

FRAMEWORK FOR LEARNING



CREATIVE
HAPPY
SUCCESSFUL

An education where imagination, curiosity and resilience enable us to ignite our learning.

A shared belief that optimism, empathy and responsibility are the foundations for a respectful, safe and inclusive community.

Individuals who are ready to learn, practise being reflective, and are motivated to become champions.

SUBJECTMathsINTENT"Without mediated"

"Without mathematics, there's nothing you can do. Everything around you is mathematics. Everything around you is numbers." - Shakuntala Devi

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.



YEAR GROUP	YEAR 11 – HIGH	ER TIER				
RATIONAL / NARRATIVE	Year 11 seeks to harness life scenarios. Students s and future careers. Give below following a robust	students' skills and know eek to understand why pro n that the vast majority of assessment schedule and	ledge, creating mathemat ocesses work, understand t f the curriculum has now l careful analysis of, and rea	icians who are forging link heir limitations, evaluate a been covered in Years 7 to action to Question Level A	s between topics and linki nd generalise methods in p 10, students will be direc nalysis data.	ng problems to everyday reparation for their GCSE ted to the areas outlined
TERM KNOWLEDGE	AUTUMN 1 Number • Fractional and negative indices • Product Rule • Upper & Lower Bounds • Surds including rationalizing • Harder compound interest problems Ratio & Proportion • Problem-solving with ratio (e.g. combined ratios) <u>Geometry & Measure</u> • Angles in polygons • Compound measures • Co-ordinate geometry • Surface area and volume of cylinders, cones, spheres and cylinder • Transformations	AUTUMN 2 AUTUMN 2 Ratio & Proportion • Direct & Inverse Proportion Geometry & Measure • Similarity in 2D and 3D • Further trigonometry Algebra • Quadratics including the formula • Iteration • Simultaneous Equations • Using graphs of circles, cubes and quadratics • Graphs of trigonometric functions • Transformations of graphs Statistics & Probability • Sampling	careful analysis of, and res SPRING 1 Algebra • Gradient & Area under a curve • Algebraic Proof • Functions <u>Geometry & Measure</u> • Circle geometry (gradients/tangents) • Circle Theorems • Loci • Congruence & Geometric Proof • Vectors	Revision based topics tailored to students' specific learning needs as identified through use of PLCs and practice examinations.	Revision based topics tailored to students' specific learning needs as identified through use of PLCs and practice examinations.	
	 <u>Algebra</u> Expanding and factorizing Recurring decimals to fractions <u>Statistics & Probability</u> 	 Cumulative frequency & boxplots Histograms Conditional Probability 				



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and applying a method to solve itimmediately obvious, between different parts of mathematicsimmediately obvious, between different parts of mathematics• developing strategies for problem-solving, such as drawing a diagram or using bar modellingimmediately obvious, between different parts of mathematicsimmediately obvious, between different parts of mathematics• finding an error in a process and being able to correct itimmediately obvious, parts of mathematicsimmediately obvious, between different parts of mathematics• finding an error in a process and being able to correct itimmediately obvious, parts of mathematicsimmediately obvious, between different parts of mathematics• interpreting solutions in the context of theimmediately obvious, between different parts of mathematicsimmediately obvious, between different parts of mathematics		unfamiliar context	may not be	may not be			
 method to solve it method to solve it parts of mathematics developing strategies for problem-solving, such as drawing a diagram or using bar modelling finding an error in a process and being able to correct it interpreting solutions in the context of the 		and applying a	immediately obvious,	immediately obvious,			
 developing strategies for problem-solving, such as drawing a diagram or using bar modelling finding an error in a process and being able to correct it interpreting solutions in the context of the 		method to solve it	between different	between different			
 developing strategies for problem-solving, such as drawing a diagram or using bar modelling finding an error in a process and being able to correct it interpreting solutions in the context of the 		doveloping strategies	parts of mathematics	parts of mathematics			
 such as drawing a diagram or using bar modelling finding an error in a process and being able to correct it interpreting solutions in the context of the 		for problem column		•			
 such as drawing a diagram or using bar modelling finding an error in a process and being able to correct it interpreting solutions in the context of the 		ior problem-solving,					
diagram or using bar modelling • finding an error in a process and being able to correct it • interpreting solutions in the context of the		such as drawing a					
 modelling finding an error in a process and being able to correct it interpreting solutions in the context of the 		diagram or using bar					
 finding an error in a process and being able to correct it interpreting solutions in the context of the 		modelling					
 process and being able to correct it interpreting solutions in the context of the 		 finding an error in a 					
able to correct it interpreting solutions in the context of the		process and being					
interpreting solutions in the context of the		able to correct it					
in the context of the		 interpreting solutions 					
		in the context of the					
			1	1	1	1	



ASSESSMENT	given problem, ensuring an answer is sensible • making and using connections, which may not be immediately obvious, between different parts of mathematics <u>Marking Point 1</u> Students will complete a mock GCSE examination paper for the new specification 9-1 GCSE during Week 3 of the term. Students will be provided with feedback on their examination in the form of a Personal Learning Checklist. <u>Marking Point 2</u> 1 x in-class practice examination paper will be teacher assessed, with identified areas of strength and areas for development as part of a Feedback Workshop.	Marking points 3/4/5: College Mock examinations Students will sit a full set of three paper, as part of their College Entry examinations. Feedback will be in the form of detailed Question Level Analysis which provides students with a Red/Amber/Green breakdown of performance and provides them with Next Steps to progress.	Marking Point 1 Students will complete a full mock GCSE examination paper for the new specification 9-1 GCSE during Week 1 of Spring term. Students will be provided with feedback on their examination in the form of a Personal Learning Checklist. <u>Marking Point 2</u> 1 x in-class practice examination paper will be teacher assessed, with identified areas of strength and areas for development as part of a Feedback Workshop.	Marking points 3/4/5: Spring Term Mock examinations Students will sit a full set of three papers, as part of their Spring term examinations. Feedback will be in the form of detailed Question Level Analysis which provides students with a Red/Amber/Green breakdown of performance and provides them with Next Steps to progress.	
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	Students will also be set weekly revision tasks on Sparx to complement their paper-based home learning.	Students will also be set weekly revision tasks on Sparx to complement their paper-based home learning.	Students will also be set weekly revision tasks on Sparx to complement their paper-based home learning.	 Students will also be set weekly revision tasks on Sparx to complement their paper-based home learning 		
READING, WRITING, TALK, NUMERACY	Peer assess each other's seen paper performance identify missing marks and checking questions. Links to etymology where appropriate through our whole school SEEC model. Numeracy is embedded across the Mathematics curriculum. Numeracy interventions will be put into place for students identified as underperforming for specific topics.	Peer assess each other's seen paper performance identify missing marks and checking questions. Links to etymology where appropriate through our whole school SEEC model. Numeracy is embedded across the Mathematics curriculum. Numeracy interventions will be put into place for students identified as underperforming for specific topics.	Peer assess each other's seen paper performance identify missing marks and checking questions. Links to etymology where appropriate through our whole school SEEC model. Numeracy is embedded across the Mathematics curriculum. Numeracy interventions will be put into place for students identified as underperforming for specific topics.	A02/A03 problem solving exam questions to solve in groups. Mark scheme to support. Students to predict what they might have to calculate in a question. Links to etymology where appropriate through our whole school SEEC model. Numeracy is embedded across the Mathematics curriculum. Numeracy interventions will be put into place for students identified as underperforming for specific topics.	A02/A03 problem solving exam questions to solve in groups. Mark scheme to support. Links to etymology where appropriate through our whole school SEEC model. Students to predict what they might have to calculate in a question.	
TIER 2 Vocabulary	Expand, express, simplify, substitute, derive, sector, rearrange.	Simultaneous, area, process , determine, outline.	Justify, prove, evaluate	Command words in exams: Evaluate, complete, solve, calculate, investigate, prove, show, describe, estimate, sketch, construct, expand, factorise, simplify.	Command words in exams: Evaluate, complete, solve, calculate, investigate, prove, show, describe, estimate, sketch, construct, expand, factorise, simplify.	
TIER 3 Vocabulary	Integer, surd, irrational standard form, simplify, rationalise, recurring, expression, identity, equation, formula, expand, simplify, completing the square, factorise. Cone, cylinder, surface area, translation,	Mutually exclusive, conditional, outcomes, theoretical, relative frequency, rearrange, similar, length, area, volume, scale factor, stratified sample, random, cumulative frequency, box plot, histogram, frequency	Gradient, cyclic, chord, reciprocal, perpendicular quadrilateral, alternate, segment, subject, proof, function notation, inverse, vector, congruence, direction, magnitude, scalar, ratio, parallel, proof, column vector.			





	rotation, reflection,	density, interquartile				
	enlargement, vector.	range, spread, outlier,				
	Speed, density, pressure,	arc,				
	force.	segment, sector,				
	Mean, median, mode,	circumference, radius,				
	range.	diameter, pi.				
HOLLA JUDGE	Economic Wellbeing –	Economic well-being –	Cultural – Constructions	Personal - promotion of	Personal - promotion of	
	Debt	students are able to	are useful for a range of	independence and self	independence and self	
VALIES AND	How are prime factors	identify and analyse data	jobs including	confidence with clear	confidence with clear	
	keeping online	in a variety of forms.	engineering, architecture	focus on exam technique	focus on exam technique	
DIVFRSITY	transactions secure?		and town planning.	and exam questions.	and exam questions.	
BITEROIT	Prevention of fraud.	Social – interpretation of	Discussion of why			
		real-life graphs.	engineers use circles in			
	<u>Citizenship/Cultural</u> -		constructions such as			
	Why do we have different	<u>Personal</u> – students are	bridges.			
	units for measurement?	given a 'personal learning				
	Where did they come	checklist following each	Economic Wellbeing –			
	from?	practice paper and asked	using graphs to work out			
		to reflect on their	when certain companies			
	<u>British Values</u> – During	progress, identifying their	are better value.			
	lessons students are	areas of development to				
	encouraged to reflect on	focus independent				
	learning and take	revision.				
	responsibility for their					
	behaviour. Students are					
	encouraged to respect					
	their peers. Through					
	teacher/self and peer					
	feedback, students					
	develop their self-					
	confidence and self-					
	esteem.					





YEAR GROUP YEAR 11 – CROSSOVER Year 11 seeks to harness students' skills and knowledge, creating mathematicians who are forging links between topics and linking problems to everyday **RATIONAL /** life scenarios. Students seek to understand why processes work, understand their limitations, evaluate and generalise methods in preparation for their GCSE NARRATIVE and future careers. TERM **AUTUMN 1** AUTUMN 2 **SPRING 1** SPRING 2 **SUMMER 1** KNOWLEDGE Revision based topics **Ratio & Proportion** Revision based topics Number Number • Error Intervals ٠ Standard Form Surds tailored to students' tailored to students' specific learning needs as specific learning needs as • Compound Interest • Proportional Bounds identified through use of identified through use of reasoning **Depreciation & Decay** PLCs and practice PLCs and practice Direct & Inverse Algebra Standard Form examinations. examinations. Proportion • Expanding triple Fractional and brackets negative indices Geometry & Measure Algebraic Fractions ٠ Trigonometry **Ratio & Proportion** Quadratic formula Pythagoras & Trig Problem-solving with ٠ Finding exact values Geometry & Measure ratio (e.g. combined ٠ • ratios) • Bearings Similarity Similarity in area and Arcs and sectors • Geometry & Measure volume • Surface area Speed/distance/ time Circle Theorems Volume ٠ **Compound Measures** Constructions Transformations Angles in parallel lines ٠ Vectors • Angles in polygons <u>Algeb</u>ra Algebra ٠ Quadratic sequences • Solving equations and ٠ Forming and solving inequalities (inc. geometrical Changing the subject problems) Inequalities Linear graphs Statistics & Probability Y=mx+c ٠ Histograms . Parallel and • Sampling perpendicular lines Quadratic and cubic graphs Quadratics – expanding and factorising



SKILLS

CHS SOUTH - CURRICULUM - FRAMEWORK FOR LEARNING

F

Statistics & Probability				
Reverse Mean				
 Averages from a 				
frequency table (inc.				
grouped)				
 Boxplots 				
Cumulative				
Frequency				
 Frequency Polygons 				
 Tree diagrams 				
 Recalling key 	Recalling key	Recalling key	Recalling key	
formulae across the	formulae across the	formulae across the	formulae across the	
specification	specification	specification	specification	
 4 Operations 	 Interpreting data 	Accurate use of	 Interpreting data 	
 Manipulating 	Manipulating	mathematical	Manipulating	
algebraic expression	algebraic expressions	equipment such as a	algebraic expressions	
 Solving an equation 	Pattern recognition	ruler, protractor and	 Interpreting an 	
and checking whether	 Understanding how 	compass	unfamiliar context	
it works through	ratio/proportion link	Confidence at using a	and applying a	
substitution	together	calculator	method to solve it	
 Identifying parallel 	 Interpreting an 	 Interpreting an 	 developing strategies 	
and perpendicular	unfamiliar context	unfamiliar context	for problem-solving,	
lines	and applying a	and applying a	such as drawing a	
Drawing and labelling	method to solve it	method to solve it	diagram or using bar	
axes	 developing strategies 	 developing strategies 	modelling	
 Comparing and 	for problem-solving,	for problem-solving,	 finding an error in a 	
interpreting averages	such as drawing a	such as drawing a	process and being	
and range	diagram or using bar	diagram or using bar	able to correct it	
 Solving multistep 	modelling	modelling	 interpreting solutions 	
worded problems	 finding an error in a 	 finding an error in a 	in the context of the	
 Use of mathematical 	process and being	process and being	given problem,	
equipment	able to correct it	able to correct it	ensuring an answer is	
 Reading scales 	Interpreting solutions	 Interpreting solutions 	sensible	
 Rounding 	in the context of the	in the context of the	 making and using 	
Recognising parts of a	given problem,	given problem,	connections, which	
whole	ensuring an answer is	ensuring an answer is	may not be	
Confidence at using a	sensible		hotwoon different	
calculator	 making and using 	 making and using connections, which 	perween amerent	
Interpreting an	connections, which	may not bo	parts of mathematics	
unfamiliar context	may not be	immediately obvious		
and applying a	hotwoon different	hetween different		
method to solve it	perween unierent	narts of mathematics		
developing strategies	parts of mathematics			
for problem-solving,				



	such as drawing a				
	diagram or using bar				
	modelling				
	 finding an error in a 				
	nrocess and being				
	able to correct it				
	able to confect it				
	 Interpreting solutions 				
	In the context of the				
	given problem,				
	ensuring an answer is				
	sensible making and				
	using connections,				
	which may not be				
	immediately obvious,				
	between different				
	parts of mathematics				
ACCECCMENT	Marking Point 1	Marking points 3/4/5:	<u>Marking Point 1</u>	Marking points 3/4/5:	
ASSESSMENT	Students will complete a	<u>College Mock</u>	Students will complete a	Spring Term Mock	
	mock GCSE examination	examinations	full mock GCSE	examinations	
	paper for the new	Students will sit a full set	examination paper for the	Students will sit a full set	
	specification 9-1 GCSE	of three paper, as part of	new specification 9-1	of three papers, as part of	
	during Week 3 of the	their College Entry	GCSE during Week 1 of	their Spring term	
	term. Students will be	examinations.	Spring term. Students will	examinations.	
	provided with feedback	Feedback will be in the	be provided with	Feedback will be in the	
	on their examination in	form of detailed Question	feedback on their	form of detailed Question	
	the form of a Personal	Level Analysis which	examination in the form	Level Analysis which	
	Learning Checklist.	provides students with a	of a Personal Learning	provides students with a	
	5	Red/Amber/Green	Checklist.	Red/Amber/Green	
	Marking Point 2	breakdown of		breakdown of	
	1 x in-class practice	performance and	Marking Point 2	performance and	
	examination paper will be	provides them with Next	1 x in-class practice	provides them with Next	
	teacher assessed with	Steps to progress	examination paper will be	Steps to progress	
	identified areas of	steps to progress.	teacher assessed with	steps to progress.	
	strength and areas for	•	identified areas of		
	development as part of a		strength and areas for		
	Eoodback Workshop		dovelopment as part of a		
	reeuback workshop.		Ecodback Workshop		
	Students alternate the	Students alternate the	Students alternate the	Students alternate the	
IOME LEARNING	students alternate the	students alternate the	students alternate the	students alternate the	
	style of nome learning	style of nome learning	style of nome learning	style of nome learning	
	amerent formats:	amerent formats:	amerent formats:	amerent formats:	
	- By completing	- By completing	- By completing	- By completing	
	Practice Papers at	Practice Papers at	Practice Papers at	Practice Papers at	
	home which will	home which will	home which will	home which will	
	either be self/peer	either be self/peer	either be self/peer	either be self/peer	



P

	assessed in class. Pupil friendly mark schemes have been created for most exam series. Students will also be set weekly revision tasks on Sparx to complement their paper-based home learning.	assessed in class. Pupil friendly mark schemes have been created for most exam series. Students will also be set weekly revision tasks on Sparx to complement their paper-based home learning.	assessed in class. Pupil friendly mark schemes have been created for most exam series. Students will also be set weekly revision tasks on Sparx to complement their paper-based home learning.	 assessed in class. Pupil friendly mark schemes have been created for most exam series. Students will also be set weekly revision tasks on Sparx to complement their paper-based home learning 		
READING, WRITING, TALK, NUMERACY	Peer assess each other's seen paper performance identify missing marks and checking questions. Links to etymology where appropriate through our whole school SEEC model. Numeracy is embedded across the Mathematics curriculum. Numeracy interventions will be put into place for students identified as underperforming for specific topics.	Peer assess each other's seen paper performance identify missing marks and checking questions. Links to etymology where appropriate through our whole school SEEC model. Numeracy is embedded across the Mathematics curriculum. Numeracy interventions will be put into place for students identified as underperforming for specific topics.	Peer assess each other's seen paper performance identify missing marks and checking questions. Links to etymology where appropriate through our whole school SEEC model. Numeracy is embedded across the Mathematics curriculum. Numeracy interventions will be put into place for students identified as underperforming for specific topics.	A02/A03 problem solving exam questions to solve in groups. Mark scheme to support. Students to predict what they might have to calculate in a question. Links to etymology where appropriate through our whole school SEEC model. Numeracy is embedded across the Mathematics curriculum. Numeracy interventions will be put into place for students identified as underperforming for specific topics.	A02/A03 problem solving exam questions to solve in groups. Mark scheme to support. Links to etymology where appropriate through our whole school SEEC model. Students to predict what they might have to calculate in a question.	
TIER 2 Vocabulary	Expand, express, simplify, substitute, derive, rearrange, evaluate, simultaneous	Area, process , determine, outline, sector	Justify, prove, evaluate, similar.	Command words in exams: Evaluate, complete, solve, calculate, investigate, prove, show, describe, estimate, sketch, construct, expand, factorise, simplify.	Command words in exams: Evaluate, complete, solve, calculate, investigate, prove, show, describe, estimate, sketch, construct, expand, factorise, simplify.	
TIER 3 Vocabulary	Integer, prime, lowest common multiple (LCM), highest common factor (HCF), union, intersection, value, estimate, currency, convert, round, truncate,	Ratio, proportion, direct, inverse, reciprocal, constant. standard form.	Surd, irrational, square root, error intervals, polynomials. Quadratic, co-efficient. Numerator, denominator.			



F

	 bounds, original, percentage, proportion, multiplier, compound/simple interest, depreciation, decay. Expression, identity, equation, simplify, formula, substitute, subject, factorise, Cumulative, frequency, outliers, mean, median, mode, range Speed, density, pressure. Parallel, perpendicular, polygon, gradient. 	Hypotenuse, bearing, arc, segment, circumference, radius, diameter, pi. Cone, cylinder, surface area, translation, rotation, reflection, enlargement, vector, column vectors. Quadratic, nth term	Congruent, scale factor, ratio Gradient, cyclic, chord, perpendicular quadrilateral, alternate, segment, prove, proof. Parallel, bisector, construct.			
PSPSMC, BRITISH VALUES AND DIVERSITY	Economic Wellbeing – Debt How are prime factors keeping online transactions secure? Prevention of fraud. Citizenship/ Cultural – Why do we have different units for measurement? Where did they come from? British Values – During lessons students are encouraged to reflect on learning and take responsibility for their behaviour. Students are encouraged to respect their peers. Through teacher/self and peer feedback, students develop their self- confidence and self- esteem.	Economic well-being – students are able to identify and analyse data in a variety of forms. Social – interpretation of real-life graphs. Personal – students are given a 'personal learning checklist following each practice paper and asked to reflect on their progress, identifying their areas of development to focus independent revision.	Cultural – Constructions are useful for a range of jobs including engineering, architecture and town planning. Discussion of why engineers use circles in constructions such as bridges. Economic Wellbeing – using graphs to work out when certain companies are better value.	<u>Personal</u> - promotion of independence and self confidence with clear focus on exam technique and exam questions.	<u>Personal</u> - promotion of independence and self confidence with clear focus on exam technique and exam questions.	





YEAR GROUP YEAR 11 – FOUNDATION TIER Year 11 seeks to harness students' skills and knowledge, creating mathematicians who are forging links between topics and linking problems to everyday **RATIONAL /** life scenarios. Students seek to understand why processes work, understand their limitations, evaluate and generalise methods in preparation for their GCSE NARRATIVE and future careers. **TERM AUTUMN 1 AUTUMN 2 SPRING 1 SPRING 2 SUMMER 1** KNOWLEDGE Geometry & Measure Revision based topics Revision based topics Number Algebra Speed/distance/time • Product of prime ٠ Sequences tailored to students' tailored to students' specific learning needs as specific learning needs as numbers • Compound measures • Forming and solving identified through use of identified through use of Worded HCF and LCM ٠ Pythagoras equations PLCs and practice PLCs and practice ٠ Best Value ٠ Trigonometry Simultaneous examinations. examinations. Exchange Rates Pythagoras and equations • Direct and inverse Rounding and trigonometry • estimation combined proportion Error intervals ٠ Bearings ٠ Geometry & Measure ٠ Interest and growth • Alternate and Plans and elevations ٠ Depreciation and corresponding angles Constructions decay • Interior and exterior • Circles Use of a calculator angles ٠ Arcs and sectors **Reverse Percentages** • Algebra Surface area and Fractions • Linear graphs volume Standard Form • Quadratic and cubic • ٠ Congruence Ratio & Proportion graphs Similar Shapes ٠ Problem-solving with Co-ordinate geometry • Transformations ٠ ratio (e.g. combined ٠ Real life graphs • Vectors ratios) Proportion – recipes Statistics & Probability ٠ Frequency diagrams ٠ Algebra ٠ Scatter graphs Expanding and • **Time Series** simplifying ٠ Sampling ٠ Factorising **Pie Charts** Solving equations Probability Changing the subject Tree diagrams ٠ Inequalities Statistics & Probability • Averages from a table and grouped data





SKILLS	 Recalling key formulae across the specification 4 Operations Manipulating algebraic expressions Solving an equation and checking whether it works through substitution interpreting averages and range Solving multistep worded problems Rounding Understanding how ratio/proportion link together Confidence at using a calculator Interpreting an unfamiliar context and applying a method to solve it Developing strategies for problem-solving, such as drawing a diagram or using bar modelling Finding an error in a process and being able to correct it Interpreting solutions in the context of the given problem, ensuring an answer is sensible Making and using connections, which may not be immediately obvious, between different parts of mathematics 	 Recalling key formulae across the specification Interpreting data Manipulating algebraic expressions Drawing and labelling axes Reading scales Accurate use of mathematical equipment such as a ruler, protractor and compass Comparing and Pattern recognition Interpreting an unfamiliar context and applying a method to solve it Developing strategies for problem-solving, such as drawing a diagram or using bar modelling Finding an error in a process and being able to correct it Interpreting solutions in the context of the given problem, ensuring an answer is sensible Making and using connections, which may not be immediately obvious, between different parts of mathematics 	 Recalling key formulae across the specification Confidence at using a calculator Interpreting an unfamiliar context and applying a method to solve it Developing strategies for problem-solving, such as drawing a diagram or using bar modelling Finding an error in a process and being able to correct it Interpreting solutions in the context of the given problem, ensuring an answer is sensible Making and using connections, which may not be immediately obvious, between different parts of mathematics 	 Recalling key formulae across the specification Interpreting data Manipulating algebraic expressions Interpreting an unfamiliar context and applying a method to solve it Developing strategies for problem-solving, such as drawing a diagram or using bar modelling Finding an error in a process and being able to correct it Interpreting solutions in the context of the given problem, ensuring an answer is sensible Making and using connections, which may not be immediately obvious, between different parts of mathematics 	



ASSESSMENT	Marking Point 1 Students will complete a mock GCSE examination paper for the new specification 9-1 GCSE during Week 3 of the term. Students will be provided with feedback on their examination in the form of a Personal Learning Checklist. <u>Marking Point 2</u> 1 x in-class practice examination paper will be teacher assessed, with identified areas of strength and areas for development as part of a Feedback Workshop.	Marking points 3/4/5: College Mock examinations Students will sit a full set of three paper, as part of their College Entry examinations. Feedback will be in the form of detailed Question Level Analysis which provides students with a Red/Amber/Green breakdown of performance and provides them with Next Steps to progress.	Marking Point 1 Students will complete a full mock GCSE examination paper for the new specification 9-1 GCSE during Week 1 of Spring term. Students will be provided with feedback on their examination in the form of a Personal Learning Checklist. <u>Marking Point 2</u> 1 x in-class practice examination paper will be teacher assessed, with identified areas of strength and areas for development as part of a Feedback Workshop.	Marking points 3/4/5: Spring Term Mock examinations Students will sit a full set of three papers, as part of their Spring term examinations. Feedback will be in the form of detailed Question Level Analysis which provides students with a Red/Amber/Green breakdown of performance and provides them with Next Steps to progress.	
HOME LEARNING	Students alternate the style of home learning each week with two different formats: - By completing Practice Papers at home which will either be self/peer assessed in class. Pupil friendly mark schemes have been created for most exam series. Students will also be set weekly revision tasks on Sparx to complement their paper-based home learning.	Students alternate the style of home learning each week with two different formats: - By completing Practice Papers at home which will either be self/peer assessed in class. Pupil friendly mark schemes have been created for most exam series. Students will also be set weekly revision tasks on Sparx to complement their paper-based home learning.	Students alternate the style of home learning each week with two different formats: - By completing Practice Papers at home which will either be self/peer assessed in class. Pupil friendly mark schemes have been created for most exam series. Students will also be set weekly revision tasks on Sparx to complement their paper-based home learning.	 Students alternate the style of home learning each week with two different formats: By completing Practice Papers at home which will either be self/peer assessed in class. Pupil friendly mark schemes have been created for most exam series. Students will also be set weekly revision tasks on Sparx to complement their paper-based home learning 	

B





READING, WRITING, TALK, NUMERACY	Peer assess each other's seen paper performance identify missing marks and checking questions. Numeracy is embedded across the Mathematics curriculum. Numeracy interventions will be put into place for students identified as underperforming for specific topics.	Peer assess each other's seen paper performance identify missing marks and checking questions. Numeracy is embedded across the Mathematics curriculum. Numeracy interventions will be put into place for students identified as underperforming for specific topics.	Peer assess each other's seen paper performance identify missing marks and checking questions. Numeracy is embedded across the Mathematics curriculum. Numeracy interventions will be put into place for students identified as underperforming for specific topics.	A02/A03 problem solving exam questions to solve in groups. Mark scheme to support. Students to predict what they might have to calculate in a question. Numeracy is embedded across the Mathematics curriculum. Numeracy interventions will be put into place for students identified as underperforming for specific topics.	A02/A03 problem solving exam questions to solve in groups. Mark scheme to support. Students to predict what they might have to calculate in a question.
TIER 2 Vocabulary	Expand, express, simplify, substitute, derive, rearrange, evaluate, simultaneous	Area, process, parallel determine, outline, sector	Plan, similar, simultaneous, area	Command words in exams: Evaluate, complete, solve, calculate, investigate, prove, show, describe, estimate, sketch, construct, expand, factorise, simplify.	Command words in exams: Evaluate, complete, solve, calculate, investigate, prove, show, describe, estimate, sketch, construct, expand, factorise, simplify.
TIER 3 Vocabulary	Integer, prime, lowest common multiple (LCM), highest common factor (HCF), union, intersection, value, estimate, currency, convert, round, truncate, bounds, original. Compound interest, simple interest, depreciate, multiplier, ratio, proportion, multiplier. Expression, identity, equation, simplify, formula, substitute, subject, expand, factorise, rearrange, evaluate, standard form. Mean, median, mode, range, frequency,	Alternate, corresponding, polygon, interior, exterior, bearing, hypotenuse. Linear, quadratic, cubic, axes, gradient, intercept, linear, speed, density, pressure. Sample, theoretical, expected, outcomes, independent. Correlation, line of best fit, trend.	Plan, elevation, bisector, perpendicular, arc, segment, sector, circumference, radius, diameter, pi, translation, reflection, rotation, enlargement, volume, vector, eliminate. Co- efficient, eliminate.	<u>Command words:</u> Evaluate, solve, calculate, investigate, prove, show, describe, estimate, sketch, construct, expand, factorise, simplify.	<u>Command words:</u> Evaluate, solve, calculate, investigate, prove, show, describe, estimate, sketch, construct, expand, factorise, simplify.



P



	E : 147 III :	E 1 147 III 1				
SPSMC_BRITISH	Economic Wellbeing –	Economic Wellbeing –	Citizenship/Cultural –	Personal - promotion of	Personal - promotion of	
	Debt: How are prime	using graphs to work out	Why do we have different	independence and self	independence and self	
VALUES AND	factors keeping online	when certain companies	units for measurement?	confidence with clear	confidence with clear	
DIVEDOITV	transactions secure?	are better value.	Where did they come	focus on exam technique	focus on exam technique	
DIVERSITY	Prevention of fraud.		from?	and exam questions.	and exam questions.	
		Social – interpretation of	Constructions are useful			
	Economic well-being –	real-life graphs: trends	for a range of jobs	<u>British Values</u> – Students	<u>British Values</u> – Students	
	Debt and savings:	and comparisons.	including engineering,	are encouraged to reflect	are encouraged to reflect	
	Students are able to		architecture and town	on learning and take	on learning and take	
	understand how banks	<u>Personal</u> – students are	planning.	responsibility for their	responsibility for their	
	and lenders work and the	given a 'personal learning		behaviour. Students are	behaviour. Students are	
	impact of interest rates.	checklist following each	<u>British Values</u> – Students	encouraged to respect	encouraged to respect	
	Also, impact of	practice paper and asked	are encouraged to reflect	their peers. Through	their peers. Through	
	depreciation on cars and	to reflect on their	on learning and take	teacher/self and peer	teacher/self and peer	
	machinery.	progress, identifying their	responsibility for their	feedback, students	feedback, students	
		areas of development to	behaviour. Students are	develop their self-	develop their self-	
	<u>Cultural</u> – Students	focus independent	encouraged to respect	confidence and self-	confidence and self-	
	appreciate that very large	revision.	their peers. Through	esteem	esteem.	
	and small numbers can		teacher/self and peer			
	be written in a universal		feedback, students			
	form.		develop their self-			
			confidence and self-			
	<u>Citizenship/Cultural</u> –		esteem.			
	Currency conversions:					
	functional maths related					
	to holidays abroard.					
	Implication of inflation					
	rates and economic					
	stability.					
	,					
	British Values – Students					
	are encouraged to reflect					
	on learning and take					
	responsibility for their					
	behaviour. Students are					
	encouraged to respect					
	their peers. Through					
	teacher/self and peer					
	feedback, students					
	develop their self-					
	confidence and self-					
	esteem.					
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