

Curriculum Map Subject: <mark>Maths</mark>

## Year Group: 10 Foundation

Time	Autumn Term		Spring Term		Summer Term	
Period		1				
Content	<ul> <li>Algebraic expressions</li> <li>Scale diagrams and Bearings</li> <li>Linear equations and inequalities</li> <li>Sequences (Linear)</li> </ul>	<ul> <li>Pythagoras' theorem and Trigonometry in right angled triangles</li> <li>Probability</li> <li>Fractions and Percentages</li> </ul>	<ul> <li>Ratio and Proportion</li> <li>Rearranging formulae</li> <li>Further percentages</li> <li>Linear and Quadratic graphs</li> </ul>	<ul> <li>Averages and Range</li> <li>Area and Volume</li> <li>Scatter graphs</li> <li>Standard form</li> </ul>	<ul> <li>Angles</li> <li>Area of sectors and length of arcs</li> <li>Construction and loci</li> </ul>	<ul> <li>Transformations</li> <li>Plans and elevations</li> <li>Introducing Surds</li> </ul>
Skills	Number		Number		Number	
	Numbersimplify using laws of indices (including expressions with negative powers and complex expressions)Ratio, proportion and rates of change relate map scales to ratiosAlgebraCollect like terms, expand brackets (including double brackets), factorisation (including simple questions on quadratic factorisation), solve linear equations and linear inequalities, derive expressions and equations, work out the nth term of linear sequencesGeometry and Measures work out the bearing of a location from another, apply basic angle facts and angle facts related to parallel lines and polygons in unstructured problems stating reasons for the answers, work out unknown lengths using Pythagoras' theorem, work out unknown lengths and angles using trigonometryProbability and Statistics solve probability problems on combined events using tree diagrams and Venn diagrams		Number round to the asked number of decimal places and significant figures, express large and small numbers in standard form, solve real life problems involving numbers in standard form, Ratio, proportion and rates of change solve problems on direct proportion, solve real life problems (related to recipes, currency conversion, value for money), use the unitary method to solve problems, solve problems related to compound measures (speed and density), know the difference between and solve problems related to simple and compound interest, work out the original amount in percentage change problems Algebra rearrange abstract and real life formulae, draw linear and quadratic graphs, work out the gradient and identify the y intercept of straight line graphs, work out the equation of a line from a graph, recognise the roots and turning point of a quadratic graph Work out surface area and volume of prisms, Probability and Statistics draw and interpret scatter graphs, calculate averages and range from a frequency table		Number simplify surd expressions involving squares and collect like terms in expressions involving surds Geometry and Measures apply basic angle facts and angle facts related to polygons and parallel lines to solve unstructured problems, work out area of a sector of a circle, work out the length of an arc of a circle, perform compass and ruler constructions, solve problems on loci by applying basic constructions, draw plan view and elevations of 3d shapes, perform transformations (translations, reflections, rotations and enlargements) on a pair of coordinate axes	
Assessment week and content	wb 13 <sup>th</sup> November 2023 Algebraic expressions, Scale diagrams and Bearings, Linear equations and inequalities, Sequences (Linear), Pythagoras' theorem and Trigonometry in right angled triangles,		wb 5 <sup>th</sup> February 2023 Fractions and Percentages, Ratio and Proportion, rearranging formulae, Linear and Quadratic graphs, Area and Volume		EOY exam Exam window 15 <sup>th</sup> of April – 26 <sup>th</sup> of April 2024 All the content covered over the year	
	Probability (students will also be give a topic list with reference to MathsWatch clips to support them with revision)		(students will also be give a topic list with reference to MathsWatch clips to support them with revision)		(students will also be give a topic list with reference to MathsWatch clips to support them with revision)	

- Grow and Succeed -

Lemsford Lane, Welwyn Garden City, Hertfordshire AL8 6YR Tel: 01707 321755 • admin@stanborough.herts.sch.uk • www.stanborough.herts.sch.uk • Company No: 07900439