

Curriculum Overview

Subject: MATHEMATICS

Year Group: 7

Year 7 Mathematics builds upon the mathematical skills developed through Key Stage 2. Pupils will cover five topic areas: number, algebra, statistics and probability, geometry and measure, and, ratio, proportion and rates of change. They will be presented in lessons with AO1 – using and applying standard techniques, AO2 – reasoning, interpreting and communicating mathematically, and AO3 – solving problems in mathematics and in other contexts. Pupils are given the opportunity to learn how to use scientific calculators efficiently and effectively. Skills acquired over term 1 are interleaved throughout year 7 to enhance long term retention.

TERM 1		TERM 2		TERM 3	
<u>AUTUMN 1</u>	<u>AUTUMN 2</u>	<u>SPRING 1</u>	<u>SPRING 2</u>	<u>SUMMER 1</u>	<u>SUMMER 2</u>
Number Sense Calculations	Expressions and equations Measures	2D Shapes Area and Perimeter Coordinates Factors and Multiples	Primes Fractions Algebra - Brackets	Angles Handling Data Statistical Diagrams Proportion	Fractions, Decimals and Percentages Probability
<u>KNOWLEDGE/SKILLS</u> Number sense Adding and subtracting Multiplying Dividing Calculating with negative numbers Order of operations	<u>KNOWLEDGE/SKILLS</u> Expressions Substitution Solving Equations Measures of Time Measures of Mass, Length and Capacity	<u>KNOWLEDGE/SKILLS</u> Line and Shape Properties Perimeter Area Coordinates and Shapes Factors and Multiples	<u>KNOWLEDGE/SKILLS</u> Prime Numbers Prime Factor Decomposition Writing and Comparing Fractions Adding and Subtracting Fractions Distributive Law Algebra – Single Brackets	<u>KNOWLEDGE/SKILLS</u> Types of angles, estimating, measuring and drawing angles. Finding Unknown Angles Averages and Range Tables and Charts Collecting and Presenting Data Solving Proportion Problems	<u>KNOWLEDGE/SKILLS</u> Multiply and divide Fractions Fractions of Amounts Fractions, decimals and Percentages Theoretical Probability
<u>KEY ASSESSMENTS</u> Year 7 Baseline Assessment Post Knowledge Checks Term 1 Assessment		<u>KEY ASSESSMENTS</u> Post Knowledge Checks Term 2 Assessment		<u>KEY ASSESSMENTS</u> Post Knowledge Checks End of Year Assessment	
<u>External Resources and Extended Studies</u> SPARX Maths - https://sparxmaths.com/ Our main homework platform Mathsbot - https://mathsbot.com/ Differentiated activities to help build key skills as well as worksheets for consolidation of work. Corbett Maths – https://corbettmaths.com 5-a-day questions which are good problem-solving starter questions for all abilities. Maths Genie - https://www.mathsgenie.co.uk/ A free revision site. It has past papers, mark schemes and model answers to GCSE exam questions			<u>Enrichment and Development</u> Literacy words displayed in the maths corridor to promote key vocabulary used throughout the curriculum. Comprehension tasks scheduled for each half term encompassing literacy, diversity and inclusion, careers and cross-curricular links Careers in maths information displayed in the maths corridor to spark curiosity Diversity and inclusion, and women in maths posters displayed in the corridor to highlight and celebrate important figures in maths Use of SPARX Maths and calculators Key dates in the maths calendar: Pi Day (March 14 th) and National Numeracy Day (May)		

Curriculum Overview

Subject: MATHEMATICS

Year Group: 8

Year 8 Mathematics builds upon the mathematical skills developed through Key Stage 2 and Year 7. Pupils will cover five topic areas: number, algebra, statistics and probability, geometry and measure, and, ratio, proportion and rates of change. They will be presented in lessons with AO1 – using and applying standard techniques, AO2 – reasoning, interpreting and communicating mathematically, and AO3 – solving problems in mathematics and in other contexts. Pupils are given the opportunity to continue developing the use of scientific calculators efficiently and effectively. Skills acquired in Year 7 are interleaved throughout year 8 to enhance long term retention.

TERM 1		TERM 2		TERM 3	
<u>AUTUMN 1</u>	<u>AUTUMN 2</u>	<u>SPRING 1</u>	<u>SPRING 2</u>	<u>SUMMER 1</u>	<u>SUMMER 2</u>
Percentages Money Indices Equations	Sequences Ratio	Rounding Coordinates Area Circles Standard Form	Venn Diagrams 3D Shapes Surface Area and Volumes	Linear Graphs Transformations Angles Statistical Diagrams	Inequalities Algebra – Double Brackets Algebraic Fractions Recurring Decimals
<u>KNOWLEDGE/SKILLS</u> Percentages of Amounts Percentage Change Calculations with Money Index Laws Solving Equations	<u>KNOWLEDGE/SKILLS</u> Term-to-Term Rule Position-to-Term Rule Ratios Scale Diagrams	<u>KNOWLEDGE/SKILLS</u> Significant Figures Coordinates and Midpoints Area and Units Area and Circumference Standard Form and Ordinary Numbers	<u>KNOWLEDGE/SKILLS</u> Venn Diagrams Factors, Multiples and Primes Nets of 3D shapes Surface Area Volume	<u>KNOWLEDGE/SKILLS</u> Plotting Graphs and Finding Equations Transforming Shapes – Translations and Reflections Finding Unknown Angles Drawing and Interpreting Statistical Diagrams	<u>KNOWLEDGE/SKILLS</u> Linear Inequalities Expanding Double Brackets Fractions Review Algebraic Fractions Fractions and Recurring Decimals
<u>KEY ASSESSMENTS</u> Post Knowledge Checks Term 1 Assessment		<u>KEY ASSESSMENTS</u> Post Knowledge Checks Term 2 Assessment		<u>KEY ASSESSMENTS</u> Post Knowledge Checks End of Year Assessment	
<u>External Resources and Extended Studies</u> SPARX Maths - https://sparxmaths.com/ Our main homework platform Mathsbot - https://mathsbot.com/ Differentiated activities to help build key skills as well as worksheets for consolidation of work. Corbett Maths – https://corbettmaths.com 5-a-day questions which are good problem-solving starter questions for all abilities. Maths Genie - https://www.mathsgenie.co.uk/ A free revision site. It has past papers, mark schemes and model answers to GCSE exam questions			<u>Enrichment and Development</u> Literacy words displayed in the maths corridor to promote key vocabulary used throughout the curriculum. Comprehension tasks scheduled for each half term encompassing literacy, diversity and inclusion, careers and cross-curricular links Careers in maths information displayed in the maths corridor to spark curiosity Diversity and inclusion, and women in maths posters displayed in the corridor to highlight and celebrate important figures in maths Use of SPARX Maths and calculators Key dates in the maths calendar: Pi Day (March 14 th) and National Numeracy Day (May)		

Curriculum Overview

Subject: MATHEMATICS

Year Group: 9



CHASE HIGH SCHOOL
AMBITION - RESILIENCE - KINDNESS

Year 9 Mathematics builds upon the mathematical skills developed through Year 7 and Year 8. Pupils will cover five topic areas: number, algebra, statistics and probability, geometry and measure, and, ratio, proportion and rates of change. They will be presented in lessons with AO1 – using and applying standard techniques, AO2 – reasoning, interpreting and communicating mathematically, and AO3 – solving problems in mathematics and in other contexts. Pupils are given the opportunity to continue developing the use of scientific calculators efficiently and effectively. Skills acquired in Year 8 are interleaved throughout Year 9 to enhance long term retention.

TERM 1		TERM 2		TERM 3	
<u>AUTUMN 1</u>	<u>AUTUMN 2</u>	<u>SPRING 1</u>	<u>SPRING 2</u>	<u>SUMMER 1</u>	<u>SUMMER 2</u>
Fractions and Percentages Probability Standard Form Inequalities	Quadratic Equations Formulae Constructions Circles	Rounding 3D shapes Pythagoras' Theorem Ratio & Proportion	Linear Graphs Compound Measures Motion Time Graphs	Quadratic Graphs Angles & Bearings Transformations Similarity & Congruence	Handling Data Statistical Diagrams Vectors
<u>KNOWLEDGE/SKILLS</u> Fractions, Decimals and Percentage Review Percentage Change Theoretical Probability Experimental Probability Calculations with Standard Form Linear Inequalities	<u>KNOWLEDGE/SKILLS</u> Factorising Quadratic Equations Solving Quadratic Substitution Solving Equations Measures of Time Measures of Mass, Length and Capacity	<u>KNOWLEDGE/SKILLS</u> Error Intervals Pythagoras' Theorem in 2D Ratio Proportion worded Problems	<u>KNOWLEDGE/SKILLS</u> Plotting Graphs Finding Equations Speed and Rates Distance Time Graphs	<u>KNOWLEDGE/SKILLS</u> Plotting and Interpreting Quadratic Graphs Angle Facts Bearings Transforming Shapes Similarity and Congruence	<u>KNOWLEDGE/SKILLS</u> Scatter Graphs Collecting and Presenting Data Grouped Data Column Vectors
<u>KEY ASSESSMENTS</u> Post Knowledge Checks Term 1 Assessment		<u>KEY ASSESSMENTS</u> Post Knowledge Checks Term 2 Assessment		<u>KEY ASSESSMENTS</u> Post Knowledge Checks End of Year Assessment	
<u>External Resources and Extended Studies</u> SPARX Maths - https://sparxmaths.com/ Our main homework platform Mathsbot - https://mathsbot.com/ Differentiated activities to help build key skills as well as worksheets for consolidation of work. Corbett Maths – https://corbettmaths.com 5-a-day questions which are good problem-solving starter questions for all abilities. Maths Genie - https://www.mathsgenie.co.uk/ A free revision site. It has past papers, mark schemes and model answers to GCSE exam questions			<u>Enrichment and Development</u> Literacy words displayed in the maths corridor to promote key vocabulary used throughout the curriculum. Comprehension tasks scheduled for each half term encompassing literacy, diversity and inclusion, careers and cross-curricular links Careers in maths information displayed in the maths corridor to spark curiosity and a dedicated lesson to careers in maths Diversity and inclusion, and women in maths posters displayed in the corridor to highlight and celebrate important figures in maths Use of SPARX Maths and calculators Key dates in the maths calendar: Pi Day (March 14 th) and National Numeracy Day (May)		