Maths Learning Journey Map

Year 11 Higher

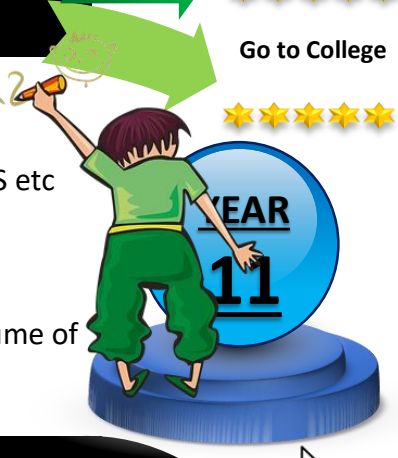
SKILLS DEVELOPED

Year 11 Survival Top Tips	
Tip 1	Try questions from the math's book
Tip 2	Read through the instructions in the book and your notes copy
Tip 3	Attempt exam questions
Tip 4	Time yourself doing questions
Tip 5	Redo questions from an exam that were incorrect

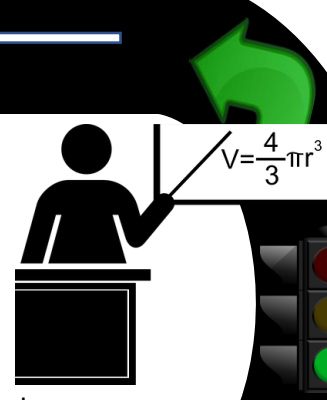
GCSE Results Day

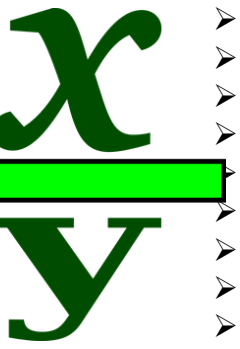
Start A Level's

Go to College

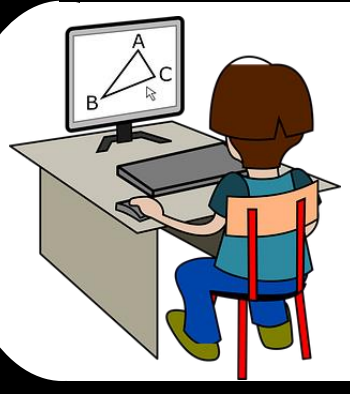


- Reflections , Rotations, translations and combinations of transformations
- Congruent triangles including proof using SSS, SAS, ASA, RHS etc
- Prove two triangles are similar
- Use similarity to find missing sides and scale factors
- Use exact calculations including surds, ratios etc
- Understand the relationship between lengths, area and volume of similar shapes

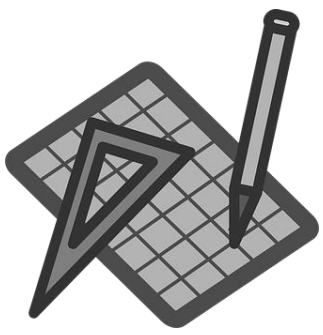




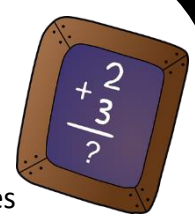
- Reflections and Rotations
- Translations and column vectors
- Enlargements
- Identify centres of enlargements and scale factors
- Use fractional scale factors
- Recognise graphs of tanx, sinx and cosx
- Recognise the equation of a circle and its graph
- Calculate the equation of radii/diameters/tangents to circles
- Recognise and interpret graphs illustrating direct and inverse proportion



- Find the gradient from a graph and interpret straight line gradients as rates of change
- Use velocity as gradient of distance time graph
- Use the concept of average and instantaneous rates of change-linked to kinematics and financial graphs
- Construct graphs in real world contexts
- Recognise and interpret graphs of direct and inverse proportion
- Calculate and estimate area under graphs
- Interpret area under graph in context of distance/time or velocity time graphs



- Generate simple sequence given a nth term rule
- Find the nth term rule for linear sequences
- Find the formula for a sequence generated from a diagram or word problem
- Identify and find rule for simple quadratic sequences
- Recognise special sequences such as triangle, square and cube numbers and the Fibonacci sequence



- Revise circles
- Revise angles
- Revise use of Pythagoras theorem
- Trigonometry
- Y=mx+c with parallel and perpendicular lines

- Product rule for counting
- Relative frequency
- Expected outcomes
- Sample space and listing outcomes
- Venn diagrams
- Two way tables to find probabilities
- Use addition and multiplication law for probability
- Draw and use tree diagrams

CURRICULUM OVERVIEW

SKILLS TAUGHT ACROSS ___MATHEMATICS_____

1) **Reading skills**
2) **Using calculators effectively**
3) **Resilience**
4) **Communication skills**
5) **Problem-solving skills**

welcome

CURRICULUM OVERVIEW