Maths Targets   A Stage 5 Mathematician

	TARGETS						
Number and Place Value							
E	I can read, write, order and compare numbers to 10,000 and determine the value of each digit						
E	I can count forwards or backwards in steps of powers of 10 for any given number up to 10,000.						
E	I can count forwards and backwards with positive and negative whole numbers						
E	I can round any number up to 10,000 to the nearest 10, 100 and 1000.						
D	I can read, write, order and compare numbers to 100,000, and determine the value of each digit						
D	I can begin to interpret negative numbers						
D	I can round any number up to 100,000 to the nearest 10, 100, 1000 and 10000						
D	I can read Roman Numerals to 100 and begin to recognise years written in Roman Numerals						
S	I can read, write, order and compare numbers to 1,000,000 and determine the value of each digit						
S	I can count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.						
S	I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.						
S	I can round any number up to 1,000,000 to the nearest 10, 100, 1000, 10000 and 100000.						
S	I can read Roman numerals to 1,000 (M) and recognise years written in Roman numerals.						
S	I can solve number problems and practical problems with the above.						
	Emerging		Developing		Secure		

Addition and Subtraction							
E	I can begin to + and - whole numbers with more than 4 digits, including using formal written methods.						
E	I can begin to solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.						
D	I can begin to add and subtract numbers mentally with increasingly large numbers. (3 or 4 digits)						
D	I can use rounding to check answers to calculations						
S	I can add and subtract whole numbers with more than 4 digits, including using formal written methods.						
S	I can add and subtract numbers mentally with increasingly large numbers (5 digits)						
S	I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.						
S	I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.						
	Emerging		Developing		Secure		

Multiplication and Division							
E	I can identify factors, including finding factor pairs of a number						
E	I can know and use the vocabulary of prime numbers						
E	I can establish whether a number up to 30 is prime						
E	I can multiply numbers up to 4 digits by a 1-digit number using a formal written method						
E	I can divide 3 digit numbers by a 1-digit number using the formal written method with remainders						
E	I can multiply and divide whole numbers by 10 and 100.						
E	I recognise and use square numbers						
D	I can identify multiples and factors						
D	I can know and use the vocabulary of prime numbers and prime factors						
D	I can establish whether a number up to 50 is prime						
D	I can divide 4 digit numbers by a 1-digit number using formal written method, with remainders						

D	I can multiply and divide numbers mentally drawing on known facts.							
D	I can multiply and divide whole numbers and those involving decimals by 10 and 100							
D	I can begin to solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.							
S	I can identify multiples and factors, including finding all factor pairs of a number and common factor pairs of two numbers.							
S	I use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.							
S	I can establish whether a number up to 100 is prime and recall prime numbers up to 19.							
S	I can multiply numbers up to 4 digits by a 1-digit or 2-digit number using a formal written method, including long multiplication for 2-digit numbers.							
S	I can divide numbers up to 4 digits by a 1-digit number using the formal written method of short division and interpret remainders appropriately for the context.							
S	I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.							
S	I recognise and use square numbers and cube numbers, and the notation for squared and cubed.							
S	I can solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes.							
S	I can solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.							
S	I can solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates.							
	Emerging	Developing		Secure				

	Fractions							
E	I can identify, name and write equivalent fractions of a given fraction, including tenths							
E	I can begin to recognise simple mixed numbers and improper fractions and convert them							
E	I can add and subtract fractions with the same denominator							
E	I can read and write simple decimal numbers as fractions (tenths)							
E	I can read, write, order and compare numbers with up to 2 decimal places.							
E	I recognise the % symbol and understand that percent relates to 'number parts per hundred'.							
E	I can solve problems which require knowing percentage and decimal equivalents of ½, ¼, 1/10							
D	I can compare and order fractions whose denominators are multiples of the same number.							
D	I can multiply proper fractions by whole numbers, supported by materials and diagrams.							
D	I can read and write decimal numbers as fractions (tenths and hundredths)							
D	I recognise and can use thousandths and relate them to tenths, hundredths and decimal equiv's							
D	I can round decimals with 2 decimal places to the nearest whole number.							
D	I can write percentages as a fraction with denominator hundred, and as a decimal.							
D	I can solve problems which require knowing percentage & decimal equivalents of ½ ¼ 1/5, 2/5, 4/5							
S	I can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.							
S	I can recognise mixed numbers and improper fractions and convert from one form to the other. I can write mathematical statements >1 as a mixed number							
S	I can add and subtract fractions with denominators that are multiples of the same number.							
S	I can multiply proper fractions & mixed numbers by whole numbers aided by materials & diagrams							
S	I can read, write, order and compare numbers with up to 3 decimal places.							
S	I can round decimals with 2 decimal places to the nearest whole number and 1 decimal place.							
S	I can solve problems involving numbers up to 3 decimal places.							
S	I can solve problems which require knowing percentage and decimal equivalents of ½, ¼, 1/5, 2/5, 4/5 and those fractions with a denominator or a multiple of 10 or 25.							

		Emerging	Developing	Secure					
Measurement									
E	I can measure and calculate the perimeter of rectilinear shapes in cm and m								
E	I can calculate and compare the area of rectangles, including using standard units (cm^2 and m^2)								
E	I can use all four operations to solve simple problems involving money using decimal notation.								
D	I can convert between different units of metric measure.								
D	I can estimate volume and capacity.								
D	I can solve problems involving converting between units of time.								
S	I understand and use approximate equivalences between metric units and common imperial units, such as inches, pounds and pints.								
S	I can measure and calculate the perimeter of composite rectilinear shapes in cm and m, with unknown lengths								
S	I can calculate and compare the area of rectangles (incl squares), and including using standard units (cm^2 and cm^3) to estimate the area of irregular shapes.								
S	I can use all 4 operations to solve problems involving money using decimal notation, incl. scaling.								

		Emerging	Developing	Secure					
Shape and Geometry									
E	I know angles are measured in degrees.								
E	I can compare acute and obtuse angles								
E	I can identify angles at a point and one whole turn.								
E	I can represent the position of a shape following a reflection or translation								
D	I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles.								
D	I can estimate and compare acute, obtuse and reflex angles.								
D	I can identify angles at a point on a straight line and ½ a turn.								
D	I can identify other multiples of 90º.								
S	I can use the properties of rectangles to deduce related facts and find missing lengths and angles.								
S	I can draw given angles and measure them in degrees.								
S	I can identify 3D shapes, including cubes and other cuboids, from 2D representations.								
S	I can identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.								

		Emerging	Developing	Secure					
Statistics									
E	I can continue to solve comparison, sum and difference problems using information presented in bar charts and time graphs								
E	I can read and interpret information in tables, including simple timetables								
D	I can begin to solve comparison, sum and difference problems using information presented in a line graph								
S	I can complete, read and interpret information in tables, including timetables.								
S	I can solve comparison, sum and difference problems using information presented in a line graph.								

	Emerging	Developing	Secure