[Maths] KEY STAGE 3 CURRICULUM MAP

Curriculum Overviews	Autumn 1	Autumn 2 7 Weeks	Spring 1 6 Weeks	Spring 2 6 Weeks	Summer 1 6 Weeks	Summer 2 7 Weeks
Year 7	**Place Value**	**Arithmetic**	**Expressions and Equations**	**Perimeter and Area**	**Fractions**	**Transformations**
	1.1 Place value in integers	3.1 Addition and subtraction with negative integers	4.1 Introduction to algebra	6.1 Properties of quadrilaterals and triangles	7.1 Working with fractions and decimals	9.1 Translations
	1.2 Place value in decimals	3.2 Multiplication and division with negative integers	4.2 Formulae and equations	6.2 Perimeter	7.2 Comparing and ordering fractions	9.2 Rotations
	1.3 Ordering and comparing numbers	3.3 Addition and subtraction with decimals	4.3 Simplifying expressions	6.3 Area	7.3 Adding and subtracting fractions	9.3 Reflections
	1.4 Measures	3.4 Multiplication and division with decimals	4.4 Using the distributive law	**End of term revision and assessment**	7.4 Multiplying and dividing fractions	9.4 Scale diagrams
	Properties of Numbers	3.5 Efficient calculations	**Coordinates**		**Ratio and Proportion**	9.5 Enlargements
	2.1 Multiples	**End of term revision and assessment**	5.1 Plotting coordinates		8.1 Multiplicative relationships	**End of term revision and assessment**
	2.2 Powers and roots		5.2 Coordinates, formulae, and graphs		8.2 Representing multiplicative relationships	
	2.3 Factors and prime factorisation				8.3 Fractions in context	
					8.4 Applying ratios	
Year 8	**Estimating and Rounding**	**Sequences**	**Percentages and Proportionality**	**Statistics**	**Perimeter, area and volume**	**Constructions**
	1.1 Rounding to decimal place	3.1 Features of sequences	5.1 Percentages	6.1 Representing data	7.1 Perimeter	9.1 Constructions using circles
	1.2 Rounding to significant figures	3.2 Arithmetic sequences	5.2 Proportionality	6.2 Angles and pie charts	7.2 Area	9.2 Constructions using rhombuses
	1.3 Estimation	**Linear Graphs**		6.3 Measures of average and spread of data	7.3 Surface area	**End of term revision and assessment**
	Solving Linear Equations	4.1 Connect coordinates, equations, and graphs		6.4 Analysing and comparing data	7.4 Volume	
	2.1 Solutions to linear equation	4.2 Linear relationships		**End of term revision and assessment**	**Polygons and Angles**	
	2.2 One-step linear equations	**End of term revision and assessment**			8.1 Symmetry	
	2.3 Two-step linear equations				8.2 Angle properties	
	2.4 Linear equations with brackets and fractions				8.3 Angle properties of polygon	
					8.4 Problem-solving with angle	

Year 9	Similarity and Congruence	Probability	Non Linear Sequences	Trigonometry	Standard Form	Linear and Non Linear Graphs
	1.1 Notation and naming 1.2 Similarity 1.3 Congruency **Pythagoras** 2.1 Pythagorean triples 2.2 Finding the length of the hypotenuse 2.3 Finding lengths in right angled triangles 2.4 Reasoning with righ angled triangles	3.1 Likelihood and randomness 3.2 Probability: the chance of an outcome 3.3 Combined events **End of term revision and assessment**	4.1 Non-Linear sequences 4.2 Geometric sequences 4.3 Other types of sequences **Expressions and Formulae** 5.1 Distributive Law 5.2 The difference of two square 5.3 Inverse Operations 5.4 Changing the subject	6.1 A different kind of proportionality 6.2 A different kid of measure 6.3 Using trigonometric ratios to find sides 6.4 Using trigonometric ratios to find angles **End of term revision and assessment**	7.1 The multiplicative identity and power 7.2 Writing powers of ten in index form 7.3 Writing large numbers in standard form 7.4 Writing small numbers in standard form	8.1 Interpreting linear graphs 8.2 Modelling real life situations graphically 8.3 Quadratic and non linear graphs 6.4 Direct and inverse proportion **End of term revision and assessment**

Texts, Useful Websites:

Key Stage 3 (Year 7,8,9)
www.sparxmaths.uk Mosaic – Oxford Smart www.mathspad.co.uk

[MATHS] KEY STAGE 4 CURRICULUM MAP

Curriculum Overviews	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 10	**Similarity** Congruence, similarity and enlargement Trigonometry	**Developing Algebra** Representing solutions of equations and inequalities Simultaneous equations	**Geometry** Angles and Bearings Working with circles Vectors	**Proportions and Proportional Change** Ratios and fractions Percentages and Interest Probability	**Delving into data** Collecting, representing and interpreting data **Using Number** Non-calculator methods	**Using Number** Types of number and sequences Indices and roots **Expressions** Manipulating expressions
Year 11	**Graphs** Gradients and Lines Non Linear graphs Using graphs	**Algebra** Expanding and factorizing Changing the subject Functions	**Reasoning** Multiplicative reasoning Geometric reasoning Algebraic reasoning	**Revision and Communication** Transforming and constructing Listing and describing Show that…	**Revision and examinations**	

Texts, Exam Boards, and Useful Websites:

Key Stage 4 (Year 10 - 11)
Exam Board – Edexcel Higher and Foundation tiers www.mathspad.co.uk - online maths resource www.mathsgenie.co.uk - all exam papers, modelled solutions and mark schemes www.sparxmaths.uk – home learning resource www.pinpointlearning.co.uk – targeted independent revision based from completed exam papers

[Maths] KEY STAGE 5 CURRICULUM MAP

Curriculum Overviews	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 12	**Core** Quadratics Equations and Inequalities Graphs and transformations	**Statistics** Data collection Measures of Location and spread **Core** Straight line graphs Circles Algebraic Methods	**Mechanics** Modelling Constant acceleration Forces and motion **Core** Binominal Expansions Trigonometric Ratios Trigonometric identities and equations	**Statistics** Representations of data Correlation Probability Statisical distributions Cumulative Probability Hypothesis Testing	**Core** Vectors Differentiation Integration Exponentials and Logarithms	**Mechanics** Variable Acceleration **Commence Year 2 Alevel Course – Core** Algebraic Methods Functions and graphs Sequences and Series
Year 13	**Core** Binominal Expansion Trig - radians, arcs and sectors Trig – Reciprocal functions and identities Trig – Angle addition and double angle identities Trig – Prove and solve Trig - modelling	**Mechanics** Moments **Statistics** Normal distribution **Core** Parametrics Diff – Chain and product rule Diff – Product and quotient rule Diff – Parametrics **Mechanics** Forces and friction	**Core** Implicit and rates of changes **Mechanics** Projectiles **Statistics** Correlation Conditional Probability **Core** Integrating (ax+b)^n, reciprocals, e and trig	**Core** Integrating by parts and substitution Differential equations and reverse chain rule Numerical methods **Mechanics** Statics **Core** Vectors **Mechanics** Dynamics	**Mechanics** Further Kinematics **Revision and Examinations**	**Revision and Examinations**

Texts, Exam Boards, and Useful Websites:

Key Stage 5 (Year 12 - 13)
Exam Board – Edexcel www.physicsandmathstutor.com/maths https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/mathematics-2017.html - exam board specification and information www.uplearn.co.uk www.alevelmathsrevision.com www.drfrost.org