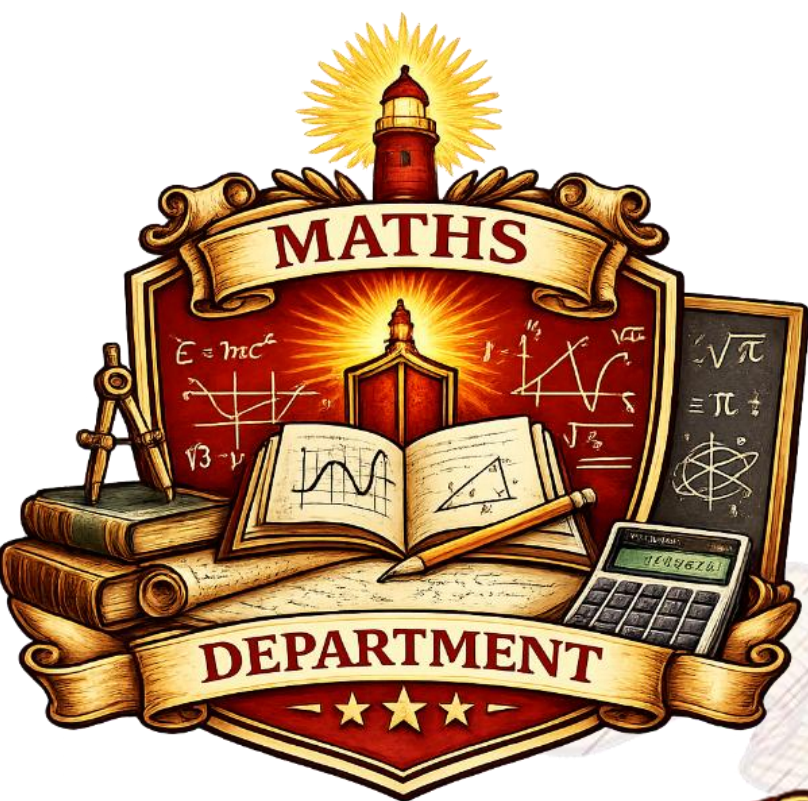




KS3: YEAR 8



Charts and Diagrams

Scatter graphs, Pie charts, Bar charts, Venn Diagrams

Averages

Averages and Range from a list
Mode, median, range and mean from a table

Formulae

Rearrange formula to change subject,
Rearrangement including factorising

Inequalities

Represent inequalities, Writing inequalities, Listing integers, Solving inequalities, Form inequalities: worded problems

SUMMER 3:2

Compound Measures
Converting units, Speed, Density, Pressure
Constructions
Accurate line segments and angles, Bisection, Loci and scale diagrams, Map scale, Triangle congruence

SUMMER 3:1

Probability
List outcomes, Theoretical probability, Sample Space Diagrams, Expected frequency, Two-way tables
Standard Form
Types of number including powers, Writing numbers in standard form, Operations with Standard Form
Angles
Angle rules, Interior and Exterior angles, Parallel Lines

SPRING 2:2

Pythagoras Theorem
Using Pythagoras Theorem, Length of line segment
Graphs
Coordinates and basic graphs, Plotting linear graphs, Identifying the gradient and y-intercept from a line
Transformations
Scale factors, Enlargement from a centre, Column vectors, Translation
Percentages (calc)
Percentage of an amount, Increase by a percentage, Percentage change, Simple interest

SPRING 2:1

Ratio
Use ratio notation, Simplify ratios, Ratios as fractions, Divide in a given ratio, Ratios of the form 1:n
Powers and roots
Know Squares, Cubes and Roots, Index Notation, use of Index Laws, Negative indices
Sequences
Arithmetic and Geometric sequences, Find the n^{th} term, Finding a given term of a sequence,
Equations
Solve two step equations, Unknowns on both sides, Form equations: worded problems
Volume
Cuboids, Prisms, Cylinders, Missing length problems

AUTUMN 1:2

Numeracy
Four Operations with Decimals, Money problems, Order of Operations
Factors Multiples and Primes
HCF, LCM, Product of prime factors, Venn diagram Notation
Algebraic Manipulation
Expand and simplify single brackets, Expand double brackets, Factorise into single bracket, Substitution
Rounding and Estimation
Decimal Places, Significant figures, Estimation by rounding, Error Intervals
Fractions
Four operations with fractions, Mixed numbers and Improper Fractions, Fraction of an amount

AUTUMN 1:1

Key
Topics in red are covered by sets 1-2 only

