
Maths Learning Journey Map
Year 10 Foundation
SKILS DEVELOPED

| Year 10 Survival Top Tips |  |
| :--- | :--- |
| Tip 1 | Organise your schoolbag <br> the night before |
| Tip 2 | Arrive to class on time |
| Tip 3 | Have homework <br> completed for each class |
| Tip 4 | Make a list for <br> homework and activities <br> for each day |
| Tip 5 | Write due dates for <br> projects into a wall <br> calendar |

> Solving simultaneous equations graphically
$>$ Solving equations graphically

- Linear equations one unknown including brackets and two
unknowns
> Solving quadratic equations by factorising
$>$ Simultaneous equations using algebra
> Calculations with mixed numbers
$>$ Recurring decimals
> Dividing decimals
$>$ Scatter diagrams, outliers and correlation
$>$ Index notation and the laws of indices
$>$ Standard index form including calculations
> Exact calculations
> Exact angles for trigonometry i.e.. 30.45 and 60 degrees
>Solving Linear inequalities
$>$ Constructions and Loci
- Angles rules including parallel lines Angles in triangles and quadrilaterals
$>$ Interior and exterior angles of polygons
> Simplifying ratios
- Sharing in a ratio and problem solving
> Direct proportion and Inverse proportion formulae and graphically
> Percentage change
$>$ Using multipliers
$>$ Growth and decay including compound interest
> Rounding using decimals place and significant figures

> Estimation using significant figures
- Upper and lower bounds
> Circumference and Area of circles
$>$ Surface area and
- Pythagoras's Theorem
> Trigonometry to find lengths and angles in right angles triangles
> Forming and solving equations
> Writing formulae


## > Sampling

> Calculate the mode, median, mean and range for ungrouped and grouped data.
> Draw and interpret frequency polygons
$>$ Bar charts, Pie Charts, Pictograms-Foundation
$>$ Box Plots, Cumulative Frequency and Histograms -Higher
$>$ Interpret and construct line graphs for time series data, and identify trends

$>$ Recap types of number > Product of its prime factors. $>$ Find the HCF and LCM
> Simplify algebraic expressions
$>$ Expand brackets
> Difference between two squares

- Factorise using common factors
> Factorise quadratic expression
> Substitute increasingly complex formulae
$>$ Rearrange formulae

