## **Scope and Sequence Document for: Mathematics 7**

| Year:                 | 7  |  |  |
|-----------------------|--|--|--|
| Tutor:                | Lucy Sykes                                       |  |  |
| Tutor qualifications: | B.Sc. (Hons) Mathematics, Durham PGCE            |  |  |
| Resources required:   | Mathematical instruments. Scientific calculator. |  |  |

| Module No. | NSW week<br>No. | Week beginning<br>Monday the: | Contents of study  |
|------------|-----------------|-------------------------------|--|
| 1 & 2      | 1               | 04/09/23                      | Introduction 2D Shapes   |
| 3 & 4      | 2               | 11/09/23                      | Factorisation Using Scientific Calculators   |
| 5 & 6      | 3               | 18/09/23                      | Tessellation with Shapes Properties of Triangles                                       |
| 7 & 8      | 4               | 25/09/23                      | Describing Quadrilaterals 3D Shapes and Prisms   |
| 9 & 10     | 5               | 02/10/23                      | Writing numbers using words and digits Comparing the size of numbers                   |
| 11 & 12    | 6               | 09/10/23                      | Reading and writing numbers on a scale Multiplying a number by a power of 10           |
| 13 & 14    | 7               | 16/10/23                      | Dividing a number by a power of 10 Alternative Number Systems                          |
|            | 8               | 23/10/23                      | Half Term  |
| 15 & 16    | 9               | 30/10/23                      | Alternative Number Systems Finding Prime Factors                                       |
| 17 & 18    | 10              | 06/11/23                      | Finding Prime Numbers Multiples of Numbers and Expressions                             |
| 19 & 20    | 11              | 13/11/23                      | Factor Pairs of Number and Terms Square Numbers and Square Roots                       |
| 21 & 22    | 12              | 20/11/23                      | Drawing Stem and Leaf Diagrams Calculate the Mean Average                              |
| 23 & 24    | 13              | 27/11/23                      | Mean Average and Range Comparing Stem and Leaf Diagrams                                |
| 25 & 26    | 14              | 04/12/2023                    | Averages using the Median and Mode Multiplying and Dividing with Algebra               |
| 27 & 28    | 15              | 11/12/2023                    | Writing Expressions using Diagrams Writing Expressions using Keywords                  |
|            | 16              | 18/12/2023                    | Christmas Holiday  |
|            | 17              | 25/12/2023                    | Christmas Holiday  |
|            | 18              | 01/01/2024                    | Christmas Holiday  |
| 29 & 30    | 19              | 08/01/2024                    | Substituting Numbers into expressions Simplifying Expressions by Collecting Like Terms |
| 31 & 32    | 20              | 15/01/2024                    | Solving an Equation with Function Machines Multiplication Problems                     |
| 33 & 34    | 21              | 22/01/2024                    | Rounding Decimal Numbers Subtraction with Decimal Numbers                              |

|             |    |            | 2023-24  |
|-------------|----|------------|--|
| 35 & 36     | 22 | 29/01/2024 | Multiplying Decimal numbers using the Grid Method Division with Decimal Numbers                                  |
| 37 & 38     | 23 | 05/02/2024 | Multiplication with Decimal Numbers Addition with Decimal Numbers  |
| 39 & 40     | 24 | 12/02/2024 | Dividing with Negative Numbers Multiplying with Negative Numbers   |
|             | 25 | 19/02/2024 | Half Term  |
| 41 & 42     | 26 | 26/02/2024 | Subtraction with Negative Numbers Comparing + with - numbers   |
| 43 & 44     | 27 | 04/03/2024 | Addition with Negative Numbers Volumes of Cubes and Cuboids  |
| 45 & 46     | 28 | 11/03/2024 | Perimeter of Complex Shapes Area of Composite Shapes   |
| 47 & 48     | 29 | 18/03/2024 | Finding the area of a Triangle Finding the area of a Rectangle   |
| 49 & 50     | 30 | 25/03/2024 | Subtracting Fractions using a Fraction Wall Adding Factors using a Fraction Wall                                 |
|             | 31 | 01/04/2024 | Easter Holiday   |
|             | 32 | 08/04/2024 | Easter Holiday   |
|             | 33 | 15/04/2024 | Easter Holiday   |
| 51 & 52     | 34 | 22/04/2024 | Introducing Mixed Numbers Calculating Fractions of an Amount   |
| 53 & 54     | 35 | 29/04/2024 | Introduction to writing equivalent fractions Comparing fractions with different denominators                     |
| 55 & 56     | 36 | 06/05/2024 | Plotting sequences on a grid Finding the nth term of a sequence  |
| 57 & 58     | 37 | 13/05/2024 | Describing Number Patterns Describing Picture Sequences  |
| 59 & 60     | 38 | 20/05/2024 | Creating a sequence using formula Converting between fractions, decimals and percentages                         |
|             | 39 | 27/05/2024 | Half Term  |
| 61, 62 & 63 | 40 | 03/06/2024 | Fractions and Decimal Numbers Writing Fractions as Percentages Predicting Outcomes Using Probability             |
| 64, 65 & 66 | 41 | 10/06/2024 | Probability with Fractions Permutations of two events Estimate Probabilities from Experimental Data              |
| 67, 68 & 69 | 42 | 17/06/2024 | Comparing the probability of events Introducing angles in a quadrilateral Measuring and Naming Angles            |
| 70, 71 & 72 | 43 | 24/06/2024 | Introducing angles on a straight line Introducing angles on a triangle Vertically opposite angles around a point |