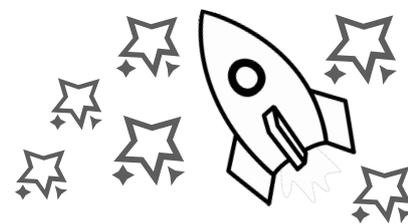


# Achievement Statements

## Year 5 Mathematics



### Foundational Achievement Statements

	Power Statement
I can read, write, order and compare and round numbers to at least 1,000,000 and determine the value of each digit	☆
I can round numbers to at least 1,000,000 and determine the value of each digit	☆
I can count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000	☆
I can interpret negative numbers in context, and count forwards and backwards with positive and negative whole numbers through zero	☆
I can read Roman numerals to 1000 (M) and years written in Roman numerals	
I can add and subtract whole numbers with more than 4 digits using efficient written methods (columnar addition and subtraction)	☆
I can add and subtract numbers mentally with increasingly large numbers	☆
I can multiply numbers up to 4-digits by a 1 or 2-digit number using an efficient written method, including long multiplication for 2-digit numbers	☆
I can divide numbers up to 4 digits and 1-digit number using the efficient written method of short division and interpret remainders appropriately for the context	☆
I can multiply and divide numbers mentally drawing upon known facts including multiplying and dividing by 10, 100 and 1000	☆
I can identify different factor pairs for a given number	☆
I can compare and order fractions whose denominators are all multiples of the same numbers	
I can convert mixed numbers and improper fractions from one form to the other	
I can recognise and use thousandths and relate them to tenths, hundredths and decimals equivalents	☆
I can read and write decimal numbers as fractions e.g. 0.71 = 71/100	
I can read, write, order, compare and round numbers with up to three decimal places	☆
I can write simple fractions and decimals as percentages (e.g. $1/2 = 0.5 = 50\% = 50/100$ )	☆
I can measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres	☆
I can calculate and compare the area of squares, rectangles and related composite shapes using standard units, including centimetre squared and metre squared and estimate the area of irregular shapes	
I can convert between different units of metric measures, e.g. kilometre to metre, metre to centimetre, litre and millimetre	☆
I can identify 3-D shapes, including cubes and cuboids, from 2-D representations	
I can identify, describe and represent the position of a shape following a reflection or translation using the appropriate vocabulary, and I know that the shape has not changed	
I can calculate angles where there are two or more angles on a straight line or $1/2$ turn (180 degrees) and where there are two or more angles in a whole turn (360 degrees)	☆
I can estimate a given angle in degrees and say if the angle is an acute, reflex, obtuse, right angle or multiples of 90 degrees	

### Conceptual Achievement Statements

	Power Statement
I can estimate the answer to, and solve, number and practical problems that involve numbers up to 1,000,000	☆
I can solve single and multi-step practical problems involving a combination of addition, subtraction, multiplication and division calculations, including understanding the meaning of the equals sign	☆
I can explain my choice of calculation when solving single and multi-step problems	☆
I can use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy	☆
I can explain what the vocabulary of prime numbers means including prime number, prime factor and composite (non-prime) number	☆
I can establish whether a number up to 100 is prime and recall the prime numbers up to 19	
I can recognise and use square numbers and square roots, and the notation for squared (2) and cubed (3)	☆
I can solve problems including multiplication and division including scaling by simple fractions and problems involving simple rates	☆
I can write and name equivalent fractions of a given fraction, including tenths and hundredths	
I can add and subtract fractions with the same denominator and related fractions including writing mathematical statements that exceed 1 as a mixed number: e.g. $2/5 + 4/5 = 6/5 = 1 1/5$	☆
I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams	
I can round decimals with two decimal places to the nearest whole number or to the first decimal place	☆
I can solve problems involving numbers up to three decimal places	☆
I can explain what the percent symbol means and relate my understanding to parts of a whole number or a whole quantity	☆
I can solve problems which require knowing percentage and decimal equivalents of $1/2$ , $1/4$ , $1/5$ , $2/5$ and $4/5$ and those fractions with a denominator of a multiple of 10 or 25	☆
I can say what the equivalences are between common metric and imperial units and estimate equivalences of a given measure e.g. inches, pints and pounds	
I can estimate force in Newtons (N)	
I can estimate and calculate the volume of cuboids (including cubes) and the capacity of liquids	
I can check my answers using estimates and by applying inverse operations I can solve problems converting between the units of time	
I can draw shapes from given dimensions and angles	
I can use the properties of rectangles to deduce related facts and find missing lengths and angles	
I can distinguish between regular and irregular polygons based on reasoning about equal sides and angles	
I can prove that shapes with the same areas can have different perimeters and vice versa	
I can complete, read and interpret information in tables, using timetables	☆
I can solve comparison, sum and difference problems using information presented in graphs	
I can use symbols and letters to represent variables and missing numbers in mathematical situations involving - arithmetical rules (e.g. $a+b = b+a$ )	
I can use symbols and letters to represent variables and missing numbers in mathematical situations involving - number puzzles (e.g. What two numbers can add up to n?)	

### The Progression of Evidence

This objective has been TAUGHT.	Achieved with SUPPORT.	Achieved INDEPENDENTLY.	Shown in a CROSS-CURRICULAR piece of work.	INDEPENDENTLY APPLIED.