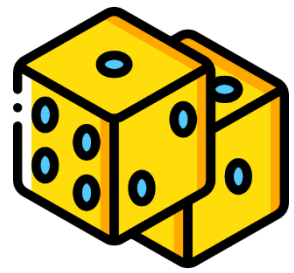
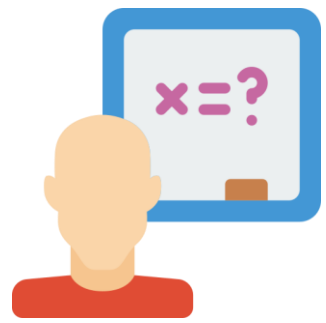
# Mathematics KS3: Year 7 (23/24)

CARDINAL NEWMAN CATHOLIC SCHOOL






**Reteach**
- Address the gaps after the end of Year assessment

**Constructions**
- Drawing accurate line segments and angles
- Accurate use of compasses
- Constructing triangles
- Bisection
- Loci and scale diagrams

**SUMMER 3:2**

**Measures and Conversions**
- Converting between metric units
- Converting between units of time
- Conversion graphs
- Calculating speed
- Distance-time graphs

**Averages and Range**
- Types of data
- Mode, median, range
- Mean from a list or a frequency table

**Probability**
- Probability scale
- Listing outcomes
- Experimental and theoretical probability
- Mutually exclusive and independent events
- Relative frequency
- Expected number of outcomes
- Probability from two way tables

**Percentages**
- Calculating percentages with and without a calculator
- Increase/decrease by a given percentage
- Percentage change

**SUMMER 3:1**

**Decimals, Rounding and Estimation**
- Four operations with decimals
- Rounding
- Decimal Places
- Significant figures
- Estimation by rounding

**Fractions**
- Equivalent fractions
- Comparing fractions
- Four operations with fractions
- Mixed numbers and Improper Fractions

**Charts and Diagrams**
- Frequency diagrams
- Pictograms
- Bar charts
- Pie charts

**SPRING 2:2**

**Graphs**
- Coordinates
- Plotting linear graphs

**Sequences**
- Term to term rule
- Generate a sequence
- Find the nth term

**Transformations**
- Reflection
- Rotation
- Translation
- Enlargement

**SPRING 2:1**

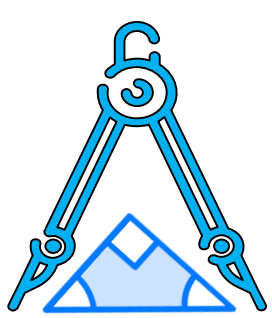
**3D Shapes**
- Volume of cuboids
- Volume of prisms
- Nets, Plans and Elevations

**Area and Perimeter**
- Classifying 2d shapes
- Area and perimeter of triangles, quadrilaterals and trapezia

**AUTUMN 1:2**

**Algebraic Manipulation**
- Collect like terms
- Expand and factorise
- Substitution

**Equations**
- Solving linear equations
- Forming equations

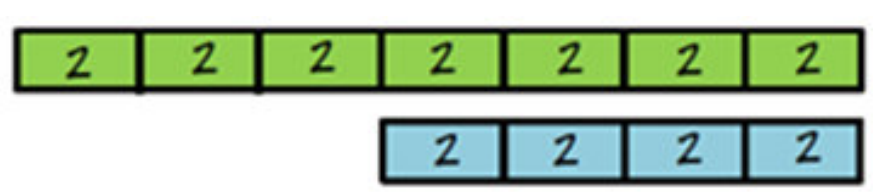


**Angles**
- Types of angles
- Drawing and measuring
- Angle rules
- Angle properties in special types of triangles and quadrilaterals

**KS2/KS3 Transition**
Addressing gaps from the KS2:
- Four operations
- Properties of number
- Negative Numbers

**Ratio**
- Use ratio notation
- Simplify ratios
- Ratios as fractions
- Dividing in a given ratio

**Calculator Introduction**
- Use of a calculator

**AUTUMN 1:1**

# OUR LEARNING JOURNEY