

Below is a list of topics that have been covered so far this year. Students should use mathswatch and their exercise books to revise these topics before the spring assessment. Each topic has been sub divided into bands so each student can identify what they need to revise.

Multiples, factors and primes

- 1 Recall multiplication tables up to 10
- 2 Find factors of a number
Find multiples of a factor
Identify Prime numbers
- 3 Product of prime Factors
Highest common Factor of 2 or more numbers
Lowest Common Multiple of 2 or more numbers
Square cubes and roots
Recap Basic index laws

Algebra

- 1 Understand algebraic notation
- 2 Simplify algebraic expressions
Collect like terms
- 3 Expand single brackets
Simple Factorisation (one bracket)
lol
- 4 Expand and simplify Brackets
Expand and simplify double
brackets
- 5 Factorise Quadratics

Graphs

- 1 Plot co-ordinates
- 2
- 3 Plot a linear graph

Plot a quadratic graph
- 4 Find the midpoint of a line
- 5 Find the equation of a line $y = mx + c$
Find the equation of a line when given the gradient and a co-ordinate
Find the equation of a line when given two co-ordinates
Plot Cubic and Reciprocal graphs

Equations

- 3 Solve equations using flowcharts
Subject of a formula using flowcharts

- 4 Solve linear equations
 - Rearrange simple formula
 - Forming formulae and equations
 - Trial and improvement
- 5 Roots and turning points of quadratics
 - Simultaneous equations-Linear**
 - Solve quadratics by factorising
- 6 Iteration-Trial and improvement

Proportion

- 1 Identify a ratio
- 2 Write equivalent Ratios
 - Simplify a ratio
 - Ratio recipe
 - Basic proportion
 - Best value
 - Simple Proportion
- 3 Share an amount in a ratio
 - Direct proportion ratio tables
- 4 similar shapes

Area and Circles

- 2 Label the parts of a circle
- 3 Find the circumference of a circle
 - Find the area of a circle
 - Find the area of compound shapes
- 5 Find the volume of a sphere
 - Find the volume of a cone
 - Find the volume of a pyramid
 - Find the surface area of spheres and cones

Pythagoras

- 2 Find the area of squares
- 3 Find the square root of numbers
- 4 Recall Pythagoras' theorem
 - Use pythagoras to find the hypotenuse
 - Use pythagoras to find any side of a triangle

Trigonometry

Label the sides of a triangle opp, adj,
hyp
Identify which trigometrical ratio to
use
Find the side of a right angled

triangle

Find the angle in a right angled

triangle

Fractions

- 1 Say what fraction of a shape has been shaded etc
Convert between basic fraction, decimal and
- 2 percentage
Use equivalent Fractions
Simplify a fraction
- 3 Add & Subtract Fractions
Find a fraction of an amount
Multiply and Divide Fractions
Reciprocals
Convert between Fractions, Decimals and percentages
Order Fractions Decimals and percentages

Graphs Charts and diagrams

- Read and construct
- 1 pictograms
 - 2 Two way tables
Vertical line charts
Frequency tables and
diagrams
Bar charts
 - 3 Venn Diagrams
Pie charts
Scatter Diagrams
 - 4
 - 5
Cumulative Frequency
 - 6 Diagrams
Construct box plots