**FOUNDATION - Grades 1 - 5**

**Geometry and Measures**

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| I can do this | Grade | Title |
|  | 5 | Arc lengths and sectors |
|  | 5 | Derive triangle results |
|  | 5 | Enlargements and negative SF |
|  | 5 | Loci |
|  | 5 | Pythagoras |
|  | 5 | Similarity and Congruence |
|  | 5 | Standard constructions |
|  | 5 | Surface Area |
|  | 5 | Trigonometric ratios |
|  | 5 | Volume |
|  | 4 | Alternate and corresponding angles |
|  | 4 | Area of a circle |
|  | 4 | Areas of composite shapes |
|  | 4 | Areas of triangles, trapezia and parallelograms |
|  | 4 | Bearings |
|  | 4 | Circle terminology |
|  | 4 | Circumference of a circle |
|  | 4 | Congruent triangles |
|  | 4 | Enlargements and fractional SF |
|  | 4 | Perimeter of 2D shapes |
|  | 4 | Plans and elevations |
|  | 4 | Polygons |
|  | 4 | Solve geometrical problems |
|  | 4 | Vector arithmetic |
|  | 4 | Volume of prisms |
|  | 3 | 3-D Shapes |
|  | 3 | Congruent and similar shapes |
|  | 3 | Geometrical terminology and diagrams |
|  | 3 | Measuring lines and angles |
|  | 3 | Properties of quadrilaterals |
|  | 3 | Properties of triangles |
|  | 3 | Translations and vectors |
|  | 3 | Using standard units |

**Algebra**

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| I can do this | Grade | Title |
|  | 5 | Algebraic terminology |
|  | 5 | Cubic and Reciprocal graphs |
|  | 5 | Deduce quadratic roots algebraically |
|  | 5 | Derive an equation |
|  | 5 | Equation of a line |
|  | 5 | Expand the product of two binomials |
|  | 5 | Factorising quadratic expressions |
|  | 5 | Fibonacci, quadratic and simple geometric sequences |
|  | 5 | Graphical solution to equations |
|  | 5 | Inequalities on number lines |
|  | 5 | Linear equations |
|  | 5 | Quadratic graphs |
|  | 5 | Reciprocal real-life graphs |
|  | 5 | Simplify indices |
|  | 5 | Simplify surds |
|  | 5 | Solve linear inequalities in one variable |
|  | 5 | Writing formulae and expressions |
|  | 4 | Changing the subject |
|  | 4 | Collecting like terms |
|  | 4 | Expressions |
|  | 4 | Factorise single bracket |
|  | 4 | Finding the equation of a line |
|  | 4 | Graphs of linear functions |
|  | 4 | Graphs of quadratic functions |
|  | 4 | Linear equations one unknown |
|  | 4 | Multiplying single brackets |
|  | 4 | Non-standard real life graphs |
|  | 4 | nth term of a linear sequence |
|  | 4 | Number machines |
|  | 4 | Substitution |
|  | 4 | Using "y = mx + c" |
|  | 3 | Coordinates in four quadrants |
|  | 3 | Plotting straight line graphs |
|  | 3 | Position to term rules |
|  | 3 | Sequences of square, triangular and cube numbers |
|  | 3 | Using Formulae |
|  | 2 | Sequences and Rules |

**Statistics**

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| I can do this | Grade | Title |
|  | 5 | Histograms with equal class widths |
|  | 5 | Scatter graphs |
|  | 4 | Comparing data using graphs |
|  | 4 | Comparing Distributions |
|  | 4 | Correlation |
|  | 4 | Population |
|  | 4 | Sampling |
|  | 4 | Scatter Diagrams |
|  | 4 | Time series |
|  | 3 | Charts and Diagrams |
|  | 3 | Pie Charts |
|  | 3 | Types of data |
|  | 3 | Vertical Line Charts |

**Ratio, Proportion and rates of change**

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| I can do this | Grade | Title |
|  | 5 | Compound Units |
|  | 5 | Gradient & the rate of change |
|  | 5 | Growth and decay |
|  | 5 | Interpret Proportion |
|  | 5 | Percentage change |
|  | 5 | Problems with compound units |
|  | 5 | Scale factors and similarity |
|  | 5 | Simple Interest and Financial Maths |
|  | 5 | Solve Proportion Problems |
|  | 4 | Compare Fractions, Decimals and Percentages |
|  | 4 | Compare lengths, area, volume |
|  | 4 | Comparing quantities as a ratio |
|  | 4 | Division of a quantity as a ratio |
|  | 4 | Express one quantity as a % of another |
|  | 4 | Percentage change |
|  | 4 | Problems involving ratio |
|  | 4 | Proportion and ratio |
|  | 4 | Ratio and fractions |
|  | 4 | Ratio Sharing |
|  | 3 | Convert standard units |
|  | 3 | Express one quantity as a fraction of another |
|  | 3 | Use ratio notation |
|  | 3 | Use scale factors, diagrams and maps |

**Number**

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| I can do this | Grade | Title |
|  | 5 | Calculating with fractions |
|  | 5 | Error intervals |
|  | 5 | Index Laws |
|  | 5 | Limits of accuracy |
|  | 4 | Adding and subtracting fractions |
|  | 4 | Checking calculations |
|  | 4 | Compound measures |
|  | 4 | Converting metric units |
|  | 4 | Estimation |
|  | 4 | Fractions and percentages |
|  | 4 | Fractions and ratio problems |
|  | 4 | Interpret calculator displays |
|  | 4 | LCM and HCF |
|  | 4 | Multiples and factors |
|  | 4 | Multiplying fractions |
|  | 4 | Operations |
|  | 4 | Order of operations |
|  | 4 | Powers |
|  | 4 | Rounding |
|  | 4 | Standard Form |
|  | 4 | Terminating decimals and fractions |
|  | 3 | Decimals |
|  | 3 | Listing outcomes |
|  | 3 | Prime numbers |
|  | 3 | Using standard units |
|  | 2 | Add and Subtract integers |
|  | 2 | Dividing integers |
|  | 2 | Multiplying integers |
|  | 2 | Ordering numbers |
|  | 2 | Place value |

**Probability**

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| I can do this | Grade | Title |
|  | 5 | Probability of dependent events |
|  | 5 | Probability of independent events |
|  | 4 | Mutually exclusive sum |
|  | 4 | Relative Frequency |
|  | 4 | Tables and Grids |
|  | 4 | Theoretical Probability |
|  | 4 | Unbiased Samples |
|  | 4 | Venn Diagrams |
|  | 3 | Frequency Trees |
|  | 3 | Probability of equally likely outcomes |

Useful websites for revision:

<https://corbettmaths.com/>

<https://www.mathsgenie.co.uk/gcse.html>

<http://www.mathedup.co.uk/gcse-maths-takeaway/>

<https://hegartymaths.com/>

<https://www.bbc.com/education/examspecs/z9p3mnb>