Mathematics KS3: Year 9

CARDINAL NEWMAN CATHOLIC SCHOOL

Scatter Graphs
- Draw and interpret
- Lines of Best Fit
- Estimate from graph

Cumulative Frequency
- Drawing CF Curves
- Boxplots
- Histograms

Loci and Construction
- Angle bisectors
- Perpendicular bisectors
- Simple Loci
- Map Scales

Simultaneous Equations:
- Higher groups to solve simultaneous equations

SUMMER 3:2

Ratio and Proportion
- Express as a fraction
- ratio problems with fractions

Standard Form
- Change from ordinary numbers to standard form and vice versa
- St Form Calculations

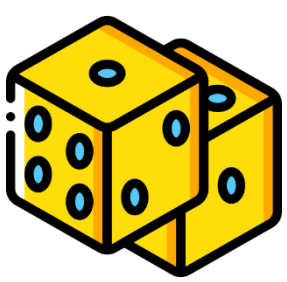
Trigonometry
- Higher groups cover basic Trigonometry

Pythagoras Theorem
- Applying Pythagoras
- Applying Pythagoras in real life
- Distance between two points on a grid

SUMMER 3:1

Graphs
- Coordinates
- Plotting linear graphs
- Gradient and Intercept
- Quadratic Graphs

Transformations
- Enlargement
- Reflection
- Translation
- Rotation



SPRING 2:2

Percentages
- Percentage of an amount
- Increase by a percentage
- Amounts as a percentage

Averages
- Mode, median, range
- Mean from a list or table
- Averages from grouped data

Ratio 1
- Use ratio notation
- Simplify ratios
- Ratios as fractions

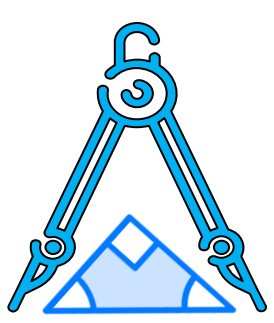
Equations and Inequalities
- Solve 1 and 2 step equations
- Form equations

Compound Measures
- Distance Time Graphs
- Speed
- Density
- Pressure

SPRING 2:1

Charts and Diagrams
- Bar Charts
- Pie Charts
- Interpret diagrams
- Two way tables

Area and Perimeter
- Triangles, Trapezia, Parallelogram
- Circles
- Circumference



AUTUMN 1:2

Number 1
- BIDMAS
- Product of prime factors
- HCF, LCM
- Indices
- Rules of Indices

Algebraic Manipulation
- Collect like terms
- Expand and factorise
- Expand double ad triple brackets

Angles & Shapes
- Angle rules for points, lines triangles
- Angles in parallel lines
- Polygon angles
- Bearings

Decimals & Fractions
- Equivalent fractions
- Four operations
- Mixed numbers and Improper Fractions
- Change decimals to fractions

Sequences
- Term to term rule
- Generate a sequence
- Find the nth term
- Fibonacci sequences
- Geometric and Quadratic Sequences

AUTUMN 1:1

OUR LEARNING JOURNEY

Key
Topics in green are for Set 1/2 only