KS3 **MATHS**   Year 7 Progression Grid

	Working Towards	Expected Standard	Greater Depth
	By the end of Year 7 a student should be able to:	By the end of Year 7 a student should be able to:	By the end of Year 7 a student should be able to:
A U T U M N	Use negative numbers in context and calculate intervals across zero Perform written and mental calculations using addition and subtraction Apply knowledge of addition and subtraction to solve problems that draw upon mathematical knowledge i.e measure & money	Add and subtract numbers up to and including a billion including decimals Add and subtract decimals up to 5 decimal places Add and subtract algebraic expressions Add and subtract time in differing units - minutes, seconds, hours Budgeting and debt as applications of addition and subtraction Complete frequency trees and two way tables Calculate with perimeters	Add and subtract algebraic expressions including context such as perimeter Work with frequency trees and two way tables including information presented in fractions, decimals and percentages Add and subtract algebraic expressions with terms that have indices

SPRING	multiply multi digit numbers up to 4 digits by using a formal written method	Multiply and divide integers, decimals and negatives up to and including 4 significant figures	Multiply and divide algebraic expressions
	Divide numbers up to 4 digits by using a formal written method	Multiply and divide unit and improper fractions	Use prime factor decomposition to find a LCM and HCF using a venn diagram
	Multiply one digit numbers with up to 2 decimal places	Find Lowest common multiple, highest common factor and prime factor decomposition of any number	Understand the rules of geometric sequences and find missing terms
	Use written division methods where the answers has up to 2 decimal places	Use the order of operations correctly BIDMAS	Form and solve two step equations involving contexts such as area and perimeter
	Use knowledge of order of operations to carry out calculations	Use a function machine to solve an equation	
	Multiply and divide numbers by 10,100,1000	Solve two step equations utilising multiplication and division	
	Solve problems involving the calculation of units of measures	Find the next term in a geometric sequence	
	Convert between miles and kilometres		
	Find areas and perimeters of shapes		

S U M M E R	Round any whole number to a required degree of accuracy Use common factors to simplify fractions Compare and order fractions Add and subtract fractions with different denominators multiply simple pairs of proper fractions divide fractions by whole numbers Recall and use equivalences between simple fractions, decimals and percentages Solve problems involving the calculations of percentages using multiples of 5 Solve problems with unequal sharing Recognise angles and calculate problems involving angles Interpret and construct pie charts and line graphs Calculate and interpret the mean as an average	Rounding numbers to decimals places and significant figures Perform four operations with both proper and improper fractions Convert between fractions, decimals and percentages Calculate percentage of amount Increase and decrease quantities by a given quantity Solve ratio problems given the total amount Solve problems involving ratio and FDP Calculate angles around a point and on a line Make comparisons between statistical diagrams Calculate averages and select an appropriate average for a problem	Giving an error interval for a calculation Perform four operations on simple algebraic fractions with singular terms Calculate a total when given part of a ratio Form and solve equations involving angles around a point and on a line Calculate an average from a frequency table