

## Match of White Rose Scheme of Work v3.0 to Numicon 5 Activity Groups

Clicking on a link in the long-term plan below will take you straight to all the information you need on that strand within the document. There, you can see which Numicon Focus Activity corresponds to each White Rose Small Step for that strand. You can click on each of the Numicon Focus Activity links to open the relevant activity on Numicon Online in a new tab. Please note you will need to be logged into your Numicon Online subscription first.

Unless otherwise specified, references are to the *Number, Pattern and Calculating 5 Teaching Resource Handbook (NPC 5 TRH)* or the *Geometry, Measurement and Statistics 5 Teaching Resource Handbook (GMS 5 TRH)*.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn term	<a href="#">Number Place value</a>			<a href="#">Number Addition and subtraction</a>		<a href="#">Number Multiplication and division A</a>			<a href="#">Number Fractions A</a>			
Spring term	<a href="#">Number Multiplication and division B</a>			<a href="#">Number Fractions B</a>		<a href="#">Number Decimals and percentages</a>			<a href="#">Measurement Perimeter and area</a>		<a href="#">Statistics</a>	
Summer term	<a href="#">Geometry Shape</a>			<a href="#">Geometry Position and direction</a>		<a href="#">Number Decimals</a>			<a href="#">Number Negative numbers</a>	<a href="#">Measurement Converting units</a>		<a href="#">Measurement Volume</a>

## Match of White Rose Maths Progression to Numicon Focus Activities

Year 5 | Autumn Term | Small Steps Progression

Week 1 to 3 – Number: Place value

Unless otherwise specified, references are to the *Number, Pattern and Calculating 5 Teaching Resource Handbook (NPC 5 TRH)* or the *Geometry, Measurement and Statistics 5 Teaching Resource Handbook (GMS 5 TRH)*. The strands are referred to as follows: PA = Pattern and Algebra; NNS = Numbers and the Number System; Calc = Calculating; Geo = Geometry; Mea = Measurement; SF = Securing Foundations. The first number denotes the Activity Group, while the second number marks the focus activity.

For example, NNS 1.7 refers to Numbers and the Number System 1, focus activity 7.

### Overview

Small step	Numicon focus activities
Roman numerals to 1,000	<a href="#">NNS 1.8</a>
Numbers to 10,000	<a href="#">NNS 1.1</a>
Numbers to 100,000	<a href="#">NNS 1.1</a> , <a href="#">NNS 1.2</a>
Numbers to 1,000,000	<a href="#">NNS 1.3</a>
Read and write numbers to 1,000,000	<a href="#">NNS 1.4</a>
Powers of 10	<a href="#">NNS 1.5</a>
10/100/1,000/10,000/100,000 more or less	<a href="#">NNS 1.6</a>
Partition numbers to 1,000,000	<a href="#">NNS 1.4</a>
Number line to 1,000,000	<i>Adapt</i> <a href="#">NNS 1.5</a> or <a href="#">NNS 1.6</a>
Compare and order numbers to 100,000	<a href="#">NNS 1.7</a>
Compare and order numbers to 1,000,000	<a href="#">NNS 1.7</a>
Round to the nearest 10, 100 or 1,000	<a href="#">NNS 4.2</a> , <a href="#">NNS 4.3</a>
Round within 100,000	<a href="#">NNS 4.4</a>
Round within 1,000,000	<i>Extend</i> <a href="#">NNS 4.4</a>

### NC Objectives

- Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit.
- Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000.
- Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10,000 and 100,000.
- Solve number problems and practical problems that involve all of the above
- Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.

## Match of White Rose Maths Progression to Numicon Focus Activities

Year 5 | Autumn Term | Small Steps Progression

Week 4 to 5 – Number: Addition and subtraction

Unless otherwise specified, references are to the *Number, Pattern and Calculating 5 Teaching Resource Handbook (NPC 5 TRH)* or the *Geometry, Measurement and Statistics 5 Teaching Resource Handbook (GMS 5 TRH)*. The strands are referred to as follows: PA = Pattern and Algebra; NNS = Numbers and the Number System; Calc = Calculating; Geo = Geometry; Mea = Measurement; SF = Securing Foundations. The first number denotes the Activity Group, while the second number marks the focus activity.

For example, NNS 1.7 refers to Numbers and the Number System 1, focus activity 7.

### Overview

Small step	Numicon focus activities
Mental strategies	<a href="#">Calc 2.1</a> , <a href="#">Calc 2.2</a>
Add whole numbers with more than four digits	Extend <a href="#">Calc 5.2</a> and <a href="#">Calc 5.3</a>
Subtract whole numbers with more than four digits	<a href="#">Calc 6.1</a>
Round to check answers	<a href="#">Calc 3.2</a>
Inverse operations (addition and subtraction)	<a href="#">Calc 1.1</a> , <a href="#">Calc 1.2</a>
Multi-step addition and subtraction problems	<a href="#">Calc 1.7</a> , <a href="#">Calc 16.4</a>
Compare calculations	<a href="#">Calc 3.3</a>
Find missing numbers	<a href="#">PA 2.4</a> , <a href="#">PA 5.4</a>

### NC Objectives

- Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).
- Add and subtract numbers mentally with increasingly large numbers.
- Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.

## Match of White Rose Maths Progression to Numicon Focus Activities

Year 5 | Autumn Term | Small Steps Progression

Week 6 to 8 – Number: Multiplication and division A

Unless otherwise specified, references are to the *Number, Pattern and Calculating 5 Teaching Resource Handbook (NPC 5 TRH)* or the *Geometry, Measurement and Statistics 5 Teaching Resource Handbook (GMS 5 TRH)*. The strands are referred to as follows: PA = Pattern and Algebra; NNS = Numbers and the Number System; Calc = Calculating; Geo = Geometry; Mea = Measurement; SF = Securing Foundations. The first number denotes the Activity Group, while the second number marks the focus activity.

For example, NNS 1.7 refers to Numbers and the Number System 1, focus activity 7.

### Overview

Small step	Numicon focus activities
Multiples	<a href="#">PA 3.1</a>
Common multiples	<a href="#">PA 3.3</a>
Factors	<a href="#">PA 3.4</a> , <a href="#">PA 3.5</a> , <a href="#">Calc 4.4</a>
Common factors	<a href="#">PA 3.5</a>
Prime numbers	<a href="#">PA 3.6</a> , <a href="#">PA 3.7</a> , <a href="#">Mea 3.2</a>
Square numbers	<a href="#">PA 4.4</a> , <a href="#">PA 4.5</a> , <a href="#">PA 4.6</a> , <a href="#">Mea 3.2</a>
Cube numbers	<a href="#">PA 4.7</a>
Multiply by 10, 100 and 1,000	<a href="#">Calc 7.1</a> , <a href="#">Calc 7.3</a>
Divide by 10, 100 and 1,000	<a href="#">Calc 7.2</a> , <a href="#">Calc 7.3</a>
Multiples of 10, 100 and 1,000	<a href="#">Calc 7</a> <i>practice and discussion</i>

### NC Objectives

- Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.
- Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) number.
- Establish whether a number up to 100 is prime and recall prime numbers up to 19.
- Multiply and divide numbers mentally drawing upon known facts.
- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.
- Recognise and use square numbers and cube numbers, and use the notation  $^2$  (squared) and  $^3$  (cubed).
- Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.

## Match of White Rose Maths Progression to Numicon Focus Activities

Year 5 | Autumn Term | Small Steps Progression

Week 9 to 12 – Number: Fractions A

Unless otherwise specified, references are to the *Number, Pattern and Calculating 5 Teaching Resource Handbook (NPC 5 TRH)* or the *Geometry, Measurement and Statistics 5 Teaching Resource Handbook (GMS 5 TRH)*. The strands are referred to as follows: PA = Pattern and Algebra; NNS = Numbers and the Number System; Calc = Calculating; Geo = Geometry; Mea = Measurement; SF = Securing Foundations. The first number denotes the Activity Group, while the second number marks the focus activity.

For example, NNS 1.7 refers to Numbers and the Number System 1, focus activity 7.

### Overview

Small step	Numicon focus activities
Find fractions equivalent to a unit fraction	<a href="#">NNS 2.5</a> , <a href="#">NNS 2.7</a>
Find fractions equivalent to a non-unit fraction	<a href="#">NNS 2.5</a> , <a href="#">NNS 2.7</a>
Recognise equivalent fractions	<a href="#">PA 1.7</a>
Convert improper fractions to mixed numbers	<a href="#">NNS 2.1</a> , <a href="#">NNS 2.2</a> , <a href="#">NNS 2.3</a>
Convert mixed numbers to improper fractions	<a href="#">NNS 2.4</a>
Compare fractions less than 1	<a href="#">NNS 6.1</a> , <a href="#">NNS 6.2</a> , <a href="#">NNS 6.3</a>
Order fractions less than 1	<a href="#">NNS 6.1</a> , <a href="#">NNS 6.2</a>
Compare and order fractions greater than 1	<a href="#">PA 1.6</a>
Add and subtract fractions with the same denominator	<a href="#">Calc 1.4</a> , <a href="#">Calc 15.1</a> , <a href="#">Calc 15.2</a> , <a href="#">Calc 15.3</a>
Add fractions within 1	<a href="#">Calc 15.4</a>
Add fractions with total greater than 1	<a href="#">Calc 2.4</a>
Add to a mixed number	<a href="#">Calc 2.4</a>
Add two mixed numbers	<a href="#">Calc 2.4</a>
Subtract fractions	<a href="#">Calc 15.4</a>
Subtract from a mixed number	<a href="#">Calc 15.3</a>
Subtract from a mixed number – breaking the whole	<a href="#">Calc 2.4</a> , <a href="#">Calc 15.2</a> , <a href="#">Calc 15.3</a>
Subtract two mixed numbers	<i>Extend</i> <a href="#">Calc 15.3</a>

### NC Objectives

- Compare and order fractions whose denominators are all multiples of the same number.
- Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.
- Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements  $> 1$  as a mixed number.
- Add and subtract fractions with the same denominator and denominators that are multiples of the same number.

## Match of White Rose Maths Progression to Numicon Focus Activities

Year 5 | Spring Term | Small Steps Progression

Week 1 to 3 – Number: Multiplication and division B

Unless otherwise specified, references are to the *Number, Pattern and Calculating 5 Teaching Resource Handbook (NPC 5 TRH)* or the *Geometry, Measurement and Statistics 5 Teaching Resource Handbook (GMS 5 TRH)*. The strands are referred to as follows: PA = Pattern and Algebra; NNS = Numbers and the Number System; Calc = Calculating; Geo = Geometry; Mea = Measurement; SF = Securing Foundations. The first number denotes the Activity Group, while the second number marks the focus activity.

For example, NNS 1.7 refers to Numbers and the Number System 1, focus activity 7.

### Overview

Small step	Numicon focus activities
Multiply up to a 4-digit number by a 1-digit number	<a href="#">Calc 4.5</a> , <a href="#">Calc 12.1</a> , <a href="#">Calc 2.2</a>
Multiply a 2-digit number by a 2-digit number (area model)	<a href="#">Calc 12.4</a>
Multiply a 2-digit number by a 2-digit number	<a href="#">Calc 12.5</a>
Multiply a 3-digit number by a 2-digit number	<a href="#">NPC 6: Calc 9.3</a>
Multiply a 4-digit number by a 2-digit number	<a href="#">NPC 6: Calc 9.3</a>
Solve problems with multiplication	<a href="#">Calc 16.1</a> , <a href="#">Calc 16.2</a>
Short division	<a href="#">Calc 4.6</a>
Divide a 4-digit number by a 1-digit number	<a href="#">Calc 13.2</a>
Divide with remainders	<a href="#">Calc 9.1</a> , <a href="#">Calc 9.3</a> , <a href="#">Calc 13.1</a>
Efficient division	<a href="#">Calc 8.4</a> , <a href="#">Calc 8.5</a>
Solve problems with multiplication and division	<a href="#">PA 2.2</a> , <a href="#">PA 2.5</a> , <a href="#">Calc 4.3</a>

### NC Objectives

- Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.
- Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context.
- Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.

## Match of White Rose Maths Progression to Numicon Focus Activities

Year 5 | Spring Term | Small Steps Progression

Week 4 to 5 – Number: Fractions B

Unless otherwise specified, references are to the *Number, Pattern and Calculating 5 Teaching Resource Handbook (NPC 5 TRH)* or the *Geometry, Measurement and Statistics 5 Teaching Resource Handbook (GMS 5 TRH)*. The strands are referred to as follows: PA = Pattern and Algebra; NNS = Numbers and the Number System; Calc = Calculating; Geo = Geometry; Mea = Measurement; SF = Securing Foundations. The first number denotes the Activity Group, while the second number marks the focus activity.

For example, NNS 1.7 refers to Numbers and the Number System 1, focus activity 7.

### Overview

Small step	Numicon focus activities
Multiply a unit fraction by an integer	<a href="#">Calc 15.5</a>
Multiply a non-unit fraction by an integer	<a href="#">Calc 15.5</a>
Multiply a mixed number by an integer	<a href="#">Calc 15.6</a>
Calculate a fraction of a quantity	<a href="#">Calc 14.1</a>
Fraction of an amount	<a href="#">Calc 14.2</a> , <a href="#">Calc 14.3</a> , <a href="#">Calc 14.5</a>
Find the whole	Adapt <a href="#">Calc 14.4</a> to create an empty box situation for the whole
Use fractions as operators	Adapt <a href="#">NNS 7.6</a> to exclude percentages

### NC Objectives

- Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
- Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number (Y4).

## Match of White Rose Maths Progression to Numicon Focus Activities

Year 5 | Spring Term | Small Steps Progression

Week 6 to 8 – Number: Decimals and percentages

Unless otherwise specified, references are to the *Number, Pattern and Calculating 5 Teaching Resource Handbook (NPC 5 TRH)* or the *Geometry, Measurement and Statistics 5 Teaching Resource Handbook (GMS 5 TRH)*. The strands are referred to as follows: PA = Pattern and Algebra; NNS = Numbers and the Number System; Calc = Calculating; Geo = Geometry; Mea = Measurement; SF = Securing Foundations. The first number denotes the Activity Group, while the second number marks the focus activity.

For example, NNS 1.7 refers to Numbers and the Number System 1, focus activity 7.

### Overview

Small step	Numicon focus activities
Decimals up to 2 decimal places	<a href="#">NNS 3.1</a>
Equivalent fractions and decimals (tenths)	<a href="#">NNS 3.2</a>
Equivalent fractions and decimals (hundredths)	<a href="#">NNS 3.3</a> , <a href="#">NNS 3.4</a>
Equivalent fractions and decimals	<a href="#">NNS 3.5</a>
Thousandths as fractions	<a href="#">NNS 3.6</a>
Thousandths as decimals	<a href="#">NNS 3.6</a>
Thousandths on a place value chart	<a href="#">NNS 3.6</a>
Order and compare decimals (same number of decimal places)	<a href="#">NNS 3.8</a>
Order and compare any decimals with up to 3 decimal places	<a href="#">NNS 3.7</a>
Round to the nearest whole number	<a href="#">NNS 4.5</a>
Round to 1 decimal place	<a href="#">NNS 4.6</a>
Understand percentages	<a href="#">Calc 11.1</a> , <a href="#">Calc 11.2</a> , <a href="#">Calc 11.3</a>
Percentages as fractions	<a href="#">NNS 7.1</a> , <a href="#">NNS 7.3</a> , <a href="#">NNS 7.4</a>
Percentages as decimals	<a href="#">NNS 7.1</a>
Equivalent fractions, decimals and percentages	<a href="#">NNS 7.1</a> , <a href="#">Calc 11.6</a>

### NC Objectives

- Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.
- Read and write decimal numbers as fractions [for example,  $0.71 = \frac{71}{100}$ ].
- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.
- Round decimals with two decimal places to the nearest whole number and to one decimal place.
- Read, write, order and compare numbers with up to three decimal places.
- Solve problems involving number up to three decimal places.
- Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal.
- Solve problems which require knowing percentage and decimal equivalents of  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{5}$ ,  $\frac{2}{5}$ ,  $\frac{4}{5}$ , and those fractions with a denominator of a multiple of 10 or 25.



## Match of White Rose Maths Progression to Numicon Focus Activities

Year 5 | Spring Term | Small Steps Progression

Week 9 to 10 – Measurement: Perimeter and area

Unless otherwise specified, references are to the *Number, Pattern and Calculating 5 Teaching Resource Handbook (NPC 5 TRH)* or the *Geometry, Measurement and Statistics 5 Teaching Resource Handbook (GMS 5 TRH)*. The strands are referred to as follows: PA = Pattern and Algebra; NNS = Numbers and the Number System; Calc = Calculating; Geo = Geometry; Mea = Measurement; SF = Securing Foundations. The first number denotes the Activity Group, while the second number marks the focus activity.

For example, NNS 1.7 refers to Numbers and the Number System 1, focus activity 7.

### Overview

Small step	Numicon focus activities
Perimeter of rectangles	<a href="#">Mea 3.1</a> , <a href="#">Mea 3.3</a> , <a href="#">Mea 5.3</a> , <a href="#">Mea 5.4</a>
Perimeter of rectilinear shapes	<a href="#">Mea 3.4</a>
Perimeter of polygons	<a href="#">GMS 4: Mea 6.1</a>
Area of rectangles	<a href="#">Mea 3.1</a> , <a href="#">Mea 3.3</a> , <a href="#">Mea 5.3</a> , <a href="#">Mea 5.4</a>
Area of compound shapes	<a href="#">Mea 3.4</a> , <a href="#">Mea 5.2</a>
Estimate area	<i>Adapt</i> <a href="#">Mea 5.4</a>

### NC Objectives

- Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.
- Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres ( $\text{cm}^2$ ) and square metres ( $\text{m}^2$ ) and estimate the area of irregular shapes.

## Match of White Rose Maths Progression to Numicon Focus Activities

Year 5 | Spring Term | Small Steps Progression

Week 11 to 12 – Statistics

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For example, NNS 1.7 refers to Numbers and the Number System 1, focus activity 7.

### Overview

Small step	Numicon focus activities
Draw line graphs	<a href="#">Mea 2.2</a> , <a href="#">Mea 2.4</a>
Read and interpret line graphs	<a href="#">Mea 2.3</a>
Read and interpret tables	<a href="#">Mea 2.1</a>
Two-way tables	<a href="#">Mea 2.6</a>
Read and interpret timetables	<a href="#">Mea 2.5</a>

### NC Objectives

- Solve comparison, sum and difference problems using information presented in a line graph.
- Complete, read and interpret information in tables, including timetables.

## Match of White Rose Maths Progression to Numicon Focus Activities

Year 5 | Summer Term | Small Steps Progression

Week 1 to 3 – Geometry: Shape

Unless otherwise specified, references are to the *Number, Pattern and Calculating 5 Teaching Resource Handbook (NPC 5 TRH)* or the *Geometry, Measurement and Statistics 5 Teaching Resource Handbook (GMS 5 TRH)*. The strands are referred to as follows: PA = Pattern and Algebra; NNS = Numbers and the Number System; Calc = Calculating; Geo = Geometry; Mea = Measurement; SF = Securing Foundations. The first number denotes the Activity Group, while the second number marks the focus activity.

For example, NNS 1.7 refers to Numbers and the Number System 1, focus activity 7.

### Overview

Small step	Numicon focus activities
Understand and use degrees	<a href="#">Geo 1.1</a>
Classify angles	<i>Adapt and extend</i> <a href="#">GMS 4: Geo 3.1</a>
Estimate angles	<i>Adapt and extend</i> <a href="#">Geo 1.1</a>
Measure angles up to 180°	<a href="#">Geo 1.2</a> , <a href="#">Geo 1.3</a>
Draw lines and angles accurately	<a href="#">Geo 1.4</a>
Calculate angles around a point	<a href="#">Geo 1.5</a> , <a href="#">Geo 3.1</a> , <a href="#">Mea 2.6</a>
Calculate angles on a straight line	<a href="#">Geo 1.5</a> , <a href="#">Calc 1.3</a>
Lengths and angles in shapes	<a href="#">Geo 3.2</a> , <a href="#">Geo 3.3</a> , <a href="#">Geo 3.4</a>
Regular and irregular polygons	<a href="#">Geo 3.5</a>
3-D shapes	<a href="#">Mea 4.2</a>

### NC Objectives

- Identify 3D shapes, including cubes and other cuboids, from 2D representations.
- Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.
- Draw given angles, and measure them in degrees.
- Identify:
  - angles at a point and one whole turn (total 360°),
  - angles at a point on a straight line and  $\frac{1}{2}$  a turn (total 180°),
  - other multiples of 90°
- Use the properties of rectangles to deduce related facts and find missing lengths and angles.
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.

## Match of White Rose Maths Progression to Numicon Focus Activities

Year 5 | Summer Term | Small Steps Progression

Week 4 to 5 – Geometry: Position and direction

Unless otherwise specified, references are to the *Number, Pattern and Calculating 5 Teaching Resource Handbook (NPC 5 TRH)* or the *Geometry, Measurement and Statistics 5 Teaching Resource Handbook (GMS 5 TRH)*. The strands are referred to as follows: PA = Pattern and Algebra; NNS = Numbers and the Number System; Calc = Calculating; Geo = Geometry; Mea = Measurement; SF = Securing Foundations. The first number denotes the Activity Group, while the second number marks the focus activity.

For example, NNS 1.7 refers to Numbers and the Number System 1, focus activity 7.

### Overview

Small step	Numicon focus activities
Read and plot coordinates	<a href="#">Geo 2.2</a>
Problem solving with coordinates	<i>Extend</i> <a href="#">Geo 2.2</a>
Translation	<a href="#">Geo 2.3</a>
Translation with coordinates	<a href="#">Geo 2.4</a>
Lines of symmetry	<a href="#">GMS 4: Geo 2.1, Geo 2.2, Geo 2.3, Geo 2.4, Geo 2.5, Geo 2.6</a>
Reflection in horizontal and vertical lines	<a href="#">Geo 2.1</a>

### NC Objectives

- Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.

## Match of White Rose Maths Progression to Numicon Focus Activities

Year 5 | Summer Term | Small Steps Progression

Week 6 to 8 – Number: Decimals

Unless otherwise specified, references are to the *Number, Pattern and Calculating 5 Teaching Resource Handbook (NPC 5 TRH)* or the *Geometry, Measurement and Statistics 5 Teaching Resource Handbook (GMS 5 TRH)*. The strands are referred to as follows: PA = Pattern and Algebra; NNS = Numbers and the Number System; Calc = Calculating; Geo = Geometry; Mea = Measurement; SF = Securing Foundations. The first number denotes the Activity Group, while the second number marks the focus activity.

For example, NNS 1.7 refers to Numbers and the Number System 1, focus activity 7.

### Overview

Small step	Numicon focus activities
Add and subtract decimals within 1 (known facts)	<i>Simplify</i> <a href="#">Calc 1.5</a>
Complements to 1	<i>Simplify</i> <a href="#">Calc 1.5</a>
Add and subtract decimals (bridging)	<a href="#">Calc 1.5</a> , <a href="#">Calc 2.5</a> , <a href="#">Calc 2.6</a>
Add decimals – same number of decimal places	<a href="#">Calc 1.6</a> , <a href="#">Calc 3.4</a>
Subtract decimals with the same number of decimal places	<a href="#">Calc 6.3</a> , <a href="#">Calc 6.4</a> , <a href="#">Calc 6.5</a>
Add decimals with different numbers of decimal places	<a href="#">Calc 2.5</a> , <a href="#">Calc 5.4</a>
Subtract decimals with different numbers of decimal places	<a href="#">Calc 2.6</a> , <a href="#">Calc 6.5</a>
Efficient strategies for adding and subtracting decimals	<a href="#">PA 2.5</a> , <a href="#">Calc 16.4</a>
Decimal sequences	<a href="#">PA 1.4</a> , <a href="#">PA 1.5</a> , <a href="#">PA 2.6</a>
Multiply by 10, 100 and 1,000	<a href="#">Calc 7.4</a> , <a href="#">Calc 7.5</a> , <a href="#">Calc 7.6</a>
Divide by 10, 100 and 1,000	<a href="#">Calc 7.4</a> , <a href="#">Calc 7.5</a> , <a href="#">Calc 7.6</a>
Multiply and divide decimals (missing values)	<i>Adapt</i> <a href="#">Calc 7.6</a>

### NC Objectives

- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.
- Solve problems involving number up to three decimal places.
- Read, write, order and compare numbers with up to 3 decimal places.
- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.

## Match of White Rose Maths Progression to Numicon Focus Activities

Year 5 | Summer Term | Small Steps Progression

Week 9 – Number: Negative numbers

Unless otherwise specified, references are to the *Number, Pattern and Calculating 5 Teaching Resource Handbook (NPC 5 TRH)* or the *Geometry, Measurement and Statistics 5 Teaching Resource Handbook (GMS 5 TRH)*. The strands are referred to as follows: PA = Pattern and Algebra; NNS = Numbers and the Number System; Calc = Calculating; Geo = Geometry; Mea = Measurement; SF = Securing Foundations. The first number denotes the Activity Group, while the second number marks the focus activity.

For example, NNS 1.7 refers to Numbers and the Number System 1, focus activity 7.

### Overview

Small step	Numicon focus activities
Understand negative numbers	<a href="#">NNS 5.1</a> , <a href="#">NNS 5.2</a>
Count through zero in ones	<a href="#">NNS 5.3</a>
Count through zero in multiples	Adapt <a href="#">NNS 5.3</a> or <a href="#">NNS 5.6</a>
Compare and order negative numbers	<a href="#">NNS 5.4</a>
Find the difference	<a href="#">NNS 5.5</a>

### NC Objectives

- Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero.

## Match of White Rose Maths Progression to Numicon Focus Activities

Year 5 | Summer Term | Small Steps Progression

Week 10 to 11 – Measurement: Converting units

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For example, NNS 1.7 refers to Numbers and the Number System 1, focus activity 7.

### Overview

Small step	Numicon focus activities
Kilograms and kilometres	Adapt <a href="#">GMS 4: Mea 4.3</a> , <a href="#">NNS 3.1</a>
Millimetres and millilitres	Adapt <a href="#">GMS 4: Mea 5.2</a>
Convert units of length	<a href="#">Mea 1.1</a>
Convert between metric and imperial units	<a href="#">Mea 1.2</a> , <a href="#">Mea 1.3</a> , <a href="#">Mea 1.4</a> , <a href="#">Mea 1.5</a>
Convert units of time	<a href="#">Mea 7.2</a>
Calculate with timetables	<a href="#">Mea 2.5</a>

### NC Objectives

- Convert between different units of metric measure (for example, km and m; cm and m; cm and mm; g and kg; l and ml).
- Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.
- Solve problems involving converting between units of time.

## Match of White Rose Maths Progression to Numicon Focus Activities

Year 5 | Summer Term | Small Steps Progression

Week 12 – Measurement: Volume

Unless otherwise specified, references are to the *Number, Pattern and Calculating 5 Teaching Resource Handbook (NPC 5 TRH)* or the *Geometry, Measurement and Statistics 5 Teaching Resource Handbook (GMS 5 TRH)*. The strands are referred to as follows: PA = Pattern and Algebra; NNS = Numbers and the Number System; Calc = Calculating; Geo = Geometry; Mea = Measurement; SF = Securing Foundations. The first number denotes the Activity Group, while the second number marks the focus activity.

For example, NNS 1.7 refers to Numbers and the Number System 1, focus activity 7.

### Overview

Small step	Numicon focus activities
Cubic Centimetres	<a href="#">Mea 4.1</a> , <a href="#">Mea 4.2</a>
Compare volume	<a href="#">Mea 4.1</a> , <a href="#">Mea 4.3</a> , <a href="#">Mea 4.4</a>
Estimate volume	<a href="#">Mea 4.5</a>
Estimate capacity	<a href="#">Mea 4.6</a>

### NC Objectives

- Estimate volume [for example using  $1 \text{ cm}^3$  blocks to build cuboids (including cubes)] and capacity (for example, using water).