**Progression Framework for**

# Mathematics
# Year One

# Progression Framework

## Introduction

domain in the Programme of Study.

The content of each domain is further broken down into strands. These are:

• Number (which is split into the following three sub-domains):

  ▫ Number and place value

  ▫ Calculations and fractions

  ▫ Decimals and percentages

• Measurement

• Geometry – shape and position

• Statistics

• Ratio and proportion (Year 6 only)

• Algebra (Year 6 only).

See the separate document 'About the Progression Framework for mathematics' for more detailed information.

# Progression Framework for Mathematics, Year One

## Domain: Number

| Strand | Sub-strand | Progression statement | NAHT key performance indicator (Y/N) | What to look for guidance (Working towards expectations) | What to look for guidance (Meeting expectations) | What to look for guidance (Exceeding expectations) |
|---|---|---|---|---|---|---|
| 1) Number and place value | a) Count | **1.1.a.1 Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number** | Y | The pupil can count forwards from 1 to 100. | The pupil can count forwards from 94 to 120 and backwards from 125. | The pupil can count forwards from 180 to 220 and backwards from 205. |
| | | **1.1.a.2 Given a number, identify one more and one less** | Y | The pupil can answer 9 when asked 'I have eaten 8 grapes and eat one more. How many have I eaten?' | The pupil can answer 27 when asked 'I have 28 grapes and eat one of them. How many are left?' | The pupil can answer 27 when asked 'I have 29 grapes and eat two of them. How many are left?' |
| | | **1.1.a.3 Count in multiples of twos, fives and tens** (^) | Y | The pupil can count beads in twos. | The pupil can count beads in groups of two, five and ten. | The pupil can predict whether a given number will be in the sequence when they count in twos, fives and tens. |
| | b) Represent numbers | **1.1.b.1 Read and write numbers to 100 in numerals** (^) | Y | The pupil can record familiar numbers and identify numbers beyond 20. | The pupil can record the page number in their reading book and identify a friend's house from the number. | The pupil can write the counting sequence in numerals and complete a jigsaw of the 100 square. |
| | | 1.1.b.2 Read and write numbers from 1 to 20 in words (^) | N | The pupil can match the numeral 5 to the word 'five' and fill in the missing word or numeral for numbers to 10. | The pupil can match the numeral 13 to the word 'thirteen' and fill in the missing word or numeral for numbers to 20. | The pupil can arrange the words for the numbers to 20 in alphabetical order and then replace them with their numerals. |
| | | 1.1.b.3 Identify and represent numbers using objects and pictorial representations including the number line (^) | N | The pupil can make numbers below ten using manipulatives. | The pupil can place numbers on an empty number line. | The pupil can represent and recognise numbers from a wide variety of representations. |

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|---|---|---|---|---|---|---|
| 1) Number and place value | c) Order and compare | 1.1.c.1 Use the language of: equal to, more than, less than (fewer), most, least (^) | N | The pupil can identify the largest or smallest of a set of numbers below ten and compare two of them, saying which is smaller. They use the language of 'first' and 'second'. | The pupil can compare three numbers using sets of counters, making statements such as 12 is more than 5; 27 is the number with the most counters; 5 is fewer counters than 12. They use the language of 'first', 'second' and 'third'. | The pupil can sort sets of objects (or pictures of them on cards) using a Venn diagram labelled 'smaller than or equal to 12' and 'greater than or equal to 12', correctly identifying the cards which belong to both sets. They use the language of ordinal numbers up to ninth and tenth. |
| | d) Solve number problems | 1.1.d.1 Solve number problems with number and place value from the Year 1 curriculum (+) | N | The pupil can solve problems such as 'There are three people on the bus. One more gets on, how many are on the bus now?', with supporting equipment. | The pupil can solve problems such as 'There are five birds in a nest. One flies off, how many are left?' | The pupil can solve problems such as 'I am thinking of a number. It is greater than seven and smaller than ten. I don't say it when I count in multiples of two. What is my number?' |
| | e) Round numbers | There is no content for this sub-strand in Year 1. | | | | |

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## Domain: Number

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|---|---|---|---|---|---|---|
| 2) Calculation | a) Understand calculation | **1.2.a.1 Represent and use number bonds and related subtraction facts within 20** | Y | The pupil can use manipulatives to find pairs of numbers that add to totals less than 20. | The pupil can deduce from 3 + 12 = 15, that 15 − 12 = 3 or 4 + 12 = 16 or 3 + 13 = 16. | The pupil can solve problems such as 'Use the numbers 1, 3, 6, 11 adding and subtracting them in pairs to make as many different numbers as possible.' |
| | | 1.2.a.2 Begin to understand multiplication, division and doubling through grouping and sharing small quantities (+) | N | The pupil can select three more counters in order to double the set of three counters they already have. | The pupil can arrange a set of 12 counters into two groups of six each. | The pupil can predict the number of counters in a set when an equal number of counters is added to it for small numbers. |
| | b) Calculate mentally | 1.2.b.1 Mentally add and subtract one- and two-digit numbers to 20, including zero | N | The pupil can calculate the sum and difference of numbers up to ten. | The pupil can find pairs of numbers below 20 with a difference of four or a sum of 18. | The pupil can solve problems such as 'Two numbers have a sum of 19 and a difference of five. What are they?' |
| | | 1.2.b.2 Mentally double numbers up to 10 (+) | N | The pupil can add another three counters to a set of three counters to double it. | The pupil can answer six when asked to double three. | The pupil can answer 16 when asked to double eight. |
| | c) Solve calculation problems | 1.2.c.1 Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ − 9 | N | The pupil can use counters to work out simple number problems such as 2 + 3 = ?. | The pupil can use counters to work out the missing number in 8 + ? = 14. | The pupil can solve missing number problems such as 28 − ? = 11. |
| | | 1.2.c.2 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 | N | The pupil can work out how many pieces of paper are needed on a table with four children if each child has two pieces each. | The pupil can work out how many grapes each child gets if 12 are shared between four children using counters to represent the grapes. | The pupil can work out how many pencils each child gets when 20 pencils are shared equally between five children, by imagining the pencils. |

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|---|---|---|---|---|---|---|
| 2) Calculation | d) Recall | 1.2.d.1 Begin to memorise number bonds to 10 and 20, including noticing the effect of adding or subtracting zero (+) | N | The pupil can recall number bonds to 10 with prompting. | The pupil can recall number bonds to 10 and 20 and reason with them. | The pupil can recall number bonds to 10 and 20 in both additive and subtractive forms. |
| | e) Use written calculation | 1.2.e.1 Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs | N | The pupil can use counters to demonstrate 3 + 5 = 8, with prompting. | The pupil can use counters to demonstrate 3 + 7 = 10 and write the correct number sentence for five counters, remove two counters to leave three counters. | The pupil can match a set of number sentences involving addition and subtraction to ten with their representations using counters. |
| | | 1.2.e.2 Use arrays to represent multiplication and record grouping when doing division (+) | N | The pupil can draw two lines of five dots to represent repeated addition, with prompting. | The pupil can draw two lines of five dots to represent repeated addition independently. | The pupil can draw an array to represent multiplication. |
| | f) Check | There is no content in this sub-strand in Year 1. | | | | |

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## Domain: Number

| Strand | Sub-strand | Progression statement | NAHT key performance indicator (Y/N) | What to look for guidance (Working towards expectations) | What to look for guidance (Meeting expectations) | What to look for guidance (Exceeding expectations) |
|---|---|---|---|---|---|---|
| 3) Fractions, decimals and Percentages | a) Understand FDP | **1.3.a.1 Recognise, find and name a half as one of two equal parts of an object, shape or quantity** | Y | The pupil can identify that ten counters can be grouped into two sets in several ways and, with prompting, conclude that only the five and five partition represents a half. | The pupil can identify when a shape, such as a rectangle is divided into two equal pieces and so each is a half, and when the two pieces are unequal and so each is not a half. | The pupil can explain why the term 'bigger half' does not make sense. |
| | | 1.3.a.2 Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity | N | The pupil can group 12 counters into four equal groups of three each and choose one of them as a quarter, with supporting prompts. | The pupil can identify four equal parts of a rectangle and choose one of them as a quarter. | The pupil can sort a number of situations consisting of four parts to select those which are one of four equal parts and those which are one of four unequal parts. |
| | b) Convert FDP | There is no content in this sub-strand in Year 1. | | | | |
| | c) Use FDP as numbers | There is no content in this sub-strand in Year 1. | | | | |
| | d) Solve FDP problems | There is no content in this sub-strand in Year 1. | | | | |

# Progression Framework for Mathematics, Year One

## Domain: Measurement

| Strand | Progression statement | NAHT key performance indicator (Y/N) | What to look for guidance (Working towards expectations) | What to look for guidance (Meeting expectations) | What to look for guidance (Exceeding expectations) |
|---|---|---|---|---|---|
| 1) Understand units of measure | 1.1.1 Sequence events in chronological order using language | N | The pupil can describe everyday events using the appropriate sequencing language such as 'I put on my socks before I put on my shoes', 'I walked to school after I had eaten my breakfast'. | The pupil can describe events in chronological order such as 'Monday comes before Tuesday', 'Yesterday evening I did my homework, then I went to bed' and 'Tomorrow afternoon I have to visit the dentist'. | The pupil can describe a sequence of three everyday events in several different ways such as 'I ate my lunch after I had my drink and before going out to play', 'I went out to play after I had finished my lunch. I had finished my drink during morning break' and 'I had my drink first, then ate my lunch. Finally I went out to play'. |
| | 1.1.2 Recognise and use language relating to dates, including days of the week, weeks, months and years | N | The pupil can chant the days of the week and the months of the year in order and, with support, identify today's date. | The pupil can say the date 'Tuesday the 2nd of June' and describe future events as 'in two weeks' time' and 'In three years I shall be in Year 4'. | The pupil can interpret a calendar for the year, labelling significant dates and making statements such as 'Christmas Day is on the fourth Wednesday in December' or 'My birthday is three weeks before Easter'. |
| | 1.1.3 Recognise and know the value of different denominations of coins and notes | N | The pupil can identify coins and order them according to their value. | The pupil can role play buying an item in a shop. The pupil can select the correct coins to pay for an item costing 23p and know that, if they hand over a £5 note, they should get some change. | The pupil can assemble the appropriate coins and notes to pay for any item up to £10, explaining why they have chosen them. |
| | 1.1.4 Use non-standard units to measure length, mass and capacity (+) | N | The pupil can pace out the length of a path to measure its length. | The pupil can measure weight by balancing an object with a number of plastic cubes, for example. | The pupil can measure length, weight and capacity using non-standard units and describe some of the disadvantages of them. |

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|---|---|---|---|---|---|
| 2) Make measurements | **1.2.1 Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times** | Y | The pupil can tell when it is 12 o'clock and, with support, identify half past two. | The pupil can tell when it is 12 o'clock and half past two and draw a clock face with hands to show these times. | The pupil can tell which of the o'clock and half past times is the next to occur and draw a clock face with hands to show these times. |
| | 1.2.2 Measure and begin to record time (hours, minutes, seconds) (^) | N | The pupil can draw hands on a clock face and respond orally to simple questions about time. | The pupil can draw hands on a clock face and identify the correct answer from a number of possibilities to questions about time. | The pupil can both draw hands on a clock face and write down the time in words. |
| | 1.2.3 Measure and begin to record lengths and heights, mass/weight, capacity and volume (^) | N | The pupil can measure the length of the playground using non-standard units such as paces and a trundle wheel to measure it in metres, with prompts to support the accuracy of the measurement. | The pupil can measure the length of the playground using non-standard units such as paces and a trundle wheel to measure it in metres. The pupil can use both standard and non-standard units to measure capacity and weight, recognising the advantages of standard units. | The pupil can use standard units to measure length, capacity and weight, estimating before doing so to develop their intuitive grasp of how long, big/heavy things are. |

## Domain: Measurement

| Strand | Progression statement | NAHT key performance indicator (Y/N) | What to look for guidance (Working towards expectations) | What to look for guidance (Meeting expectations) | What to look for guidance (Exceeding expectations) |
|---|---|---|---|---|---|
| 3) Solve measurement problems | 1.3.1 Compare, describe and solve practical problems for time (^) | N | The pupil can describe lunchtime as being later in the day than morning break. | The pupil can pour water from one container to another and describe the water as pouring more quickly or more slowly than on a previous occasion. | The pupil can combine two ideas of time, such as 'I walked to school more quickly today so I arrived earlier.' |
| | 1.3.2 Begin to handle coins and become familiar with coins up to 20 pence (+) | N | The pupil can identify the 1p, 2p and 5p coins. | The pupil can sort a collection of coins up to 20p and form equivalences such as two 1p coins are worth the same as one 2p coin, up to four 5p coins are worth the same as one 20p coin. | The pupil can solve some problems such as 'How many different ways can you make 25p? How do you know you have them all?' |

| Strand | Progression statement | NAHT key performance indicator (Y/N) | What to look for guidance (Working towards expectations) | What to look for guidance (Meeting expectations) | What to look for guidance (Exceeding expectations) |
|---|---|---|---|---|---|
| | **1.3.3 Compare, describe and solve practical problems for lengths and heights, mass or weight and capacity/volume** (^) | Y | The pupil can solve problems such as 'Using a balance, compare two boxes to find out which is heavier'. | The pupil can solve problems such as 'Using a balance, compare four boxes to find out which is heaviest'. | The pupil can solve problems such as 'Using a balance, compare four boxes and arrange them in ascending order of weight'. |

## Domain: Geometry

| Strand | Progression statement | NAHT key performance indicator (Y/N) | What to look for guidance (Working towards expectations) | What to look for guidance (Meeting expectations) | What to look for guidance (Exceeding expectations) |
|---|---|---|---|---|---|
| 1) Make and visualise shapes | There is no content for this strand in Year 1. | | | | |
| 2) Classify shapes | **1.2.1 Recognise common 2-D shapes** in different orientations and sizes **i.e. including rectangles (including squares), circles and triangles** | Y | The pupil can identify rectangles, triangles and circles around the classroom and in the outdoor area, when prompted. | The pupil can independently and spontaneously identify rectangles, triangles and circles around the classroom and in the outdoor area. | The pupil can explain what is the same and what is different about the shapes. |
| | **1.2.2 Name common 2-D shapes** in different orientations and sizes **i.e. including rectangles (including squares), circles and triangles** (^) | Y | The pupil can name rectangles and circles around the classroom correctly, when prompted. | The pupil can name rectangles, triangles and circles around the classroom correctly. | The pupil can name rectangles, triangles and circles correctly and use related mathematical language to describe them. |
| | **1.2.3 Recognise and name common 3-D shapes** in different orientations and sizes **i.e. including cuboids (including cubes), pyramids and spheres** (^) | Y | The pupil can select a pyramid from a set of 3-D shapes, with support. | The pupil can select a pyramid from a set of 3-D shapes. | The pupil can sort a collection of 3-D shapes while naming them correctly. |

# Progression Framework for Mathematics, Year One

## Domain: Geometry

| Strand | Progression statement | NAHT key performance indicator (Y/N) | What to look for guidance (Working towards expectations) | What to look for guidance (Meeting expectations) | What to look for guidance (Exceeding expectations) |
|---|---|---|---|---|---|
| 3) Solve shape problems | There is no content for this strand in Year 1. | | | | |
| 4) Describe position | 1.4.1 Describe position using everyday language e.g. top, middle, bottom, in front of, between, near, inside (+) | N | The pupil can arrange four objects in a 2 by 2 array and describe the position of one of them by referring to another object in the array, with support. | The pupil can arrange nine objects in a 3 by 3 array and describe the position of one of them by referring to another object or the array. | The pupil can arrange nine objects in a 3 by 3 array and describe the position of one of them by referring to another object or the array, and do so in a variety of ways. |
| | 1.4.2 Recognise and create simple repeating patterns with objects and shapes (+) | N | The pupil can identify a sequence such as RBGRBGRBG and continue it, with support (R=red, B=blue, G=green). | The pupil can identify a sequence such as RBBGRBBGRBBG and continue it (R=red, B=blue, G=green). | The pupil can make up their own sequence and extend it, describing the rule they are following. |
| 5) Describe movement | 1.5.1 Describe movement in straight lines using everyday language and describe turns, including half, quarter and threequarter turns in both directions and connect turning clockwise with movement on a clock face (+) | N | The pupil can follow instructions from another pupil to walk to a particular place including the turns either left or right, with prompts. The pupil can follow instructions from another pupil to walk around a shape including the quarter turns either clockwise or anticlockwise, referring to a clock face to establish the direction, with prompts. | The pupil can give instructions to another pupil to walk to a particular place including the turns either left or right. The pupil can give instructions to another pupil to walk around a shape including the quarter turns either clockwise or anti-clockwise, referring to a clock face to establish the direction. | The pupil can write a series of instructions to another pupil to walk to a particular place including the turns either left or right. The pupil can give instructions to a Beebot to walk around a shape including the quarter turns either clockwise or anticlockwise, referring to a clock face to establish the direction. |

## Domain: Statistics

| Strand | Progression statement | NAHT key performance indicator (Y/N) | What to look for guidance (Working towards expectations) | What to look for guidance (Meeting expectations) | What to look for guidance (Exceeding expectations) |
|---|---|---|---|---|---|
| 1) Interpret data | There is no content for this strand in Year 1. | | | | |
| 2) Present data | There is no content for this strand in Year 1. | | | | |
| 3) Solve data problems | There is no content for this strand in Year 1. | | | | |

# Progression Framework for Mathematics, Year One

| Domain: Algebra | | | | | |
|---|---|---|---|---|---|
| **Strand** | **Progression statement** | **NAHT key performance indicator (Y/N)** | **What to look for guidance (Working towards expectations)** | **What to look for guidance (Meeting expectations)** | **What to look for guidance (Exceeding expectations)** |
| 1) Understand formulae | There is no content for this strand in Year 1. | | | | |
| 2) Solve algebra problems | There is no content for this strand in Year 1. | | | | |
| 3) Describe sequences | There is no content for this strand in Year 1. | | | | |

RISING STARS
ASSESSMENT

## Progression Frameworks

## Credits

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## Developed in

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