



(Maths) AT PLECKGATE YEAR (9) LEARNING JOURNEY



YEAR
10

Split a given ratio and extend to combined ratios

Solve currency conversion problems

Find the nth term for a quadratic sequence

Plot coordinates in all 4 quadrants

Find the volume of prisms and work backwards to find lengths

Ratio and proportion

Sequences

Real life Graphs

End of year consolidation

Solve recipe questions

Solve best buy problems

Find the nth term formula

Use multipliers to solve percentage problems

Calculate surface area and volume of cylinders

Find the volume of cubes and cuboids

Change the subject of the formula when x appears more than once

Recall prime number facts

Calculate the LCM and HCF of values

Recall and use the formula for various 2d shapes

Calculate surface area

Solve problems involving circles

Volume

Factors, multiples and Primes

Perimeter, Area and 3D

Percentages

Convert between fractions decimals and percentages

Fractions and equations consolidation

Change the subject of a simple formula

Write numbers in terms of their prime factors

Calculate the LCM and HCF of algebraic terms
Add, subtract, divide and multiply fractions

Calculate area of compound shapes

Calculate area and perimeters

Calculate lengths of sectors and arcs

Rearranging And Solving Equations

Solve equations with integer and fractional coefficients

Calculate equivalent fractions

Use algebraic knowledge to set up and solve geometric problems

Solve problems involving all types of angles

Set up and solve simple equations

Add, divide, multiply and subtract whole numbers and decimals

Convert recurring decimals to fractions

Work with fractions, decimal and percentage equivalents

Simplify fractions

Solve problems involving all types of polygons

Understand all angle conventions

Draw lines of symmetry

Polygons and Angles

Know how to factorise expressions

Work with and apply difference of 2 squares

Apply the index laws

Know squares, cubes and their respective roots

Know and apply all angle facts incl angles formed by parallel lines

Angles, Indices and Algebra consolidation

Indices and reciprocals

Polygons and Angles

Algebra and Number consolidation

Collect like terms to form expressions

Substitute positive and negative number

Expand brackets

Apply index law to fractional and negative powers

Factorise quadratics written in the form $ax^2 + bx + c$

Understanding Algebra

Estimate and approximate calculations

Multiply and divide by decimals

Interpret grouped data

Draw frequency polygons and compare distributions

Construct and interpret 2 way tables

Calculations and rounding

Data Handling Consolidation

Represent and Interpret data

Data Handling

Answer given that questions

Round numbers to decimal places and significant figures

Add, subtract, multiply and divide decimals and whole numbers

Draw and interpret all types of charts

Calculate averages from stem and leaf diagrams

Calculate averages and range for discrete and continuous data