

Scope and Sequence Document for: Mathematics 9

Year:	9	
Tutor	Ann Humphreys	
Tutor qualifications:	B Sc. (hons) Lancaster, PGCE	
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	07/09/20	Pythagoras CH1 - Construction of right-angled triangles leading to Pythagorean triples.
	2	14/09/20	Calculation of missing sides. Geometric proof TMA
2	3	21/09/20	Formulas CH2 - Extension of work on number patterns leading to the deduction of a rule. Prediction of results TMA
3	4	28/09/20	Circles CH3 - Circumference of a circle, by measurement, by calculation, justification of formulae
	5	05/10/20	Area of circle by approximation and calculation Compound shapes TMA
4	6	12/10/20	Statistic1 CH4 (part) - Bar charts for discrete and continuous data. Revision of range and averages, apply to continuous data
	7	19/10/20	TMA
	8	26/10/20	Half Term
5	9	02/11/20	Accuracy CH5 - Rounding off numbers to significant figures. Use in estimation. Multiplying and dividing by fractions.
	10	09/11/20	Use of the calculator What is a reasonable answer? Error in measurement Standard form for large numbers TMA
6	11	16/11/20	Volume CH6 - Volume and units of capacity. Volume of cuboid
	12	23/11/20	Areas of cross-section Volume of Cylinders and prisms. Flow in pipes. Units of capacity TMA

7	13	30/11/20	Number Revision CH7 - Revision of different ways of expressing a fraction. Increase and decrease as a percentage.
	14	07/12/20	Application to ratio and proportion Expression in the form 1: n Distance and speed problems, average speed TMA
8	15	14/12/20	Algebra1 CH8 - Use and expansion of brackets. collecting like terms
	16	21/12/20	Christmas Holiday
	17	28/12/20	Christmas Holiday
	18	04/01/21	Christmas Holiday
8	19	11/01/21	Solution of linear equations TMA
9	20	18/01/21	Statistics2 CH9 & CH4 (part) - Estimation of Range and averages grouped data. Stem & Leaf diagrams.
	21	25/01/21	General use of pie charts and scatter diagrams. Types and strength of correlation. Line of best fit
	22	01/02/21	What we are comparing, when interpreting diagrams. Estimating with more than one pie chart. Simple surveys TMA
10	23	08/02/21	Probability CH10 - Revision of probability – listing equally likely outcomes
	24	15/02/21	Half Term
10	25	22/02/21	Relative frequency and estimation Sample space diagrams TMA
11	26	01/03/21	Algebra2 CH11 - Solution of quadratic equations and inequalities by trial and improvement methods
	27	08/03/21	Relative frequency and estimation Sample space diagrams TMA
12	28	15/03/21	Decimals CH12 – Using a calculator and order of operations BODMAS
	29	22/03/21	Mental work with decimals leading to long multiplication and division TMA
	30	29/03/21	Easter Holiday
	31	05/04/21	Easter Holiday
	32	12/04/21	Easter Holiday
13	33	19/04/21	Angles CH13 - Revision of angle work leading to angles of regular polygons and related formula
	34	26/04/21	Congruence Repeated geometrical transformations generating patterns. Enlargement with fractional scale factor. TMA
	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