

Academic Learning Journey - Key Stage 3 and Key Stage 4

**Mathematics** 



## Intent :

The Mathematics Department aims to encourage and develop the joy of problem solving. Students will leave Wadham School with essential mathematical skills for everyday life, to enable them to live their life in all its fullness. Students are actively encouraged to always try and sometimes fail. Mathematics is not somethings done to you but a subject that students actively engage in. Everyone is capable of being successful in Mathematics.

## GCSE Exam Board - Assessment objectives (or other)(if applicable)

Edexcel (GCSE)

- develop fluent knowledge, skills and understanding of mathematical methods and concepts
  - acquire, select and apply mathematical techniques to solve problems
  - reason mathematically, make deductions and inferences, and draw conclusions
- comprehend, interpret and communicate mathematical information in a variety of forms appropriate to the information and context.

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 7	7.1 Sequences	7.4 Place value & ordering integers & decimals	7.6 Solving problems with addition & subtraction	7.9 Operations & equations with directed number	7.11 Constructing, measuring & using geometric notation	7.13 Developing number sense
	7.2 Understand & use algebraic notation	7.5 Fraction, decimal & percentage equivalence	7.7 Solving problems with multiplication & division	7.10 Addition & subtraction of fractions	7.12 Developing geometric reasoning	7.14 Sets & probability
	7.3 Equality & equivalence	]	7.8 Fractions & percentages of amounts			Revision & end of year assessment
						7.15 Prime number & proc
Year 8	8.1 Ratio & scale	8.4 Working in the Cartesian plane	8.7 Brackets, equations & inequalities	8.10 Fractions & percentages	8.13 Angles in parallel lines & polygons	8.16 The data handling cycle
	8.2 Multiplicative change	8.5 Representing data	8.8 Sequences	8.11 Standard index form	8.14 Area of trapezia & circles	Revision & end of year assessment
	8.3 Multiplying & dividing fractions	8.6 Tables & probability	8.9 Indices	8.12 Number sense	8.15 Line symmetry & reflection	8.17 Measures of location
Year 9	9.1 Straight line graphs	9.4 Three dimensional shapes	9.6 Numbers	9.9 Deduction	9.12 Enlargement & similarity	9.15 Probability
	9.2 Forming & solving equations	9.5 Constructions & congruency	9.7 Using percentages	9.10 Rotation & translation	9.13 Solving ratio & proportion problems	9.16 Algebraic representation
	9.3 Testing conjectures	]	9.8 Maths and money	9.11 Pythagoras' Theorem	9.14 Rates	Revision and End of Year Exams

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 10	10.1 Congruence, similarity & enlargement	10.3 Representing solutions of equations & inequalities	10.5 Angles & bearings	10.8 Ratio & fractions	10.11 Collecting, representing & interpreting data	10.14 Indices & roots
	10.2 Trigonometry	10.4 Simultaneous equations	10.6 Working with circles	10.9 Percentages & interest	10.12 Non-calculator methods	10.15 Manipulating expressions
			10.7 Vectors	10.10 Probability	10.13 Types of number & sequences	Revision and End of yea Exams
Year 11	11.1 Algebra 1	11.6 Ratio and proportion	11.10 Pythagoras & trigonometry	11.13 Constructions		
	11.2 Fractions, decimals and percentages	11.7 Shape 2	11.11 Probability	11.15 Algebra 3		
	11.3 Shapes 1	11.8 Data	11.12 Number 2	11.16 Vectors		
	11.4 Number 1	11.9 Algebra 2	11.13 Transformations	11.17 Similarity		
	11.5 Graphs	1	11.14 Constructions		1	