



CHORLTON HIGH SCHOOL: CURRICULUM

CHS Curriculum Intent

SUCCESSFUL: Learners who gain deep and powerful knowledge in preparation for life; combining academic rigour, curiosity and creative flair.

CREATIVE: Learners who are imaginative, optimistic and inventive; finding their voice to become effective communicators prepared for lifelong adaptability

HAPPY: Learners who are confident, resilient, well-rounded citizens; they understand the world's communities and are ready to discover their place in it.

CHS Curriculum Area Framework for Learning – Year 10

SUBJECT	Maths
INTENT	Maths is a universal language that explains the world around us. The study of Mathematics enables you to make sense of everyday situations, forge links between topics and establish connections to real life context. Maths fosters curiosity, equipping students with various strategies to tackle problems; it empowers students with resilience to take risks, get it wrong, form a new strategy and start again, with determination and drive to reach the final answer. Maths is logical thinking, reasoning, intuition, analysis, construction, generalisation and beauty.



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Year Group	10					
Rationale/ Narrative	Year 10 continues to equip students to problem solve and reason with resilience and determination. Students will consolidate and extend their existing skills gained in Year 9. Students will work on a range of GCSE topics, applying their skills to complex situations and promoting their communication and strategising throughout. Students will become more familiar with the GCSE assessment and expectations.					
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
KNOWLEDGE	<u>Ratio and Proportion</u> <ul style="list-style-type: none"> Proportion Ratio and scales Percentage Change <u>Circles and Constructions</u> <ul style="list-style-type: none"> Circumference Area Surface area of 3D shapes such as cones, cylinders Arc length and sector area Constructions Loci 	<u>Factors, Powers and Roots</u> <ul style="list-style-type: none"> Factors and multiples Prime factor decomposition Powers and roots <u>Graphs 1</u> <ul style="list-style-type: none"> Drawing straight-line graphs Equation of straight line Kinematic graphs <u>Working with 3D shapes</u> <ul style="list-style-type: none"> 3D shapes Volume of a prism Volume and surface area 	<u>Working with 3D shapes cont.</u> <u>Handling data</u> <ul style="list-style-type: none"> Frequency diagrams Averages and spread Scatter graphs and correlation Time series <u>Calculations 2</u> <ul style="list-style-type: none"> Calculating with roots and indices Exact calculations Standard Form <i>(Work experience for two weeks)</i>	<u>Calculations 2 cont'd</u> See Spring 1 <u>Graphs 2</u> <ul style="list-style-type: none"> Properties of quadratic functions Sketching functions Real-life Graphs <u>Pythagoras and Trigonometry</u> <ul style="list-style-type: none"> Pythagoras' Theorem Trigonometry Vectors 	Pythagoras and Trigonometry cont'd See Spring 2 <u>Combined Events (Probability)</u> <ul style="list-style-type: none"> Sets Possibility Spaces Tree Diagrams <u>Sequences</u> <ul style="list-style-type: none"> Sequence Rules Nth term Special Sequences Quadratic Sequences 	<u>Sequences cont'd</u> See Summer 1 <u>Ratio and Proportion</u> <ul style="list-style-type: none"> Compound Units Direct Proportion Inverse Proportion Growth and Decay
SKILLS	Percentage multipliers	Recalling factors, multiples and primes	Pattern recognition	Reading axes	Use of language in probability	Percentage multipliers Ability spot patterns



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	<p>Visualising and drawing shapes Understanding loci Use of mathematical equipment Reading maps and scales Ability to answer problem-solving</p>	<p>Square numbers Cube numbers Reading axes Drawing and labelling axes Ability to answer problem-solving questions Substitution</p>	<p>Trends and relationships Substitution Multiplication Division Addition Subtraction Ability to mathematically reason Recognising different parts of shapes Use of mathematical equipment Ability to mathematically reason Use of a calculator</p>	<p>Drawing and labelling axes Substitution Calculator skills Number skills Ability to answer problem-solving questions Recalling formulae</p>	<p>Manipulation of equations Ability to answer problem-solving questions</p>	<p>Manipulation of equations Ability to answer problem-solving questions</p>
ASSESSMENTS	<p>1 x Ratio and Proportion assessment 1 x Circles and constructions assessment</p>	<p>1 x Equations and Inequalities assessment 1 x Factors, Powers, Roots assessment 1 x progress test</p>	<p>1 x Working in 3D assessment 1 x Handling Data assessment</p>	<p>1 x Calculations assessment 1 x progress test</p>	<p>1 x Pythagoras and Trigonometry assessment 1 x combined events assessment</p>	<p>1 x sequences assessment 2 x progress test (one non calculator and one calculator)</p>