

THE ROAD AHEAD TO YOUR FUTURE .....

### Summer 2

Quadratic equations: expanding and factorising  
 Quadratic equations, rearranging equations, graphs of cubic and reciprocal functions and simultaneous equations  
 Circles, cylinders, cones and spheres  
 Fractions and reciprocals  
 Indices and standard form  
 Similarity and congruence in 2D  
 Vectors

GCSE Exams

### Summer 1

Ratio  
 Proportion  
 Right-angled triangles: Pythagoras and trigonometry  
 Probability  
 Multiplicative reasoning  
 Plans and elevations  
 Constructions, loci and bearings

### Spring 2

Statistics, sampling and the averages  
 Perimeter, area and volume  
 Real-life graphs  
 Straight-line graphs  
 Transformations

Functional Skills Level 2 Assessments

### Spring 1

Fractions, decimals and percentages  
 Percentages  
 Equations and inequalities  
 Sequences  
 Properties of shapes, parallel lines and angle facts  
 Interior and exterior angles of polygons

Functional Skills Level 1 Assessments

### Autumn 2

Algebra: the basics  
 Expressions and substitution into formulae  
 Tables, charts and graphs  
 Pie charts  
 Scatter graphs

Functional Skills Entry Level Assessments

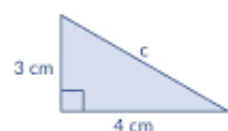
### Autumn 1

Integers and place value  
 Decimals  
 Indices, powers and roots  
 Factors, multiples and primes



Students progress through graded steps and KPIs in each topic area. Starting points and target grades are determined by baseline tests on entry.

Pythagoras' Theorem



$$a^2 + b^2 = c^2$$

$$c = \sqrt{a^2 + b^2}$$

$$c = \sqrt{3^2 + 4^2}$$

$$c = \sqrt{9 + 16}$$

$$c = \sqrt{25}$$

