

## Scope and Sequence Document for: Mathematics 8

Year:	8	
Tutor:	Lucy Sykes	
Tutor qualifications:	B.Sc. (Hons) Mathematics, Durham PGCE	
Resources required:	Mathematical instruments. Scientific calculator.	

Module No.	NSW week No.	Week beginning Monday the:	Contents of study
1 & 2	1	04/09/23	Multiply and divide by 0.1, 0.01 Rounding numbers to a significant figure
3 & 4	2	11/09/23	Making approximations using rounding Simplifying numbers written in index form
5 & 6	3	18/09/23	Indices with negative powers Large numbers in standard form
7 & 8	4	25/09/23	Writing small numbers in standard form Alternate and interior angles in parallel lines
9 & 10	5	02/10/23	Corresponding angles in parallel lines Exterior angles of polygons
11 & 12	6	09/10/23	Interior angles of polygons Problem solving with angles of polygons
13 & 14	7	16/10/23	Multiplying with fractions Multiplying with mixed numbers and top-heavy fractions
	8	23/10/23	Half Term
15 & 16	9	30/10/23	Dividing with fractions using visual methods Dividing with mixed numbers and top-heavy fractions
17 & 18	10	06/11/23	Calculations with fractions and mixed numbers Bar charts for continuous data
19 & 20	11	13/11/23	Construct and interpret pie charts Draw and interpret line graphs
21 & 22	12	20/11/23	Scatter graphs and correlation Area of triangles and composite shapes
23 & 24	13	27/11/23	Composite area of 2D shapes Surface area of a cube and cuboid
25 & 26	14	04/12/2023	Surface area of prisms Scale drawings and map ratios
27 & 28	15	11/12/2023	Writing ratios in their simplest form Sharing in a given ratio
	16	18/12/2023	Christmas Holiday
	17	25/12/2023	Christmas Holiday
	18	01/01/2024	Christmas Holiday
29 & 30	19	08/01/2024	Ratio and equivalent proportions Direct proportion and exchange rates
31 & 32	20	15/01/2024	Inverse proportion Speed, distance and time
33 & 34	21	22/01/2024	Horizontal and vertical straight line graphs Plotting graphs on a grid

35 & 36	22	29/01/2024	Using graphs to solve linear equations Interpreting linear graphs
37 & 38	23	05/02/2024	Using real life graphs Drawing parabolas
39 & 40	24	12/02/2024	Using parabolas to solve quadratic equations Expanding a pair of brackets
	25	19/02/2024	Half Term
41 & 42	26	26/02/2024	Factorising expressions Expanding brackets and collecting like terms
43 & 44	27	04/03/2024	Equations with the unknown on both sides Substitution into formulae
45 & 46	28	11/03/2024	Changing the subject of a formula Circumference of a Circle
47 & 48	29	18/03/2024	Area of a Circle Problems with Circular Shapes
49 & 50	30	25/03/2024	Total Surface Area of a Cylinder Volume of a Cylinder
	31	01/04/2024	Easter Holiday
	32	08/04/2024	Easter Holiday
	33	15/04/2024	Easter Holiday
51 & 52	34	22/04/2024	Constructing triangles Angles of elevation and depression
53 & 54	35	29/04/2024	Perpendicular bisectors Bisecting angles
55 & 56	36	06/05/2024	Scale drawings of bearings Expressing one number as a percentage of another
57 & 58	37	13/05/2024	Finding percentages without a calculator Solve problems involving percentage change
59 & 60	38	20/05/2024	Finding the original value Simple interest in financial mathematics
	39	27/05/2024	Half Term
61, 62 & 63	40	03/06/2024	Calculating the hypotenuse in a right-angled triangle Lengths in right-angled triangles Finding any length of a right-angled triangle
64, 65 & 66	41	10/06/2024	Pythagoras' Theorem – solving complex problems Sample space diagrams Calculating probabilities from two-way tables
67, 68 & 69	42	17/06/2024	Understanding set notation Venn diagrams Mutually exclusive outcomes
70, 71 & 72	43	24/06/2024	Recap and practice questions Recap and practice questions Recap and practice questions