Curriculum Map: **Math**   **Year 1**

Below outlines the learning focus for each term

Year 1 Programme of Study – by the end of the academic year:

Number – number and place value
- 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.

Number – addition and subtraction
- 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 $7 = \square - 9$.

Number – multiplication and division
- 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.

Number – fractions
- 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.

Measurement
- compare, describe and solve practical problems for:
  - ➢ lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]
  - ➢ 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]
  - ➢ time [for example, quicker, slower, earlier, later]
- measure and begin to record the following:
  - ➢ lengths and heights
  - ➢ mass/weight
  - ➢ capacity and volume
  - ➢ time (hours, minutes, seconds)
- recognise and know the value of different denominations of coins and notes
- 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.

Geometry – properties of shapes
- 2-D shapes [for example, rectangles (including squares), circles and triangles]
- 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].

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

Term	Learning Focus	
	Knowledge	**Skills**
Autumn Term	**Number : Place Value (within 30)** • count to 30, forwards and backwards, beginning with 0 or 1, or from any given number • count, read and write numbers to 30 in numerals and words; • identify and represent numbers using objects and pictorial representations including the number line, & use language of: equal to, more than, less than (fewer), most, least,< and > • given a number, identify one more and one less • Reason about the location of numbers to 30 within the linear number system, including comparing using < > and = • Reason about the location of numbers to 30 within the linear number system, • including comparing using < > and = • count to 30, forwards and backwards, beginning with 0 or 1, or from any given number • read and write numbers from 1 to 30 in numerals and words • given a number, identify one more and one less **Number : Addition and Subtraction (within 30)** • Compose numbers to 20, from 2 parts and partition numbers to 30 into parts, including recognising odd and even numbers • Read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs • represent and use number bonds to 20 and related subtraction facts • Develop fluency in addition and subtraction facts within 30 • Read, write and interpret equations containing addition, subtraction and equals symbols, and relate additive expressions and equations to real-life contexts. • identify and represent numbers using objects and pictorial representations including the number line, & use language of: equal to, more than, less than (fewer), most, least • given a number, identify one more and one less **Geometry – Shape** • recognise and name common 2-D shapes (e.g. Square, circle, triangle) • recognise and name common 3-D shapes (e.g. Cubes, cuboids, pyramids & spheres) • Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations.	
Spring Term	**Number: Place Value (within 50)** • Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number • 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 • compare and order numbers from 0 up to 100; use and = signs • Count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s	

Number : Addition and Subtraction (within 50)

- Represent and use number bonds and related subtraction facts within 50
- Add and subtract 1-digit and 2-digit numbers to 50, including zero
- Represent and use number bonds and related subtraction facts within 50
- Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems
- Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs

Measurement – length & height

- 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
- Compare, describe and solve practical problems for: mass/weight [for example, heavy/light, heavier than, lighter than]
- Measure and begin to record the following: mass/ weight
- Compare, describe and solve practical problems for: capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]
- Measure and begin to record the following: capacity and volume

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Summer Term

Number: Place Value (within 100)

- Count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s
- 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
- Exploring number patterns
- Given a number, identify one more and one less
- Partitioning numbers - recognise the place value of each digit in a 2-digit number (tens, ones)
- Comparing and ordering numbers

Number : Addition and Subtraction (within 100)

- Bonds to 100
- Represent and use number bonds and related subtraction facts within 20
- Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100

Number – multiplication and division

- Counting in 10s, 5s and 2s
- Count, read and write numbers to 100 in numerals; count in multiples of 2s, 5s and 10s
- Making equal groups
- Adding equal groups
- Making simple arrays

- 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
- Making doubles
- Solving word problems – multiplication
- Sharing equally

Number – fractions
- Finding halves
- Recognise, find and name a half as one of two equal parts of an object, shape or quantity
- Finding quarters
- Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity
- Solving word problems – halves and quarters

Measurement – time
- Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]
- Using before and after
- Recognise and use language relating to dates, including days of the week, weeks, months and years
- Using a calendar
- Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.
- Solving word problems – time; compare, describe and solve practical problems for time [for example, quicker, slower, earlier, later]

Measurement – money
- Recognise and know the value of different denominations of coins and notes
- Counting with coins

Geometry – position & direction
- Describe position, direction and movement, including whole, half, quarter and three-quarter turns
- Describing turns
- Describing positions

Intent

The intent of our mathematics curriculum is to provide children with a foundation for understanding number, reasoning, thinking logically and problem solving with resilience so that they are fully prepared for the future.

We are committed to ensuring that children are able to recognise the importance of Maths in the wider world and that they are also able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts. We want all children to enjoy Mathematics, develop their curiosity about the subject, and to experience success in the subject.

Implementation

The majority of pupils will move through the programmes of study at broadly the same pace.... Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on

- Teachers reinforce an expectation that all pupils are capable of achieving high standards in mathematics.
- Pupils are taught through whole-class teaching, where the focus is on all pupils working together on the same lesson content at the same time.
- Differentiation is achieved by emphasising deep knowledge and/or through individual support and intervention.
- If a pupil fails to grasp a concept or procedure, this is identified within the lesson structure and timely intervention ensures the pupil is best placed to move forward.
- Key facts such as multiplication tables and addition facts within 10 are retained through retrieval practice to develop automaticity; this avoids cognitive overload in the working memory and enables pupils to focus on new concepts.

Impact

Children demonstrate quick recall of facts and procedures. This includes:

- The recollection of the times tables.
- The flexibility and fluidity to move between different contexts and representations of mathematics.
- The ability to recognise relationships and make connections in mathematics.
- Children show confidence in Believing that they will achieve.
- Children show a high level of pride in the presentation and understanding of the work

Ongoing formative assessment enabling teachers to be responsive to our children's needs. Furthermore, our lesson design structure is shaped in a way that ensures misconceptions are identified during the lesson and immediately addressed at the point of learning.

Termly teacher assessment, alongside standardised tests, are used to help identify any gaps there may be in a pupils understanding