KS3: YEAR 9

OUR LEARNING JOURNEY

SUMMER 3:2

Standard Form

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

Equations:

Review solving equations, Solving simultaneous equations graphically, Solving Simultaneous equations algebraically

Data representation

Quartiles, Box Plots, Cumulative frequency

SUMMER 3:1

Graphs

Using y = mx + c, Find y = mx + c from point(s) on graph, Plotting quadratic graphs from a table, Solving quadratics using the graph

Transformations

Enlargement, Reflection, Translation, Rotation

Pythagoras Theorem

Applying Pythagoras, Applying Pythagoras in real, Distance between two points on a grid, 3D Pythagoras

Trigonometry

Trigonometric Ratios, Missing Sides, Missing Angles, 3D trigonometry

SPRING 2:2

Percentages

Recap percentages, Repeated percentage change, Reverse percentages, Compound/ Simple interest comparison

Averages

Averages from a table, Averages from grouped data, Quartiles

SPRING 2:1

Compound Measures

Distance-Time graphs, Speed, Density, Pressure, Rates of Pay

Equations

Solve 1 and 2-step equations, Variables on both sides, Form equations: shape

Inequalities

Represent inequalities, Writing inequalities, Listing integers, Solving inequalities

Ratio Proportion

Sharing in ratio, Combined ratio, Work rate, Best buys

AUTUMN 1:2

Sequences

Generate a sequence, Find the n^{th} term, Fibonacci sequences, Determine whether a value is in a given sequence, Geometric Sequences, Quadratic Sequences

Decimals & Fractions

Decimal operations, Fraction operations, Conversions, Worded problems, Recurring decimals to fractions

Angles & Shapes

Basic angle rules, Angles in parallel lines, Bearings, Interior and Exterior angles

Algebraic Manipulation

Collect like terms, Expand and factorise single bracket, Expand a pair of brackets, Expand triple brackets, Factorising quadratics

AUTUMN 1:1

Number and Indices

BIDMAS, Product of prime factors, HCF, LCM, Rules of Indices, Negative Indices, Fractional Indices

Area and Volume

Area and perimeter recap, Circles recap, Arc Length/Sectors, Volume of Prisms, Surface Area

Charts and Diagrams

Pie Charts, Scatter graphs, Frequency Polygons, Stem & leaf

Key

Topics in red are covered by sets 1-2 only

St John Henry Newman Catholic School