

Scope and Sequence Document for: Mathematics 9

Year:	9	Exam week for this course:	36
Tutor	Mrs Ann Humphreys	Last date for submission of internal exams:	
Tutor qualifications:	B Sc (Hons) Chemistry, Lancaster PGCE	IGCSE/A level Exam board & Specification: No:	
Resources required:	Key maths 9/2, (2001), Baker, Hogan, Job and Verity, ISBN 9780748759880, Nelson Thornes; Mathematical instruments; Scientific calculator.		

Module No.	NSW week No.	Week beginning Monday the:	Contents of study
1	1	04/09/17	Pythagoras CH1 - Construction of right-angled triangles leading to Pythagorean triples.
	2	11/09/17	Calculation of missing sides. Geometric proof TMA
2	3	18/09/17	Formulas CH2 - Extension of work on number patterns leading to the deduction of a rule. Prediction of results TMA
3	4	25/09/17	Circles CH3 - Circumference of a circle, by measurement, by calculation, justification of formulae
	5	02/10/17	Area of circle by approximation and calculation Compound shapes TMA
4	6	09/10/17	Statistic1 CH4 (part) - Bar charts for discrete and continuous data. Revision of range and averages, apply to continuous data
	7	16/10/17	TMA
	8	23/10/17	Half Term
5	9	30/10/17	Accuracy CH5 - Rounding off numbers to significant figures. Use in estimation. Multiplying and dividing by fractions.
	10	06/11/17	Use of the calculator What is a reasonable answer? Error in measurement Standard form for large numbers TMA
6	11	13/11/17	Volume CH6 - Volume and units of capacity. Volume of cuboid
	12	20/11/17	Areas of cross-section Volume of Cylinders and prisms. Flow in pipes. Units of capacity TMA
7	13	27/11/17	Number Revision CH7 - Revision of different ways of expressing a fraction. Increase and decrease as a percentage.
	14	04/12/17	Application to ratio and proportion Expression in the form 1: n Distance and speed problems, average speed. TMA
8	15	11/12/17	Algebra1 CH8 - Use and expansion of brackets. collecting like terms
	16	18/12/17	Christmas Holiday
	17	25/12/17	Christmas Holiday
	18	01/01/18	Christmas Holiday
8	19	08/01/18	Solution of linear equations TMA

9	20	15/01/18	Statistics2 CH9 & CH4 (part) - Estimation of Range and averages grouped data. Stem & Leaf diagrams.
	21	22/01/18	General use of pie charts and scatter diagrams. Types and strength of correlation. Line of best fit
	22	29/01/18	What we are comparing, when interpreting diagrams. Estimating with more than one pie chart. Simple surveys TMA
10	23	05/02/18	Probability CH10 - Revision of probability – listing equally likely outcomes
	24	12/02/18	Half Term
10	25	19/02/18	Relative frequency and estimation Sample space diagrams TMA
11	26	26/02/18	Algebra2 CH11 - Solution of quadratic equations and inequalities by trial and improvement methods
	27	05/03/18	Extension of inequalities to the whole number line TMA
12	28	12/03/18	Decimals CH12 – Using a calculator and order of operations BODMAS
	29	19/03/18	Mental work with decimals leading to long multiplication and division TMA
	30	26/03/18	Angles CH13 - Revision of angle work leading to angles of regular polygons and related formula
	31	02/04/18	Easter Holiday
	32	09/04/18	Easter Holiday
13	33	16/04/18	Angles CH13 - Revision of angle work leading to angles of regular polygons and related formula
	34	23/04/18	Congruence Repeated geometrical transformations generating patterns. Enlargement with fractional scale factor. TMA
	35	30/04/18	Revision
	36	07/05/18	Exam Year 9
14	37	14/05/18	Algebra3 CH14 - Parallel perpendicular lines, Intersecting lines, leading to the solution of simultaneous equations.
	38	21/05/18	Algebraic solution by elimination. Problems generating simultaneous equations. TMA
	39	28/05/18	Half Term
15	40	04/06/18	Loci CH15 - Locus as a set of points which obey a rule. Application to problems of intersecting loci. Paths traced out by rotating objects
	41	11/06/18	Compass constructions of bisectors and perpendiculars. Circles of a triangle by paper folding and by construction TMA
16	42	18/06/18	Shape & Symmetry CH16 - Planes of symmetry of solids, nets of solids
	43	25/06/18	Building a shape sorter TMA