



Curriculum Overview: Mathematics

Year group 7

What your child will learn each half term

This overview shows the key topics, skills, and knowledge your child will be learning in **Maths in Year 7**. It helps families understand what's being taught, how it builds on previous learning, and how you can support your child at home.

- **What we are learning:** The topic or focus for the half term.
- **Key knowledge & skills:** What students should understand and be able to do.
- **How we assess learning:** knowledge checks, practical tasks, written responses and formal assessments.
- **Key words to know:** Vocabulary students will learn and use.

Half term	What we are learning	Key Knowledge and Skills	How we will assess learning in this unit	Homework	Key vocabulary for this unit
HT 1	Negative numbers Algebraic manipulation Averages	Calculate with negative numbers Simply algebraic expressions, expand brackets, substitute values into expressions. Calculate the mean, median mode and range.	Check knowledge and understanding during class activities and homework tasks. Formal 1hr exam Covering Topics 1-3	Weekly Fluency Booklet + Shorter tasks to consolidate understanding or to assist with revision.	Negative Simplify Expression Expand Formula Substitute
HT 2	Number Types Perimeter and area Ratio	Identify factors, multiples and prime numbers. Calculate the HCF and LCM of 2 numbers. Understand prime factor decomposition Calculate the perimeter of shapes. Calculate the area of rectangles, triangles, parallelograms, trapezia and simple compound shapes. Simplify ratios Solve problems involving ratio	Checking for knowledge and understanding during class activities and homework tasks. Formal 1hr exam Covering Topics 4-6	Weekly Fluency Booklet + Shorter tasks to consolidate understanding or to assist with revision.	Factor Multiple Prime Square Cube Area Perimeter Quadrilateral Simplify Share
HT 3	Sequences Probability Fractions	Extend and generate sequences Calculate the nth term of sequence Calculate probabilities using fractions. Simplifying fractions. Recognise equivalent fractions. Calculate fractions of amounts. Add and Subtract fractions. Conver between fractions decimals and Percentages	Checking for knowledge and understanding during class activities and homework tasks. Formal 1hr exam Covering Topics 7-9	Weekly Fluency Booklet + Shorter tasks to consolidate understanding or to assist with revision.	Term Pattern Arithmetic Chance Outcome Likely Unlikely Even chance Fari Biased Simplify Equivalent Numerator Denominator

HT 4	Angles Linear Graphs Presenting Data	Understand types of angles. Calculate missing angles on straight lines, around a point, in triangles and in quadrilateral. Identify properties of 2D shapes. Plot simple linear graphs. Interpret real life graphs. Draw and interpret bar charts, pie charts and pictograms	Checking for knowledge and understanding during class activities and homework tasks. Formal 1hr exam Covering Topics 10-12	Weekly Fluency Booklet + Shorter tasks to consolidate understanding or to assist with revision.	Acute Obtuse Reflex Regular Horizontal Vertical Parallel Perpendicular
HT5	Measures Volume and Surface Area Equations	Solve problems involving time Use milage charts and bus timetables. Identify faces, edges and vertices Calculate the volume and surface area of a cuboid. Solve simple equations.	Checking for knowledge and understanding during class activities and homework tasks.	Weekly Fluency Booklet + Shorter tasks to consolidate understanding or to assist with revision.	Am Pm 24-hour clock Interval Faces Edges Vertices Solve
HT 6	Percentages Transformations Decimals Constructions	Calculate percentages of amount. Calculate percentage change. Reflect, rotate, translate and enlarge shapes. Calculate with decimals. Construct simple triangles	End of Year Assessment Paper 1 Non-Calculator Paper 2 Calculator Covering Topics 1 -14	Weekly Fluency Booklet + Shorter tasks to consolidate understanding or to assist with revision.	percent, decimal, tenth, hundredth, equivalent, reflect, rotate, translate and enlarge