Key Stage	Year Group	Subject	Teacher	Programme of Study			
KS3	7/8/9	Maths	Mrs Chean	National Curriculum			
Autumn A		Autumn B	Spring A	Spring B	Summer A	Summer B	
Topic(s)		Topic(s)	Topic(s)	Topic(s)	Topic(s)	Topic(s)	
Number/ Probability		Number/ Geometry and measure/ Statistics	Number/ Algebra	Number/ Geometry and measure/ statistics	Number/ Algebra	Number/ Ratio/ Geometry and measure	
Year 7							
Four operations		Fractions, add, subtract, multiply, divide, Equivalences and decimals	Whole numbers, place value and decimals	Rounding	Basic percentages	Primes numbers, Multiples, factors, square, cube and prime factorisation, roots	
Times tables		2D/3D shapes- Perimeter and area	Algebra- Expressions, equations, formulae, terms, factors, inequalities and identities, simplify and collect	Angles- acute, obtuse, reflex	Algebra- substituting numerical values	Ratio- Simplest forms and multiplicative relationships	
Probability key terms and use Scale 0 to 1.		Averages- Mean, mode and range	Interpret algebraic notion	Charts- tables, timetables, line graphs and pictograms, coordinates	Algebra- Find the term-to- term rule	2D shapes- Translations, rotations, reflection, enlargements and symmetry	
<u>Year 8</u>							
Use a calculator efficiently		Convert fractions decimals and percentages	Negative numbers	Rounding estimating, significant figures and decimals	Percentages of a quantity	Factors, multiples, HCF and LCM	
= <> <u><</u> <u>></u>		Composite shapes, circumference, area and perimeter and volume	Algebra- Solve Linear equations	Unknown angles, alternate, corresponding and complementary angles	Algebra- Standard form	Proportion- percentage increase, decrease and change	
Probability- Mutual equally likely	- -	Averages- Modal class	Algebra- Expand single and double brackets	Charts-interpret discrete data. Connect coordinates, equations and graphs. Statistical representations frequency tables))	Algebra- Find the nth term of a sequence	Properties of circle and rhombus	
Year 9							
Recipro	ocals	Powers of fractions	Inverse and order of operations	Rounding errors	Percentage problems involving interest	Factorising, Powers Roots and standard form	
Division 3 digit by 2 digit whole numbers		similarity and congruence Pythagoras theorem Trigonometry	Algebra-Factorise linear and quadratic expressions	Pythagoras and trigonometry	Algebra- recognise other types of sequences (non-arithmetic)	Proportion- Speed, unit pricing and density	
Probability- analyse theoretical prob single/combin	pabilities and	Averages- Compare grouped, discrete or continuous data	Algebra-Standard form	Chart-Scatter graphs and describes mathematical relationships between two	Binominals and rearrange formulae	Elevations of 3D shapes	

Core Skills

		COIE SKIII	<u>s</u>		
Four operations	Times tables Long multiplication	Multiplying by 10, 100 and 1000	Rounding + Using a protractor	Worded problems	Primes numbers, Multiples, factors, square, cube4
Assessment Tasks	Assessment Tasks	Assessment Tasks	Assessment Tasks	Assessment Task	Assessment Tasks
Pupils to complete a formative assessment (OPEN BOOK) using all 4 operations.	Pupils design a 2D net for a box and create their own 3D selection box for their enterprise project.	Shopping budget challenge including writing out cheques to pay.	Pupils will use their knowledge of bearings, angles and co-ordinates to plan and take part in an Faster Faa hunt.	Pupils will complete a formative assessment (OPEN BOOK) on percentages.	Pupils will complete a formative assessment (CLOSED BOOK) on HCM and LCM
Spinner bingo- Pupils analyse a simple game and plan a winning strategy.	Pupils will be given a budget and floor plans. They will research the cost of different material and labour to fit carpet or wooden floor in every room.	Pupils to complete a formative assessment (OPEN BOOK) using equations and expressions.	Pupils are asked to choose the best trip using survey data and then cost it.	Pupils will create their own code breaker with their own answer sheet	Pupils will create their own digital video/ presentation to describe the different terminology.
Personal	Personal	Personal	Personal	Personal	Personal
Development/Careers Looking at why we need mathematics to support career aspirations.	Enterprise skills and introduction to careers and understanding careers and future aspirations.	Making ethical financial decisions. Saving, spending and budgeting our money	Mental health and emotional wellbeing, including body image Managing change and loss	Development/Careers Diversity, prejudice and bullying including cyber bullying. Looking at statistics percentages and case studies	Development/Careers Health – Nutritional information and how to read products so that students can make an informed decision on their intake
Reading & Writing	Reading & Writing	Reading &Writing	Reading &Writing	Reading &Writing	Reading & Writing
Relate their findings to the situation and deduce which totals give the best chance of winning.	Pupils are to read instructions, measurements and directions carefully to produce a 2D and 3D plan of their selection box.	Students will learn strategies for planning, revising and editing	Interpret graphs and diagrams, including pie charts, and draw conclusions	Combine information and ideas from multiple sources.	Describing key words and generate their own explanations
Speaking & Listening	Speaking & Listening	Speaking & Listening	Speaking & Listening	Speaking & Listening	Speaking & Listening
Communicate conclusions and reasoning clearly and effectively.	Pupils are to pitch their ideas to the class. Why would their design work?	Students will participate in debates to enhance their critical thinking.	Pupils are to communicate conclusions and reasoning clearly and effectively	Tasks in small groups to determine how to solve a problem.	Pupils are to consider the assumptions and the context of solutions.
Numeracy & Mathematical Reasoning	Numeracy & Mathematical Reasoning	Numeracy & Mathematical Reasoning	Numeracy & Mathematical Reasoning	Numeracy & Mathematical Reasoning	Numeracy & Mathematical Reasoning
Explore the different combinations that are possible; deduce that some totals are impossible and that some are more likely than others.	Consider the relationship between the lengths of the edges of the shapes, between the areas within the shapes, and between the positions of the shapes.	Work logically towards a result, recognising the impact of constraints. Calculate accurately and apply routine algorithms, making estimates and checking calculations.	Pupils are to work logically to solve a puzzle applying mathematical reasoning and applying skills taught in lessons.	Represent a situation from the real world; analyse it using mathematical procedures, determining appropriate variables; interpret and evaluate the	Explore the effect of varying the values in the problem, bearing in mind the constraints; calculate costs systematically
Creative Media	Creative Media	Creative Media	Creative Media	Creative Media	Creative Media
lpads-probability game	Ipad- Plan their speeches Interactive games	Computer- research facts and statistics relating to mental health	Computer- generate graphs Surveys and research	Computer- Interactive games/quizzes	Computer- video/presentation

Number		
Algebra		
Ratio		
Geometry and		
measure		
Probability		
Statistics		