

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 $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{10}$						
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 $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$						
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 $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ 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 90°.												
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									