

Scope and Sequence Document for: Mathematics 9

Year:	9	
Tutor	Ann Humphreys	
Tutor qualifications:	B Sc (Hons) Chemistry, Lancaster PGCE	
Resources required:	Key maths 9/2, (2001), Baker, Hogan, Job and Verity, ISBN 9780748759880, Nelson Thornes; ¹ Mathematical instruments; Scientific calculator.	

Module No.	NSW week No.	Week beginning Monday the:	Contents of study
1	1	02/09/19	Pythagoras CH1 - Construction of right-angled triangles leading to Pythagorean triples.
	2	09/09/19	Calculation of missing sides. Geometric proof TMA
2	3	16/09/19	Formulas CH2 - Extension of work on number patterns leading to the deduction of a rule. Prediction of results TMA
3	4	23/09/19	Circles CH3 - Circumference of a circle, by measurement, by calculation, justification of formulae
	5	30/09/19	Area of circle by approximation and calculation Compound shapes TMA
4	6	07/10/19	Statistic1 CH4 (part) - Bar charts for discrete and continuous data. Revision of range and averages, apply to continuous data
	7	14/10/19	TMA
	8	21/10/19	Half Term
5	9	28/10/19	Accuracy CH5 - Rounding off numbers to significant figures. Use in estimation. Multiplying and dividing by fractions.
	10	04/11/19	Use of the calculator What is a reasonable answer? Error in measurement Standard form for large numbers TMA
6	11	11/11/19	Volume CH6 - Volume and units of capacity. Volume of cuboid
	12	18/11/19	Areas of cross-section Volume of Cylinders and prisms. Flow in pipes. Units of capacity TMA
7	13	25/11/19	Number Revision CH7 - Revision of different ways of expressing a fraction. Increase and decrease as a percentage.
	14	02/12/19	Application to ratio and proportion Expression in the form 1: n Distance and speed problems, average speed. TMA
8	15	09/12/19	Algebra1 CH8 - Use and expansion of brackets. collecting like terms
	16	16/12/19	Christmas Holiday
	17	23/12/19	Christmas Holiday

¹ Out of print but can be purchased from Amazon as pre-used
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	18	30/12/19	Christmas Holiday
8	19	06/01/20	Solution of linear equations TMA
9	20	13/01/20	Statistics2 CH9 & CH4 (part) - Estimation of Range and averages grouped data. Stem & Leaf diagrams.
	21	20/01/20	General use of pie charts and scatter diagrams. Types and strength of correlation. Line of best fit
	22	27/01/20	What we are comparing, when interpreting diagrams. Estimating with more than one pie chart. Simple surveys TMA
10	23	03/02/20	Probability CH10 - Revision of probability – listing equally likely outcomes
	24	10/02/20	Half Term
10	25	17/02/20	Relative frequency and estimation Sample space diagrams TMA
11	26	24/02/20	Algebra2 CH11 - Solution of quadratic equations and inequalities by trial and improvement methods
	27	02/03/20	Extension of inequalities to the whole number line TMA
12	28	09/03/20	Decimals CH12 – Using a calculator and order of operations BODMAS
	29	16/03/20	Mental work with decimals leading to long multiplication and division TMA
13	30	23/03/20	Angles CH13 - Revision of angle work leading to angles of regular polygons and related formula
	31	30/03/20	Congruence Repeated geometrical transformations generating patterns. Enlargement with fractional scale factor. TMA
	32	06/04/20	Easter Holiday
	33	13/04/20	Easter Holiday
	34	20/04/20	Easter Holiday
	35	27/04/20	Revision
	36	04/05/20	Exam Year 9
14	37	11/05/20	Algebra3 CH14 - Parallel perpendicular lines, Intersecting lines, leading to the solution of simultaneous equations.
	38	18/05/20	Algebraic solution by elimination. Problems generating simultaneous equations. TMA
	39	25/05/20	Half Term
15	40	01/06/20	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	08/06/20	Compass constructions of bisectors and perpendiculars. Circles of a triangle by paper folding and by construction TMA
16	42	15/06/20	Shape & Symmetry CH16 - Planes of symmetry of solids, nets of solids
	43	22/06/20	Building a shape sorter TMA