Curriculum Implementation Mapping – Skills and Knowledge

Subject: Maths **Year group: 11 Foundation**

Topic	Term 1	Term 2	Term 3
Knowledge	Probability: combined events including two-way tables, Venn diagrams and tree diagrams. Algebra: recognise patterns in number sequences and find the nth term of a linear sequence. Recognise and continue special sequences. Geometry: Congruence and Similarity. Algebra: Indices review.	Geometry and measures: area of a sector, length of an arc, angle of a sector, volume and surface area of pyramids, cones and spheres. Number: Standard Form. Constructions and loci: constructing triangles, bisectors and loci and solving problems involving loci.	Trigonometry: Review. Algebra: Review of solving linear equations. Review of solving simultaneous equations using the two different methods. Algebra: Non Linear graphs: Distance time graphs, velocity time graphs, quadratic graphs, cubics and reciprocal graphs.
Skills	Probability: calculate the probability of combined events, read and use two-way tables, use Venn diagrams to solve probability questions and use tree diagrams to solve probability problems. Algebra: recognise patterns in sequences and generate sequences, given the nth term. Find the nth term of a linear sequence. Recognise special sequences (e.g. primes, squares, cubes) and continue these. Find nth term from a diagrammatic or practical sequence. Geometry: Demonstrate that two triangles are congruent using SSS, SAS, AAS and RHS. Recognise similarity, show two shapes are similar, work with scale factors and find a missing length using similarity.	Geometry: to calculate the area of a sector, length of an arc, angle of a sector, volume and surface area of pyramids, cones and spheres. Number: Convert between standard form and ordinary numbers. Calculate with numbers in standard form. Leave answers in standard form. Constructions: construct triangles using a protractor and compasses, bisect angles and lines, and solve practical problems using loci.	Trigonometry: Find a missing length, a missing angle and solve problems involving trigonometry. Algebra: Solve all types of linear equations. Set up and solve equations from word problems or pictorial problems. Solve linear inequalities and represent on a number line. Solving simultaneous equations by elimination and substitution. Solve word problems involving simultaneous equations. Solve simultaneous equations graphically. Algebra: Non Linear graphs: Interpret and draw distance time and velocity time graphs, including calculating acceleration rate. Plot and read values from quadratic graphs. Solve a quadratic equation by factorising. Identify the

	Algebra: Write one number as a power of another number. Simplify expressions involving powers. Multiply and divide by powers of 10. Use index laws for multiplying, dividing, raising one power. Understanding anything to the power of zero = 1.		significant points of a quadratic graph including the roots and turning point by solving and completing the square. Recognise and plot cubics and reciprocal graphs.
Assessment Pattern	Non-Calculator GCSE Exam (Foundation level OCR) to be sat in class over two lessons	Mock Exams in Sports Hall Full set of OCR Foundation GCSE papers	Calculator GCSE Exam (Foundation level OCR) to be sat in class over two lessons

Topic	**Term 4**	**Term 5**	**Term 6**
Knowledge	Recap and exam practice: Teachers should utilise exam analysis (using PinPoint learning and marking assessments) to inform their planning and which topics to focus on for their classes.		
Skills	Solid understanding of all topics. Metacognition skills significantly improved through exam practice and direction from teachers.		
Assessment Pattern	March Mocks. Full set of OCR Foundation Papers in the hall.	MATHS GCSE PAPER 1	MATHS GCSE PAPERS 2 & 3