

Pupils follow the EDEXCEL GCSE Mathematics course in years 10 and 11. Schemes are carefully planned to build skills year by year and to prepare pupils for the final examination.

	Year 10	Year 11	
	Foundation and Higher	Foundation	Higher
Autumn 1	<ul style="list-style-type: none"> Core numerical written methods Primes, factors and multiples Indices and standard form Fractions 	<ul style="list-style-type: none"> Core numeracy recap on unit 1 and unit 2 Circles Similarity and congruence Compound measures 	<ul style="list-style-type: none"> Core numeracy + Area and perimeter Linear Graphs 3D shapes and units Percentage problems Upper and lower bounds Fractions
Autumn 2	<ul style="list-style-type: none"> Percentages Ratio Algebraic manipulation 	<ul style="list-style-type: none"> Percentage problems Equations Pythagoras 	<ul style="list-style-type: none"> Quadratic functions Algebraic fractions Equations of straight lined graphs
Spring 1	<ul style="list-style-type: none"> Angles Sequences and graphs 	<ul style="list-style-type: none"> Graphs Transformation Use of formulae 	<ul style="list-style-type: none"> Simultaneous equations Trigonometry Direct and inverse proportion
Spring 2	<ul style="list-style-type: none"> Perimeter, area and volume Accuracy Similarity Collection and presentation of data 	<ul style="list-style-type: none"> Similarity and congruence Nets and plans Bearings 	<ul style="list-style-type: none"> Vectors Cones and spheres Transformations of graphs
Summer 1	<ul style="list-style-type: none"> Equations Pythagoras and Trigonometry Probability 		
Summer 2	<ul style="list-style-type: none"> Compound units Transformations Construction 		

ATTAINMENT TARGETS/SKILLS

Pupils will be expected to develop the following skills:

- **Fluency** in the fundamentals of mathematics, including varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **Reasoning mathematically** by following a line of enquiry, conjecturing relationships and generalisations and developing an argument, justification or proof using mathematical language.
- The ability to **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

METHODS OF ASSESSMENT

1. Pupils are **assessed formally through examination past papers**. Teachers respond to written and oral work with positive and constructive comments. WWW and Pupil Action is used in each formal assessment to promote pupil-teacher dialogue.
2. **Self and peer-assessment** plays an important role during lessons. Pupils have the opportunity to assess their own classwork and set personal targets for future lessons.
3. The website www.mymaths.co.uk and GCSE examination workbooks are used to set homework.

HOW PARENTS/CARERS CAN HELP

- Checking homework is completed to a high quality and encourage your child to ask their teacher for help when it is needed.
- Helping pupils to learn from mistakes that have been made on assessments.
- Talk to pupils about their work.