

Hebburn Comprehensive School

Key Stage 3 Scheme of Learning Overview

Mathematics Department

	Lower	Middle	Upper
Year 7	Stage 1	Stage 2	Stage 3
Year 8	Stage 2	Stage 3	Stage 4
Year 9	Stage 3	Stage 4	Stage 5

Years 7, 8 & 9 Topics by Stage		
Stage 1 Topics		
Autumn	Spring	Summer
Written Calculations and Checking Geometrical Reasoning: lines, angles and shapes Equations, Formulae, Identities and Expressions Integers, Powers and Roots Probability Sequences, Functions and Graphs Measures and Mensuration: Area	Transformations and Vectors Sequences, Functions and Graphs Mental Calculations and Checking Processing and Representing Data: Interpreting Results Fractions, Decimals and Percentages Equations, Formulae, Identities and Expressions Ratio and Proportion	Measures and Mensuration Calculations and Checking Equations, Expressions and Functions Geometrical Reasoning: Shapes and Coordinates Statistical Enquiry Construction and Loci Problem Solving
Stage 2 Topics		
Autumn	Spring	Summer
Written Calculations and Checking Geometrical Reasoning: lines, angles and shapes Equations, Formulae, Identities and Expressions Integers, Powers and Roots Probability Sequences, Functions and Graphs Measures and Mensuration: Area	Transformations and Vectors Sequences, Functions and Graphs Mental Calculations and Checking Processing and Representing Data: Interpreting Results Fractions, Decimals and Percentages Equations, Formulae, Identities and Expressions Ratio and Proportion	Measures and Mensuration Calculations and Checking Equations, Expressions and Functions Geometrical Reasoning Statistical Enquiry Construction and Loci Problem Solving
Stage 3 Topics		
Autumn	Spring	Summer
Written Calculations and Checking Geometrical Reasoning: lines, angles and shapes Equations, Formulae, Identities and Expressions Integers, Powers and Roots Sequences, Functions and Graphs Probability Measures and Mensuration: Area	Transformations and Vectors Sequences, Functions and Graphs Mental Calculations and Checking Processing and Representing Data: Interpreting Results Fractions, Decimals and Percentages Measures and Mensuration Equations, Formulae, Identities and Expressions Ratio and Proportion	Measures and Mensuration: Volume Calculations and Checking Equations, Expressions and Functions Geometrical Reasoning Sequences, Functions and Graphs Statistical Enquiry Construction and Loci
Stage 4 Topics		
Autumn	Spring	Summer
Written Calculations and Checking Geometrical Reasoning: lines, angles and shapes Equations, Formulae, Identities and Expressions Integers, Powers and Roots Sequences, Functions and Graphs Probability Measures and Mensuration: Area	Transformations and Vectors Sequences, Functions and Graphs Mental Calculations and Checking Processing and Representing Data: Interpreting Results Fractions, Decimals and Percentages Measures and Mensuration Equations, Formulae, Identities and Expressions Ratio and Proportion	Measures and Mensuration: Volume Calculations and Checking Equations, Expressions and Functions Geometrical Reasoning: Coordinates and Construction Sequences, Functions and Graphs Statistical Enquiry Construction and Loci



Stage 5 Topics		
Autumn	Spring	Summer
Written Calculations and Checking Geometrical Reasoning: lines, angles and shapes Equations, Formulae, Identities and Expressions Integers, Powers and Roots Sequences, Functions and Graphs Probability Measures and Mensuration: Area	Transformations and Vectors Sequences, Functions and Graphs Processing and Representing Data: Interpreting Results Fractions, Decimals and Percentages Measures and Mensuration Equations, Formulae, Identities and Expressions Ratio and Proportion	Measures and Mensuration: Volume, mass and density Calculations and Checking Equations, Expressions and Functions Geometrical Reasoning: Trigonometry Sequences, Functions and Graphs Statistical Enquiry Construction and Loci

Please note: As pupils progress through the stages they will recap the same topics but at a more advanced level. For example, in the sequences strand, a stage 1 pupil would be expected to describe an integer sequence and generate simple terms. A stage 3 pupil would calculate the n th term of a linear sequence, and stage 5 would cover quadratic and geometric sequences.

