



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 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

PREFECT

YEAR 11f

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

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 10: Tree Diagrams

Unit 8: Graphing

Unit 7: Ratios and Similarity

Unit 6: Solving linear equations

Unit 5: Area, Perimeter and Volume.

Unit 4: Fractions, Decimals and Percentages

Unit 3: Expanding and factorising

Unit 2: Angles on parallel lines.

Unit 1: Primes, Factors, Multiplies, HCF & LCM.

Unit 9: Pythagoras.

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

YEAR 10f

End of year assessment on all units

Unit 13: Data

Unit 12: Probability

Unit 11: Construction and transformations

YEAR 9f

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

Unit 1: Rounding/Bodmas

Unit 2: Properties and Angles

Unit 3: Primes, Powers & Roots.

Unit 4: Simplifying

Unit 5: Fractions Decimals & Percentages

Unit 6: Sequences

Unit 7: Solving equations

Unit 8: Perimeter & Area

Unit 9: Scale factors & similar shapes

Unit 10: Graphing

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

YEAR 8f

End of year assessment on all units

Unit 15: Measuring and Estimating

Unit 14: Describing position

Unit 13: Proportional Reasoning

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

Unit 3: Solving calculation

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

Unit 2: Pattern Sniffing

Unit 1: Investigating number systems

Unit 11: Visualising shape

Unit 12: Exploring Change

Baseline test, identifies ability and gaps in KS2 skills set

YEAR 7f

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.