

## Curriculum Map - Maths

### Curriculum Area: Maths (addition and subtraction)

**Curriculum Intent:**

We want children to be competent mathematicians throughout their time at Hilldene and beyond. We promote enquiry and passion in all our learners to achieve proficiency of mathematical fluency in the four operations; addition, subtraction, multiplication and division.

We have chosen to implement a mastery approach, for the teaching of mathematics. Through the Discover section of the lessons, children will be confident to investigate different mathematical concepts encouraging collaboration and resilience. This will be achieved by using prior learning, taught mathematical vocabulary and strategies to enhance and develop curiosity.

We will produce logical thinkers who can problem solve efficiently and apply their skills to real life situations outside of the classroom environment.

	EYFS Number	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Unit Outcome:	Unit Outcome:	Unit Outcome:	Unit Outcome:	Unit Outcome:	Unit Outcome:	Unit Outcome:
	Skills	Skills	Skills	Skills	Skills	Skills	Skills
Number - Addition and Subtraction	Skills taught:	Skills taught: To count on from a number To count all (addition) To use a part whole model to understand the relationship between numbers. To use number bonds. To use concrete and pictorial representations	Skills taught: To recall number bonds of 10 and apply to bonds within 20 and to 20 and then 100. To use a written method to add and subtract. To use known number facts within mental calculations <u>Representations:</u> part whole model	Skills taught: To add and subtract using formal methods To use mental methods for adding and subtracting.  <u>Representations:</u> Place value equipment Number lines Part-whole models	Skills taught: To add and subtract using strategies including: Column method Number lines To learn how to find and use equivalent difference, and other mental methods  <u>Representations:</u> Place value grid	Skills taught: To add and subtract up to 5 digits using strategies including: Column method Number lines  To use inverse calculations to check answers  <u>Representations:</u> Place value grid Column method	Skills taught: <u>Four operations (1)</u> To use written method for addition and subtraction To use checking strategies  <u>Representations</u> Column method for addition and subtraction

### Curriculum Map - Maths

	<p>for subtraction</p> <p><u>Representations</u> Part-whole model Number line Ten frame</p> <p><u>Addition within 20</u> To add by counting on To use number bonds to 10 to help us with numbers bonds to 20 To combine numbers to make a whole.</p> <p><u>Representations:</u> Ten frame Bead string Part-whole model Number line and number track</p> <p><u>Subtraction within 20</u> To compare addition and subtraction To cross the '10' To use the part whole for inverse</p> <p><u>Representations</u> Number line and</p>	<p>Number line Column method Use of 100 square</p>	<p><u>Unit 3</u> To use formal strategies To develop fluency in adding and subtracting</p> <p><u>Representations:</u> Place value grid Base 10 equipment Column method Bar model</p>	<p>Bar model Part whole model</p>	<p>addition and subtraction Bar model</p>	
--	---	--	--	---------------------------------------	---	--

### Curriculum Map - Maths

		number track Ten frame Part-whole model Bead strings					
	Knowledge	Knowledge	Knowledge	Knowledge	Knowledge	Knowledge	Knowledge
	Knowledge taught:	<p>Knowledge taught:</p> <p>To add parts to find the whole To find a missing part To find fact families To solve word problems To subtract by breaking the whole into parts To compare addition and subtraction To find the difference</p>	<p>Knowledge taught:</p> <p>To write fact families relating to addition and subtractions To add and subtract ones and tens (crossing boundaries) To add and subtract a 2 digit number to/from a 2 digit number (crossing boundaries) To know and apply inverse calculations.</p>	<p>Knowledge taught:</p> <p>To add 1s and 10s to 3-digit numbers To subtract 1s and 10s from 3-digit numbers To add and subtract 3-digit and 2-digit numbers To learn when to exchange 1s, 10s and 100s</p> <p><u>Unit 3</u> To add and subtract 3-digit numbers To exchange across more than one column To learn how to check our answers in different ways To solve 1- and 2-step problems</p>	<p>Knowledge taught:</p> <p>To add and subtract 1s, 10s, 100s and 1,000s To add and subtract two 4-digit numbers using the column method To estimate answers to additions and subtractions To learn how to check strategies and apply our knowledge</p>	<p>Knowledge taught:</p> <p>To add and subtract numbers with up to 5 digits To round numbers to estimate answers to problems To add and subtract mentally To solve problems involving addition and subtraction</p>	<p>Knowledge taught:</p> <p><u>Four operations (1)</u> To apply knowledge of column method to answer addition and subtraction calculations</p>

### Curriculum Map - Maths

	Key vocabulary	Key vocabulary	Key vocabulary	Key vocabulary	Key vocabulary	Key vocabulary	Key vocabulary
		Whole, part, groups, part whole model, how many are left? Take away, subtract, count backwards, number sentence, altogether, in total, add, added, number stories, missing part, count on, addition, difference, how many fewer, how many more, order, smallest, tens, ones, number bonds, part whole, take away, find the difference	Fact family, number sentence, Number bonds, column, 10 more, 10 less, total, subtract, difference, bar model, represent,	Addition, subtraction, mental method, column method, exchange, estimate, approximate, digits, multiple.	Addition, total, more than, subtraction, less than, column method, estimate, how much, strategy, efficient, accurate, exact, fact, diagram,	Add, subtract, mentally, inverse, round, estimate, distance, chart,	Column addition, factor, estimate,