



# William Edwards School Mathematics Department Curriculum Journey

## Ambition and intent

The mathematics curriculum builds up over 5 years, where pupils revisit topics each year, but in greater depth. The curriculum has been structured to ensure pupils have the mathematical skills required to succeed when facing more challenging mathematical concepts. Topics are interconnected allowing pupils to regularly revise key concepts and deepen their knowledge and understanding as they progress through the years. The main aim is to have a good understanding of mathematical concepts through fluency, problem solving and mathematical reasoning, which will enable pupils to have an in-depth understanding of the GCSE syllabus. The topics pupil cover each year is broken down below.

### Careers? University Study?

For those that have a head for figures, pursuing a job relating to mathematics is a choice that can add up to a rewarding and lucrative career. Whether you are using math to solve business problems or help an individual make investments the demand for mathematics experts has grown exponentially in a number of careers. Many college places require a 4+ in GCSE Mathematics

Grade 5 – Accounting  
Engineering  
Financial studies  
Psychology

Grade 6 – Chemistry  
Computer science

Grade 4 – 3D Design & Architecture  
Biomedical science  
Business  
IT  
Music performance and production

KS5

GCSE  
Exam

Independent study and revision in the build up to final GCSE examination



YEAR  
11I

Weekly revision sessions commence which are run by your class teacher covering key misconceptions and examination preparation

End of year test consisting of a full GCSE examination

Unit 1: Data.  
Unit 2: Limits and Standard Form.

November mock examination with feedback given from PIXL

Unit 3: Circles. Construction and Loci.

Exam Practice starts one GCSE paper per week under exam conditions and feedback of model answers given by teacher

February final mock examination with feedback given by teacher

Unit 12: Data

Unit 11: Tree Diagrams

Unit 10: Simultaneous equations

Unit 9: Parallel lines. Quadratic graphs.

Unit 8: Angle proofs

Unit 7: Angle facts.

Unit 6: Solving

Unit 5: Quadratic sequences

Unit 4: Percentage change. Original Amount.

Unit 3: Expanding and factorising

Unit 2: Construction and Loci

Unit 1: Roots and indices. Standard form

After every unit studied throughout year 10 a unit assessment test will be completed

End of year assessment on all units

YEAR  
10I

Unit 12: Data

Unit 11: Probability

Unit 10: Transformations

Unit 1: Primes, Factors, Multiples, HCF & LCM

Unit 2: Angles in parallel lines.

Unit 3: Expanding and Factorising

Unit 4: Fractions, Decimals and Percentages

Unit 5: Sequences and nth terms.

Unit 6: Solving linear equations

Unit 7: Perimeter and Area.

Unit 8: Ratios and similar shapes.

After every unit studied throughout year 9 a unit assessment test will be completed

Unit 9: Graphing.

YEAR  
9I

End of year assessment on all units

Unit 15: Measurement and Estimating

Unit 14: Describing position

Unit 13: Proportional Reasoning

Unit 12: Exploring Change

Unit 11: Visualising shape

Unit 10: Investigating Statistics

Unit 9: Number Problems

Unit 8: Reasoning with fractions

Unit 7: Discovering Equivalence

Unit 6: Reasoning with measures

Unit 5: Exploring Shape

Unit 4: General arithmetic

Unit 3: Solving calculation problems

Unit 2: Pattern Sniffing

Unit 1: Investigating number systems

After every unit studied throughout year 8 a unit assessment test will be completed

End of year assessment on all units

YEAR  
8I

Unit 15: Measurement and Estimating

Unit 14: Describing position

Unit 13: Proportional Reasoning

Unit 3: Solving calculation problems

Unit 4: General arithmetic

Unit 5: Exploring Shape

Unit 6: Reasoning with measures

Unit 7: Discovering Equivalence

Unit 8: Reasoning with fractions

Unit 9: Number Problems

Unit 10: Investigating Statistics

After every unit studied throughout year 7 a unit assessment test will be completed

Unit 11: Visualising shape

Unit 12: Exploring Change

Unit 2: Pattern Sniffing

Unit 1: Investigating number systems

Baseline test, identifies ability and gaps in KS2 skills set

YEAR  
7I

We will speak to you and your Primary schools to find out what topics you have covered

KS2  
PRIMARY  
SCHOOL

Upper KS2 extend understanding of number system to include larger integers and develop connections between multiplication and division with fractions, decimals, percentages and ratio. Develop their ability to solve a wider range of complex problems. Pupils should classify shapes with increasingly complex geometric properties and know the vocabulary to describe them.

Lower KS2 pupils become fluent with whole numbers and the four operations including number facts and the concept of place value. Be able to solve a range of problems including fractions and decimals. Develop mathematical reasoning to analyze shapes and their properties

At KS1 pupils develop confidence and mental fluency with whole numbers, counting and place value. Develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary.

Attend WES Transition week. Complete CATS test and learn about WRITE WHAT YOU DO IN INDUCTION WEEK

Apply for a place at WES

Skills that pupils will learn during their curriculum journey that are required for Mathematics: Basic Numeracy skills built on the four operations. Decision making and problem solving. Graphical skills including the selection of appropriate graphs/charts and interpreting the results.