

Big Picture – Year 7 Mathematics Department



Probability

The probability scale, describing probability, theoretical and experimental probability, Venn diagrams and sets.

Ratio and Proportion

Introducing ratio and proportion, understanding ratio notation and ratio problems including scale.

UNIT
8

Multiplying and Dividing/Decimal Calculations

Multiply and divide whole numbers or decimals, Calculator methods 3.

Constructions and 3D Shapes

Constructing angles and triangles, properties of 3d shapes, nets, using mathematical equipment.

UNIT
7

Sequences

Understanding and using sequences including with negative or algebra, finding sequence rules.

Factors and Multiples

Square numbers and square roots, factors, multiples, LCM and HCF, Prime numbers and divisibility tests.

UNIT
6

Equations

Operations and inverse operations, function machines, solving equations and forming equations.

Statistics

Types of data and data collection, representing data in tables and charts, averages.

UNIT
5

Transformations and Symmetry

Line symmetry, rotational symmetry, reflections, rotations, translations and tessellation.

Whole Number Calculations

Rounding and estimation, order of operations, four operations, further calculator methods.

UNIT
4

Graphs

Coordinates, reading and plotting graphs, straight line and real-life graphs.

Angles and 2D Shapes

Measuring, drawing and calculating angles, angles properties and rules, properties of 2D shapes.

Expressions and Formulae

Using letters and symbols, simplifying expressions and collecting like terms, substitution, using and writing formulae.

Fractions, Decimals and Percentages

Representing fractions, understanding percentages, finding fractions and percentages of amounts, converting between fractions, decimals and percentages, fraction arithmetic.

UNIT
3

UNIT
2

Measure, Perimeter and Area

Measuring, units of measure, converting units, time, reading scales, area and perimeter of 2d shapes.

Whole Numbers and Decimals

Place value, ordering, negative numbers, money, addition and subtraction, calculator methods.

UNIT
1

Year
7