## \*\*\*\*\* Maths Learning Journey Map \*\*\*\* Year 10 Higher

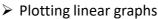


## SKILS DEVELOPED

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







- Using y=mx+c for straight lines graphs
- ➤ Linear inequalities and graphs
- Compound measures e.g. speed, density, pressure
- Pythagoras and trigonometry in 3D
- Sine and cosine rules
- ➤ Area of triangle sine rule
- Maps scales and bearings





Move on to Year 11 \*\*\*\*

> **Start Revision** \*\*\*\*

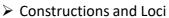
> > Next Level

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- ➤ Solving simultaneous equations graphically ➤ Index notation and the laws of indices
- Solving equations graphically
- Solving Linear equations
- Solving quadratic equations by factorising
- Simultaneous equations using algebra
- Calculations with mixed numbers
- > Recurring decimals
- Dividing decimals
- Scatter diagrams, outliers and correlation
- Standard index form including calculations
- Exact calculations
- > Exact angles for trigonometry i.e.. 30.45 and 60 degrees
- ➤ Surds
- ➤ Solving Linear inequalities
- Quadratic inequalities





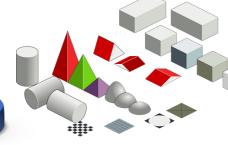
- Angles rules including parallel lines Angles in triangles and quadrilaterals
- Interior and exterior angles of polygons
- Simplifying ratios
- Sharing in a ratio and problem solving
- Direct proportion and Inverse proportion formulae and graphically
- Percentage change
- Using multipliers
- Growth and decay including compound interest



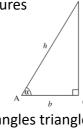








- Rounding using decimals place and significant figures
- Estimation using significant figures
- Upper and lower bounds
- Circles, sectors and arcs
- Surface area and volume
- Pythagoras's Theorem
- > Trigonometry to find lengths and angles in right angles triangles
- Forming and solving equations
- ➤ Writing formulae





- > Calculate the mode, median, mean and range for ungrouped and grouped data.
- Draw and interpret frequency polygons
- 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 including laws of indices
- Expand brackets
- ➤ Difference between two squares
- ➤ Factorise using common factors and quadratic expressions
- Substitute increasingly complex formulae
- > Rearrange formulae



**YEAR** 







- 1) **Arithmetic skills**
- 2) **Social skills**
- 3) **Communication skills**
- 4) Resilience
- 5) **Problem-solving skills**
- 6) Team work







