Foundation Maths – Grades C to G

Please note you can now get a grade C on the foundation paper, so don't give up! Just make sure that you know the topics below and see your maths teacher if there's any topics you don't understand. Revision classes run every night except Weds.

Number topics are in purple, algebra in red, shape and space in blue and handling data in green.

Grade C

Overview of percentages
Increase/decrease by a percentage
Ratio
Product of prime factors
HCF and LCM
Standard form
Recurring decimals into fractions
Four rules of negatives
Division by 2-digit decimals
Estimating answers

Algebraic simplification
Expanding and simplifying brackets
Factorisation
Solving equations
Forming equations
Changing the subject of a formula
Inequalities
Solving inequalities
Trial and improvement
Index notation for multiplication and division
Finding the nth term
Drawing straight line graphs
Finding the equation of a straight line
Solving simultaneous equations graphically
Drawing quadratic graphs
Real-life graphs

Pythagoras' Theorem
Pythagoras – Line on a graph
3D coordinates
Surface area of cuboids
Volume of a prism
Similar shapes
Dimensions
Upper and lower bounds
Compound measures
Bisecting a line

Drawing a perpendicular to a line
Bisecting an angle
Loci
Bearings

Experimental probabilities
Averages from a table
Questionnaires

<u>Grade D</u>

Factors, multiples and primes
Evaluate powers
Understanding squares, cubes and roots
Equivalent fractions
Simplification of fractions
Ordering fractions
Value for money
Percentage of amount with and without a calculator
Changing to a percentage with and without a calculator
Find a fraction of an amount
Addition and subtraction of fractions
Multiplication and division of fractions
Changing fractions to decimals
BODMAS
Multiplication of decimals
Ratio
Proportion
Using a calculator
Real-life money questions

Generate a sequence from the nth term
Substitution

Alternate angles
Angle sum of a triangle
Properties of special triangles
Angles of regular polygons
Area and circumference of circles
Area of composite shapes
Transformations   - Reflections
                         - Rotations
                         - Translations
                         - Enlargements
Find the mid-point of a line
Measuring and drawing angles
Drawing triangles
Plans and elevations
Nets
Symmetries

Questionnaires and data collection
Twp-way tables
Pie charts
Scatter graphs
Frequency diagrams
Stem and leaf diagrams
List of outcomes
Mutually exclusive events

<u>Grade E, F and G</u>

Place value
Ordering decimals
Rounding to the nearest 10, 100 etc
Reading scales
Multiplying and dividing by powers of 10
Negatives in real life
Multiplication and division with negatives
Fractions of an amount
Square and cube numbers
Fractions, decimals and percentages
Money questions
Shading fractions in rectangles
Ordering fractions, decimals and percentages
Estimation
Place value when multiplying
Addition and subtraction
Long multiplication
Long division
Multiplication and division of decimals
Decimal places and significant figures
Half way value
Reciprocals
Proportion
Distance tables
Times tables
Powers

Line graphs
Coordinates
Number sequences
Number machines

Angles
Congruent and similar shapes
Perimeter and area
Volume of cuboids
Converting metric measures
Triangles, quadrilaterals and polygons

Names of solids
Tessellations
Isometric drawing (Dotty paper to draw 3D shapes)

Probability scale
Averages
Pictograms
Conversion graphs