 Unit 6 Probability</b></p> <p>6.2 Calculating probability</p> <p><b>13 Probability</b></p> <p>13.1 Calculating probability 13.2 Two events</p> <p><b>Theta 3 Unit 6 Probability</b></p> <p>6.4 Experimental probability 13.4 Venn diagrams (not set notation) 13.5 Tree diagrams</p> <p><b>Delta 2 Unit 8 Probability</b></p> <p>8.6 Tree diagrams</p>	<p><b>13 Probability</b></p> <p>13.1 Calculating probability 13.2 Two events 13.3 Experimental probability 13.4 Venn diagrams 13.5 Tree diagrams 13.6 More tree diagrams</p>	<p><b>13 Probability</b></p> <p>13.1 Calculating probability 13.2 Two events 13.3 Experimental probability 13.4 Venn diagrams 13.5 Tree diagrams 13.6 More tree diagrams</p>	<p><b>10 Probability</b></p> <p>10.1 Combined events 10.2 Mutually exclusive events 10.3 Experimental probability 10.4 Independent events and tree diagrams 10.5 Conditional probability 10.6 Venn diagrams and set notation</p>	<p><b>10 Probability</b></p> <p>10.1 Combined events 10.3 Mutually exclusive events 10.3 Experimental probability 10.4 Independent events and tree diagrams 10.5 Conditional probability 10.6 Venn diagrams and set notation</p>	<p><b>10 Probability</b></p> <p>10.1 Combined events 10.2 Mutually exclusive events 10.3 Experimental probability 10.4 Independent events and tree diagrams 10.5 Conditional probability 10.6 Venn diagrams and set notation</p>

- 1 Speed = 40 km/h, Time = 1 hour 15 minutes, **Distance=?**
- 2 **Factorise**  $x^2 + 5x + 4$
- 3 **Expand and simplify**  $(x + 3)(x^2 + 5)$
- 4 Express  $32 \times 10^4$  in **standard form**.
- 5 What is the **gradient** of the line  $y = 6x - 4$ ?
- 6 Make **x the subject** of the formula  $y = \sqrt{x - a}$
- 7 **Express**  $\frac{9}{20}$  as a decimal
- 8 **Solve**  $\frac{x}{4} + \frac{x}{3} = 1$
- 9 **Estimate**  $4.54 \times 26.4$
- 10 What is the first term of the sequence **?** , 4, 10, 16?

The intention of the maths curriculum is to enable our children to become fluent in mathematics through varied and frequent practice allowing pupils to develop conceptual understanding with the ability to recall and apply knowledge rapidly and accurately.



We understand that our children need to be fully prepared for the technological advances rapidly taking place in society, and that maths has an extremely important role to play in this preparation.