

Year 7 Mathematics

GUNNERSBURY
CATHOLIC SCHOOL



Working with numbers

- ✓ Multiplying and dividing negative numbers
- ✓ Factors and highest common factor (HCF)
- ✓ Multiples and lowest common multiple (LCM)
- ✓ Powers and roots
- ✓ Prime factors

Percentages

- ✓ Calculating percentages
- ✓ Calculating percentage increases and decreases
- ✓ Calculating a percentage change

Surface Area and Volume of Prisms

- ✓ Metric units for area and volume
- ✓ Surface area of prisms
- ✓ Volume of prisms

Graphs

- ✓ Graphs from linear equations
- ✓ Gradient (steepness) of a straight line
- ✓ Graphs from quadratic equations
- ✓ Real-life graphs

Algebra

- ✓ Algebraic notation
- ✓ Like terms
- ✓ Expanding brackets
- ✓ Using algebraic expressions
- ✓ Using index notation

Fractions and decimals

- ✓ Adding and subtracting fractions
- ✓ Multiplying fractions and integers
- ✓ Dividing with integers and fractions
- ✓ Multiplication with large and small numbers
- ✓ Division with large and small numbers

Proportion

- ✓ Direct proportion
- ✓ Graphs and direct proportion
- ✓ Inverse proportion
- ✓ Comparing direct proportion and inverse proportion

Circles

- ✓ The circumference of a circle
- ✓ Formula for the circumference of a circle
- ✓ Formula for the area of a circle

Geometry

- ✓ Parallel lines
- ✓ The geometric properties of quadrilaterals
- ✓ Translations
- ✓ Enlargements
- ✓ Constructions

Probability

- ✓ Mutually exclusive outcomes and exhaustive outcomes
- ✓ Using a sample space to calculate probabilities
- ✓ Estimates of probability

Congruent Shapes

- ✓ Congruent shapes
- ✓ Congruent triangles
- ✓ Using congruent triangles to solve problems

Number

- ✓ Powers of 10
- ✓ Significant figures
- ✓ Standard form with large numbers
- ✓ Multiplying with numbers in standard form

Interpreting data

- ✓ Interpreting graphs and diagrams
- ✓ Relative sized pie charts
- ✓ Scatter graphs and correlation
- ✓ Creating scatter graphs

Shape and ratio

- ✓ Ratio of lengths, areas and volumes
- ✓ Fractional enlargement
- ✓ Map scales

Equations and Formulae

- ✓ Equations with brackets
- ✓ Equations with the variable on both sides
- ✓ More complex equations
- ✓ Rearranging formulae

Comparing data

- ✓ Grouped frequency tables
- ✓ Drawing frequency diagrams
- ✓ Comparing sets of data
- ✓ Misleading charts