

## Year 1 Year Maths Progression in Knowledge

<b>NC Knowledge</b>
<b>Autumn Unit 1: Number and Place Value – within 10</b>
<ul style="list-style-type: none"><li>• count to and across 10, forwards and backwards, beginning with 0 or 1, or from any given number</li><li>• count, read and write numbers to 10 in numerals; count in multiples of 2s, 5s and 10s</li><li>• given a number, identify 1 more and 1 less</li><li>• 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</li></ul>
<b>Autumn Unit 2: Addition and subtraction – within 10</b>
<ul style="list-style-type: none"><li>• read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs</li><li>• represent and use number bonds and related subtraction facts within 10</li><li>• add and subtract one-digit and two-digit numbers to 20, including 0</li><li>• 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></li></ul>
<b>Autumn Unit 3: Shape</b>
<ul style="list-style-type: none"><li>• recognise and name common 2-D and 3-D shapes, including:</li><li>• 2-D shapes [for example, rectangles (including squares), circles and triangles]</li><li>• recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]</li></ul>
<b>Autumn Unit 4: Number and Place Value – within 20</b>
<ul style="list-style-type: none"><li>• count to and across 20 forwards and backwards, beginning with 0 or 1, or from any given number</li><li>• count, read and write numbers to 20 in numerals and words</li><li>• given a number, identify 1 more and 1 less</li><li>• 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</li></ul>
<b>Spring 1: Number and Place Value – within 10</b>
<b>Addition and subtraction – within 20</b>
<ul style="list-style-type: none"><li>• read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs</li><li>• represent and use number bonds and related subtraction facts within 20</li><li>• add and subtract one-digit and two-digit numbers to 20, including 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></li></ul>
<b>Spring 2: Number and Place Value – within 50</b>
<ul style="list-style-type: none"><li>• Count to and across 50, forwards and backwards, beginning with 0 or 1, or from any given number</li><li>• count, read and write numbers to 50 in numerals and words;</li></ul>

- count in multiples of 2s, 5s
- 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

### **Spring 3: Measurement**

- 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 height

### **Spring 4: Measurement**

- 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

### **Summer 1: Multiplication and division**

- Count in multiples of 2,5 and 10
- 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

### **Summer 2: Fractions**

- recognise, find and name a half as 1 of 2 equal parts of an object, shape or quantity
- recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity
- Compare, describe and solve practical problems for lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]
- Compare, describe and solve practical problems for mass/weight [for example, heavy/light, heavier than, lighter than]

### **Summer 3: Position and direction**

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

### **Summer 4: Number and place value -within 100**

- 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

### **Summer 5: Money**

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

### **Summer 6: Time**

- Measure and begin to record time [for example, quicker, slower, earlier, later]
- 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

## Year 1 Maths Progression in Skills and Knowledge

### Y1/2 Working Mathematically:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **reason** mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **solve problems** by applying their mathematics to a variety of routine and nonroutine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.
- By the end of year 2, pupils should know the number bonds to 20 and be precise in using and understanding place value.