### Key Stage 3 Subject Timeline Year 7 to 8

# Subject: Mathematics (RP)

#### **Exam Board: Pearson**

	Year 7								
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2			
Topics	Pythagoras Place value Addition/subtraction Multiplication/division	Angles Identifying shape properties Measurement Perimeter/area Negative numbers Co-ordinates	Transformations Time Division recap Fractions Money Rounding	Revision on topics from the year	Measurement Percentages Proportion Factors and multiples	Algebra Drawing charts and graphs Interpreting graphs Sequences Probability Revising topics from the year			
Key skills and Concepts	Finding missing sides Using a calculator Understanding place value Using the column method Multiplying numbers Division	Using a ruler/protractor Edges, vertices and faces Finding area and perimeter Working with negatives Coordinates	4 transformations Telling the time Dividing numbers Fraction calculations Working with money Rounding numbers	Revision on key topics	Converting units Percentages of amounts Percentage change Proportion Finding factors and multiples	Simplifying Expanding Drawing graphs Using graphs Finding terms of sequences Probability			
Threshold Concepts	Basis knowledge of number Calculator use Column method	Basic knowledge of using a ruler Understanding of shape Knowledge of coordinates	Knowledge of symmetry Knowledge of calculations (basic) Understanding of money		Understanding of different units Knowledge of percentages Times tables	Knowledge of graphs Understanding of patterns in number Some understanding of probability Fractions			
Endpoints	Able to find a missing side Able to calculate with and without a calculator.	Draw lines/angles Measure lines/angles Calculate perimeter and area Calculate with negative numbers Use coordinates	Transformations of shapes Able to tell the time and complete questions on this Calculate with fractions Money calculations Able to round numbers		Able to convert units Find percentages of amounts Calculate percentage change Find factors and multiples	Simplifying and expanding Draw and interpret charts and graphs Find terms of sequences Use probability			
Assessment	In class formative assessment	End of term test	In class formative assessment	In class formative assessment	In class formative assessment	End of year exam			

### Key Stage 3 Subject Timeline Year 7 to 8

## Subject: Mathematics (RP)

#### **Exam Board: Pearson**

	Year 8								
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2			
	Place value/number system Multiplying and dividing Fractions and percentages	Sequences Negative numbers Powers BIDMAS Rounding Revision	Expressions Factors, multiples Powers Angle rules		Ratio Properties of shapes Area, perimeter and volume Revision	Revision Statistics			
Key skills and Concepts	Understanding number Calculations Converting FDP Calculations with fractions	Rules of sequences Sums with negative numbers Indices Order of operations Rounding to 10, 100, 1000	Simplifying algebra Factors and multiples HCF and LCM Powers Using angle rules	Theoretical probability Using a probability scale	Sharing into ratio Ratio calculations Properties of shapes Area and perimeter of shapes Volume of shapes	Averages Drawing charts and graphs			
Threshold Concepts	Basic understanding of number. Knowledge of calculating numbers. Times tables.	Knowledge of negative numbers. Simple rounding Number patterns	Idea of algebra Finding factors and multiples Powers Basic angle rules	Basic fractions Idea of probability as a concept	Identifying shapes Concept of ratio	Use of charts/graphs			
	Able to convert fractions, decimals and percentages Multiplying and dividing calculations Fractions calculations	Sums with negative numbers Rounding to DPs Sequences – finding nth terms Power calculations	Simplifying and expanding Finding the HCF and LCM Knowledge of powers Identifying square, cube numbers Use angle rules	Finding probabilities	Share into a ratio Work out one side of a ratio Simplify a ratio Identify properties of shapes Area/perimeter of shapes Find volume of shapes	Draw and interpret charts and graphs Find averages			
Assessment	In class formative assessment	End of term test	In class formative assessment	In class formative assessment	In class formative assessment	End of year exam			