



# Maths Curriculum



# Maths Overview



		Term		
		Autumn	Spring	Summer
Gold Class		Colours Match Sort Number 1 Number 2 Pattern	Number 3 Number 4 Number 5 Number 6 Height and length Mass Capacity	Sequencing Positional language More than/ fewer than Shape 2D Shape 3D One more /one less Number composition 1-5 revision What comes after? What comes before? Numbers to 5
		Getting to know you Match, sort and compare Talk about measure and patterns It's me 1,2,3 Circles and triangles 1,2,3,4,5 Shapes with 4 sides	Alive in 5 Mass and capacity Growing 6, 7, 8 Length, height and time Building 9 and 10 Explore 3D shapes	To 20 and beyond How many now? Manipulate, compose and decompose Sharing and grouping Visualise, build and map Make connections
Red Class		Getting to know you Match, sort and compare Talk about measure and patterns It's me 1,2,3 Circles and triangles 1,2,3,4,5 Shapes with 4 sides	Alive in 5 Mass and capacity Growing 6, 7, 8 Length, height and time Building 9 and 10 Explore 3D shapes	To 20 and beyond How many now? Manipulate, compose and decompose Sharing and grouping Visualise, build and map Make connections
		Getting to know you Match, sort and compare Talk about measure and patterns It's me 1,2,3 Circles and triangles 1,2,3,4,5 Shapes with 4 sides	Alive in 5 Mass and capacity Growing 6, 7, 8 Length, height and time Building 9 and 10 Explore 3D shapes	To 20 and beyond How many now? Manipulate, compose and decompose Sharing and grouping Visualise, build and map Make connections



# Maths Overview



	Term		
	Autumn	Spring	Summer
Yellow Class	<p><b>Number:</b> Place Value (within 10)  <b>Number:</b> Addition and Subtraction (within 10)  <b>Geometry:</b> Shape  <b>Consolidation</b></p>	<p><b>Number:</b> Place Value (within 20)  <b>Number:</b> Addition and Subtraction (within 20)  <b>Number:</b> Place Value (within 50)  <b>Measurement:</b> Length and Height  <b>Measurement:</b> Mass and Volume</p>	<p><b>Number:</b> Multiplication and Division  <b>Number:</b> Fractions  <b>Geometry:</b> Position and Direction  <b>Number:</b> Place Value (within 100)  <b>Measurement:</b> Money  <b>Measurement:</b> Time</p>
Green Class	<p><b>Number:</b> Place Value  <b>Number:</b> Addition and Subtraction  <b>Geometry:</b> Shape</p>	<p><b>Number:</b> Place Value (Year 1)  <b>Measurement:</b> Money  <b>Number:</b> Multiplication and Division (Year 2)  <b>Number:</b> Addition and Subtraction  <b>Measurement:</b> Length and height  <b>Measurement:</b> Mass , Capacity and temperature</p>	<p><b>Number:</b> Multiplication and Division (Year 1)  <b>Number—</b>Fractions  <b>Measurement:</b> Time  <b>Statistics</b> (Year 2)  <b>Measurement—</b>Position and direction</p>



# Maths Overview



	Term		
	Autumn	Spring	Summer
Blue Class	<b>Number:</b> Place value <b>Number:</b> Addition and Subtraction <b>Geometry:</b> Shape	<b>Measurement:</b> Money <b>Number:</b> Multiplication and division <b>Measurement:</b> Length and height <b>Measurement:</b> Mass, capacity and temperature	<b>Number:</b> Fractions <b>Measurement:</b> Time <b>Statistics</b> <b>Geometry:</b> Position and direction
Orange Class	<b>Number:</b> Place value <b>Number:</b> Addition and Subtraction <b>Number:</b> Multiplication and division A	<b>Number:</b> Multiplication and division B <b>Measure:</b> Length and perimeter <b>Number :</b> Fractions A <b>Measurement :</b> Mass and capacity	<b>Number :</b> Fractions B <b>Measurement:</b> Money <b>Measurement:</b> Time <b>Geometry:</b> Shape <b>Statistics</b>



# Maths Overview



		Term		
		Autumn	Spring	Summer
Lime Class	<p><b>Number:</b> Place value  <b>Number:</b> Addition and Subtraction  <b>Number:</b> Multiplication and division A  <b>Measurement :</b>Area (Year 4)</p>	<p><b>Number:</b> Multiplication and division b  <b>Measurement :</b>Length and perimeter  <b>Number:</b> Fractions  <b>Number :</b>Fractions A (Year 3) Decimals A (Year 4)  <b>Measurement</b> Mass and capacity (Year 3)</p>	<p><b>Number</b> Fractions B (Year 3) Decimals B (Year 4)  <b>Measurement:</b> Money  <b>Measurement:</b> Time  <b>Geometry:</b> Shape  <b>Statistics</b>  <b>Geometry:</b> Position and direction (Year 4)</p>	
	Lilac Class	<p><b>Number:</b> Place value  <b>Number:</b> Addition and Subtraction  <b>Number:</b> Multiplication and division A  <b>Measurement:</b> area (Year 4)  <b>Number:</b> Fractions A (Year 5)</p>	<p><b>Number:</b> Multiplication and division B  <b>Measurement</b> Length and perimeter (area Year 5)  <b>Number:</b> Fractions  <b>Number:</b> Decimals A (Year 4) Decimals and percentages (Year 5)</p>	<p><b>Number</b> Decimals B  <b>Measurement</b> Money (Year 4)  <b>Measurement–</b> Time (Year 4)                      Statistics  <b>Geometry—</b>Shape  <b>Geometry—</b>Position and direction  <b>Number—</b>Negative numbers (Year 5)  <b>Measurement—</b>Converting units and volume (Year 5)</p>



# Maths Overview



	Term		
	Autumn	Spring	Summer
Turquoise Class	<p><b>Number:</b> Place value</p> <p><b>Number:</b> Addition, subtraction, (Year 6 four operations)</p> <p><b>Number:</b> Multiplication and division A</p> <p><b>Number:</b> Fractions A (&amp; Fractions b Year 6)</p> <p><b>Measurement:</b> Comparing units (Year 6)</p>	<p><b>Number</b> Multiplication and Division B (Year 5)</p> <p><b>Number</b> Ratio (Year 6)</p> <p><b>Number</b> Algebra (Year 6)</p> <p>Number Fractions B (Year 5)</p> <p><b>Number</b> Decimals and percentages (&amp; Fractions Year 6)</p> <p><b>Measurement</b>—Perimeter and Area (Year 6 Volume)</p> <p><b>Statistics</b></p>	<p><b>Geometry:</b> Shape</p> <p><b>Geometry:</b> position and direction</p> <p><b>Number:</b> Decimals (Year 5)</p> <p><b>Number:</b> Negative numbers (Year 5)</p> <p><b>Measurement:</b> converting units (Year 5)</p> <p><b>Measurement</b>—Volume</p> <p>Themed projects, consolidation and problem solving (Year 6)</p>
Purple Class	<p><b>Number:</b> Place value</p> <p><b>Number:</b> Addition, subtraction, multiplication and division</p> <p><b>Number:</b> Fractions A</p> <p><b>Number:</b> Fractions B</p> <p><b>Measurement:</b> Comparing units</p>	<p><b>Number:</b> Ratio</p> <p><b>Number:</b> Algebra</p> <p><b>Number:</b> Decimals</p> <p><b>Number:</b> Fractions, decimals and percentages</p> <p><b>Measurement:</b> Area, perimeter and volume</p> <p><b>Statistics</b></p>	<p><b>Geometry:</b> Shape</p> <p><b>Geometry:</b> position and direction</p> <p>Themed projects, consolidation and problem solving</p>



# Yellow Class - Autumn



## Number - Place Value (within 10)

### Small Steps

- Step 1:** Sort objects
- Step 2:** Count objects
- Step 3:** Count objects from a larger group
- Step 4:** Represent objects
- Step 5:** Recognise numbers as words
- Step 6:** Count on from any number
- Step 7:** 1 more
- Step 8:** Count backwards within 10
- Step 9:** 1 less
- Step 10:** Compare groups by matching
- Step 11:** Fewer, more, same
- Step 12:** Less than, greater than, equal to
- Step 13:** Compare numbers
- Step 14:** Order objects and numbers
- Step 15:** The number line

### National Curriculum (EOY)

#### **Pupils should be taught to:**

- count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s
- given a number, identify 1 more and 1 less
- identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least
- read and write numbers from 1 to 20 in numerals and words



# Yellow Class - Autumn



## Number - Addition and Subtraction (within 10)

### Small Steps

- Step 1:** Introduce parts and wholes
- Step 2:** Part-whole model
- Step 3:** Write number sentences
- Step 4:** Fact families – addition facts
- Step 5:** Number bonds within 10
- Step 6:** Systematic number bonds within 10
- Step 7:** Number bonds to 10
- Step 8:** Addition – add together
- Step 9:** Addition – add more
- Step 10:** Addition problems
- Step 11:** Find a part
- Step 12:** Subtraction – find a part
- Step 13:** Fact families – the eight facts
- Step 14:** Subtraction – take away/cross out (How many left?)
- Step 15:** Take away (How many left?)
- Step 16:** Subtraction on a number line
- Step 17:** Add or subtract 1 or 2

### National Curriculum (EOY)

**Pupils should be taught to:**

- read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs
- represent and use number bonds and related subtraction facts within 20
- add and subtract one-digit and two-digit numbers to 20, including 0
- solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as  $7 = ? - 9$





# Yellow Class - Autumn



## Geometry - Shape

### Small Steps

- Step 1:** Recognise and name 3-D shapes
- Step 2:** Sort 3-D shapes
- Step 3:** Recognise and name 2-D shapes
- Step 4:** Sort 2-D shapes
- Step 5:** Patterns with 2-D and 3-D shapes

### National Curriculum (EOY)

**Pupils should be taught to:**

recognise and name common 2-D and 3-D shapes, including:

2-D shapes [for example, rectangles (including squares), circles and triangles]

3-D shapes [for example, cuboids (including cubes), pyramids and spheres]



# Yellow Class - Spring



## Number: Place value to 20

Small Steps	National Curriculum (EOY)
<p><b>Step 1:</b> Count within 20</p> <p><b>Step 2:</b> Understand 10</p> <p><b>Step 3:</b> Understand 11, 12 and 13</p> <p><b>Step 4:</b> Understand 14, 15 and 16</p> <p><b>Step 5:</b> Understand 17, 18 and 19</p> <p><b>Step 6:</b> Understand 20</p> <p><b>Step 7:</b> 1 more and 1 less</p> <p><b>Step 8:</b> The number line to 20</p> <p><b>Step 9:</b> Use a number line to 20</p> <p><b>Step 10:</b> Estimate on a number line to 20</p> <p><b>Step 11:</b> Compare numbers to 20</p> <p><b>Step 12:</b> Order numbers to 20</p>	<p><b>Pupils should be taught to:</b></p> <p>count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number</p> <p>count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens</p> <p>given a number, identify one more and one less</p> <p>identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least</p> <p>read and write numbers from 1 to 20 in numerals and words.</p>



# Yellow Class - Spring



## Number: Addition and subtraction (within 20)

### Small Steps

- Step 1** Add by counting on within 20
- Step 2** Add ones using number bonds
- Step 3** Find and make number bonds to 20
- Step 4** Doubles
- Step 5** Near doubles
- Step 6** Subtract ones using number bonds
- Step 7** Subtraction - counting back
- Step 8** Subtraction - finding the difference
- Step 9** Related facts
- Step 10** Missing number problems

### National Curriculum (EOY)

#### **Pupils should be taught to:**

read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs

represent and use number bonds and related subtraction facts within 20

add and subtract one-digit and two-digit numbers to 20, including zero

solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as  $7 = ? - 9$ .



# Yellow Class - Spring



## Number - Place Value (within 50)

### Small Steps

- Step 1** Count from 20 to 50
- Step 2** 20, 30, 40 and 50
- Step 3** Count by making groups of tens
- Step 4** Groups of tens and ones
- Step 5** Partition into tens and ones
- Step 6** The number line to 50
- Step 7** Estimate on a number line to 50
- Step 8** 1 more, 1 less

### National Curriculum (EOY)

#### **Pupils should be taught to:**

- count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens
- given a number, identify one more and one less
- identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least
- read and write numbers from 1 to 20 in numerals and words.



# Yellow Class - Spring



## Measurement - Length and Height

### Small Steps

- Step 1** Compare lengths and heights
- Step 2** Measure length using objects
- Step 3** Measure length in centimetre

### National Curriculum (EOY)

#### **Measurement: Length and height**

#### **Pupils should be taught to:**

compare, describe and solve practical problems for:

lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]

measure and begin to record the following:

lengths and heights



# Yellow Class - Spring



## Measurement - Mass and Volume

### Small Steps

- Step 1** Heavier and lighter
- Step 2** Measure mass
- Step 3** Compare mass
- Step 4** Full and empty
- Step 5** Compare volume
- Step 6** Measure capacity
- Step 7** Compare capacity

### National Curriculum (EOY)

**Pupils should be taught to:**

compare, describe and solve practical problems for:

mass/weight [for example, heavy/light, heavier than, lighter than]

capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]

measure and begin to record the following:

mass/weight

capacity and volume



# Yellow Class - Summer



## Number - Multiplication and Division

### Small Steps

- Step 1** Count in 2s
- Step 2** Count in 10s
- Step 3** Count in 5s
- Step 4** Recognise equal groups
- Step 5** Add equal groups
- Step 6** Make arrays
- Step 7** Make doubles
- Step 8** Make equal groups - grouping
- Step 9** Make equal groups - sharing

### National Curriculum (EOY)

**Pupils should be taught to:**

solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher



# Yellow Class - Summer



## Number - Fractions

### Small Steps

- Step 1** Recognise a half of an object or a shape
- Step 2** Find a half of an object or a shape
- Step 3** Recognise a half of a quantity
- Step 4** Find a half of a quantity
- Step 5** Recognise a quarter of an object or a shape
- Step 6** Find a quarter of an object or a shape
- Step 7** Recognise a quarter of a quantity
- Step 8** Find a quarter of a quantity

### National Curriculum (EOY)

#### **Pupils should be taught to:**

- recognise, find and name a half as one of two equal parts of an object, shape or quantity
- recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.





# Yellow Class - Summer



## Geometry - Position and direction

### Small Steps

- Step 1** Describe turns
- Step 2** Describe position - left and right
- Step 3** Describe position - forwards and backwards
- Step 4** Describe position - above and below
- Step 5** Ordinal numbers

### National Curriculum (EOY)

**Pupils should be taught to:**

describe position, direction and movement, including whole, half, quarter and three quarter turns.



# Yellow Class - Summer



## Number - Place Value (within 100)

Small Steps	National Curriculum (EOY)
<p><b>Step 1</b> Count from 50 to 100</p> <p><b>Step 2</b> Tens to 100</p> <p><b>Step 3</b> Partition into tens and ones</p> <p><b>Step 4</b> The number line to 100</p> <p><b>Step 5</b> 1 more, 1 less</p> <p><b>Step 6</b> Compare numbers with the same number of tens</p> <p><b>Step 7</b> Compare any two numbers</p>	<p><b>Pupils should be taught to:</b></p> <p>count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number</p> <p>count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens</p> <p>given a number, identify one more and one less</p> <p>identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least</p> <p>read and write numbers from 1 to 20 in numerals and words</p>



# Yellow Class - Summer



## Measurement - Money

### Small Steps

- Step 1** Unitising
- Step 2** Recognise coins
- Step 3** Recognise notes
- Step 4** Count in coin

### National Curriculum (EOY)

**Pupils should be taught to:**

recognise and know the value of different denominations of coins and notes



# Yellow Class - Summer



## Measurement - Time

### Small Steps

- Step 1** Before and after
- Step 2** Days of the week
- Step 3** Months of the year
- Step 4** Hours, minutes and seconds
- Step 5** Tell the time to the hour
- Step 6** Tell the time to the half hour

### National Curriculum (EOY)

**Pupils should be taught to:**

measure and begin to record the following  
time (hours, minutes, seconds)

sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]

recognise and use language relating to dates, including days of the week, weeks, months and years

tell the time to the hour and half past the hour and draw the hands on a clock face to show these times



# Green Class - Autumn



## Number - Place Value

Small Steps Year 1	Small Steps Year 2	National Curriculum (EOY)
<p><b>Step 1:</b> Sort objects  <b>Step 2:</b> Count objects  <b>Step 3:</b> Count objects from a larger group  <b>Step 4:</b> Represent objects  <b>Step 5:</b> Recognise numbers as words  <b>Step 6:</b> Count on from any number  <b>Step 7:</b> 1 more  <b>Step 8:</b> Count backwards within 10  <b>Step 9:</b> 1 less  <b>Step 10:</b> Compare groups by matching  <b>Step 11:</b> Fewer, more, same  <b>Step 12:</b> Less than, greater than, equal to  <b>Step 13:</b> Compare numbers  <b>Step 14:</b> Order objects and numbers  <b>Step 15:</b> The number line</p>	<p><b>Step 1</b> Numbers to 20  <b>Step 2</b> Count objects to 100 by making 10s  <b>Step 3</b> Recognise tens and ones  <b>Step 4</b> Use a place value chart  <b>Step 5</b> Partition numbers to 100  <b>Step 6</b> Write numbers to 100 in words  <b>Step 7</b> Flexibly partition numbers to 100  <b>Step 8</b> Write numbers to 100 in expanded form  <b>Step 9</b> 10s on the number line to 100  <b>Step 10</b> 10s and 1s on the number line to 100  <b>Step 11</b> Estimate numbers on a number line  <b>Step 12</b> Compare objects  <b>Step 13</b> Compare numbers  <b>Step 14</b> Order objects and numbers  <b>Step 15</b> Count in 2s, 5s and 10s  <b>Step 16</b> Count in 3s</p>	<p><b>Year 1 Pupils should be taught to</b>            count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number            count, read and write numbers to 100 in numerals;            count in multiples of 2s, 5s and 10s            given a number, identify 1 more and 1 less            identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least            read and write numbers from 1 to 20 in numerals and words</p> <p><b>Year 2 Pupils should be taught to</b>            count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward            recognise the place value of each digit in a two-digit number (tens, ones)            identify, represent and estimate numbers using different representations, including the number line            compare and order numbers from 0 up to 100; use and = signs            read and write numbers to at least 100 in numerals and in words            use place value and number facts to solve problems</p>



# Green Class - Autumn



## Number - Addition and Subtraction

Small Steps Year 1	Small Steps Year 2	National Curriculum (EOY)
<p><b>Step 1:</b> Introduce parts and wholes  <b>Step 2:</b> Part-whole model  <b>Step 3:</b> Write number sentences  <b>Step 4:</b> Fact families – addition facts  <b>Step 5:</b> Number bonds within 10  <b>Step 6:</b> Systematic number bonds within 10  <b>Step 7:</b> Number bonds to 10  <b>Step 8:</b> Addition – add together  <b>Step 9:</b> Addition – add more  <b>Step 10:</b> Addition problems  <b>Step 11:</b> Find a part  <b>Step 12:</b> Subtraction – find a part  <b>Step 13:</b> Fact families – the eight facts  <b>Step 14:</b> Subtraction – take away/cross out (How many left?)  <b>Step 15:</b> Take away (How many left?)  <b>Step 16:</b> Subtraction on a number line  <b>Step 17:</b> Add or subtract 1 or 2</p>	<p><b>Step 1</b> Bonds to 10  <b>Step 2</b> Fact families - addition and subtraction bonds within 20  <b>Step 3</b> Related facts  <b>Step 4</b> Bonds to 100 (tens)  <b>Step 5</b> Add and subtract 1s  <b>Step 6</b> Add by making 10  <b>Step 7</b> Add three 1-digit numbers  <b>Step 8</b> Add to the next 10  <b>Step 9</b> Add across a 10  <b>Step 10</b> Subtract across 10  <b>Step 11</b> Subtract from a 10  <b>Step 12</b> Subtract a 1-digit number from a 2-digit number (across a 10)  <b>Step 13</b> 10 more, 10 less  <b>Step 14</b> Add and subtract 10s  <b>Step 15</b> Add two 2-digit numbers (not across a 10)  <b>Step 16</b> Add two 2-digit numbers (across a 10)  <b>Step 17</b> Subtract two 2-digit numbers (not across a 10)  <b>Step 18</b> Subtract two 2-digit numbers (across a 10)  <b>Step 19</b> Mixed addition and subtraction  <b>Step 20</b> Compare number sentences  <b>Step 21</b> Missing number problems</p>	<p><b>Year 1 Pupils should be taught to</b>  read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs  represent and use number bonds and related subtraction facts within 20  add and subtract one-digit and two-digit numbers to 20, including 0  solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as <math>7 = ? - 9</math></p> <p><b>Year 2 Pupils should be taught to</b>  solve problems with addition and subtraction:  using concrete objects and pictorial representations, including those involving numbers, quantities and measures  applying their increasing knowledge of mental and written methods  recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100  add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones  a two-digit number and tens  two two-digit numbers  adding three one-digit numbers  show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot  recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p>



# Green Class - Autumn



## Geometry - Shape

Small Steps Year 1	Small Steps Year 2	National Curriculum (EOY)
<p><b>Step 1:</b> Recognise and name 3-D shapes</p> <p><b>Step 2:</b> Sort 3-D shapes</p> <p><b>Step 3:</b> Recognise and name 2-D shapes</p> <p><b>Step 4:</b> Sort 2-D shapes</p> <p><b>Step 5:</b> Patterns with 2-D and 3-D shapes</p>	<p><b>Step 1</b> Recognise 2-D and 3-D shapes</p> <p><b>Step 2</b> Count sides on 2-D shapes</p> <p><b>Step 3</b> Count vertices on 2-D shapes</p> <p><b>Step 4</b> Draw 2-D shapes</p> <p><b>Step 5</b> Lines of symmetry on shapes</p> <p><b>Step 6</b> Use lines of symmetry to complete shapes</p> <p><b>Step 7</b> Sort 2-D shapes</p> <p><b>Step 8</b> Count faces on 3-D shapes</p> <p><b>Step 9</b> Count edges on 3-D shapes</p> <p><b>Step 10</b> Count vertices on 3-D shapes</p> <p><b>Step 11</b> Sort 3-D shapes</p> <p><b>Step 12</b> Make patterns with 2-D and 3-D shapes</p>	<p><b>Year 1 Pupils should be taught to</b> recognise and name common 2-D and 3-D shapes, including:</p> <p>2-D shapes [for example, rectangles (including squares), circles and triangles]</p> <p>3-D shapes [for example, cuboids (including cubes), pyramids and spheres]</p> <p><b>Year 2 Pupils should be taught to</b> identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line</p> <p>identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</p> <p>identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]</p> <p>compare and sort common 2-D and 3-D shapes and everyday objects.</p>



# Green Class - Autumn



## Number - Place Value

Small Steps Year 1	Small Steps Year 2	National Curriculum (EOY)
<p><b>Step 1</b> Count from 20 to 50 <b>Step 2</b> 20, 30, 40 and 50 <b>Step 3</b> Count by making groups of tens <b>Step 4</b> Groups of tens and ones <b>Step 5</b> Partition into tens and ones <b>Step 6</b> The number line to 50 <b>Step 7</b> Estimate on a number line to 50 <b>Step 8</b> 1 more, 1 less</p>	<p><b>Step 1</b> Count from 20 to 50 <b>Step 2</b> 20, 30, 40 and 50 <b>Step 3</b> Count by making groups of tens <b>Step 4</b> Groups of tens and ones <b>Step 5</b> Partition into tens and ones <b>Step 6</b> The number line to 50 <b>Step 7</b> Estimate on a number line to 50 <b>Step 8</b> 1 more, 1 less</p>	<p><b>Year 1 Pupils should be taught to</b> count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s given a number, identify 1 more and 1 less identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least read and write numbers from 1 to 20 in numerals and words</p> <p><b>Year 2 Pupils should be taught to</b> count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward recognise the place value of each digit in a two-digit number (tens, ones) identify, represent and estimate numbers using different representations, including the number line compare and order numbers from 0 up to 100; use and = signs read and write numbers to at least 100 in numerals and in words use place value and number facts to solve problems</p>





# Green Class - Autumn



## Number - Place Value

Small Steps Year 1	Small Steps Year 2	National Curriculum (EOY)
<p><b>Step 1:</b> Sort objects</p> <p><b>Step 2:</b> Count objects</p> <p><b>Step 3:</b> Count objects from a larger group</p> <p><b>Step 4:</b> Represent objects</p> <p><b>Step 5:</b> Recognise numbers as words</p> <p><b>Step 6:</b> Count on from any number</p> <p><b>Step 7:</b> 1 more</p> <p><b>Step 8:</b> Count backwards within 10</p> <p><b>Step 9:</b> 1 less</p> <p><b>Step 10:</b> Compare groups by matching</p> <p><b>Step 11:</b> Fewer, more, same</p> <p><b>Step 12:</b> Less than, greater than, equal to</p> <p><b>Step 13:</b> Compare numbers</p> <p><b>Step 14:</b> Order objects and numbers</p> <p><b>Step 15:</b> The number line</p>	<p><b>Step 1</b> Numbers to 20</p> <p><b>Step 2</b> Count objects to 100 by making 10s</p> <p><b>Step 3</b> Recognise tens and ones</p> <p><b>Step 4</b> Use a place value chart</p> <p><b>Step 5</b> Partition numbers to 100</p> <p><b>Step 6</b> Write numbers to 100 in words</p> <p><b>Step 7</b> Flexibly partition numbers to 100</p> <p><b>Step 8</b> Write numbers to 100 in expanded form</p> <p><b>Step 9</b> 10s on the number line to 100</p> <p><b>Step 10</b> 10s and 1s on the number line to 100</p> <p><b>Step 11</b> Estimate numbers on a number line</p> <p><b>Step 12</b> Compare objects</p> <p><b>Step 13</b> Compare numbers</p> <p><b>Step 14</b> Order objects and numbers</p> <p><b>Step 15</b> Count in 2s, 5s and 10s</p> <p><b>Step 16</b> Count in 3s</p>	<p><b>Year 1 Pupils should be taught to</b></p> <p>count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number</p> <p>count, read and write numbers to 100 in numerals;</p> <p>count in multiples of 2s, 5s and 10s</p> <p>given a number, identify 1 more and 1 less</p> <p>identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least</p> <p>read and write numbers from 1 to 20 in numerals and words</p> <p><b>Year 2 Pupils should be taught to</b></p> <p>count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward</p> <p>recognise the place value of each digit in a two-digit number (tens, ones)</p> <p>identify, represent and estimate numbers using different representations, including the number line</p> <p>compare and order numbers from 0 up to 100; use and = signs</p> <p>read and write numbers to at least 100 in numerals and in words</p> <p>use place value and number facts to solve problems</p>



# Green Class - Spring



## Measurement - Length and Height

Small Steps Year 1	Small Steps Year 2	National Curriculum (EOY)
<p><b>Step 1</b> Compare lengths and heights <b>Step 2</b> Measure length using objects <b>Step 3</b> Measure length in centimetre</p>	<p><b>Step 1</b> Measure in centimetres <b>Step 2</b> Measure in metres <b>Step 3</b> Compare lengths and heights <b>Step 4</b> Order lengths and heights <b>Step 5</b> Four operations with lengths and heights</p>	<p><b>Year 1 Pupils should be taught to:</b></p> <p>compare, describe and solve practical problems for: lengths and heights [for example, long/short, longer/shorter, tall/short, double/half] measure and begin to record the following: lengths and heights</p> <p><b>Year 2 -Pupils should be taught to:</b></p> <p>choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels compare and order lengths, mass, volume/capacity and record the results using &gt;, &lt; and =</p>



# Green Class - Spring



## Measurement - Mass and Volume (Including temperature Year 2)

Small Steps Year 1	Small Steps Year 2	National Curriculum (EOY)
<p><b>Step 1</b> Heavier and lighter</p> <p><b>Step 2</b> Measure mass</p> <p><b>Step 3</b> Compare mass</p> <p><b>Step 4</b> Full and empty</p> <p><b>Step 5</b> Compare volume</p> <p><b>Step 6</b> Measure capacity</p> <p><b>Step 7</b> Compare capacity</p>	<p><b>Step 1</b> Measure in centimetres</p> <p><b>Step 2</b> Measure in metres</p> <p><b>Step 3</b> Compare lengths and heights</p> <p><b>Step 4</b> Order lengths and heights</p> <p><b>Step 5</b> Four operations with lengths and heights</p>	<p><b>Year 1 Pupils should be taught to:</b></p> <p>compare, describe and solve practical problems for:</p> <p>mass/weight [for example, heavy/light, heavier than, lighter than]</p> <p>capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]</p> <p>measure and begin to record the following:</p> <p>mass/weight capacity and volume</p> <p><b>Year 2 -Pupils should be taught to:</b></p> <p>choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels</p> <p>compare and order lengths, mass, volume/capacity and record the results using &gt;, &lt; and =</p>



# Green Class - Spring



## Statistics

Small Steps Year 1	Small Steps Year 2	National Curriculum (EOY)
	<p><b>Step 1</b> Make tally charts <b>Step 2</b> Tables <b>Step 3</b> Block diagrams <b>Step 4</b> Draw pictograms (1-1) <b>Step 5</b> Interpret pictograms (1-1) <b>Step 6</b> Draw pictograms (2, 5 and 10) <b>Step 7</b> Interpret pictograms (2, 5 and 10)</p>	<p><b>Year 2 -Pupils should be taught to:</b></p> <p>interpret and construct simple pictograms, tally charts, block diagrams and simple tables ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity ask and answer questions about totalling and comparing categorical data.</p>



# Green Class - Spring



## Number - Multiplication and Division

Small Steps Year 1	Small Steps Year 2	National Curriculum (EOY)
<p><b>Step 1</b> Count in 2s  <b>Step 2</b> Count in 10s  <b>Step 3</b> Count in 5s  <b>Step 4</b> Recognise equal groups  <b>Step 5</b> Add equal groups  <b>Step 6</b> Make arrays  <b>Step 7</b> Make doubles  <b>Step 8</b> Make equal groups - grouping  <b>Step 9</b> Make equal groups - sharing</p>	<p><b>Step 1</b> Recognise equal groups  <b>Step 2</b> Make equal groups  <b>Step 3</b> Add equal groups  <b>Step 4</b> Introduce the multiplication symbol  <b>Step 5</b> Multiplication sentences  <b>Step 6</b> Use arrays  <b>Step 7</b> Make equal groups – grouping  <b>Step 8</b> Make equal groups – sharing  <b>Step 9</b> The 2 times-table  <b>Step 10</b> Divide by 2  <b>Step 11</b> Doubling and halving  <b>Step 12</b> Odd and even numbers  <b>Step 13</b> The 10 times-table  <b>Step 14</b> Divide by 10  <b>Step 15</b> The 5 times-table  <b>Step 16</b> Divide by 5  <b>Step 17</b> The 5 and 10 times-tables</p>	<p>Year 1 Pupils should be taught to:</p> <p>solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher</p> <p>Year 2 -Pupils should be taught to:</p> <p>recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</p> <p>calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (<math>=</math>) signs</p> <p><input type="checkbox"/> show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</p> <p>solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</p>



# Green Class - Summer



## Number Fractions

Small Steps Year 1	Small Steps Year 2	National Curriculum (EOY)
<p><b>Step 1</b> Recognise a half of an object or a shape</p> <p><b>Step 2</b> Find a half of an object or a shape</p> <p><b>Step 3</b> Recognise a half of a quantity</p> <p><b>Step 4</b> Find a half of a quantity</p> <p><b>Step 5</b> Recognise a quarter of an object or a shape</p> <p><b>Step 6</b> Find a quarter of an object or a shape</p> <p><b>Step 7</b> Recognise a quarter of a quantity</p> <p><b>Step 8</b> Find a quarter of a quantity</p>	<p><b>Step 1</b> Introduction to parts and whole</p> <p><b>Step 2</b> Equal and unequal parts</p> <p><b>Step 3</b> Recognise a half</p> <p><b>Step 4</b> Find a half</p> <p><b>Step 5</b> Recognise a quarter</p> <p><b>Step 6</b> Find a quarter</p> <p><b>Step 7</b> Recognise a third</p> <p><b>Step 8</b> Find a third</p> <p><b>Step 9</b> Find the whole</p> <p><b>Step 10</b> Unit fractions</p> <p><b>Step 11</b> Non-unit fractions</p> <p><b>Step 12</b> Recognise the equivalence of a half and two quarters</p> <p><b>Step 13</b> Recognise three-quarters</p> <p><b>Step 14</b> Find three-quarters</p> <p><b>Step 15</b> Count in fractions up to a whole</p>	<p>Year 1 -Pupils should be taught to</p> <p>recognise, find and name a half as one of two equal parts of an object, shape or quantity</p> <p>recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.</p> <p>Year 2 -Pupils should be taught to:</p> <p>recognise, find, name and write fractions <math>\frac{1}{3}</math> <math>\frac{2}{4}</math> and <math>\frac{3}{4}</math> of a length, shape, set of objects or quantity</p> <p>write simple fractions for example, <math>\frac{1}{2}</math> of 6 = 3 and recognise the equivalence of <math>\frac{2}{4}</math> and <math>\frac{1}{2}</math> .</p>



# Green Class - Summer



## Geometry: Position and direction

Small Steps Year 1	Small Steps Year 2	National Curriculum (EOY)
<p><b>Step 1</b> Describe turns</p> <p><b>Step 2</b> Describe position - left and right</p> <p><b>Step 3</b> Describe position - forwards and backwards</p> <p><b>Step 4</b> Describe position - above and below</p> <p><b>Step 5</b> Ordinal numbers</p>	<p><b>Step 1</b> Language of position</p> <p><b>Step 2</b> Describe movement</p> <p><b>Step 3</b> Describe turns</p> <p><b>Step 4</b> Describe movement and turns</p> <p><b>Step 5</b> Shape patterns with turns</p>	<p><b>Year 1 -Pupils should be taught to</b></p> <p>describe position, direction and movement, including whole, half, quarter and three quarter turns.</p> <p><b>Year 2 -Pupils should be taught to:</b></p> <p>order and arrange combinations of mathematical objects in patterns and sequences use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise).</p>



# Green Class - Summer



## Measurement - Money

Small Steps Year 1	Small Steps Year 2	National Curriculum (EOY)
<p><b>Step 1</b> Unitising</p> <p><b>Step 2</b> Recognise coins</p> <p><b>Step 3</b> Recognise notes</p> <p><b>Step 4</b> Count in coin</p>	<p><b>Step 1</b> Count money - pence</p> <p><b>Step 2</b> Count money - pounds (notes and coins)</p> <p><b>Step 3</b> Count money - pounds and pence</p> <p><b>Step 4</b> Choose notes and coins</p> <p><b>Step 5</b> Make the same amount</p> <p><b>Step 6</b> Compare amounts of money</p> <p><b>Step 7</b> Calculate with money</p> <p><b>Step 8</b> Make a pound</p>	<p><b>Year 1 -Pupils should be taught to</b></p> <p>recognise and know the value of different denominations of coins and notes</p> <p><b>Year 2 -Pupils should be taught to:</b></p> <p>recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value find different combinations of coins that equal the same amounts of money solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</p>





# Green Class - Summer



## Measurement - Time

Small Steps Year 1	Small Steps Year 2	National Curriculum (EOY)
<p><b>Step 1</b> Before and after</p> <p><b>Step 2</b> Days of the week</p> <p><b>Step 3</b> Months of the year</p> <p><b>Step 4</b> Hours, minutes and seconds</p> <p><b>Step 5</b> Tell the time to the hour</p> <p><b>Step 6</b> Tell the time to the half hour</p>	<p><b>Step 1</b> O'clock and half past</p> <p><b>Step 2</b> Quarter past and quarter to</p> <p><b>Step 3</b> Tell time past the hour</p> <p><b>Step 4</b> Tell time to the hour</p> <p><b>Step 5</b> Tell the time to 5 minutes</p> <p><b>Step 6</b> Minutes in an hour</p> <p><b>Step 7</b> Hours in a day</p>	<p><b>Year 1 -Pupils should be taught to</b></p> <p>measure and begin to record the following time (hours, minutes, seconds)</p> <p>sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]</p> <p>recognise and use language relating to dates, including days of the week, weeks, months and years</p> <p>tell the time to the hour and half past the hour and draw the hands on a clock face to show these times</p> <p><b>Year 2 -Pupils should be taught to:</b></p> <p>compare and sequence intervals of time tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times</p> <p>know the number of minutes in an hour and the number of hours in a day.</p>



# Blue Class - Autumn



## Number - Place Value

Small Steps	National Curriculum (EOY)
<p><b>Step 1</b> Numbers to 20</p> <p><b>Step 2</b> Count objects to 100 by making 10s</p> <p><b>Step 3</b> Recognise tens and ones</p> <p><b>Step 4</b> Use a place value chart</p> <p><b>Step 5</b> Partition numbers to 100</p> <p><b>Step 6</b> Write numbers to 100 in words</p> <p><b>Step 7</b> Flexibly partition numbers to 100</p> <p><b>Step 8</b> Write numbers to 100 in expanded form</p> <p><b>Step 9</b> 10s on the number line to 100</p> <p><b>Step 10</b> 10s and 1s on the number line to 100</p> <p><b>Step 11</b> Estimate numbers on a number line</p> <p><b>Step 12</b> Compare objects</p> <p><b>Step 13</b> Compare numbers</p> <p><b>Step 14</b> Order objects and numbers</p> <p><b>Step 15</b> Count in 2s, 5s and 10s</p> <p><b>Step 16</b> Count in 3s</p>	<p><b>Pupils should be taught to:</b></p> <p>count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward</p> <p>recognise the place value of each digit in a two-digit number (tens, ones)</p> <p>identify, represent and estimate numbers using different representations, including the number line</p> <p>compare and order numbers from 0 up to 100; use and = signs</p> <p>read and write numbers to at least 100 in numerals and in words</p> <p>use place value and number facts to solve problems</p>



# Blue Class - Autumn



## Number - Addition and Subtraction

Small Steps	National Curriculum (EOY)
<p><b>Step 1</b> Bonds to 10 <b>Step 2</b> Fact families - addition and subtraction bonds within 20 <b>Step 3</b> Related facts <b>Step 4</b> Bonds to 100 (tens) <b>Step 5</b> Add and subtract 1s <b>Step 6</b> Add by making 10 <b>Step 7</b> Add three 1-digit numbers <b>Step 8</b> Add to the next 10 <b>Step 9</b> Add across a 10 <b>Step 10</b> Subtract across 10 <b>Step 11</b> Subtract from a 10 <b>Step 12</b> Subtract a 1-digit number from a 2-digit number (across a 10) <b>Step 13</b> 10 more, 10 less <b>Step 14</b> Add and subtract 10s <b>Step 15</b> Add two 2-digit numbers (not across a 10) <b>Step 16</b> Add two 2-digit numbers (across a 10) <b>Step 17</b> Subtract two 2-digit numbers (not across a 10) <b>Step 18</b> Subtract two 2-digit numbers (across a 10) <b>Step 19</b> Mixed addition and subtraction <b>Step 20</b> Compare number sentences <b>Step 21</b> Missing number problems</p>	<p><b>Pupils should be taught to:</b></p> <p>solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures applying their increasing knowledge of mental and written methods recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones a two-digit number and tens two two-digit numbers adding three one-digit numbers show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.</p>



# Blue Class - Autumn



<u>Geometry - Shape</u>	
Small Steps	National Curriculum (EOY)
<p><b>Step 1</b> Recognise 2-D and 3-D shapes <b>Step 2</b> Count sides on 2-D shapes <b>Step 3</b> Count vertices on 2-D shapes <b>Step 4</b> Draw 2-D shapes <b>Step 5</b> Lines of symmetry on shapes <b>Step 6</b> Use lines of symmetry to complete shapes <b>Step 7</b> Sort 2-D shapes <b>Step 8</b> Count faces on 3-D shapes <b>Step 9</b> Count edges on 3-D shapes <b>Step 10</b> Count vertices on 3-D shapes <b>Step 11</b> Sort 3-D shapes <b>Step 12</b> Make patterns with 2-D and 3-D shapes</p>	<p><b>Pupils should be taught to:</b></p> <p>identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] compare and sort common 2-D and 3-D shapes and everyday objects.</p>



# Blue Class - Spring



## Measurement - Money

Small Steps	National Curriculum (EOY)
<p><b>Step 1</b> Count money - pence</p> <p><b>Step 2</b> Count money - pounds (notes and coins)</p> <p><b>Step 3</b> Count money - pounds and pence</p> <p><b>Step 4</b> Choose notes and coins</p> <p><b>Step 5</b> Make the same amount</p> <p><b>Step 6</b> Compare amounts of money</p> <p><b>Step 7</b> Calculate with money</p> <p><b>Step 8</b> Make a pound</p>	<p><b>Pupils should be taught to:</b></p> <p>recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</p> <p>find different combinations of coins that equal the same amounts of money</p> <p>solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</p>



# Blue Class - Spring



## Number - Multiplication and division

Small Steps	National Curriculum (EOY)
<p><b>Step 1</b> Recognise equal groups <b>Step 2</b> Make equal groups <b>Step 3</b> Add equal groups <b>Step 4</b> Introduce the multiplication symbol <b>Step 5</b> Multiplication sentences <b>Step 6</b> Use arrays <b>Step 7</b> Make equal groups – grouping <b>Step 8</b> Make equal groups – sharing <b>Step 9</b> The 2 times-table <b>Step 10</b> Divide by 2 <b>Step 11</b> Doubling and halving <b>Step 12</b> Odd and even numbers <b>Step 13</b> The 10 times-table <b>Step 14</b> Divide by 10 <b>Step 15</b> The 5 times-table <b>Step 16</b> Divide by 5 <b>Step 17</b> The 5 and 10 times-tables</p>	<p><b>Pupils should be taught to:</b></p> <p>recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (=) signs □ show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</p>



# Blue Class - Spring



## Measurement - Length and Height

Small Steps	National Curriculum (EOY)
<p><b>Step 1</b> Measure in centimetres <b>Step 2</b> Measure in metres <b>Step 3</b> Compare lengths and heights <b>Step 4</b> Order lengths and heights <b>Step 5</b> Four operations with lengths and heights</p>	<p><b>Pupils should be taught to:</b></p> <p>choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels</p> <p>compare and order lengths, mass, volume/capacity and record the results using &gt;, &lt; and =</p>



# Blue Class - Spring



## Measurement - Mass, Capacity and Temperature

Small Steps	National Curriculum (EOY)
<p><b>Step 1</b> Measure in centimetres <b>Step 2</b> Measure in metres <b>Step 3</b> Compare lengths and heights <b>Step 4</b> Order lengths and heights <b>Step 5</b> Four operations with lengths and heights</p>	<p><b>Pupils should be taught to:</b></p> <p>choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (<math>^{\circ}\text{C}</math>); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels</p> <p>compare and order lengths, mass, volume/capacity and record the results using <math>&gt;</math>, <math>&lt;</math> and <math>=</math></p>





# Blue Class - Summer



## Number - Fractions

### Small Steps

- Step 1** Introduction to parts and whole
- Step 2** Equal and unequal parts
- Step 3** Recognise a half
- Step 4** Find a half
- Step 5** Recognise a quarter
- Step 6** Find a quarter
- Step 7** Recognise a third
- Step 8** Find a third
- Step 9** Find the whole
- Step 10** Unit fractions
- Step 11** Non-unit fractions
- Step 12** Recognise the equivalence of a half and two quarters
- Step 13** Recognise three-quarters
- Step 14** Find three-quarters
- Step 15** Count in fractions up to a whole

### National Curriculum (EOY)

Pupils should be taught to:

recognise, find, name and write fractions  $\frac{1}{3}$   $\frac{2}{4}$  and  $\frac{3}{4}$  of a length, shape, set of objects or quantity

write simple fractions for example,  $\frac{1}{2}$  of 6 = 3 and recognise the equivalence of  $\frac{2}{4}$  and  $\frac{1}{2}$  .



# Blue Class - Summer



## Measurement - Time

### Small Steps

- Step 1** O'clock and half past
- Step 2** Quarter past and quarter to
- Step 3** Tell time past the hour
- Step 4** Tell time to the hour
- Step 5** Tell the time to 5 minutes
- Step 6** Minutes in an hour
- Step 7** Hours in a day

### National Curriculum (EOY)

**Pupils should be taught to:**

compare and sequence intervals of time tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times

know the number of minutes in an hour and the number of hours in a day



# Blue Class - Summer



## Statistics

### Small Steps

- Step 1** Make tally charts
- Step 2** Tables
- Step 3** Block diagrams
- Step 4** Draw pictograms (1-1)
- Step 5** Interpret pictograms (1-1)
- Step 6** Draw pictograms (2, 5 and 10)
- Step 7** Interpret pictograms (2, 5 and 10)

### National Curriculum (EOY)

#### **Pupils should be taught to:**

interpret and construct simple pictograms, tally charts, block diagrams and simple tables ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity

ask and answer questions about totalling and comparing categorical data.



# Blue Class - Summer



## Geometry - Position and Direction

### Small Steps

**Step 1** Language of position

**Step 2** Describe movement

**Step 3** Describe turns

**Step 4** Describe movement and turns

**Step 5** Shape patterns with turns

### National Curriculum (EOY)

**Pupils should be taught to:**

order and arrange combinations of mathematical objects in patterns and sequences

use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anticlockwise).



# Orange Class - Autumn



## Number - Place Value

### Small Steps

- Step 1** Represent numbers to 100
- Step 2** Partition numbers to 100
- Step 3** Number line to 100
- Step 4** Hundreds
- Step 5** Represent numbers to 1,000
- Step 6** Partition numbers to 1,000
- Step 7** Flexible partitioning of numbers to 1,000
- Step 8** Hundreds, tens and ones
- Step 9** Find 1, 10 or 100 more or less
- Step 10** Number line to 1,000
- Step 11** Estimate on a number line to 1,000
- Step 12** Compare numbers to 1,000
- Step 13** Order numbers to 1,000
- Step 14** Count in 50s

### National Curriculum (EOY)

#### **Pupils should be taught to:**

count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number  
recognise the place value of each digit in a three-digit number (hundreds, tens, ones)

compare and order numbers up to 1000

identify, represent and estimate numbers using different representations

read and write numbers up to 1000 in numerals and in words  
solve number problems and practical problems involving these ideas



# Orange Class - Autumn



## Number - Addition and Subtraction

### Small Steps

- Step 1** Apply number bonds within 10
- Step 2** Add and subtract 1s
- Step 3** Add and subtract 10s
- Step 4** Add and subtract 100s
- Step 5** Spot the pattern
- Step 6** Add 1s across a 10
- Step 7** Add 10s across a 100
- Step 8** Subtract 1s across a 10
- Step 9** Subtract 10s across a 100
- Step 10** Make connections
- Step 11** Add two numbers (no exchange)
- Step 12** Subtract two numbers (no exchange)
- Step 13** Add two numbers (across a 10)
- Step 14** Add two numbers (across a 100)
- Step 15** Subtract two numbers (across a 10)
- Step 16** Subtract two numbers (across a 100)
- Step 17** Add 2-digit and 3-digit numbers
- Step 18** Subtract a 2-digit number from a 3-digit number
- Step 19** Complements to 100
- Step 20** Estimate answers
- Step 21** Inverse operations
- Step 22** Make decisions

### National Curriculum (EOY)

#### **Pupils should be taught to:**

add and subtract numbers mentally, including:

- a three-digit number and ones
- a three-digit number and tens
- a three-digit number and hundreds

add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction

estimate the answer to a calculation and use inverse operations to check answers

solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.



# Orange Class - Autumn



## Number - Multiplication and Division A

### Small Steps

- Step 1** Multiplication - equal groups
- Step 2** Use arrays
- Step 3** Multiples of 2
- Step 4** Multiples of 5 and 10
- Step 5** Sharing and grouping
- Step 6** Multiply by 3
- Step 7** Divide by 3
- Step 8** The 3 times-table
- Step 9** Multiply by 4
- Step 10** Divide by 4
- Step 11** The 4 times-table
- Step 12** Multiply by 8
- Step 13** Divide by 8
- Step 14** The 8 times-table
- Step 15** The 2, 4 and 8 times-tables

### National Curriculum (EOY)

#### **Pupils should be taught to:**

recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables

write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods

solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which  $n$  objects are connected to  $m$  objects. .



# Orange Class - Spring



## Number - Multiplication and Division B

### Small Steps

- Step 1** Multiples of 10
- Step 2** Related calculations
- Step 3** Reasoning about multiplication
- Step 4** Multiply a 2-digit number by a 1-digit number - no exchange
- Step 5** Multiply a 2-digit number by a 1-digit number - with exchange
- Step 6** Link multiplication and division
- Step 7** Divide a 2-digit number by a 1-digit number - no exchange
- Step 8** Divide a 2-digit number by a 1-digit number - flexible partitioning
- Step 9** Divide a 2-digit number by a 1-digit number - with remainders
- Step 10** Scaling
- Step 11** How many ways?

### National Curriculum (EOY)

#### **Pupils should be taught to:**

recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables

write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods

solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which  $n$  objects are connected to  $m$  objects.





# Orange Class - Spring



## Measurement - Length and Perimeter

### Small Steps

- Step 1** Measure in metres and centimetres
- Step 2** Measure in millimetres
- Step 3** Measure in centimetres and millimetres
- Step 4** Metres, centimetres and millimetres
- Step 5** Equivalent lengths (metres and centimetres)
- Step 6** Equivalent lengths (centimetres and millimetres)
- Step 7** Compare lengths
- Step 8** Add lengths
- Step 9** Subtract lengths
- Step 10** What is perimeter?
- Step 11** Measure perimeter
- Step 12** Calculate perimeter

### National Curriculum (EOY)

**Pupils should be taught to:**

measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)

measure the perimeter of simple 2-D shapes .



# Orange Class - Spring



## Number - Fractions A

### Small Steps

- Step 1** Understand the denominators of unit fractions
- Step 2** Compare and order unit fractions
- Step 3** Understand the numerators of non-unit fractions
- Step 4** Understand the whole
- Step 5** Compare and order non-unit fractions
- Step 6** Fractions and scales
- Step 7** Fractions on a number line
- Step 8** Count in fractions on a number line

### National Curriculum (EOY)

**Pupils should be taught to:**

count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10

recognise, find and write fractions of a discrete set of objects: unit fractions and non unit fractions with small denominators

recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators

recognise and show, using diagrams, equivalent fractions with small denominators

add and subtract fractions with the same denominator within one whole [for example,  $5/7 + 1/7 = 6/7$ ]

compare and order unit fractions, and fractions with the same denominators

solve problems that involve all of the above



# Orange Class - Spring



## Measurement - Mass and Capacity

### Small Steps

- Step 1** Use scales
- Step 2** Measure mass in grams
- Step 3** Measure mass in kilograms and grams
- Step 4** Equivalent masses (kilograms and grams)
- Step 5** Compare mass
- Step 6** Add and subtract mass
- Step 7** Measure capacity and volume in millilitres
- Step 8** Measure capacity and volume in litres and millilitres
- Step 9** Equivalent capacities and volumes (litres and millilitres)
- Step 10** Compare capacity and volume
- Step 11** Add and subtract capacity and volume

### National Curriculum (EOY)

#### **Pupils should be taught to:**

measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) .



# Orange Class - Summer



## Number - Fractions B

### Small Steps

- Step 1** Add fractions
- Step 2** Subtract fractions
- Step 3** Partition the whole
- Step 4** Unit fractions of a set of objects
- Step 5** Non-unit fractions of a set of objects
- Step 6** Reasoning with fractions of an amount

### National Curriculum (EOY)

#### **Pupils should be taught to:**

count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10

recognise, find and write fractions of a discrete set of objects: unit fractions and non unit fractions with small denominators

recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators

recognise and show, using diagrams, equivalent fractions with small denominators

add and subtract fractions with the same denominator within one whole [for example,  $5/7 + 1/7 = 6/7$ ]

compare and order unit fractions, and fractions with the same denominators

solve problems that involve all of the above



# Orange Class - Spring



## Measurement - Money

### Small Steps

**Step 1** Pounds and pence

**Step 2** Convert pounds and pence

**Step 3** Add money

**Step 4** Subtract money

**Step 5** Find change

### National Curriculum (EOY)

**Pupils should be taught to:**

add and subtract amounts of money to give change, using both £ and p in practical contexts



# Orange Class - Summer



## Measurement - Time

### Small Steps

- Step 1** Roman numerals to 12
- Step 2** Tell the time to 5 minutes
- Step 3** Tell the time to the minute
- Step 4** Read time on a digital clock
- Step 5** Use a.m. and p.m.
- Step 6** Years, months and days
- Step 7** Days and hours
- Step 8** Hours and minutes - use start and end times

### National Curriculum (EOY)

#### **Pupils should be taught to:**

tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks

estimate and read time with increasing accuracy to the nearest minute;

record and compare time in terms of seconds, minutes and hours;

use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight

know the number of seconds in a minute and the number of days in each month, year and leap year

compare durations of events [for example to calculate the time taken by particular events or tasks].



# Orange Class - Summer



## Geometry - Shape

### Small Steps

- Step 1** Turns and angles
- Step 2** Right angles
- Step 3** Compare angles
- Step 4** Measure and draw accurately
- Step 5** Horizontal and vertical
- Step 6** Parallel and perpendicular
- Step 7** Recognise and describe 2-D shapes
- Step 8 Draw polygons

### National Curriculum (EOY)

#### **Pupils should be taught to:**

draw 2-D shapes and make 3-D shapes using modelling materials;

recognise 3-D shapes in different orientations and describe them

recognise angles as a property of shape or a description of a turn

identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle

identify horizontal and vertical lines and pairs of perpendicular and parallel lines.



# Orange Class - Summer



## Statistics

### Small Steps

- Step 1** Interpret pictograms
- Step 2** Draw pictograms
- Step 3** Interpret bar charts
- Step 4** Draw bar charts
- Step 5** Collect and represent data
- Step 6** Two-way tables

### National Curriculum (EOY)

#### **Pupils should be taught to:**

interpret and present data using bar charts, pictograms and tables

solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.





# Lime Class - Autumn



## Number - Place Value

Small Steps Year 3	Small Steps Year 4	National Curriculum (EOY)
<p><b>Step 1</b> Represent numbers to 100  <b>Step 2</b> Partition numbers to 100  <b>Step 3</b> Number line to 100  <b>Step 4</b> Hundreds  <b>Step 5</b> Represent numbers to 1,000  <b>Step 6</b> Partition numbers to 1,000  <b>Step 7</b> Flexible partitioning of numbers to 1,000  <b>Step 8</b> Hundreds, tens and ones  <b>Step 9</b> Find 1, 10 or 100 more or less  <b>Step 10</b> Number line to 1,000  <b>Step 11</b> Estimate on a number line to 1,000  <b>Step 12</b> Compare numbers to 1,000  <b>Step 13</b> Order numbers to 1,000  <b>Step 14</b> Count in 50s</p>	<p><b>Step 1</b> Represent numbers to 1,000  <b>Step 2</b> Partition numbers to 1,000  <b>Step 3</b> Number line to 1,000  <b>Step 4</b> Thousands  <b>Step 5</b> Represent numbers to 10,000  <b>Step 6</b> Partition numbers to 10,000  <b>Step 7</b> Flexible partitioning of numbers to 10,000  <b>Step 8</b> Find 1, 10, 100, 1,000 more or less  <b>Step 9</b> Number line to 10,000  <b>Step 10</b> Estimate on a number line to 10,000  <b>Step 11</b> Compare numbers to 10,000  <b>Step 12</b> Order numbers to 10,000  <b>Step 13</b> Roman numerals  <b>Step 14</b> Round to the nearest 10  <b>Step 15</b> Round to the nearest 100  <b>Step 16</b> Round to the nearest 1,000  <b>Step 17</b> Round to the nearest 10, 100 or 1,000</p>	<p><b>Year 3 Pupils should be taught to</b>            count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number            recognise the place value of each digit in a three-digit number (hundreds, tens, ones)            compare and order numbers up to 1000            identify, represent and estimate numbers using different representations            read and write numbers up to 1000 in numerals and in words            solve number problems and practical problems involving these ideas</p> <p><b>Year 4 Pupils should be taught to:</b>            count in multiples of 6, 7, 9, 25 and 1000            find 1000 more or less than a given number            count backwards through zero to include negative numbers            recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)            order and compare numbers beyond 1000 □ identify, represent and estimate numbers using different representations            round any number to the nearest 10, 100 or 1000 Solve number and practical problems that involve all of the above and with increasingly large positive numbers            read Roman numerals to 100 (I to C) and know that over time</p>



# Lime Class - Autumn



## Number: Addition and Subtraction

Small Steps Year 3	Small Steps Year 4	National Curriculum (EOY)
<p><b>Step 1</b> Apply number bonds within 10</p> <p><b>Step 2</b> Add and subtract 1s</p> <p><b>Step 3</b> Add and subtract 10s</p> <p><b>Step 4</b> Add and subtract 100s</p> <p><b>Step 5</b> Spot the pattern</p> <p><b>Step 6</b> Add 1s across a 10</p> <p><b>Step 7</b> Add 10s across a 100</p> <p><b>Step 8</b> Subtract 1s across a 10</p> <p><b>Step 9</b> Subtract 10s across a 100</p> <p><b>Step 10</b> Make connections</p> <p><b>Step 11</b> Add two numbers (no exchange)</p> <p><b>Step 12</b> Subtract two numbers (no exchange)</p> <p><b>Step 13</b> Add two numbers (across a 10)</p> <p><b>Step 14</b> Add two numbers (across a 100)</p> <p><b>Step 15</b> Subtract two numbers (across a 10)</p> <p><b>Step 16</b> Subtract two numbers (across a 100)</p> <p><b>Step 17</b> Add 2-digit and 3-digit numbers</p> <p><b>Step 18</b> Subtract a 2-digit number from a 3-digit number</p> <p><b>Step 19</b> Complements to 100</p> <p><b>Step 20</b> Estimate answers</p> <p><b>Step 21</b> Inverse operations</p> <p><b>Step 22</b> Make decisions</p>	<p><b>Step 1</b> Add and subtract 1s, 10s, 100s and 1,000s</p> <p><b>Step 2</b> Add up to two 4-digit numbers - no exchange</p> <p><b>Step 3</b> Add two 4-digit numbers - one exchange</p> <p><b>Step 4</b> Add two 4-digit numbers - more than one exchange</p> <p><b>Step 5</b> Subtract two 4-digit numbers - no exchange</p> <p><b>Step 6</b> Subtract two 4-digit numbers - one exchange</p> <p><b>Step 7</b> Subtract two 4-digit numbers - more than one exchange</p> <p><b>Step 8</b> Efficient subtraction</p> <p><b>Step 9</b> Estimate answers</p> <p><b>Step 10</b> Checking strategies</p>	<p><b>Year 3 Pupils should be taught to</b>            add and subtract numbers mentally, including:            a three-digit number and ones            a three-digit number and tens            a three-digit number and hundreds            add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction            estimate the answer to a calculation and use inverse operations to check answers            solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction</p> <p><b>Year 4 Pupils should be taught to:</b>            add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate            estimate and use inverse operations to check answers to a calculation            solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</p>



# Lime Class– Autumn



## Number - Multiplication and Division A

Small Steps Year 3	Small Steps Year 4	National Curriculum (EOY)
<p><b>Step 1</b> Multiplication - equal groups</p> <p><b>Step 2</b> Use arrays</p> <p><b>Step 3</b> Multiples of 2</p> <p><b>Step 4</b> Multiples of 5 and 10</p> <p><b>Step 5</b> Sharing and grouping</p> <p><b>Step 6</b> Multiply by 3</p> <p><b>Step 7</b> Divide by 3</p> <p><b>Step 8</b> The 3 times-table</p> <p><b>Step 9</b> Multiply by 4</p> <p><b>Step 10</b> Divide by 4</p> <p><b>Step 11</b> The 4 times-table</p> <p><b>Step 12</b> Multiply by 8</p> <p><b>Step 13</b> Divide by 8</p> <p><b>Step 14</b> The 8 times-table</p> <p><b>Step 15</b> The 2, 4 and 8 times-tables</p>	<p><b>Step 1</b> Multiples of 3</p> <p><b>Step 2</b> Multiply and divide by 6</p> <p><b>Step 3</b> 6 times-table and division facts</p> <p><b>Step 4</b> Multiply and divide by 9</p> <p><b>Step 5</b> 9 times-table and division facts</p> <p><b>Step 6</b> The 3, 6 and 9 times-tables</p> <p><b>Step 7</b> Multiply and divide by 7</p> <p><b>Step 8</b> 7 times-table and division facts</p>	<p><b>Year 3 - Pupils should be taught to:</b>  recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables  write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods  solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. .</p> <p><b>Year 4 - Pupils should be taught to:</b>  recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math>  use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers  recognise and use factor pairs and commutativity in mental calculations  multiply two-digit and three-digit numbers by a one-digit number using formal written layout solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</p>



# Lime Class - Autumn



Measurement - Mass and capacity		
Small Steps Year 3	Small Steps Year 4	National Curriculum (EOY)
<p><b>Step 1</b> Use scales</p> <p><b>Step 2</b> Measure mass in grams</p> <p><b>Step 3</b> Measure mass in kilograms and grams</p> <p><b>Step 4</b> Equivalent masses (kilograms and grams)</p> <p><b>Step 5</b> Compare mass</p> <p><b>Step 6</b> Add and subtract mass</p> <p><b>Step 7</b> Measure capacity and volume in millilitres</p> <p><b>Step 8</b> Measure capacity and volume in litres and millilitres</p> <p><b>Step 9</b> Equivalent capacities and volumes (litres and millilitres)</p> <p><b>Step 10</b> Compare capacity and volume</p> <p><b>Step 11</b> Add and subtract capacity and volume</p>	<p><b>Step 1</b> Use scales</p> <p><b>Step 2</b> Measure mass in grams</p> <p><b>Step 3</b> Measure mass in kilograms and grams</p> <p><b>Step 4</b> Equivalent masses (kilograms and grams)</p> <p><b>Step 5</b> Compare mass</p> <p><b>Step 6</b> Add and subtract mass</p> <p><b>Step 7</b> Measure capacity and volume in millilitres</p> <p><b>Step 8</b> Measure capacity and volume in litres and millilitres</p> <p><b>Step 9</b> Equivalent capacities and volumes (litres and millilitres)</p> <p><b>Step 10</b> Compare capacity and volume</p> <p><b>Step 11</b> Add and subtract capacity and volume</p>	<p><b>Pupils should be taught to:</b></p> <p>measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) .</p>



# Lime Class– Spring



## Number - Multiplication and Division B

Small Steps Year 3	Small Steps Year 4	National Curriculum (EOY)
<p><b>Step 1</b> Multiples of 10</p> <p><b>Step 2</b> Related calculations</p> <p><b>Step 3</b> Reasoning about multiplication</p> <p><b>Step 4</b> Multiply a 2-digit number by a 1-digit number - no exchange</p> <p><b>Step 5</b> Multiply a 2-digit number by a 1-digit number - with exchange</p> <p><b>Step 6</b> Link multiplication and division</p> <p><b>Step 7</b> Divide a 2-digit number by a 1-digit number - no exchange</p> <p><b>Step 8</b> Divide a 2-digit number by a 1-digit number - flexible partitioning</p> <p><b>Step 9</b> Divide a 2-digit number by a 1-digit number - with remainders</p> <p><b>Step 10</b> Scaling</p> <p><b>Step 11</b> How many ways?</p>	<p><b>Step 1</b> Factor pairs</p> <p><b>Step 2</b> Use factor pairs</p> <p><b>Step 3</b> Multiply by 10</p> <p><b>Step 4</b> Multiply by 100</p> <p><b>Step 5</b> Divide by 10</p> <p><b>Step 6</b> Divide by 100</p> <p><b>Step 7</b> Related facts – multiplication and division</p> <p><b>Step 8</b> Informal written methods for multiplication</p>	<p><b>Year 3 -Pupils should be taught to:</b>  recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables  write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods  solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects. .</p> <p><b>Year 4 -Pupils should be taught to:</b>  recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math>  use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers  recognise and use factor pairs and commutativity in mental calculations  multiply two-digit and three-digit numbers by a one-digit number using formal written layout solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.</p>



# Lime Class - Spring



## Number: Fractions A (Year 3) Fractions (Year 4)

Small Steps Year 3	Small Steps Year 4	National Curriculum (EOY)
<p><b>Step 1</b> Understand the denominators of unit fractions</p> <p><b>Step 2</b> Compare and order unit fractions</p> <p><b>Step 3</b> Understand the numerators of non-unit fractions</p> <p><b>Step 4</b> Understand the whole</p> <p><b>Step 5</b> Compare and order non-unit fractions</p> <p><b>Step 6</b> Fractions and scales</p> <p><b>Step 7</b> Fractions on a number line</p> <p><b>Step 8</b> Count in fractions on a number line</p>	<p><b>Step 1</b> Understand the whole</p> <p><b>Step 2</b> Count beyond 1</p> <p><b>Step 3</b> Partition a mixed number</p> <p><b>Step 4</b> Number lines with mixed numbers</p> <p><b>Step 5</b> Compare and order mixed numbers</p> <p><b>Step 6</b> Understand improper fractions</p> <p><b>Step 7</b> Convert mixed numbers to improper fractions</p> <p><b>Step 8</b> Convert improper fractions to mixed numbers</p> <p><b>Step 9</b> Equivalent fractions on a number line</p> <p><b>Step 10</b> Equivalent fraction families</p> <p><b>Step 11</b> Add two or more fractions</p> <p><b>Step 12</b> Add fractions and mixed numbers</p> <p><b>Step 13</b> Subtract two fractions</p> <p><b>Step 14</b> Subtract from whole amounts</p> <p><b>Step 15</b> Subtract from mixed numbers</p>	<p><b>Year 3 Pupils should be taught to:</b>            count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10            recognise, find and write fractions of a discrete set of objects: unit fractions and non unit fractions with small denominators □ recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators            recognise and show, using diagrams, equivalent fractions with small denominators            add and subtract fractions with the same denominator within one whole [for example, <math>5/7 + 1/7 = 6/7</math>]            compare and order unit fractions, and fractions with the same denominators            solve problems that involve all of the above</p> <p><b>Year 4 Pupils should be taught to:</b>            recognise and show, using diagrams, families of common equivalent fractions            count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.            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            add and subtract fractions with the same denominator            recognise and write decimal equivalents of any number of tenths or hundredths</p>



# Lime Class - Spring



## Number - Fractions B Year 3 Decimals A and B (Year 4)

Small Steps Year 3	Small Steps Year 4	National Curriculum (EOY)
<p><b>Step 1</b> Add fractions</p> <p><b>Step 2</b> Subtract fractions</p> <p><b>Step 3</b> Partition the whole</p> <p><b>Step 4</b> Unit fractions of a set of objects</p> <p><b>Step 5</b> Non-unit fractions of a set of objects</p> <p><b>Step 6</b> Reasoning with fractions of an amount</p>	<p><b>Step 1</b> Tenths as fractions</p> <p><b>Step 2</b> Tenths as decimals</p> <p><b>Step 3</b> Tenths on a place value chart</p> <p><b>Step 4</b> Tenths on a number line</p> <p><b>Step 5</b> Divide a 1-digit number by 10</p> <p><b>Step 6</b> Divide a 2-digit number by 10</p> <p><b>Step 7</b> Hundredths as fractions</p> <p><b>Step 8</b> Hundredths as decimals</p> <p><b>Step 1</b> Make a whole with tenths</p> <p><b>Step 2</b> Make a whole with hundredths</p> <p><b>Step 3</b> Partition decimals</p> <p>Step 4 Flexibly partition decimals</p> <p><b>Step 5</b> Compare decimals</p> <p><b>Step 6</b> Order decimals</p> <p><b>Step 7</b> Round to the nearest whole number</p> <p><b>Step 8</b> Halves and quarters as decimals</p>	<p><b>Year 3 Pupils should be taught to:</b></p> <p>count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10</p> <p>recognise, find and write fractions of a discrete set of objects: unit fractions and non unit fractions with small denominators</p> <p>recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators</p> <p>recognise and show, using diagrams, equivalent fractions with small denominators</p> <p>add and subtract fractions with the same denominator within one whole [for example, <math>5/7 + 1/7 = 6/7</math>]</p> <p>compare and order unit fractions, and fractions with the same denominators</p> <p>solve problems that involve all of the above</p> <p><b>Year 4 Pupils should be taught to:</b></p> <p>recognise and show, using recognise and write decimal equivalents to <math>1/4</math>, <math>1/2</math>, <math>3/4</math> find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths</p> <p>round decimals with one decimal place to the nearest whole number</p> <p>compare numbers with the same number of decimal places up to two decimal places</p> <p>solve simple measure and money problems involving fractions and decimals to two decimal places</p>



# Lime Class– Summer



## Measurement - Length, Perimeter and Area (Year 4)

Small Steps Year 3	Small Steps Year 4	National Curriculum (EOY)
<p><b>Step 1</b> Measure in metres and centimetres</p> <p><b>Step 2</b> Measure in millimetres</p> <p><b>Step 3</b> Measure in centimetres and millimetres</p> <p><b>Step 4</b> Metres, centimetres and millimetres</p> <p><b>Step 5</b> Equivalent lengths (metres and centimetres)</p> <p><b>Step 6</b> Equivalent lengths (centimetres and millimetres)</p> <p><b>Step 7</b> Compare lengths</p> <p><b>Step 8</b> Add lengths</p> <p><b>Step 9</b> Subtract lengths</p> <p><b>Step 10</b> What is perimeter?</p> <p><b>Step 11</b> Measure perimeter</p> <p><b>Step 12</b> Calculate perimeter</p>	<p><b>Step 1</b> Measure in kilometres and metres</p> <p><b>Step 2</b> Equivalent lengths (kilometres and metres)</p> <p><b>Step 3</b> Perimeter on a grid</p> <p><b>Step 4</b> Perimeter of a rectangle</p> <p><b>Step 5</b> Perimeter of rectilinear shapes</p> <p><b>Step 6</b> Find missing lengths in rectilinear shapes</p> <p><b>Step 7</b> Calculate the perimeter of rectilinear shapes</p> <p><b>Step 8</b> Perimeter of regular polygons</p> <p><b>Step 1</b> What is area?</p> <p><b>Step 2</b> Count squares</p> <p><b>Step 3</b> Make shapes</p> <p><b>Step 4</b> Compare areas</p>	<p><b>Year 3 Pupils should be taught to:</b>            measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)            measure the perimeter of simple 2-D shapes .</p> <p><b>Year 4 Pupils should be taught to:</b>            Convert between different units of measure [for example, kilometre to metre; hour to minute]            measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres            find the area of rectilinear shapes by counting squares</p>





# Lime Class - Summer



## Measurement - Money

Small Steps Year 3	Small Steps Year 4	National Curriculum (EOY)
<p><b>Step 1</b> Pounds and pence <b>Step 2</b> Convert pounds and pence <b>Step 3</b> Add money <b>Step 4</b> Subtract money <b>Step 5</b> Find change</p>	<p><b>Step 1</b> Write money using decimals <b>Step 2</b> Convert between pounds and pence <b>Step 3</b> Compare amounts of money <b>Step 4</b> Estimate with money <b>Step 5</b> Calculate with money <b>Step 6</b> Solve problems with money</p>	<p><b>Year 3 Pupils should be taught to:</b></p> <p>add and subtract amounts of money to give change, using both £ and p in practical contexts</p> <p><b>Year 4 Pupils should be taught to:</b></p> <p>estimate, compare and calculate different measures, including money in pounds and pence</p>



# Lime Class - Summer



## Measurement - Time

Small Steps Year 3	Small Steps Year 4	National Curriculum (EOY)
<p><b>Step 1</b> Roman numerals to 12</p> <p><b>Step 2</b> Tell the time to 5 minutes</p> <p><b>Step 3</b> Tell the time to the minute</p> <p><b>Step 4</b> Read time on a digital clock</p> <p><b>Step 5</b> Use a.m. and p.m.</p> <p><b>Step 6</b> Years, months and days</p> <p><b>Step 7</b> Days and hours</p> <p><b>Step 8</b> Hours and minutes - use start and end times</p>	<p><b>Step 1</b> Years, months, weeks and days</p> <p><b>Step 2</b> Hours, minutes and seconds</p> <p><b>Step 3</b> Convert between analogue and digital times</p> <p><b>Step 4</b> Convert to the 24 hour clock</p> <p><b>Step 5</b> Convert from the 24 hour clock</p>	<p><b>Year 3 Pupils should be taught to:</b></p> <p>tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks</p> <p>estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight</p> <p>know the number of seconds in a minute and the number of days in each month, year and leap year</p> <p>compare durations of events [for example to calculate the time taken by particular events or tasks].</p> <p><b>Year 4 Pupils should be taught to:</b></p> <p>read, write and convert time between analogue and digital 12- and 24-hour clocks</p> <p>solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</p>



# Lime Class - Summer



## Geometry - Shape

Small Steps Year 3	Small Steps Year 4	National Curriculum (EOY)
<p><b>Step 1</b> Turns and angles</p> <p><b>Step 2</b> Right angles</p> <p><b>Step 3</b> Compare angles</p> <p><b>Step 4</b> Measure and draw accurately</p> <p><b>Step 5</b> Horizontal and vertical</p> <p><b>Step 6</b> Parallel and perpendicular</p> <p><b>Step 7</b> Recognise and describe 2-D shapes</p> <p><b>Step 8</b> Draw polygons</p>	<p><b>Step 1</b> Understand angles as turns</p> <p><b>Step 2</b> Identify angles</p> <p><b>Step 3</b> Compare and order angles</p> <p><b>Step 4</b> Triangles</p> <p><b>Step 5</b> Quadrilaterals</p> <p><b>Step 6</b> Polygons</p> <p><b>Step 7</b> Lines of symmetry</p> <p><b>Step 8</b> Complete a symmetric figure</p>	<p><b>Year 3 Pupils should be taught to:</b> draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them recognise angles as a property of shape or a description of a turn identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle identify horizontal and vertical lines and pairs of perpendicular and parallel lines.</p> <p><b>Year 4 Pupils should be taught to:</b> compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes identify acute and obtuse angles and compare and order angles up to two right angles by size identify lines of symmetry in 2-D shapes presented in different orientations complete a simple symmetric figure with respect to a specific line of symmetry.</p>



# Lime Class - Summer



## Statistics

Small Steps Year 3	Small Steps Year 4	National Curriculum (EOY)
<p><b>Step 1</b> Interpret pictograms</p> <p><b>Step 2</b> Draw pictograms</p> <p><b>Step 3</b> Interpret bar charts</p> <p><b>Step 4</b> Draw bar charts</p> <p><b>Step 5</b> Collect and represent data</p> <p><b>Step 6</b> Two-way tables</p>	<p><b>Step 1</b> Interpret charts</p> <p><b>Step 2</b> Comparison, sum and difference</p> <p><b>Step 3</b> Interpret line graphs</p> <p><b>Step 4</b> Draw line graphs</p>	<p><b>Year 3 Pupils should be taught to:</b> interpret and present data using bar charts, pictograms and tables solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.</p> <p><b>Year 4 Pupils should be taught to:</b> interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</p>



# Lime Class - Summer



## Geometry - Position and direction

Small Steps Year 3	Small Steps Year 4	National Curriculum (EOY)
	<p><b>Step 1</b> Describe position using coordinates</p> <p><b>Step 2</b> Plot coordinates</p> <p><b>Step 3</b> Draw 2-D shapes on a grid</p> <p><b>Step 4</b> Translate on a grid</p> <p><b>Step 5</b> Describe translation on a grid</p>	<p><b>Year 4 Pupils should be taught to:</b></p> <p>describe positions on a 2-D grid as coordinates in the first quadrant</p> <p>describe movements between positions as translations of a given unit to the left/right and up/down</p> <p>plot specified points and draw sides to complete a given polygon</p>



# Lilac Class - Autumn



## Number - Place Value

Small Steps Year 4	Small Steps Year 5	National Curriculum (EOY)
<p><b>Step 1</b> Represent numbers to 1,000  <b>Step 2</b> Partition numbers to 1,000  <b>Step 3</b> Number line to 1,000  <b>Step 4</b> Thousands  <b>Step 5</b> Represent numbers to 10,000  <b>Step 6</b> Partition numbers to 10,000  <b>Step 7</b> Flexible partitioning of numbers to 10,000  <b>Step 8</b> Find 1, 10, 100, 1,000 more or less  <b>Step 9</b> Number line to 10,000  <b>Step 10</b> Estimate on a number line to 10,000  <b>Step 11</b> Compare numbers to 10,000  <b>Step 12</b> Order numbers to 10,000  <b>Step 13</b> Roman numerals  <b>Step 14</b> Round to the nearest 10  <b>Step 15</b> Round to the nearest 100  <b>Step 16</b> Round to the nearest 1,000  <b>Step 17</b> Round to the nearest 10, 100 or 1,000</p>	<p><b>Step 1</b> Roman numerals to 1,000  <b>Step 2</b> Numbers to 10,000  <b>Step 3</b> Numbers to 100,000  <b>Step 4</b> Numbers to 1,000,000  <b>Step 5</b> Read and write numbers to 1,000,000  <b>Step 6</b> Powers of 10  <b>Step 7</b> 10/100/1,000/10,000/100,000 more or less  <b>Step 8</b> Partition numbers to 1,000,000  <b>Step 9</b> Number line to 1,000,000  <b>Step 10</b> Compare and order numbers to 100,000  <b>Step 11</b> Compare and order numbers to 1,000,000  <b>Step 12</b> Round to the nearest 10, 100 or 1,000  <b>Step 13</b> Round within 100,000  <b>Step 14</b> Round within 1,000,000</p>	<p><b>Year 4 Pupils should be taught to:</b>  count in multiples of 6, 7, 9, 25 and 1000  find 1000 more or less than a given number  count backwards through zero to include negative numbers  recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)  order and compare numbers beyond 1000 □ identify, represent and estimate numbers using different representations  round any number to the nearest 10, 100 or 1000  Solve number and practical problems that involve all of the above and with increasingly large positive numbers  read Roman numerals to 100 (I to C) and know that over time</p> <p><b>Year 5 Pupils should be taught to:</b>  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 interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero □ 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</p>



# Lilac Class - Autumn



## Number - Addition and Subtraction

Small Steps Year 4	Small Steps Year 5	National Curriculum (EOY)
<p><b>Step 1</b> Add and subtract 1s, 10s, 100s and 1,000s</p> <p><b>Step 2</b> Add up to two 4-digit numbers - no exchange</p> <p><b>Step 3</b> Add two 4-digit numbers - one exchange</p> <p><b>Step 4</b> Add two 4-digit numbers - more than one exchange</p> <p><b>Step 5</b> Subtract two 4-digit numbers - no exchange</p> <p><b>Step 6</b> Subtract two 4-digit numbers - one exchange</p> <p><b>Step 7</b> Subtract two 4-digit numbers - more than one exchange</p> <p><b>Step 8</b> Efficient subtraction</p> <p><b>Step 9</b> Estimate answers</p> <p><b>Step 10</b> Checking strategies</p>	<p><b>Step 1</b> Mental strategies</p> <p><b>Step 2</b> Add whole numbers with more than four digits</p> <p><b>Step 3</b> Subtract whole numbers with more than four digits</p> <p><b>Step 4</b> Round to check answers</p> <p><b>Step 5</b> Inverse operations (addition and subtraction)</p> <p><b>Step 6</b> Multi-step addition and subtraction problems</p> <p><b>Step 7</b> Compare calculations</p> <p><b>Step 8</b> Find missing numbers</p>	<p><b>Year 4 Pupils should be taught to:</b></p> <p>add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</p> <p>estimate and use inverse operations to check answers to a calculation</p> <p>solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.</p> <p><b>Year 5 Pupils should be taught to:</b></p> <p>add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)</p> <p>add and subtract numbers mentally with increasingly large numbers</p> <p>use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy</p> <p>solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</p>



# Lilac Class - Autumn



## Number - Multiplication and Division A

### Small Steps Year 4

- Step 1** Multiples of 3
- Step 2** Multiply and divide by 6
- Step 3** 6 times-table and division facts
- Step 4** Multiply and divide by 9
- Step 5** 9 times-table and division facts
- Step 6** The 3, 6 and 9 times-tables
- Step 7** Multiply and divide by 7
- Step 8** 7 times-table and division facts

### Small Steps Year 5

- Step 1** Mental strategies
- Step 2** Add whole numbers with more than four digits
- Step 3** Subtract whole numbers with more than four digits
- Step 4** Round to check answers
- Step 5** Inverse operations (addition and subtraction)
- Step 6** Multi-step addition and subtraction problems
- Step 7** Compare calculations
- Step 8** Find missing numbers





# Lilac Class - Autumn



## Number - Multiplication and Division A

### National Curriculum (EOY)

#### **Year 4 Pupils should be taught to:**

recall multiplication and division facts for multiplication tables up to  $12 \times 12$

use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers

recognise and use factor pairs and commutativity in mental calculations

multiply two-digit and three-digit numbers by a one-digit number using formal written layout solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.

#### **Year 5 Pupils should be taught to:**

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 (nonprime) numbers

establish whether a number up to 100 is prime and recall prime numbers up to 19

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

multiply and divide numbers mentally drawing upon known facts

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

multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

recognise and use square numbers and cube numbers, and the notation for squared ( 2 ) and cubed ( 3 )

solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes

solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign

solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.



# Lilac Class - Autumn



## Measurement - Length, area and perimeter

Small Steps Year 4	Small Steps Year 5	National Curriculum (EOY)
<p><b>Step 1</b> Measure in kilometres and metres</p> <p><b>Step 2</b> Equivalent lengths (kilometres and metres)</p> <p><b>Step 3</b> Perimeter on a grid</p> <p><b>Step 4</b> Perimeter of a rectangle</p> <p><b>Step 5</b> Perimeter of rectilinear shapes</p> <p><b>Step 6</b> Find missing lengths in rectilinear shapes</p> <p><b>Step 7</b> Calculate the perimeter of rectilinear shapes</p> <p><b>Step 8</b> Perimeter of regular polygons</p> <p><b>Step 1</b> What is area?</p> <p><b>Step 2</b> Count squares</p> <p><b>Step 3</b> Make shapes</p> <p><b>Step 4</b> Compare areas</p>	<p><b>Step 1</b> Perimeter of rectangles</p> <p><b>Step 2</b> Perimeter of rectilinear shapes</p> <p><b>Step 3</b> Perimeter of polygons</p> <p><b>Step 4</b> Area of rectangles</p> <p><b>Step 5</b> Area of compound shapes</p> <p><b>Step 6</b> Estimate area</p>	<p><b>Year 4 Pupils should be taught to:</b> Convert between different units of measure [for example, kilometre to metre; hour to minute] measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres find the area of rectilinear shapes by counting squares</p> <p><b>Year 5 Pupils should be taught to:</b> 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 (cm<sup>2</sup>) and square metres (m<sup>2</sup>) and estimate the area of irregular shapes</p>



# Lilac Class - Spring



## Number - Multiplication and Division B

Small Steps Year 4	Small Steps Year 5
<p><b>Step 1</b> Factor pairs <b>Step 2</b> Use factor pairs <b>Step 3</b> Multiply by 10 <b>Step 4</b> Multiply by 100 <b>Step 5</b> Divide by 10 <b>Step 6</b> Divide by 100 <b>Step 7</b> Related facts – multiplication and division <b>Step 8</b> Informal written methods for multiplication</p>	<p><b>Step 1</b> Multiply up to a 4-digit number by a 1-digit number <b>Step 2</b> Multiply a 2-digit number by a 2-digit number (area model) <b>Step 3</b> Multiply a 2-digit number by a 2-digit number <b>Step 4</b> Multiply a 3-digit number by a 2-digit number <b>Step 5</b> Multiply a 4-digit number by a 2-digit number <b>Step 6</b> Solve problems with multiplication <b>Step 7</b> Short division <b>Step 8</b> Divide a 4-digit number by a 1-digit number <b>Step 9</b> Divide with remainders <b>Step 10</b> Efficient division <b>Step 11</b> Solve problems with multiplication and division</p>



# Lilac Class - Spring



## Number - Multiplication and Division B

### National Curriculum (EOY)

#### **Year 4 Pupils should be taught to:**

recall multiplication and division facts for multiplication tables up to  $12 \times 12$

use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers

recognise and use factor pairs and commutativity in mental calculations

multiply two-digit and three-digit numbers by a one-digit number using formal written layout solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.

#### **Year 5 Pupils should be taught to:**

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 (nonprime) numbers

establish whether a number up to 100 is prime and recall prime numbers up to 19

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

multiply and divide numbers mentally drawing upon known facts

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

multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

recognise and use square numbers and cube numbers, and the notation for squared (  $2$  ) and cubed (  $3$  )

solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes

solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign

solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.



# Lilac Class - Spring



## Number - Fractions

Small Steps Year 4	Small Steps Year 5
<p><b>Step 1</b> Understand the whole</p> <p><b>Step 2</b> Count beyond 1</p> <p><b>Step 3</b> Partition a mixed number</p> <p><b>Step 4</b> Number lines with mixed numbers</p> <p><b>Step 5</b> Compare and order mixed numbers</p> <p><b>Step 6</b> Understand improper fractions</p> <p><b>Step 7</b> Convert mixed numbers to improper fractions</p> <p><b>Step 8</b> Convert improper fractions to mixed numbers</p> <p><b>Step 9</b> Equivalent fractions on a number line</p> <p><b>Step 10</b> Equivalent fraction families</p> <p><b>Step 11</b> Add two or more fractions</p> <p><b>Step 12</b> Add fractions and mixed numbers</p> <p><b>Step 13</b> Subtract two fractions</p> <p><b>Step 14</b> Subtract from whole amounts</p> <p><b>Step 15</b> Subtract from mixed numbers</p>	<p><b>Step 1</b> Find fractions equivalent to a unit fraction</p> <p><b>Step 2</b> Find fractions equivalent to a non-unit fraction</p> <p><b>Step 3</b> Recognise equivalent <b>fractions</b></p> <p><b>Step 4</b> Convert improper fractions to mixed numbers</p> <p><b>Step 5</b> Convert mixed numbers to improper fractions</p> <p><b>Step 6</b> Compare fractions less than 1</p> <p><b>Step 7</b> Order fractions less than 1</p> <p><b>Step 8</b> Compare and order fractions greater than 1</p> <p><b>Step 9</b> Add and subtract fractions with the same denominator</p> <p><b>Step 10</b> Add fractions within 1</p> <p><b>Step 11</b> Add fractions with total greater than 1</p> <p><b>Step 12</b> Add to a mixed number</p> <p><b>Step 13</b> Add two mixed numbers</p> <p><b>Step 14</b> Subtract fractions</p> <p><b>Step 15</b> Subtract from a mixed number</p> <p><b>Step 16</b> Subtract from a mixed number - breaking the whole</p> <p><b>Step 17</b> Subtract two mixed numbers</p> <p><b>Step 1</b> Multiply a unit fraction by an integer</p> <p><b>Step 2</b> Multiply a non-unit fraction by an integer</p> <p><b>Step 3</b> Multiply a mixed number by an integer</p> <p><b>Step 4</b> Calculate a fraction of a quantity</p> <p><b>Step 5</b> Fraction of an amount</p> <p><b>Step 6</b> Find the whole</p> <p><b>Step 7</b> Use fractions as operators</p>



# Lilac Class - Spring



## Number - Fractions

### National Curriculum (EOY)

#### **Year 4 Pupils should be taught to:**

recall multiplication and division facts for multiplication tables up to  $12 \times 12$

use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers

recognise and use factor pairs and commutativity in mental calculations

multiply two-digit and three-digit numbers by a one-digit number using formal written layout solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.

#### **Year 5 Pupils should be taught to:**

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 [for example,  $2/5 + 4/5 = 6/5 = 1 \frac{1}{5}$ ]

add and subtract fractions with the same denominator and denominators that are multiples of the same number

multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams



# Lilac Class - Spring



## Number - Decimals (Year 4) and Percentages (Year 5)

Small Steps Year 4	Small Steps Year 5	National Curriculum (EOY)
<p><b>Step 1</b> Tenths as fractions  <b>Step 2</b> Tenths as decimals  <b>Step 3</b> Tenths on a place value chart  <b>Step 4</b> Tenths on a number line  <b>Step 5</b> Divide a 1-digit number by 10  <b>Step 6</b> Divide a 2-digit number by 10  <b>Step 7</b> Hundredths as fractions  <b>Step 8</b> Hundredths as decimals  <b>Step 1</b> Make a whole with tenths  <b>Step 2</b> Make a whole with hundredths  <b>Step 3</b> Partition decimals            Step 4 Flexibly partition decimals  <b>Step 5</b> Compare decimals  <b>Step 6</b> Order decimals  <b>Step 7</b> Round to the nearest whole number  <b>Step 8</b> Halves and quarters as decimals</p>	<p><b>Step 1</b> Decimals up to 2 decimal places  <b>Step 2</b> Equivalent fractions and decimals (tenths)  <b>Step 3</b> Equivalent fractions and decimals (hundredths)  <b>Step 4</b> Equivalent fractions and decimals  <b>Step 5</b> Thousandths as fractions  <b>Step 6</b> Thousandths as decimals  <b>Step 7</b> Thousandths on a place value chart  <b>Step 1</b> Use known facts to add and subtract decimals within 1  <b>Step 2</b> Complements to 1  <b>Step 3</b> Add and subtract decimals across 1  <b>Step 4</b> Add decimals with the same number of decimal places  <b>Step 5</b> Subtract decimals with the same number of decimal places  <b>Step 6</b> Add decimals with different numbers of decimal places  <b>Step 7</b> Subtract decimals with different numbers of decimal places  <b>Step 8</b> Efficient strategies for adding and subtracting decimal</p>	<p><b>Year 4 Pupils should be taught to:</b>            recognise and show, using recognise and write decimal equivalents to <math>1/4</math>, <math>1/2</math>, <math>3/4</math> find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths            round decimals with one decimal place to the nearest whole number            compare numbers with the same number of decimal places up to two decimal places            solve simple measure and money problems involving fractions and decimals to two decimal places</p> <p><b>Year 5 Pupils should be taught to:</b>            numbers, supported by materials and diagrams            read and write decimal numbers as fractions [for example, <math>0.71 = 71/100</math>] 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 <math>1/2</math>, <math>1/4</math>, <math>1/5</math>, <math>2/5</math>, <math>4/5</math> and those fractions with a denominator of a multiple of 10 or 25.</p>



# Lilac Class - Summer



## Measurement - Money

Small Steps Year 4	Small Steps Year 5	National Curriculum (EOY)
<p><b>Step 1</b> Write money using decimals</p> <p><b>Step 2</b> Convert between pounds and pence</p> <p><b>Step 3</b> Compare amounts of money</p> <p><b>Step 4</b> Estimate with money</p> <p><b>Step 5</b> Calculate with money</p> <p><b>Step 6</b> Solve problems with money</p>	<p><b>Step 1</b> Write money using decimals</p> <p><b>Step 2</b> Convert between pounds and pence</p> <p><b>Step 3</b> Compare amounts of money</p> <p><b>Step 4</b> Estimate with money</p> <p><b>Step 5</b> Calculate with money</p> <p><b>Step 6</b> Solve problems with money</p>	<p><b>Year 4 Pupils should be taught to:</b></p> <p>estimate, compare and calculate different measures, including money in pounds and pence</p>





# Lilac Class - Summer



## Measurement - Time

Small Steps Year 4	Small Steps Year 5	National Curriculum (EOY)
<p><b>Step 1</b> Years, months, weeks and days</p> <p><b>Step 2</b> Hours, minutes and seconds</p> <p><b>Step 3</b> Convert between analogue and digital times</p> <p><b>Step 4</b> Convert to the 24 hour clock</p> <p><b>Step 5</b> Convert from the 24 hour clock</p>	<p><b>Step 1</b> Years, months, weeks and days</p> <p><b>Step 2</b> Hours, minutes and seconds</p> <p><b>Step 3</b> Convert between analogue and digital times</p> <p><b>Step 4</b> Convert to the 24 hour clock</p> <p><b>Step 5</b> Convert from the 24 hour clock</p>	<p><b>Year 4 Pupils should be taught to:</b></p> <p>read, write and convert time between analogue and digital 12- and 24-hour clocks</p> <p>solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days</p>



# Lilac Class - Summer



## Statistics

Small Steps Year 4	Small Steps Year 5	National Curriculum (EOY)
<p><b>Step 1</b> Interpret pictograms</p> <p><b>Step 2</b> Draw pictograms</p> <p><b>Step 3</b> Interpret bar charts</p> <p><b>Step 4</b> Draw bar charts</p> <p><b>Step 5</b> Collect and represent data</p> <p><b>Step 6</b> Two-way tables</p>	<p><b>Step 1</b> Draw line graphs</p> <p><b>Step 2</b> Read and interpret line graphs</p> <p><b>Step 3</b> Read and interpret tables</p> <p><b>Step 4</b> Two-way tables</p> <p><b>Step 5</b> Read and interpret timetables</p>	<p><b>Year 4 Pupils should be taught to:</b></p> <p>interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.</p> <p><b>Year 5 Pupils should be taught to:</b></p> <p>solve comparison, sum and difference problems using information presented in a line graph complete, read and interpret information in tables, including timetables.</p>



# Lilac Class - Summer



## Geometry - Shape

Small Steps Year 4	Small Steps Year 5	National Curriculum (EOY)
<p><b>Step 1</b> Understand angles as turns</p> <p><b>Step 2</b> Identify angles</p> <p><b>Step 3</b> Compare and order angles</p> <p><b>Step 4</b> Triangles</p> <p><b>Step 5</b> Quadrilaterals</p> <p><b>Step 6</b> Polygons</p> <p><b>Step 7</b> Lines of symmetry</p> <p><b>Step 8</b> Complete a symmetric figure</p>	<p><b>Step 1</b> Understand and use degrees</p> <p><b>Step 2</b> Classify angles</p> <p><b>Step 3</b> Estimate angles</p> <p>Step 4 Measure angles up to 180</p> <p><b>Step 5</b> Draw lines and angles accurately</p> <p><b>Step 6</b> Calculate angles around a point</p> <p><b>Step 7</b> Calculate angles on a straight line</p>	<p><b>Year 4 Pupils should be taught to:</b>            compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes            identify acute and obtuse angles and compare and order angles up to two right angles by size            identify lines of symmetry in 2-D shapes presented in different orientations            complete a simple symmetric figure with respect to a specific line of symmetry.</p> <p><b>Year 5 Pupils should be taught to:</b>            identify 3-D shapes, including cubes and other cuboids, from 2-D representations            know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles            draw given angles, and measure them in degrees (o ) identify:            angles at a point and one whole turn (total 360o ) □ angles at a point on a straight line and 2 1 a turn (total 180o )            other multiples of 90o            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</p>



# Lilac Class - Summer



## Geometry - Position and Direction

Small Steps Year 4	Small Steps Year 5	National Curriculum (EOY)
<p><b>Step 1</b> Describe position using coordinates</p> <p><b>Step 2</b> Plot coordinates</p> <p><b>Step 3</b> Draw 2-D shapes on a grid</p> <p><b>Step 4</b> Translate on a grid</p> <p><b>Step 5</b> Describe translation on a grid</p>	<p><b>Step 1</b> Read and plot coordinates</p> <p><b>Step 2</b> Problem solving with coordinates</p> <p><b>Step 3</b> Translation</p> <p><b>Step 4</b> Translation with coordinates</p> <p><b>Step 5</b> Lines of symmetry</p> <p><b>Step 6</b> Reflection in horizontal and vertical lines</p>	<p><b>Year 4 Pupils should be taught to:</b> describe positions on a 2-D grid as coordinates in the first quadrant describe movements between positions as translations of a given unit to the left/right and up/down plot specified points and draw sides to complete a given polygon</p> <p><b>Year 5 Pupils should be taught to:</b> 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.</p>



# Lilac Class - Summer



## Number - Negative numbers (Year 5)

Small Steps Year 4	Small Steps Year 5	National Curriculum (EOY)
	<p><b>Step 1</b> Understand negative numbers</p> <p><b>Step 2</b> Count through zero in 1s</p> <p><b>Step 3</b> Count through zero in multiples</p> <p><b>Step 4</b> Compare and order negative numbers</p> <p><b>Step 5</b> Find the difference</p>	<p><b>Year 5 Pupils should be taught to:</b></p> <p>interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero</p> <p>.</p>



# Lilac Class - Summer



## Measurement - Converting Units and Volume (Year 5)

Small Steps Year 4	Small Steps Year 5	National Curriculum (EOY)
	<p><b>Step 1</b> Kilograms and kilometres</p> <p><b>Step 2</b> Millimetres and millilitres</p> <p><b>Step 3</b> Convert units of length</p> <p><b>Step 4</b> Convert between metric and imperial units</p> <p><b>Step 5</b> Convert units of time</p> <p><b>Step 6</b> Calculate with timetable</p>	<p><b>Year 5 Pupils should be taught to:</b></p> <p>convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)</p> <p>understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints .</p>



# Turquoise Class - Autumn



## Number - Place Value

Small Steps Year 5	Small Steps Year 6	National Curriculum (EOY)
<p><b>Step 1</b> Roman numerals to 1,000</p> <p><b>Step 2</b> Numbers to 10,000</p> <p><b>Step 3</b> Numbers to 100,000</p> <p><b>Step 4</b> Numbers to 1,000,000</p> <p><b>Step 5</b> Read and write numbers to 1,000,000</p> <p><b>Step 6</b> Powers of 10</p> <p><b>Step 7</b> 10/100/1,000/10,000/100,000 more or less</p> <p><b>Step 8</b> Partition numbers to 1,000,000</p> <p><b>Step 9</b> Number line to 1,000,000</p> <p><b>Step 10</b> Compare and order numbers to 100,000</p> <p><b>Step 11</b> Compare and order numbers to 1,000,000</p> <p><b>Step 12</b> Round to the nearest 10, 100 or 1,000</p> <p><b>Step 13</b> Round within 100,000</p> <p><b>Step 14</b> Round within 1,000,000</p>	<p><b>Step 1</b> Numbers to 1,000,000</p> <p><b>Step 2</b> Numbers to 10,000,000</p> <p><b>Step 3</b> Read and write numbers to 10,000,000</p> <p><b>Step 4</b> Powers of 10</p> <p><b>Step 5</b> Number line to 10,000,000</p> <p><b>Step 6</b> Compare and order any integers</p> <p><b>Step 7</b> Round any integer</p> <p><b>Step 8</b> Negative numbers</p>	<p><b>Year 5 Pupils should be taught to:</b>            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 interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero            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</p> <p><b>Year 6 Pupils should be taught to:</b>            read, write, order and compare numbers up to 10 000 000 and determine the value of each digit            round any whole number to a required degree of accuracy            use negative numbers in context, and calculate intervals across zero            solve number and practical problems that involve all of the above</p>



# Turquoise Class - Autumn



## Number - Addition, Subtraction, Multiplication and Division

### Small Steps Year 5

- Step 1** Mental strategies
- Step 2** Add whole numbers with more than four digits
- Step 3** Subtract whole numbers with more than four digits
- Step 4** Round to check answers
- Step 5** Inverse operations (addition and subtraction)
- Step 6** Multi-step addition and subtraction problems
- Step 7** Compare calculations
- Step 8** Find missing numbers
- Step 1** Multiples of 3
- Step 2** Multiply and divide by 6
- Step 3** 6 times-table and division facts
- Step 4** Multiply and divide by 9
- Step 5** 9 times-table and division facts
- Step 6** The 3, 6 and 9 times-tables
- Step 7** Multiply and divide by 7
- Step 8** 7 times-table and division facts

### Small Steps Year 6

- Step 1** Add and subtract integers
- Step 2** Common factors
- Step 3** Common multiples
- Step 4** Rules of divisibility
- Step 5** Primes to 100
- Step 6** Square and cube numbers
- Step 7** Multiply up to a 4-digit number by a 2-digit number
- Step 8** Solve problems with multiplication
- Step 9** Short division
- Step 10** Division using factors
- Step 11** Introduction to long division
- Step 12** Long division with remainders
- Step 13** Solve problems with division
- Step 14** Solve multi-step problems
- Step 15** Order of operations
- Step 16** Mental calculations and estimation
- Step 17** Reason from known facts





# Turquoise Class - Autumn



## Number - Addition, Subtraction, Multiplication and Division

### National Curriculum (EOY)

#### **Year 5 Pupils should be taught to:**

- 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.
- (M) and recognise years written in Roman numerals
- 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 (nonprime) numbers
- establish whether a number up to 100 is prime and recall prime numbers up to 19
- 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
- multiply and divide numbers mentally drawing upon known facts
- 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
- multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- recognise and use square numbers and cube numbers, and the notation for squared ( 2 ) and cubed ( 3 )
- solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
- solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign
- solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

#### **Year 6 Pupils should be taught to:**

- multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
- divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
- divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
- perform mental calculations, including with mixed operations and large numbers
- identify common factors, common multiples and prime numbers
- use their knowledge of the order of operations to carry out calculations involving the four operations
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.



# Turquoise Class - Autumn



## Number - Fractions

### Small Steps Year 5

- Step 1** Find fractions equivalent to a unit fraction
- Step 2** Find fractions equivalent to a non-unit fraction
- Step 3** Recognise equivalent **fractions**
- Step 4** Convert improper fractions to mixed numbers
- Step 5** Convert mixed numbers to improper fractions
- Step 6** Compare fractions less than 1
- Step 7** Order fractions less than 1
- Step 8** Compare and order fractions greater than 1
- Step 9** Add and subtract fractions with the same denominator
- Step 10** Add fractions within 1
- Step 11** Add fractions with total greater than 1
- Step 12** Add to a mixed number
- Step 13** Add two mixed numbers
- Step 14** Subtract fractions
- Step 15** Subtract from a mixed number
- Step 16** Subtract from a mixed number - breaking the whole
- Step 17** Subtract two mixed numbers
- Step 1** Multiply a unit fraction by an integer
- Step 2** Multiply a non-unit fraction by an integer
- Step 3** Multiply a mixed number by an integer
- Step 4** Calculate a fraction of a quantity
- Step 5** Fraction of an amount
- Step 6** Find the whole
- Step 7** Use fractions as operators

### Small Steps Year 6

- Step 1** Add and subtract integers
- Step 2** Common factors
- Step 3** Common multiples
- Step 4** Rules of divisibility
- Step 5** Primes to 100
- Step 6** Square and cube numbers
- Step 7** Multiply up to a 4-digit number by a 2-digit number
- Step 8** Solve problems with multiplication
- Step 9** Short division
- Step 10** Division using factors
- Step 11** Introduction to long division
- Step 12** Long division with remainders
- Step 13** Solve problems with division
- Step 14** Solve multi-step problems
- Step 15** Order of operations
- Step 16** Mental calculations and estimation
- Step 17** Reason from known facts



# Turquoise Class - Autumn



## Number - Fractions

### National Curriculum (EOY)

#### **Year 5 Pupils should be taught to:**

- 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 [for example,  $2/5 + 4/5 = 6/5 = 1 \frac{1}{5}$ ]
- add and subtract fractions with the same denominator and denominators that are multiples of the same number
- multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams

#### **Year 6 Pupils should be taught to:**

- multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
- divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
- divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
- perform mental calculations, including with mixed operations and large numbers
- identify common factors, common multiples and prime numbers
- use their knowledge of the order of operations to carry out calculations involving the four operations
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.



# Turquoise Class - Autumn



## Measurement - Comparing Units

Small Steps Year 5	Small Steps Year 6	National Curriculum (EOY)
	<p><b>Step 1</b> Metric measures</p> <p><b>Step 2</b> Convert metric measures</p> <p><b>Step 3</b> Calculate with metric measures</p> <p><b>Step 4</b> Miles and kilometres</p> <p><b>Step 5</b> Imperial measures</p>	<p><b>Year 6 Pupils should be taught to:</b></p> <p>solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places</p> <p>convert between miles and kilometres .</p>



# Turquoise Class - Spring



## Number - Multiplication and Division B (Year 5) Ratio (Year 6)

### Small Steps Year 5

- Step 1** Multiply up to a 4-digit number by a 1-digit number
- Step 2** Multiply a 2-digit number by a 2-digit number (area model)
- Step 3** Multiply a 2-digit number by a 2-digit number
- Step 4** Multiply a 3-digit number by a 2-digit number
- Step 5** Multiply a 4-digit number by a 2-digit number
- Step 6** Solve problems with multiplication
- Step 7** Short division
- Step 8** Divide a 4-digit number by a 1-digit number
- Step 9** Divide with remainders
- Step 10** Efficient division
- Step 11** Solve problems with multiplication and division

### Small Steps Year 6

- Step 1** Add or multiply?
- Step 2** Use ratio language
- Step 3** Introduction to the ratio symbol
- Step 4** Ratio and fractions
- Step 5** Scale drawing
- Step 6** Use scale factors
- Step 7** Similar shapes
- Step 8** Ratio problems



# Turquoise Class - Spring



## Number - Multiplication and Division B (Year 5) Ratio (Year 6)

### National Curriculum (EOY)

#### **Year 5 Pupils should be taught to:**

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 (nonprime) numbers  
establish whether a number up to 100 is prime and recall prime numbers up to 19  
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  
multiply and divide numbers mentally drawing upon known facts  
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  
multiply and divide whole numbers and those involving decimals by 10, 100 and 1000  
recognise and use square numbers and cube numbers, and the notation for squared ( 2 ) and cubed ( 3 )  
solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes  
solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign  
solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.

#### **Year 6 Pupils should be taught to:**

solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts  
solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison  
solve problems involving similar shapes where the scale factor is known or can be found  
solve problems involving unequal sharing and grouping using knowledge of fractions and multiples



# Turquoise Class - Spring



## Number - Fractions B (Year 5) Algebra (Year 6)

Small Steps Year 5	Small Steps Year 6	National Curriculum (EOY)
<p><b>Step 1</b> Multiply a unit fraction by an integer</p> <p><b>Step 2</b> Multiply a non-unit fraction by an integer</p> <p><b>Step 3</b> Multiply a mixed number by an integer</p> <p><b>Step 4</b> Calculate a fraction of a quantity</p> <p><b>Step 5</b> Fraction of an amount</p> <p><b>Step 6</b> Find the whole</p> <p><b>Step 7</b> Use fractions as operators and division</p>	<p><b>Step 1</b> 1-step function machines</p> <p><b>Step 2</b> 2-step function machines</p> <p><b>Step 3</b> Form expressions</p> <p><b>Step 4</b> Substitution</p> <p><b>Step 5</b> Formulae</p> <p><b>Step 6</b> Form equations</p>	<p><b>Year 5 Pupils should be taught to:</b></p> <ul style="list-style-type: none"><li>compare and order fractions whose denominators are all multiples of the same number</li><li>identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths</li><li>recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements <math>&gt; 1</math> as a mixed number [for example, <math>2/5 + 4/5 = 6/5 = 1 \frac{1}{5}</math>]</li><li>add and subtract fractions with the same denominator and denominators that are multiples of the same number</li><li>multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams</li></ul> <p><b>Year 6 Pupils should be taught to:</b></p> <ul style="list-style-type: none"><li>use simple formulae</li><li>generate and describe linear number sequences</li><li>express missing number problems algebraically</li><li>find pairs of numbers that satisfy an equation with two unknowns</li><li>enumerate possibilities of combinations of two variables.</li></ul>



# Turquoise Class - Spring



## Number - Decimals and Percentages (Year 5) Fractions, Decimals and Percentages (Year 6)

### Small Steps Year 5

- Step 1** Decimals up to 2 decimal places
- Step 2** Equivalent fractions and decimals (tenths)
- Step 3** Equivalent fractions and decimals (hundredths)
- Step 4** Equivalent fractions and decimals
- Step 5** Thousandths as fractions
- Step 6** Thousandths as decimals
- Step 7** Thousandths on a place value chart
- Step 1** Use known facts to add and subtract decimals within 1
- Step 2** Complements to 1
- Step 3** Add and subtract decimals across 1
- Step 4** Add decimals with the same number of decimal places
- Step 5** Subtract decimals with the same number of decimal places
- Step 6** Add decimals with different numbers of decimal places
- Step 7** Subtract decimals with different numbers of decimal places
- Step 8** Efficient strategies for adding and subtracting decimal

### Small Steps Year 6

- Step 1** Place value within 1
- Step 2** Place value – integers and decimals
- Step 3** Round decimals
- Step 4** Add and subtract decimals
- Step 5** Multiply by 10, 100 and 1,000
- Step 6** Divide by 10, 100 and 1,000
- Step 7** Multiply decimals by integers
- Step 8** Divide decimals by integer
- Step 1** Decimal and fraction equivalents
- Step 2** Fractions as division
- Step 3** Understand percentages
- Step 4** Fractions to percentages
- Step 5** Equivalent fractions, decimals and percentages
- Step 6** Order fractions, decimals and percentages
- Step 7** Percentage of an amount – one step
- Step 8** Percentage of an amount – multi-step





# Turquoise Class - Spring



## Number - Decimals and Percentages (Year 5) Fractions, Decimals and Percentages (Year 6)

### National Curriculum (EOY)

#### **Year 5 Pupils should be taught to:**

numbers, supported by materials and diagrams

read and write decimal numbers as fractions [for example,  $0.71 = 71/100$ ] 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  $1/2$ ,  $1/4$ ,  $1/5$ ,  $2/5$ ,  $4/5$  and those fractions with a denominator of a multiple of 10 or 25.

#### **Year 6 Pupils should be taught to:**

use common factors to simplify fractions; use common multiples to express fractions in the same denomination □ compare and order fractions, including fractions  $> 1$

add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions multiply simple pairs of proper fractions, writing the answer in its simplest form [for example,  $1/4 \times 2 \frac{1}{2} = 1/8$ ]

divide proper fractions by whole numbers [for example,  $1/3 \div 2 = 1/6$ ]

associate a fraction with division and calculate decimal fraction equivalents [for example,  $0.375$ ] for a simple fraction [for example,  $3/8$ ]

identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places



# Turquoise Class - Spring



## Measurement - Perimeter, Area (Year 5) and Volume (Year 6)

Small Steps Year 5	Small Steps Year 6	National Curriculum (EOY)
<p><b>Step 1</b> Perimeter of rectangles <b>Step 2</b> Perimeter of rectilinear shapes <b>Step 3</b> Perimeter of polygons <b>Step 4</b> Area of rectangles <b>Step 5</b> Area of compound shapes <b>Step 6</b> Estimate area</p>	<p><b>Step 1</b> Shapes - same area <b>Step 2</b> Area and perimeter <b>Step 3</b> Area of a triangle – counting squares <b>Step 4</b> Area of a right-angled triangle <b>Step 5</b> Area of any triangle <b>Step 6</b> Area of a parallelogram <b>Step 7</b> Volume - counting cubes <b>Step 8</b> Volume of a cuboid</p>	<p><b>Year 5 Pupils should be taught to:</b> 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 (cm<sup>2</sup>) and square metres (m<sup>2</sup>) and estimate the area of irregular shapes</p> <p><b>Year 6 Pupils should be taught to:</b> recognise that shapes with the same areas can have different perimeters and vice versa recognise when it is possible to use formulae for area and volume of shapes calculate the area of parallelograms and triangles calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm<sup>3</sup>) and cubic metres (m<sup>3</sup>), and extending to other units [for example, mm<sup>3</sup> and km<sup>3</sup>].</p>



# Turquoise Class - Spring



## Measurement - Statistics

Small Steps Year 5	Small Steps Year 6	National Curriculum (EOY)
<p><b>Step 1</b> Draw line graphs</p> <p><b>Step 2</b> Read and interpret line graphs</p> <p><b>Step 3</b> Read and interpret tables</p> <p><b>Step 4</b> Two-way tables</p> <p><b>Step 5</b> Read and interpret timetables</p>	<p><b>Step 1</b> line graphs</p> <p><b>Step 2</b> dual bar charts</p> <p><b>Step 3</b> read and interpret pie charts</p> <p><b>Step 4</b> pie charts with percentages</p> <p><b>Step 5</b> draw pie charts</p> <p><b>Step 6</b> The mean</p>	<p><b>Year 5 Pupils should be taught to:</b> Year 5 solve comparison, sum and difference problems using information presented in a line graph complete, read and interpret information in tables, including timetables.</p> <p><b>Year 6 Pupils should be taught to:</b> interpret and construct pie charts and line graphs and use these to solve problems calculate and interpret the mean as an average.</p>



# Turquoise Class - Summer



## Geometry - Position and Direction

Small Steps Year 5	Small Steps Year 6	National Curriculum (EOY)
<p><b>Step 1</b> Read and plot coordinates</p> <p><b>Step 2</b> Problem solving with coordinates</p> <p><b>Step 3</b> Translation</p> <p><b>Step 4</b> Translation with coordinates</p> <p><b>Step 5</b> Lines of symmetry</p> <p><b>Step 6</b> Reflection in horizontal and vertical lines</p>	<p><b>Step 1</b> Measure and classify angles</p> <p><b>Step 2</b> Calculate angles</p> <p><b>Step 3</b> Vertically opposite angles</p> <p><b>Step 4</b> Angles in a triangle</p> <p><b>Step 5</b> Angles in a triangle – special cases</p> <p><b>Step 6</b> Angles in a triangle – missing angles</p> <p><b>Step 7</b> Angles in quadrilaterals</p> <p><b>Step 8</b> Angles in polygon</p>	<p><b>Year 5 Pupils should be taught to:</b> 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.</p> <p><b>Year 6 Pupils should be taught to:</b> describe positions on the full coordinate grid (all four quadrants) draw and translate simple shapes on the coordinate plane, and reflect them in the axes.</p>



# Turquoise Class - Summer



## Geometry - Shape

Small Steps Year 5	Small Steps Year 6	National Curriculum (EOY)
<p><b>Step 1</b> Understand and use degrees</p> <p><b>Step 2</b> Classify angles</p> <p><b>Step 3</b> Estimate angles</p> <p>Step 4 Measure angles up to 180</p> <p><b>Step 5</b> Draw lines and angles accurately</p> <p><b>Step 6</b> Calculate angles around a point</p> <p><b>Step 7</b> Calculate angles on a straight line</p>	<p><b>Step 1</b> Measure and classify angles</p> <p><b>Step 2</b> Calculate angles</p> <p><b>Step 3</b> Vertically opposite angles</p> <p><b>Step 4</b> Angles in a triangle</p> <p><b>Step 5</b> Angles in a triangle – special cases</p> <p><b>Step 6</b> Angles in a triangle – missing angles</p> <p><b>Step 7</b> Angles in quadrilaterals</p> <p><b>Step 8</b> Angles in polygon</p>	<p><b>Year 5 Pupils should be taught to:</b></p> <p>Year 5 identify 3-D shapes, including cubes and other cuboids, from 2-D representations</p> <p>know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</p> <p>draw given angles, and measure them in degrees (o ) identify: angles at a point and one whole turn (total 360o ) □ angles at a point on a straight line and 2 1 a turn (total 180o )</p> <p>other multiples of 90o</p> <p>use the properties of rectangles to deduce related facts and find missing lengths and angles</p> <p>distinguish between regular and irregular polygons based on reasoning about equal sides and angles</p> <p><b>Year 6 Pupils should be taught to:</b></p> <p>draw 2-D shapes using given dimensions and angles</p> <p>recognise, describe and build simple 3-D shapes, including making nets</p> <p>compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons</p> <p>illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius</p> <p>recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.</p>



# Turquoise Class - Summer



## Decimals (Year 5)

Small Steps Year 5	Small Steps Year 6	National Curriculum (EOY)
<p><b>Step 1</b> Use known facts to add and subtract decimals within 1</p> <p><b>Step 2</b> Complements to 1</p> <p><b>Step 3</b> Add and subtract decimals across 1</p> <p><b>Step 4</b> Add decimals with the same number of decimal places</p> <p><b>Step 5</b> Subtract decimals with the same number of decimal places</p> <p><b>Step 6</b> Add decimals with different numbers of decimal places</p> <p><b>Step 7</b> Subtract decimals with different numbers of decimal places</p> <p><b>Step 8</b> Efficient strategies for adding and subtracting decimal</p>		<p><b>Year 5 Pupils should be taught to:</b> numbers, supported by materials and diagrams read and write decimal numbers as fractions [for example, <math>0.71 = 71/100</math>] 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 <math>1/2</math>, <math>1/4</math>, <math>1/5</math>, <math>2/5</math>, <math>4/5</math> and those fractions with a denominator of a multiple of 10 or 25.</p> <p><b>Year 6 Pupils should be taught to:</b> describe positions on the full coordinate grid (all four quadrants) draw and translate simple shapes on the coordinate plane, and reflect them in the axes.</p>



# Turquoise Class - Summer



## Negative Numbers (Year 5)

Small Steps Year 5	Small Steps Year 6	National Curriculum (EOY)
<p><b>Step 1</b> Understand negative numbers</p> <p><b>Step 2</b> Count through zero in 1s</p> <p><b>Step 3</b> Count through zero in multiples</p> <p><b>Step 4</b> Compare and order negative numbers</p> <p><b>Step 5</b> Find the difference</p>		<p><b>Year 5 Pupils should be taught to:</b> interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero</p>



# Purple Class - Autumn



## Number - Place Value

### Small Steps

- Step 1** Numbers to 1,000,000
- Step 2** Numbers to 10,000,000
- Step 3** Read and write numbers to 10,000,000
- Step 4** Powers of 10
- Step 5** Number line to 10,000,000
- Step 6** Compare and order any integers
- Step 7** Round any integer
- Step 8** Negative numbers

### National Curriculum (EOY)

**Year 6 Pupils should be taught to:**  
read, write, order and compare numbers up to 10 000 000 and determine the value of each digit  
round any whole number to a required degree of accuracy  
use negative numbers in context, and calculate intervals across zero  
solve number and practical problems that involve all of the above





# Purple Class - Autumn



## Number - Addition, Subtraction, Multiplication and Division

### Small Steps

- Step 1** Add and subtract integers
- Step 2** Common factors
- Step 3** Common multiples
- Step 4** Rules of divisibility
- Step 5** Primes to 100
- Step 6** Square and cube numbers
- Step 7** Multiply up to a 4-digit number by a 2-digit number
- Step 8** Solve problems with multiplication
- Step 9** Short division
- Step 10** Division using factors
- Step 11** Introduction to long division
- Step 12** Long division with remainders
- Step 13** Solve problems with division
- Step 14** Solve multi-step problems
- Step 15** Order of operations
- Step 16** Mental calculations and estimation
- Step 17** Reason from known facts

### National Curriculum (EOY)

**Year 6 Pupils should be taught to:**

- multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
- divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
- divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
- perform mental calculations, including with mixed operations and large numbers
- identify common factors, common multiples and prime numbers
- use their knowledge of the order of operations to carry out calculations involving the four operations
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.



# Purple Class - Autumn



## Number - Fractions A

### Small Steps

- Step 1** Equivalent fractions and simplifying
- Step 2** Equivalent fractions on a number line
- Step 3** Compare and order (denominator)
- Step 4** Compare and order (numerator)
- Step 5** Add and subtract simple fractions
- Step 6** Add and subtract any two fractions
- Step 7** Add mixed numbers
- Step 8** Subtract mixed numbers

### National Curriculum (EOY)

#### **Year 6 Pupils should be taught to:**

- multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication
- divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
- divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
- perform mental calculations, including with mixed operations and large numbers
- identify common factors, common multiples and prime numbers
- use their knowledge of the order of operations to carry out calculations involving the four operations
- solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why solve problems involving addition, subtraction, multiplication and division
- use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.



# Purple Class - Autumn



## Number - Fractions B

### Small Steps

- Step 1** Multiply fractions by integers
- Step 2** Multiply fractions by fractions
- Step 3** Divide a fraction by an integer
- Step 4** Divide any fraction by an integer
- Step 5** Mixed questions with fractions
- Step 6** Fraction of an amount
- Step 7** Fraction of an amount - find the whole

### National Curriculum (EOY)

**Year 6 Pupils should be taught to:**  
multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication  
divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context  
divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context  
perform mental calculations, including with mixed operations and large numbers  
identify common factors, common multiples and prime numbers  
use their knowledge of the order of operations to carry out calculations involving the four operations  
solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why solve problems involving addition, subtraction, multiplication and division  
use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.



# Purple Class - Autumn



## Measurement - Converting Units

### Small Steps

- Step 1** Metric measures
- Step 2** Convert metric measures
- Step 3** Calculate with metric measures
- Step 4** Miles and kilometres
- Step 5** Imperial measure

### National Curriculum (EOY)

**Year 6 Pupils should be taught to:**  
solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places  
convert between miles and kilometres .



# Purple Class - Spring



## Number - Ratio

### Small Steps

- Step 1** Add or multiply?
- Step 2** Use ratio language
- Step 3** Introduction to the ratio symbol
- Step 4** Ratio and fractions
- Step 5** Scale drawing
- Step 6** Use scale factors
- Step 7** Similar shapes
- Step 8** Ratio problem

### National Curriculum (EOY)

#### **Year 6 Pupils should be taught to:**

- solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts
- solve problems involving the calculation of percentages [for example, of measures, and such as 15% of 360] and the use of percentages for comparison
- solve problems involving similar shapes where the scale factor is known or can be found
- solve problems involving unequal sharing and grouping using knowledge of fractions and multiples



# Purple Class - Spring



## Number - Algebra

### Small Steps

- Step 1** 1-step function machines
- Step 2** 2-step function machines
- Step 3** Form expressions
- Step 4** Substitution
- Step 5** Formulae
- Step 6** Form equations

### National Curriculum (EOY)

**Year 6 Pupils should be taught to:**  
use simple formulae  
generate and describe linear number sequences  
express missing number problems algebraically  
find pairs of numbers that satisfy an equation with two unknowns  
enumerate possibilities of combinations of two variables.



# Purple Class - Spring



## Number - Decimals

### Small Steps

- Step 1** Place value within 1
- Step 2** Place value – integers and decimals
- Step 3** Round decimals
- Step 4** Add and subtract decimals
- Step 5** Multiply by 10, 100 and 1,000
- Step 6** Divide by 10, 100 and 1,000
- Step 7** Multiply decimals by integers
- Step 8** Divide decimals by integers

### National Curriculum (EOY)

**Year 6 Pupils should be taught to:**

use common factors to simplify fractions; use common multiples to express fractions in the same denomination  
compare and order fractions, including fractions  $> 1$   
add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions multiply simple pairs of proper fractions, writing the answer in its simplest form [for example,  $1/4 \times 2 \frac{1}{2} = 1/8$  ]  
divide proper fractions by whole numbers [for example,  $1/3 \div 2 = 1/6$ ]  
associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example,  $3/8$ ]  
identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places



# Purple Class - Spring



## Number - Fractions, Decimals and Percentages

### Small Steps

- Step 1** Decimal and fraction equivalents
- Step 2** Fractions as division
- Step 3** Understand percentages
- Step 4** Fractions to percentages
- Step 5** Equivalent fractions, decimals and percentages
- Step 6** Order fractions, decimals and percentages
- Step 7** Percentage of an amount – one step
- Step 8** Percentage of an amount – multi-step

### National Curriculum (EOY)

#### **Year 6 Pupils should be taught to:**

use common factors to simplify fractions; use common multiples to express fractions in the same denomination □  
compare and order fractions, including fractions  $> 1$   
add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions multiply simple pairs of proper fractions, writing the answer in its simplest form [for example,  $1/4 \times 2 \frac{1}{2} = 1/8$  ]  
divide proper fractions by whole numbers [for example,  $1/3 \div 2 = 1/6$ ]  
associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example,  $3/8$ ]  
identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places





# Purple Class - Spring



## Measurement - Area, Perimeter and Volume

### Small Steps

- Step 1** Shapes - same area
- Step 2** Area and perimeter
- Step 3** Area of a triangle – counting squares
- Step 4** Area of a right-angled triangle
- Step 5** Area of any triangle
- Step 6** Area of a parallelogram
- Step 7** Volume - counting cubes
- Step 8** Volume of a cuboid

### National Curriculum (EOY)

**Year 6 Pupils should be taught to:**  
recognise that shapes with the same areas can have different perimeters and vice versa  
recognise when it is possible to use formulae for area and volume of shapes  
calculate the area of parallelograms and triangles  
calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm<sup>3</sup>) and cubic metres (m<sup>3</sup>), and extending to other units [for example, mm<sup>3</sup> and km<sup>3</sup>].



# Purple Class - Spring



## Statistics

### Small Steps

- Step 1** line graphs
- Step 2** dual bar charts
- Step 3** read and interpret pie charts
- Step 4** pie charts with percentages
- Step 5** draw pie charts
- Step 6** The mean

### National Curriculum (EOY)

**Year 6 Pupils should be taught to:**  
interpret and construct pie charts and line graphs and use these to solve problems  
calculate and interpret the mean as an average.



# Purple Class - Summer



## Geometry - Shape

### Small Steps

- Step 1** Measure and classify angles
- Step 2** Calculate angles
- Step 3** Vertically opposite angles
- Step 4** Angles in a triangle
- Step 5** Angles in a triangle – special cases
- Step 6** Angles in a triangle – missing angles
- Step 7** Angles in quadrilaterals
- Step 8** Angles in polygon

### National Curriculum (EOY)

**Year 6 Pupils should be taught to:**  
draw 2-D shapes using given dimensions and angles  
recognise, describe and build simple 3-D shapes, including making nets  
compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons  
illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius  
recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.



# Purple Class - Summer



## Geometry - Position and Direction

### Small Steps

- Step 1** Measure and classify angles
- Step 2** Calculate angles
- Step 3** Vertically opposite angles
- Step 4** Angles in a triangle
- Step 5** Angles in a triangle – special cases
- Step 6** Angles in a triangle – missing angles
- Step 7** Angles in quadrilaterals
- Step 8** Angles in polygon

### National Curriculum (EOY)

**Year 6 Pupils should be taught to:**  
describe positions on the full coordinate grid (all four quadrants)  
draw and translate simple shapes on the coordinate plane, and reflect them in the axes.