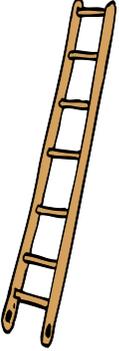
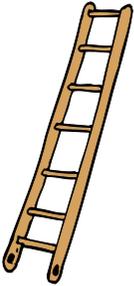


My Maths Targets

	Algebra	Number and the Number System	Calculating
Level 6 	<ul style="list-style-type: none">• I can use systematic trial and improvement methods and ICT tools to find approximate solutions to equations such as $x^3 + x = 20$• I can construct and solve linear equations with integer coefficients, using an appropriate method• I can generate terms of a sequence using term-to-term and position-to-term definitions of the sequence, on paper and using ICT;• I can write an expression to describe the nth term of an arithmetic sequence.• I can plot the graphs of linear functions, where y is given explicitly in terms of x; recognise that equations of the form $y = mx + c$ correspond to straight-line graphs• I can construct functions arising from real-life problems and plot their corresponding graphs;• I can interpret graphs arising from real situations	<ul style="list-style-type: none">• I can use the equivalence of fractions, decimals and percentages to compare proportions	<ul style="list-style-type: none">• I can calculate percentages and find the outcome of a given percentage increase or decrease• I can divide a quantity into two or more parts in a given ratio and solve problems involving ratio and direct proportion• I can use proportional reasoning to solve a problem, choosing the correct numbers to take as 100%, or as a whole• I can add and subtract fractions by writing them with a common denominator, calculate fractions of quantities (fraction answers), multiply and divide an integer by a fraction

	Using and Applying Mathematics	Shape, Space and Measure	Handling Data
<p>Level 6</p> 	<ul style="list-style-type: none"> I can solve problems and carry through substantial tasks by breaking them into smaller, more manageable tasks, using a range of efficient techniques, methods and resources, including ICT, give solutions to an appropriate degree of accuracy I can interpret, discuss and synthesise information presented in a variety of mathematical forms I can present a concise, reasoned argument, using symbols, diagrams, graphs and related explanatory texts I can use logical argument to establish the truth of a statement 	<ul style="list-style-type: none"> I can classify quadrilaterals by their geometric properties I can solve geometrical problems using properties of angles, of parallel and intersecting lines, and of triangles and other polygons I can identify alternate and corresponding angles: understand a proof that the sum of the angles of a triangle is 180° and of a quadrilateral is 360° I can devise instructions for a computer to generate and transform shapes and paths I can visualise and use 2-D representations of 3-D objects I can enlarge 2-D shapes, given a centre of enlargement and a positive whole-number scale factor I know that translations, rotations and reflections preserve length and angle and map objects onto congruent images I can use straight edge and compasses to do standard constructions I can deduce and use formulae for the area of a triangle and parallelogram, and the volume of a cuboid; calculate volumes and surface areas of cuboids I know and use the formulae for the circumference and area of a circle 	<ul style="list-style-type: none"> I can design a survey or experiment to capture the necessary data from one or more sources; design, trial and, if necessary, refine data collection sheets; construct tables for large discrete and continuous sets of raw data, choosing suitable class intervals; design and use two-way tables I can select, construct and modify, on paper and using ICT: <ul style="list-style-type: none"> ✓ pie charts for categorical data ✓ bar charts and frequency diagrams for discrete and continuous data ✓ simple time graphs for time series ✓ scatter graphs <p>and identify which are most useful in the context of the problem</p> <ul style="list-style-type: none"> I can find and record all possible mutually exclusive outcomes for single events and two successive events in a systematic way I know that the sum of probabilities of all mutually exclusive outcomes is 1 and use this when solving problems I can communicate interpretations and results of a statistical survey using selected tables, graphs and diagrams in support