

Year 8 Maths Medium Term Plan

Unit	Duration (weeks)	Learning Objectives/Outcomes
Mathematical Diagrams	1	<ul style="list-style-type: none"> • Mathematical Diagrams • Mileage charts • Flow charts and networks
Factors, multiples and primes; index notation, squares and roots	1	<ul style="list-style-type: none"> • Products of primes • LCM and HCF • Simplifying expressions using index notation • Squares, cubes, square roots and cube roots
Number Bases and Binary	1	<ul style="list-style-type: none"> • Writing numbers in different bases • Base 5 • Working in Binary
End of term activities	1	<ul style="list-style-type: none"> • End of term activities • Tessellations • Isometric drawings
Rounding and estimating, BIDMAS and use of a calculator.	2	<ul style="list-style-type: none"> • Rounding to given number of decimal places • Rounding to given number of significant figures • Estimating calculations by rounding to one SF • Efficient use of calculator • Using correct order of operations (including negatives)
Data Analysis	2	<ul style="list-style-type: none"> • Averages and Range • Pie charts • Scatter graphs • Stem and leaf diagrams • Comparing data • Estimate of mean from grouped data
Nets and Surface Areas	2	<ul style="list-style-type: none"> • Drawing accurate nets of solids • Calculating surface area • Calculating volume of prisms • Plans and elevations • Constructing triangles • Isometric drawings

Ratio	2	<ul style="list-style-type: none"> • Sharing quantities in a given ratio • Simplifying ratio • Best buys • Unitary method • Currency conversions • Link with scale drawings and maps
Algebra	1	<ul style="list-style-type: none"> • Expanding brackets • Simplifying by collecting like terms • Forming Equations from Geometric problems • Solving linear equations
Angles	2	<ul style="list-style-type: none"> • Calculating missing angles on parallel lines • Compass directions with bearings • Calculations with Bearings • Constructing Bearings accurately • Revise angle properties of special triangles and quadrilaterals
Fractions, Decimals and Percentages	2	<ul style="list-style-type: none"> • FDP conversions • Calculations with percentages (in context) • Four rules of fractions • Fractions of / Percentages of quantities • Increasing and decreasing by given percentage (use of multipliers)
Probability	1	<ul style="list-style-type: none"> • Probability of single events • Sample space diagrams • Probability of successive events • Listing outcomes
Linear Graphs	1	<ul style="list-style-type: none"> • Plotting linear graphs from table of values • Plotting linear graphs using own axes • Recognising parallel lines • Investigation into gradient and y-intercepts of linear graphs
Money and Time	2	<ul style="list-style-type: none"> • Looking into wages/bills • Expenses involved in running a home • SMSC comparing countries
Formulae	1	<ul style="list-style-type: none"> • Substituting values into given formulae (including negatives) • Rearranging Formulae
Polygons	1.5	<ul style="list-style-type: none"> • Interior angle sums of polygons • Exterior angles of Polygons • Regular Polygons • Combined polygons – calculating missing angles • Naming all polygons up to 10 sided

Units Estimating capacity, length, mass and conversions	1	<ul style="list-style-type: none"> • Conversions between units • Metric and imperial units • Estimating capacity, length • Density, mass and volume • Converting between units, metric and imperial
Speed, Distance and Time	1	<ul style="list-style-type: none"> • Calculations involving speed, distance and time • Interpreting distance time graphs • Constructing distance time graphs • Looking into other travel graphs
Questionnaires and data collection	1	<ul style="list-style-type: none"> • Forming questions to be used in questionnaires • Being critical of bad questionnaires. • Discuss biased and leading questions • Designing data collection sheets
Transformations	1	<ul style="list-style-type: none"> • Carrying out Rotations, Reflections, Translations • Describing Rotations, Reflections and Translations • Enlargements • Link enlargements with similarity
Maths in Action	1	