



Hitherfield Primary School Progression Framework for: MATHS

Statutory Framework Objectives	EYFS:		Key Stage 1:		Key Stage 2:			
	<p>ELG: Number Children at the expected level of development will:</p> <ul style="list-style-type: none"> - Have a deep understanding of number to 10, including the composition of each number - Subitise (recognise quantities without counting) up to 5 - Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts. <p>ELG: Numerical Patterns Children at the expected level of development will:</p> <ul style="list-style-type: none"> - Verbally count beyond 20, recognising the pattern of the counting system; - Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity; - Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. <p>Development matters</p> <p>Mastering Number: Reception Overview</p>		<p>Mastering Number: Year 1 overview Year 2 overview</p> <p>Maths National Curriculum</p>		<p>Maths National Curriculum</p>			
Year	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Strand: Number - place value	<ul style="list-style-type: none"> • Develop fast recognition of up to 3 objects, without having to count them individually ('subitising'). • Recite numbers past 5. Say one number for each item in order: 1,2,3,4,5. • Know that the last number reached 	<p>Mastering Number Autumn</p> <ul style="list-style-type: none"> • identify when a set can be subitised and when counting is needed • subitise different arrangements, both unstructured and structured, including using the Hungarian number frame 	<p>Count count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number Count numbers to 100 in numerals; count in multiples of twos, fives and tens</p>	<p>Count count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward</p> <p>Represent read and write numbers to at least 100 in numerals and in words • identify, represent and</p>	<p>Count count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number</p> <p>Represent identify, represent and estimate numbers using different</p>	<p>Count count in multiples of 6, 7, 9, 25 and 1000 • count backwards through zero to include negative numbers</p> <p>Represent identify, represent and estimate numbers using different</p>	<p>Count count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 • count forwards and backwards with positive and negative whole numbers, including through zero</p>	<p>Represent • read, write, (order and compare) numbers up to 10 000 000 and determine the value of each digit</p> <p>Use and compare (read, write), order and compare numbers up to 10 000 000 and</p>



<p>when counting a small set of objects tells you how many there are in total ('cardinal principle').</p> <ul style="list-style-type: none"> • Show 'finger numbers' up to 5. • Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. • Experiment with their own symbols and marks as well as numerals. • Solve real world mathematical problems with numbers up to 5. • Compare quantities using language: 'more than', 'fewer than'. <ul style="list-style-type: none"> • Point to small groups of two or three objects: "Look, there are two!" Occasionally ask children how many there are in a small set of two or three. • Regularly say the counting sequence, in a variety of playful contexts, inside and outdoors, forwards and backwards, sometimes going to high numbers. • Count things and then repeat the last number. For example: "1, 2, 3 - 3 cars". • Point out the number of things 	<ul style="list-style-type: none"> • make different arrangements of numbers within 5 and talk about what they can see, to develop their conceptual subitising skills • spot smaller numbers 'hiding' inside larger numbers connect quantities and numbers to finger patterns and explore different ways of representing numbers on their fingers • hear and join in with the counting sequence, and connect this to the 'staircase' pattern of the counting numbers, seeing that each number is made of one more than the previous number • develop counting skills and knowledge, including: that the last number in the count tells us 'how many' (cardinality); to be accurate in counting, each thing must be counted once and once only and in any order; the need for 1:1 correspondence; understanding that anything can be counted, including actions and sounds • compare sets of objects by matching • begin to develop the language of 	<p>Represent identify and represent numbers using objects and pictorial representations</p> <ul style="list-style-type: none"> • read and write numbers to 100 in numerals • read and write numbers from 1 to 20 in numerals and words <p>Use and compare given a number, identify one more and one less</p> <p>Small steps sequence Autumn</p> <p>Step 1: Sort objects</p> <p>Step 2: Count objects</p> <p>Step 3: Count objects from a larger group</p> <p>Step 4: Represent objects</p> <p>Step 5: Recognise numbers as words</p> <p>Step 6: Count on from any number</p> <p>Step 7: Understand 1 more</p> <p>Step 8: Count backwards within 10</p> <p>Step 9: Understand 1 less</p> <p>Step 10: Compare groups by matching</p> <p>Step 11: Understand fewer, more, same</p> <p>Step 12: Understand less than, greater than, equal to</p> <p>Step 13: Compare numbers</p> <p>Step 14: Order objects and</p>	<p>estimate numbers using different representations, including the number line</p> <p>Use and compare recognise the place value of each digit in a two-digit number (tens, ones) • compare and order numbers from 0 up to 100; use <, > and = signs</p> <p>Problems and Rounding use place value and number facts to solve problems</p> <p>Small steps sequence Autumn</p> <p>Step 1: Understand numbers to 20</p> <p>Step 2: Count objects to 100 by making 10s</p> <p>Step 3: Recognise tens and ones</p> <p>Step 4: Use a place value chart</p> <p>Step 5: Partition numbers to 100</p> <p>Step 6: Write numbers to 100 in words</p> <p>Step 7: Flexibly partition numbers to 100</p> <p>Step 8: Write numbers to 100 in expanded form</p> <p>Step 9: Count in 10s on the number line to 100</p> <p>Step 10: Count in 10s and 1s on the number line to 100</p> <p>Step 11: Estimate numbers on a number line</p>	<p>representations • read and write numbers up to 1000 in numerals and in words</p> <p>Use and compare recognise the place value of each digit in a three-digit number (hundreds, tens, ones) • compare and order numbers up to 1000</p> <p>Problems and Rounding solve number problems and practical problems involving these ideas</p> <p>Small steps sequence Autumn</p> <p>Step 1: Represent numbers to 100</p> <p>Step 2: Partition numbers to 100</p> <p>Step 3: Understand and use number line to 100</p> <p>Step 4: Understand Hundreds</p> <p>Step 5: Represent numbers to 1,000</p> <p>Step 6: Partition numbers to 1,000</p> <p>Step 7: Flexible partitioning of numbers to 1,000</p> <p>Step 8: Understand Hundreds, tens and ones</p> <p>Step 9: Find 1, 10 or 100 more or less</p> <p>Step 10: Understand Number line to 1,000</p> <p>Step 11: Estimate on a number line to 1,000</p>	<p>representations • read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value</p> <p>Use and compare Find 1000 more or less than a given number • recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) • order and compare numbers beyond 1000</p> <p>Problems and Rounding • 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</p> <p>Small steps sequence Autumn</p> <p>Step 1: Represent numbers to 1,000</p> <p>Step 2: Partition numbers to 1,000</p> <p>Step 3: Understand Number line to 1,000</p> <p>Step 4: Understand Thousands</p> <p>Step 5: Represent numbers to 10,000</p> <p>Step 6: Partition numbers to 10,000</p> <p>Step 7: Flexible partitioning of</p>	<p>Represent read, write, (order and compare) numbers to at least 1 000 000 and determine the value of each digit • read Roman numerals to 1000 (M) and recognise years written in Roman numerals</p> <p>Use and compare (read, write) order and compare numbers to at least 1 000 000 and determine the value of each digit</p> <p>Problems and Rounding • interpret negative numbers in context • 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</p> <p>Small steps sequence Autumn</p> <p>Step 1: Understand and identify Roman numerals to 1,000</p> <p>Step 2: Understand Numbers to 10,000</p> <p>Step 3: Understand Numbers to 100,000</p> <p>Step 4: Understand Numbers to 1,000,000</p>	<p>determine the value of each digit</p> <p>Problems and Rounding</p> <ul style="list-style-type: none"> • 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>Small steps sequence Autumn</p> <p>Step 1: Understand numbers to 1,000,000</p> <p>Step 2: Understand numbers to 10,000,000</p> <p>Step 3: Read and write numbers to 10,000,000</p> <p>Step 4: Understand powers of 10</p> <p>Step 5: Understand number line to 10,000,000</p> <p>Step 6: Compare and order any integers</p> <p>Step 7: Round any integer</p> <p>Step 8: Understand negative numbers</p>	<p>determine the value of each digit</p> <p>Problems and Rounding</p> <ul style="list-style-type: none"> • 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>Small steps sequence Autumn</p> <p>Step 1: Understand numbers to 1,000,000</p> <p>Step 2: Understand numbers to 10,000,000</p> <p>Step 3: Read and write numbers to 10,000,000</p> <p>Step 4: Understand powers of 10</p> <p>Step 5: Understand number line to 10,000,000</p> <p>Step 6: Compare and order any integers</p> <p>Step 7: Round any integer</p> <p>Step 8: Understand negative numbers</p>
---	--	---	---	---	--	--	---	---



Hitherfield Primary School Progression Framework for: MATHS

	<p>whenever possible; so, rather than just 'chairs', 'apples' or 'children', say 'two chairs', 'three apples', 'four children'.</p> <ul style="list-style-type: none"> • Ask children to get you several things and emphasise the total number in your conversation with the child. • Use small numbers to manage the learning environment. Draw children's attention to these throughout the session and especially at tidy-up time: "How many pencils should be in this pot?" or "How many have we got?" etc. • Encourage children in their own ways of recording (for example) how many balls they managed to throw through the hoop. • Provide numerals nearby for reference. • Discuss mathematical ideas throughout the day, inside and outdoors. 	<p>'whole' when talking about objects which have parts</p> <p>Mastering Number Spring</p> <ul style="list-style-type: none"> • develop their subitising skills for numbers within and beyond 5, and increasingly connect quantities to numerals • begin to identify missing parts for numbers within 5 • explore the structure of the numbers 6 and 7 as '5 and a bit' and connect this to finger patterns and the Hungarian number frame • focus on equal and unequal groups when comparing numbers -understand that two equal groups can be called a 'double' and connect this to finger patterns • sort odd and even numbers according to their 'shape' • develop their understanding of the counting sequence and link cardinality and ordinality through the 'staircase' pattern • order numbers and play track games • join in with verbal counts beyond 20, hearing the repeated pattern within the counting numbers <p>Mastering Number</p>	<p>numbers</p> <p>Step 15: Understand the number line</p> <p>Small steps sequence Spring (place value within 20):</p> <p>Step 1: Count within 20</p> <p>Step 2: Understand 10</p> <p>Step 3: Understand 11, 12 and 13</p> <p>Step 4: Understand 14, 15 and 16</p> <p>Step 5: Understand 17, 18 and 19</p> <p>Step 6: Understand 20</p> <p>Step 7: Understand 1 more and 1 less</p> <p>Step 8: Understand the number line to 20</p> <p>Step 9: Use a number line to 20</p> <p>Step 10: Estimate on a number line to 20</p> <p>Step 11: Compare numbers to 20</p> <p>Step 12: Order numbers to 20</p> <p>Small steps sequence Spring (place value within 50):</p> <p>Step 1: Count from 20 to 50</p> <p>Step 2: Develop understanding of multiples of 10 (20, 30, 40 and 50)</p> <p>Step 3: Count by making groups of tens</p> <p>Step 4: Consolidate understanding of groups of tens and</p>	<p>Step 12: Compare objects</p> <p>Step 13: Compare numbers</p> <p>Step 14: Order objects and numbers</p> <p>Step 15: Count in 2s, 5s and 10s</p> <p>Step 16: Count in 3s</p>	<p>Step 12: Compare numbers to 1,000</p> <p>Step 13: Order numbers to 1,000</p> <p>Step 14: Count in 50s</p>	<p>numbers to 10,000</p> <p>Step 8: Find 1, 10, 100, 1,000 more or less</p> <p>Step 9: Understand number line to 10,000</p> <p>Step 10: Estimate on a number line to 10,000</p> <p>Step 11: Compare numbers to 10,000</p> <p>Step 12: Order numbers to 10,000</p> <p>Step 13: Understand and identify roman numerals</p> <p>Step 14: Round to the nearest 10</p> <p>Step 15: Round to the nearest 100</p> <p>Step 16: Round to the nearest 1,000</p> <p>Step 17: Round to the nearest 10, 100 or 1,000</p>	<p>Step 5: Read and write numbers to 1,000,000</p> <p>Step 6: Understand Powers of 10</p> <p>Step 7: 10/100/1,000/10,000 /100,000 more or less</p> <p>Step 8: Partition numbers to 1,000,000</p> <p>Step 9: Understand Number line to 1,000,000</p> <p>Step 10: Compare and order numbers to 100,000</p> <p>Step 11: Compare and order numbers to 1,000,000</p> <p>Step 12: Round to the nearest 10, 100 or 1,000</p> <p>Step 13: Round within 100,000</p> <p>Step 14: Round within 1,000,000</p> <p>Small steps sequence Summer</p> <p>Step 1: Understand negative numbers</p> <p>Step 2: Count through zero in 1s</p> <p>Step 3: Count through zero in multiples</p> <p>Step 4: Compare and order negative numbers</p> <p>Step 5: Find the difference</p>	
--	--	---	--	--	---	--	---	--



Hitherfield Primary School Progression Framework for: MATHS

		<p>Summer</p> <ul style="list-style-type: none"> • develop their counting skills, counting larger sets as well as counting actions and sounds • explore a range of representations of numbers, including the 10-frame, and see how doubles can be arranged in a 10-frame • compare quantities and numbers, including sets of objects which have different attributes • develop a sense of magnitude, e.g. knowing that 8 is quite a lot more than 2, but 4 is only a little bit more than 2 • begin to generalise about 'one more than' and 'one less than' numbers within 10 • identify when sets can be subitised and when counting is necessary • develop conceptual subitising skills including when using a rekenrek 	<p>ones</p> <p>Step 5: Partition into tens and ones</p> <p>Step 6: Understand the number line to 50</p> <p>Step 7: Estimate on a number line to 50</p> <p>Step 8: Understand 1 more, 1 less</p> <p>Small steps sequence Summer <i>(place value within 100):</i></p> <p>Step 1: Count from 50 to 100</p> <p>Step 2: Explore tens to 100</p> <p>Step 3: Partition into tens and ones</p> <p>Step 4: Explore the number line to 100</p> <p>Step 5: Understand 1 more, 1 less</p> <p>Step 6: Compare numbers with the same number of tens</p> <p>Step 7: Compare any two numbers</p>					
Strand: Number - addition and subtraction			<p>Calculations add and subtract one-digit and two digit numbers to 20, including zero read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=)</p>	<p>Calculations 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 •</p>	<p>Calculations 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</p>	<p>Calculations add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate</p> <p>Problems solve addition and</p>	<p>Calculations 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</p>	<p>Calculations • perform mental calculations, including with mixed operations and large numbers • use their knowledge of the order of operations to carry out calculations involving the four</p>



			<p>signs represent and use number bonds and related subtraction facts within 20</p> <p>Problems solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = c - 9$</p> <p>Small steps sequence Autumn (within 10) Step 1: Introduce parts and wholes Step 2: Understand and use Part-whole model Step 3: Write number sentences Step 4: Understand fact families - addition facts Step 5: Identify number bonds within 10 Step 6: Understand systematic number bonds within 10 Step 7: Understand and use number bonds to 10 Step 8: Explore addition - add together Step 9: Explore addition - add more Step 10: Solve addition problems Step 11: Find a part Step 12: Explore</p>	<p>adding three one digit numbers</p> <p>Problems 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</p> <p>Small steps sequence Autumn Step 1: Understand bonds to 10 Step 2: Understand fact families - addition and subtraction bonds within 20 Step 3: Understand related facts Step 4: Understand bonds to 100 (tens) Step 5: Add and subtract 1s Step 6: Add by making 10 Step 7: Add three 1-digit numbers Step 8: Add to the next 10 Step 9: Add across a 10 Step 10: Subtract across 10 Step 11: Subtract from a 10 Step 12: Subtract a 1-digit number from a 2-digit number (across a 10) Step 13: Understand 10 more, 10 less Step 14: Add and</p>	<p>three digits, using formal written methods of columnar addition and subtraction</p> <p>Problems solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction</p> <p>Small steps sequence Autumn 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</p>	<p>subtraction two-step problems in contexts, deciding which operations and methods to use and why</p> <p>Small steps sequence Autumn Step 1: Add and subtract 1s, 10s, 100s and 1,000s Step 2: Add up to two 4-digit numbers - no exchange Step 3: Add two 4-digit numbers - one exchange Step 4: Add two 4-digit numbers - more than one exchange Step 5: Subtract two 4-digit numbers - no exchange Step 6: Subtract two 4-digit numbers - one exchange Step 7: Subtract two 4-digit numbers - more than one exchange Step 8: Efficient subtraction Step 9: Estimate answers Step 10: Checking strategies</p>	<p>large numbers</p> <p>Problems 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 and a combination of these, including understanding the meaning of the equals sign</p> <p>Small steps sequence Autumn Step 1: Develop 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: Explore inverse operations (addition and subtraction) Step 6: Explore multi-step addition and subtraction problems Step 7: Compare calculations Step 8: Find missing numbers</p>	<p>operations</p> <p>Problems solve addition and subtraction multi step problems in contexts, deciding which operations and methods to use and why</p> <p>Small steps sequence Autumn (Addition, Subtraction and Division) Step 1: Add and subtract integers Step 2: Understand Common factors Step 3: Understand Common multiples Step 4: Rules of divisibility Step 5: Understand Primes to 100 Step 6: Understand 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: Use 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</p>
--	--	--	--	---	--	---	--	--



Hitherfield Primary School Progression Framework for: MATHS

			<p>subtraction – find a part</p> <p>Step 13: Understand fact families – the eight facts</p> <p>Step 14: Explore subtraction – take away/cross out (How many left?)</p> <p>Step 15: Explore take away (How many left?)</p> <p>Step 16: Explore subtraction on a number line</p> <p>Step 17: Add or subtract 1 or 2</p> <p>Small steps sequence Spring (within 20)</p> <p>Step 1: Add by counting on within 20</p> <p>Step 2: Add ones using number bonds</p> <p>Step 3: Find and make number bonds to 20</p> <p>Step 4: Understand doubles</p> <p>Step 5: Use near doubles</p> <p>Step 6: Subtract ones using number bonds</p> <p>Step 7: Subtract – counting back</p> <p>Step 8: Subtract – finding the difference</p> <p>Step 9: Know related facts</p> <p>Step 10: Solve missing number problems</p>	<p>subtract 10s</p> <p>Step 15: Add two 2-digit numbers (not across a 10)</p> <p>Step 16: Add two 2-digit numbers (across a 10)</p> <p>Step 17: Subtract two 2-digit numbers (not across a 10)</p> <p>Step 18: Subtract two 2-digit numbers (across a 10)</p> <p>Step 19: Solve mixed addition and subtraction</p> <p>Step 20: Compare number sentences</p> <p>Step 21: Solve missing number problems</p>	<p>two numbers (across a 10)</p> <p>Step 16: Subtract two numbers (across a 100)</p> <p>Step 17: Add 2-digit and 3-digit numbers</p> <p>Step 18: Subtract a 2-digit number from a 3-digit number</p> <p>Step 19: Understand complements to 100</p> <p>Step 20: Estimate answers</p> <p>Step 21: Use inverse operations</p> <p>Step 22: Make decisions</p>			<p>Step 16: Mental calculations and estimation</p> <p>Step 17: Reason from known facts</p>
Strand: Number - multiplication and division			Problems Solve one-step problems involving	Recall/Use recall and use multiplication and	Recall/Use recall and use multiplication and	Recall/Use recall multiplication and division facts	Recall/Use identify multiples and factors,	Recall/Use identify common factors, common



			<p>multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher</p> <p>Small steps sequence Summer 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</p>	<p>division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</p> <ul style="list-style-type: none"> • show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot <p>Calculations calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs</p> <p>Problems solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</p> <p>Small steps sequence Spring Step 1: Recognise equal groups Step 2: Make equal groups Step 3: Add equal groups Step 4: Introduce the</p>	<p>division facts for the 3, 4 and 8 multiplication tables</p> <p>Calculations 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</p> <p>Problems 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>Small steps sequence Autumn Step 1: Multiplication – equal groups Step 2: Use arrays Step 3: Use Multiples of 2 Use Step 4: Multiples of 5 and 10 Step 5: Sharing and grouping Step 6: Multiply by 3 Step 7: Divide by 3</p>	<p>for multiplication tables up to 12×12</p> <ul style="list-style-type: none"> • 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 <p>Calculations multiply two-digit and three-digit numbers by a one-digit number using formal written layout</p> <p>Problems 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> <p>Small steps sequence Autumn MULTIPLICATION AND DIVISION A Step 1: Multiples of 3 Step 2: Multiply and</p>	<p>including finding all factor pairs of a number, and common factors of two numbers</p> <ul style="list-style-type: none"> • know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers • establish whether a number up to 100 is prime and recall prime numbers up to 19 • recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) <p>Calculations 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</p> <ul style="list-style-type: none"> • 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 	<p>multiples and prime numbers</p> <ul style="list-style-type: none"> • use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy <p>Calculations multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication</p> <ul style="list-style-type: none"> • 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
--	--	--	---	---	--	--	--	---



				<p>multiplication symbol Step 5: Multiplication sentences Step 6: Use arrays Step 7: Make equal groups – grouping Step 8: Make equal groups – sharing Step 9: The 2 times-table Step 10: Divide by 2 Step 11: Doubling and halving Step 12: Odd and even numbers Step 13: The 10 times-table Step 14: Divide by 10 Step 15: The 5 times-table Step 16: Divide by 5 Step 17: The 5 and 10 times-tables</p>	<p>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: Understand The 2, 4 and 8 times-tables</p> <p>Small steps sequence Spring 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?</p>	<p>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 Step 9: 11 times-table and division facts Step 10: 12 times-table and division facts Step 11: Multiply by 1 and 0 Step 12: Divide a number by 1 and itself Step 13: Multiply three numbers</p> <p>Small steps sequence Spring MULTIPLICATION AND DIVISION B Step 1: Understand factor pairs Step 2: Use factor pairs Step 3: Multiply by 10 Step 4: Multiply by 100 Step 5: Divide by 10 Step 6: Divide by 100 Step 7: Explore related facts – multiplication and division Step 8: Understand informal written methods for multiplication Step 9: Multiply a 2-digit number by a 1-digit number Step 10: Multiply a</p>	<p>by 10, 100 and 1000</p> <p>Problems solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes • solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates</p> <p>Combined solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</p> <p>Small steps sequence Autumn MULTIPLICATION AND DIVISION A Step 1: Understand multiples Step 2: Understand common multiples Step 3: Understand factors Step 4: Understand common factors Step 5: Explore prime numbers Step 6: Explore square numbers</p>	<p>Problems solve problems involving addition, subtraction, multiplication and division</p> <p>Combined use their knowledge of the order of operations to carry out calculations involving the four operations</p> <p>Small steps sequence Autumn (Addition, Subtraction Multiplication and Division) Step 1: Add and subtract integers Step 2: Understand Common factors Step 3: Understand Common multiples Step 4: Rules of divisibility Step 5: Understand Primes to 100 Step 6: Understand 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: Use Short division Step 10: Division using factors Step 11: Introduction to long division Step 12: Long division with remainders Step 13: Solve problems with</p>
--	--	--	--	---	--	--	---	---



Hitherfield Primary School Progression Framework for: MATHS

						<p>3-digit number by a 1-digit number</p> <p>Step 11: Divide a 2-digit number by a 1-digit number (1)</p> <p>Step 12: Divide a 2-digit number by a 1-digit number (2)</p> <p>Step 13: Divide a 3-digit number by a 1-digit number</p> <p>Step 14: Explore correspondence problems</p> <p>Step 15: Explore efficient multiplication</p>	<p>Step 7: Explore cube numbers</p> <p>Step 8: Multiply by 10, 100 and 1,000</p> <p>Step 9: Divide by 10, 100 and 1,000</p> <p>Step 10: Multiples of 10, 100 and 1,000</p> <p>Small steps sequence Spring MULTIPLICATION AND DIVISION B</p> <p>Step 1: Multiply up to a 4-digit number by a 1-digit number</p> <p>Step 2: Multiply a 2-digit number by a 2-digit number (area model)</p> <p>Step 3: Multiply a 2-digit number by a 2-digit number</p> <p>Step 4: Multiply a 3-digit number by a 2-digit number</p> <p>Step 5: Multiply a 4-digit number by a 2-digit number</p> <p>Step 6: Solve problems with multiplication</p> <p>Step 7: Short division</p> <p>Step 8: Divide a 4-digit number by a 1-digit number</p> <p>Step 9: Divide with remainders</p> <p>Step 10: Explore efficient division</p> <p>Step 11: Solve problems with multiplication and division</p>	<p>division</p> <p>Step 14: Solve multi-step problems</p> <p>Step 15: Order of operations</p> <p>Step 16: Mental calculations and estimation</p> <p>Step 17: Reason from known facts</p>
Strand: Number - Fractions			<p>Recognise and Write recognise, find and name a half as one of two equal parts of an object, shape</p>	<p>Recognise and Write recognise, find, name and write fractions of a length, shape, set of objects or quantity</p>	<p>Recognise and Write count up and down in tenths; recognise that tenths arise from dividing an</p>	<p>Recognise and Write count up and down in hundredths; recognise that hundredths arise</p>	<p>Recognise and Write • identify, name and write equivalent fractions of a given fraction,</p>	<p>Compare use common factors to simplify fractions; use common multiples to express fractions</p>



			<p>or quantity - recognise, find and name a quarter as one of four equal parts of an object, shape or quantity</p> <p>Small steps sequence Summer 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</p>	<p>Compare • Recognise the equivalence of 2 quarters and 1 half</p> <p>Calculations write simple fractions for example, $\frac{1}{2}$ of 6 = 3</p> <p>Small steps sequence Summer 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: Understand unit fractions Step 11: Understand 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</p>	<p>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</p> <p>Compare • recognise and show, using diagrams, equivalent fractions with small denominators • compare and order unit fractions, and fractions with the same denominators</p> <p>Calculations add and subtract fractions with the same denominator within one whole</p> <p>solve problems that involve all of the above</p> <p>Small steps sequence Spring Step 1: Understand the denominators of unit fractions Step 2: Compare and order unit fractions</p>	<p>when dividing an object by one hundred and dividing tenths by ten.</p> <p>Compare recognise and show, using diagrams, families of common equivalent fractions</p> <p>Calculations add and subtract fractions with the same denominator</p> <p>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</p> <p>solve simple measure and money problems involving fractions</p> <p>Small steps sequence Spring Step 1: Understand the whole Step 2: Count beyond 1 Step 3: Partition a mixed number Step 4: Number lines with mixed numbers Step 5: Compare and order mixed numbers Step 6: Understand improper fractions Step 7: Convert</p>	<p>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</p> <p>Compare compare and order fractions whose denominators are all multiples of the same number</p> <p>Calculations 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</p> <p>Small steps sequence Autumn Fraction A 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</p>	<p>in the same denomination • compare and order fractions, including fractions > 1</p> <p>Calculations 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 • divide proper fractions by whole numbers</p> <p>Small steps sequence Autumn Fraction A Step 1: Understand and use 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 Step 9: Multi-step problems</p>
--	--	--	---	--	--	--	--	--



				<p>Step 3: Understand the numerators of non-unit fractions</p> <p>Step 4: Understand the whole</p> <p>Step 5: Compare and order non-unit fractions</p> <p>Step 6: Fractions and scales</p> <p>Step 7: Fractions on a number line</p> <p>Step 8: Count in fractions on a number line</p> <p>Step 9: Equivalent fractions on a number line</p> <p>Step 10: Equivalent fractions as bar models</p> <p>Small steps sequence Summer</p> <p>Step 1: Add fractions</p> <p>Step 2: Subtract fractions</p> <p>Step 3: Partition the whole</p> <p>Step 4: Unit fractions of a set of objects</p> <p>Step 5: Non-unit fractions of a set of objects</p> <p>Step 6: Reasoning with fractions of an amount</p>	<p>mixed numbers to improper fractions</p> <p>Step 8: Convert improper fractions to mixed numbers</p> <p>Step 9: Explore equivalent fractions on a number line</p> <p>Step 10: Explore equivalent fraction families</p> <p>Step 11: Add two or more fractions</p> <p>Step 12: Add fractions and mixed numbers</p> <p>Step 13: Subtract two fractions</p> <p>Step 14: Subtract from whole amounts</p> <p>Step 15: Subtract from mixed numbers</p>	<p>improper fractions</p> <p>Step 6: Compare fractions less than 1</p> <p>Step 7: Order fractions less than 1</p> <p>Step 8: Compare and order fractions greater than 1</p> <p>Step 9: Add and subtract fractions with the same denominator</p> <p>Step 10: Add fractions within 1</p> <p>Step 11: Add fractions with total greater than 1</p> <p>Step 12: Add to a mixed number</p> <p>Step 13: Add two mixed numbers</p> <p>Step 14: Subtract fractions</p> <p>Step 15: Subtract from a mixed number</p> <p>Step 16: Subtract from a mixed number – breaking the whole</p> <p>Small steps sequence Spring (FRACTION B)</p> <p>Step 1: Multiply a unit fraction by an integer</p> <p>Step 2: Multiply a non-unit fraction by an integer</p> <p>Step 3: Multiply a mixed number by an integer</p> <p>Step 4: Calculate a fraction of a quantity</p> <p>Step 5: Fraction of an amount</p> <p>Step 6: Find the whole</p> <p>Step 7: Use fractions as operators</p>	<p>Small steps sequence Autumn Fraction B</p> <p>Step 1: Multiply fractions by integers</p> <p>Step 2: Multiply fractions by fractions</p> <p>Step 3: Divide a fraction by an integer</p> <p>Step 4: Divide any fraction by an integer</p> <p>Step 5: Mixed questions with fractions</p> <p>Step 6: Fraction of an amount</p> <p>Step 7: Fraction of an amount – find the whole</p> <p>Small steps sequence Spring (Fractions, Decimals and Percentages)</p> <p>Step 1: Decimal and fraction equivalents</p> <p>Step 2: Fractions as division</p> <p>Step 3: Understand percentages</p> <p>Step 4: Fractions to percentages</p> <p>Step 5: Equivalent fractions, decimals and percentages</p> <p>Step 6: Order fractions, decimals and percentages</p> <p>Step 7: Percentage of an amount – one step</p> <p>Step 8: Percentage of an amount – multi-step</p> <p>Step 9: Percentages – missing values</p>
--	--	--	--	--	--	---	--



Hitherfield Primary School Progression Framework for: MATHS

<p>Strand: Number - Decimals</p>						<p>Recognise, Write and Compare (FDP)</p> <p>recognise and write decimal equivalents of any number of tenths or hundredths</p> <ul style="list-style-type: none"> • recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ • 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 <p>solve simple measure and money problems involving fractions and decimals to two decimal places</p> <p>Small steps sequence Spring DECIMALS A</p> <p>Step 1: Explore tenths as fractions</p> <p>Step 2: Explore tenths as decimals</p> <p>Step 3: Explore tenths on a place value chart</p> <p>Step 4: Explore tenths on a number line</p> <p>Step 5: Divide a 1-digit number by 10</p> <p>Step 6: Divide a 2-digit number by 10</p> <p>Step 7: Explore hundredths as fractions</p> <p>Step 8: Explore</p>	<p>Recognise, Write and Compare (FDP)</p> <p>read and write decimal numbers as fractions</p> <ul style="list-style-type: none"> • 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 <p>Small steps sequence Spring DECIMALS and PERCENTAGES</p> <p>Step 1: Understand decimals up to 2 decimal places</p> <p>Step 2: Understand equivalent fractions and decimals (tenths)</p> <p>Step 3: Understand equivalent fractions and decimals (hundredths)</p> <p>Step 4: Understand equivalent fractions and decimals</p> <p>Step 5: Understand thousandths as fractions</p> <p>Step 6: Understand thousandths as decimals</p> <p>Step 7: Understand thousandths on a place value chart</p> <p>Step 8: Order and</p>	<p>Recognise, Write and Compare (FDP)</p> <p>identify the value of each digit in numbers given to three decimal places</p> <p>Small steps sequence Spring</p> <p>Step 1: Place value within 1</p> <p>Step 2: Place value – integers and decimals</p> <p>Step 3: Round decimals</p> <p>Step 4: Add and subtract decimals</p> <p>Step 5: Multiply by 10, 100 and 1,000</p> <p>Step 6: Divide by 10, 100 and 1,000</p> <p>Step 7: Multiply decimals by integers</p> <p>Step 8: Divide decimals by integers</p> <p>Step 9: Multiply and divide decimals in context</p> <p>Small steps sequence Spring (Fractions, Decimals and Percentages)</p> <p>Step 1: Decimal and fraction equivalents</p> <p>Step 2: Fractions as division</p> <p>Step 3: Understand percentages</p> <p>Step 4: Fractions to percentages</p> <p>Step 5: Equivalent fractions, decimals and percentages</p> <p>Step 6: Order fractions, decimals and percentages</p> <p>Step 7: Percentage of</p>
--------------------------------------	--	--	--	--	--	---	--	---



						<p>hundredths as decimals Step 9: Explore hundredths on a place value chart Step 10: Divide a 1- or 2-digit number by 100</p> <p>Small steps sequence Summer DECIMALS B Step 1: Make a whole with tenths Step 2: Make a whole with hundredths Step 3: Partition decimals Step 4: Flexibly partition decimals Step 5: Compare decimals Step 6: Order decimals Step 7: Round to the nearest whole number Step 8: Find halves and quarters as decimals</p>	<p>compare decimals (same number of decimal places) Step 9: Order and compare any decimals with up to 3 decimal places Step 10: Round to the nearest whole number Step 11: Round to 1 decimal place Step 12: Understand percentages Step 13: Understand percentages as fractions Step 14: Understand percentages as decimals Step 15: Understand equivalent fractions, decimals and percentages Step 17: Subtract two mixed numbers</p> <p>Small steps sequence Summer DECIMALS 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</p>	<p>an amount – one step Step 8: Percentage of an amount – multi-step Step 9: Percentages – missing values</p>
--	--	--	--	--	--	--	---	---



							<p>Step 7: Subtract decimals with different numbers of decimal places</p> <p>Step 8: Explore efficient strategies for adding and subtracting decimals</p> <p>Step 9: Decimal sequences</p> <p>Step 10: Multiply by 10, 100 and 1,000</p> <p>Step 11: Divide by 10, 100 and 1,000</p> <p>Step 12: Multiply and divide decimals – missing values</p>	
Strand: Number-Percentages							<p><u>Fractions, Decimals and Percentages</u> recognise the percent 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</p> <ul style="list-style-type: none"> • solve problems which require knowing percentage and decimal equivalents <p><u>Small steps sequence Spring</u> <u>DECIMALS and PERCENTAGES</u></p> <p>Step 1: Understand decimals up to 2 decimal places</p> <p>Step 2: Understand equivalent fractions and decimals (tenths)</p> <p>Step 3: Understand equivalent fractions and decimals</p>	<p><u>Fractions, Decimals and Percentages</u> associate a fraction with division and calculate decimal fraction equivalents for a simple fraction</p> <ul style="list-style-type: none"> • recall and use equivalences between simple fractions, decimals and percentages, including in different contexts <p><u>Small steps sequence Spring</u> <u>(Fractions, Decimals and Percentages)</u></p> <p>Step 1: Decimal and fraction equivalents</p> <p>Step 2: Fractions as division</p> <p>Step 3: Understand percentages</p> <p>Step 4: Fractions to percentages</p> <p>Step 5: Equivalent fractions, decimals and percentages</p> <p>Step 6: Order</p>



Hitherfield Primary School Progression Framework for: MATHS

							<p>(hundredths)</p> <p>Step 4: Understand equivalent fractions and decimals</p> <p>Step 5: Understand thousandths as fractions</p> <p>Step 6: Understand thousandths as decimals</p> <p>Step 7: Understand thousandths on a place value chart</p> <p>Step 8: Order and compare decimals (same number of decimal places)</p> <p>Step 9: Order and compare any decimals with up to 3 decimal places</p> <p>Step 10: Round to the nearest whole number</p> <p>Step 11: Round to 1 decimal place</p> <p>Step 12: Understand percentages</p> <p>Step 13: Understand percentages as fractions</p> <p>Step 14: Understand percentages as decimals</p> <p>Step 15: Understand equivalent fractions, decimals and percentages</p> <p>Step 17: Subtract two mixed numbers</p>	<p>fractions, decimals and percentages</p> <p>Step 7: Percentage of an amount – one step</p> <p>Step 8: Percentage of an amount – multi-step</p> <p>Step 9: Percentages – missing values</p>
Strand: Number-Ratio							<p>Ratio and Proportion solve problems involving the relative sizes of two quantities where missing values can</p>	



								<p>be found by using integer multiplication and division facts</p> <ul style="list-style-type: none">• solve problems involving the calculation/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 <p>Small steps sequence Spring</p> <p>Step 1: Add or multiply?</p> <p>Step 2: Use ratio language</p> <p>Step 3: Introduction to the ratio symbol</p> <p>Step 4: Ratio and fractions</p> <p>Step 5: Scale drawing</p> <p>Step 6: Use scale factors</p> <p>Step 7: Similar shapes</p> <p>Step 8: Ratio problems</p> <p>Step 9: Proportion problems</p> <p>Step 10: Solving problems to make Recipes</p>
Strand: Number-Algebra								<p>Algebra</p> <ul style="list-style-type: none">• use simple formulae• generate and



								<p>describe linear number sequences</p> <ul style="list-style-type: none"> • express missing number problems algebraically • find pairs of numbers that satisfy an equation with two unknowns • enumerate possibilities of combinations of two variables <p>Small steps sequence Spring</p> <p>Step 1: 1-step function machines</p> <p>Step 2: 2-step function machines</p> <p>Step 3: Form expressions</p> <p>Step 4: Substitution</p> <p>Step 5: Formulae</p> <p>Step 6: Form equations</p> <p>Step 7: Solve 1-step equations</p> <p>Step 8: Solve 2-step equations</p> <p>Step 9: Find pairs of values</p> <p>Step 10: Solve problems with two unknowns</p>
<p>Strand: Geometry - Shape</p>	<ul style="list-style-type: none"> • Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'. • Select shapes 	<ul style="list-style-type: none"> • Select, rotate and manipulate shapes to develop spatial reasoning skills. • Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. • Continue, copy 	<p>2-D Shape recognise and name common 2-D shapes [for example, rectangles (including squares), circles and triangles]</p> <p>3-D Shape recognise and name common 3-D</p>	<p>2-D Shape identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line</p> <ul style="list-style-type: none"> • identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a 	<p>2-D Shape • draw 2-D shapes</p> <p>3-D Shape make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them</p> <p>Angles and lines</p>	<p>2-D Shape compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</p> <ul style="list-style-type: none"> • identify lines of symmetry in 2-D shapes presented in different orientations 	<p>2-D Shape • distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</p> <ul style="list-style-type: none"> • use the properties of rectangles to deduce related facts and find missing lengths and 	<p>2-D Shape draw 2-D shapes using given dimensions and angles</p> <ul style="list-style-type: none"> • compare and classify geometric shapes based on their properties and sizes • illustrate and name parts of circles, including



	<p>appropriately: flat surfaces for building, a triangular prism for a roof, etc.</p> <ul style="list-style-type: none"> Combine shapes to make new ones – an arch, a bigger triangle, etc. Talk about and identify the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like ‘pointy’, ‘spotty’, ‘blobs’, etc. <p>Encourage children to play freely with blocks, shapes, shape puzzles and shape-sorters.</p> <ul style="list-style-type: none"> Sensitively support and discuss questions like: “What is the same and what is different?” Encourage children to talk informally about shape properties using words like ‘sharp corner’, ‘pointy’ or ‘curvy’. Talk about shapes as you play with them: “We need a piece with a straight edge.” Provide a variety of construction materials like blocks and interlocking bricks. Provide den-making materials. Allow children to play freely 	<p>and create repeating patterns.</p> <p>Small steps sequence Autumn: (Circles and Triangles)</p> <p>Step 1 Identify and name circles and triangles</p> <p>Step 2 Compare circles and triangles</p> <p>Step 3 Shapes in the environment</p> <p>Step 4 Describe position</p> <p>Small steps sequence Autumn: (Shapes with 4 sides)</p> <p>Step 1 Identify and name shapes with 4 sides</p> <p>Step 2 Combine shapes with 4 sides</p> <p>Step 3 Shapes in the environment</p> <p>Small steps sequence Spring: (Explore 3D shapes)</p> <p>Step 1 Recognise and name 3D shape</p> <p>Step 2 Find 2D shapes within 3D shapes</p> <p>Step 3 Use 3D shapes for tasks</p> <p>Step 4 3D shapes in the environment</p> <p>Step 5 Identify more complex patterns</p> <p>Step 6 Copy and continue patterns</p> <p>Step 7 Patterns in the environment</p> <p>Small steps sequence Summer: (Visualise, Map and</p>	<p>shapes [for example, cuboids (including cubes), pyramids and spheres]</p> <p>Small steps sequence Autumn:</p> <p>Step 1: Recognise and name 3-D shapes</p> <p>Step 2: Sort 3-D shapes</p> <p>Step 3: Recognise and name 2-D shapes</p> <p>Step 4: Sort 2-D shapes</p> <p>Step 5: Identify patterns with 2-D and 3-D shapes</p>	<p>triangle on a pyramid]</p> <ul style="list-style-type: none"> compare and sort common 2-D shapes and everyday objects <p>3-D Shape recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres]</p> <ul style="list-style-type: none"> compare and sort common 3-D shapes and everyday objects <p>Small steps sequence Autumn</p> <p>Step 1: Recognise 2-D and 3-D shapes</p> <p>Step 2: Count sides on 2-D shapes</p> <p>Step 3: Count vertices on 2-D shapes</p> <p>Step 4: Draw 2-D shapes</p> <p>Step 5: Lines of symmetry on shapes</p> <p>Step 6: Use lines of symmetry to complete shapes</p> <p>Step 7: Sort 2-D shapes</p> <p>Step 8: Count faces on 3-D shapes</p> <p>Step 9: Count edges on 3-D shapes</p> <p>Step 10: Count vertices on 3-D shapes</p> <p>Step 11: Sort 3-D shapes</p> <p>Step 12: Make patterns with 2-D and 3-D shapes</p>	<p>recognise angles as a property of shape or a description of a turn</p> <ul style="list-style-type: none"> identify right angles, recognise that two right angles make a half-turn, 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>Small steps sequence Summer</p> <p>Step 1: Understand Turns and angles</p> <p>Step 2: Understand Right angles</p> <p>Step 3: Compare angles</p> <p>Step 4: Measure and draw accurately</p> <p>Step 5: Understand Horizontal and vertical</p> <p>Step 6: Understand Parallel and perpendicular</p> <p>Step 7: Recognise and describe 2-D shapes</p> <p>Step 8: Draw polygons</p> <p>Step 9: Recognise and describe 3-D shapes</p> <p>Step 10: Make 3-D shapes</p>	<p>Angles and lines identify acute and obtuse angles and compare and order angles up to two right angles by size</p> <ul style="list-style-type: none"> 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>Small steps sequence Summer</p> <p>Step 1: Understand angles as turns</p> <p>Step 2: Identify angles</p> <p>Step 3: Compare and order angles</p> <p>Step 4: Explore triangles</p> <p>Step 5: Explore quadrilaterals</p> <p>Step 6: Explore polygons</p> <p>Step 7: Lines of symmetry</p> <p>Step 8: Complete a symmetric figure</p>	<p>angles</p> <p>3-D Shape identify 3-D shapes, including cubes and other cuboids, from 2-D representations</p> <p>Angles and lines know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</p> <ul style="list-style-type: none"> draw given angles, and measure them in degrees identify: <ul style="list-style-type: none"> angles at a point and one whole turn (total 360°) angles at a point on a straight line and !\$ a turn (total 180°) other multiples of 90° <p>Small steps sequence Summer</p> <p>Step 1: Understand and use degrees</p> <p>Step 2: Classify angles</p> <p>Step 3: Estimate angles</p> <p>Step 4: Measure angles up to 180°</p> <p>Step 5: Draw lines and angles accurately</p> <p>Step 6: Calculate angles around a point</p> <p>Step 7: Calculate angles on a straight line</p> <p>Step 8: Calculate</p>	<p>radius, diameter and circumference and know that the diameter is twice the radius</p> <p>3-D Shape recognise, describe and build simple 3-D shapes, including making nets</p> <p>Angles and lines find unknown angles in any triangles, quadrilaterals, and regular polygons</p> <ul style="list-style-type: none"> recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles <p>Small steps sequence Summer</p> <p>Step 1: Measure and classify angles</p> <p>Step 2: Calculate angles</p> <p>Step 3: Vertically opposite angles</p> <p>Step 4: Angles in a triangle</p> <p>Step 5: Angles in a triangle – special cases</p> <p>Step 6: Angles in a triangle – missing angles</p> <p>Step 7: Angles in a quadrilateral</p> <p>Step 8: Angles in polygons</p> <p>Step 9: Circles</p> <p>Step 10: Draw shapes accurately</p> <p>Step 11: Nets of 3-D</p>
--	---	--	---	--	--	--	--	--



Hitherfield Primary School Progression Framework for: MATHS

	<p>with these materials, outdoors and inside. When appropriate, talk about the shapes and how their properties suit the purpose.</p> <ul style="list-style-type: none"> • Provide shapes that combine to make other shapes, such as pattern blocks and interlocking shapes, for children to play freely with. When appropriate, discuss the different designs that children make. • Occasionally suggest challenges, so that children build increasingly more complex constructions. • Use tidy-up time to match blocks to silhouettes or fit things in containers, describing and naming shapes. Suggestion: "Where does this triangular one /cylinder /cuboid go?" 	<p>Build) Step 1 Identify units of repeating patterns Step 2 Create own pattern rules Step 3 Explore own pattern rules</p>					<p>lengths and angles in shapes Step 9: Calculate regular and irregular polygons Step 10: Explore 3-D shapes</p>	<p>shapes</p>
<p>Strand: Geometry - Position and direction</p>	<ul style="list-style-type: none"> • Understand position through words alone – for example, "The bag is under the table," – with no pointing. • Describe a familiar route. • Discuss routes and locations, using words like 'in front of' and 'behind'. • Extend and create ABAB patterns – stick, leaf, stick, leaf. 	<ul style="list-style-type: none"> • Continue, copy and create repeating patterns <p>Small steps sequence Autumn (Talk about measure and pattern) Step 4 Explore simple patterns Step 5 Copy and continue simple patterns Step 6 Create simple patterns</p>	<p>Position and Direction describe position, direction and movement, including whole, half, quarter and three-quarter turns</p> <p>Small steps sequence Summer Step 1: Describe turns Step 2: Describe position – left and right</p>	<p>Position and Direction order and arrange combinations of mathematical objects in patterns and sequences</p> <ul style="list-style-type: none"> • use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as 		<p>Position and Direction describe positions on a 2-D grid as coordinates in the first quadrant</p> <ul style="list-style-type: none"> • 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 	<p>Position and Direction 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>Small steps sequence Summer</p>	<p>Position and Direction describe positions on the full coordinate grid (all four quadrants)</p> <ul style="list-style-type: none"> • draw and translate simple shapes on the coordinate plane, and reflect them in the axes <p>Small steps sequence Summer Step 1: The first</p>



<ul style="list-style-type: none"> • Notice and correct an error in a repeating pattern. • Begin to describe a sequence of events, real or fictional, using words such as ‘first’, ‘then...’ <p>•Discuss position in real contexts. Suggestions: how to shift the leaves off a path or sweep water away down the drain.</p> <ul style="list-style-type: none"> •Use spatial words in play, including ‘in’, ‘on’, ‘under’, ‘up’, ‘down’, ‘besides’ and ‘between’. <p>Suggestion: “Let’s put the troll under the bridge and the billy goat beside the stream.”</p> <ul style="list-style-type: none"> •Set up obstacle courses, interesting pathways and hiding places for children to play with freely. When appropriate, ask children to describe their route and give directions to each other. •Provide complex train tracks, with loops and bridges, or water-flowing challenges with guttering that direct the flow to a water tray, for children to play freely with. •Read stories about journeys, such as ‘Rosie’s Walk’ 	<p>Small steps sequence Autumn (Circles and Triangles): Step 4 Describe position</p> <p>Small steps sequence Spring: (Explore 3D shapes) Step 5 Identify more complex patterns Step 6 Copy and continue patterns Step 7 Patterns in the environment</p> <p>Small steps sequence Summer: (Visualise, Map and Build) Step 1 Identify units of repeating patterns Step 2 Create own pattern rules Step 3 Explore own pattern rules Step 4 Replicate and build scenes and constructions Step 5 Visualise different positions Step 6 Describe positions</p>	<p>Step 3: Describe position – forwards and backwards Step 4: Describe position – above and below Step 5: Understand ordinal numbers</p>	<p>a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)</p> <p>Small steps sequence Summer Step 1: Understand the language of position Step 2: Describe movement Step 3: Describe turns Step 4: Describe movement and turns Step 5: Understand shape patterns with turns</p>			<p>given polygon</p> <p>Small steps sequence Summer Step 1: Describe position using coordinates] Step 2: Plot coordinates Step 3: Draw 2-D shapes on a grid Step 4: Translate on a grid Step 5: Describe translation on a grid</p>	<p>Step 1: Read and plot coordinates Step 2: Explore problem solving with coordinates Step 3: Understand translation Step 4: Understand translation with coordinates Step 5: Explore lines of symmetry Step 6: Explore reflection in horizontal and vertical lines</p>	<p>quadrant Step 2: Read and plot points in four quadrants Step 3: Solve problems with coordinates Step 4: Translations Step 5: Reflections</p>
---	---	---	---	--	--	--	--	---



Hitherfield Primary School Progression Framework for: MATHS

<p>Strand: Measurement - length and height</p>	<ul style="list-style-type: none"> • Make comparisons between objects relating to size, length, weight and capacity. • Provide experiences of size changes. Suggestions: “Can you make a puddle larger?”, “When you squeeze a sponge, does it stay small?”, “What happens when you stretch dough, or elastic?” • Talk with children about their everyday ways of comparing size, length, weight and capacity. • Model more specific techniques, such as lining up ends of lengths and straightening ribbons, discussing accuracy: “Is it exactly...?” 	<ul style="list-style-type: none"> • Compare length, weight and capacity Small steps sequence Autumn (Talk about measure and pattern) Step 1: Compare size Small steps sequence Spring (Length, Height and Time) Step 1: Explore length Step 2: Compare length Step 3: Explore height Step 4: Compare height 	<p>Using Measures Compare, describe and solve practical problems for: lengths and heights, -measure and begin to record the following: lengths and heights mass/weight capacity, volume and time</p> <p>Small steps sequence Spring</p> <p>Step 1: Compare lengths and heights</p> <p>Step 2: Measure length using objects</p> <p>Step 3: Measure length in centimetres</p>	<p>Using Measures choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) to the nearest appropriate unit, using rulers</p> <ul style="list-style-type: none"> • compare and order lengths and record the results using $>$, $<$ and $=$ <p>Small steps sequence Spring</p> <p>Step 1: Measure in centimetres</p> <p>Step 2: Measure in metres</p> <p>Step 3: Compare lengths and heights</p> <p>Step 4: Order lengths and heights</p> <p>Step 5: Four operations with lengths and heights</p>	<p>Using Measures measure, compare, add and subtract: lengths</p> <p>Small steps sequence Spring (length and perimeter)</p> <p>Step 1: Measure in metres and centimetres</p> <p>Step 2: Measure in millimetres</p> <p>Step 3: Measure in centimetres and millimetres</p> <p>Step 4: Metres, centimetres and millimetres</p> <p>Step 5: Equivalent lengths (metres and centimetres)</p> <p>Step 6: Equivalent lengths (centimetres and millimetres)</p> <p>Step 7: Compare lengths</p> <p>Step 8: Add lengths</p> <p>Step 9: Subtract lengths</p> <p>Step 10: What is perimeter?</p> <p>Step 11: Measure perimeter</p> <p>Step 12: Calculate perimeter</p>	<p>Using Measures Convert between different units of measure [kilometre to metre]</p> <ul style="list-style-type: none"> • estimate, compare and calculate different measures <p>Small steps sequence Spring (length and perimeter)</p> <p>Step 1: Measure in kilometres and metres</p> <p>Step 2: Equivalent lengths (kilometres and metres)</p>	<p><i>See Strand: Measurement - converting units</i></p>	<p>Using Measures solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 d.p. where appropriate</p> <ul style="list-style-type: none"> • 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 3 d.p. • convert between miles and kilometres <p>Small steps sequence Autumn</p> <p>Step 1: Use metric measures</p> <p>Step 2: Convert metric measures</p> <p>Step 3: Calculate with metric measures</p> <p>Step 4: Use Miles and kilometres</p> <p>Step 5: use Imperial measures</p>
<p>Strand: Measurement- Perimeter</p>					<p>Perimeter measure the perimeter of simple 2-D shapes</p> <p>Small steps sequence Spring (length and perimeter)</p> <p>Step 1: Measure in metres and</p>	<p>Perimeter measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres</p> <p>Small steps sequence Spring</p>	<p>Perimeter measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</p> <p>Small steps sequence Spring</p>	<p>Perimeter and Area recognise that shapes with the same areas can have different perimeters and vice versa</p> <ul style="list-style-type: none"> • recognise when it is possible to use formulae for area and volume of



Hitherfield Primary School Progression Framework for: MATHS

					<p>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</p>	<p>(length and perimeter) Step 3: Measure perimeter on a grid Step 4: Measure perimeter of a rectangle Step 5: Measure perimeter of rectilinear shapes Step 6: Find missing lengths in rectilinear shapes Step 7: Calculate perimeter of rectilinear shapes Step 8: Measure perimeter of regular polygons Step 9: Measure perimeter of polygons</p>	<p>PERIMETER and AREA Step 1: Calculate the perimeter of rectangles Step 2: Calculate the perimeter of rectilinear (including composite) shapes Step 3: Calculate the perimeter of polygons</p>	<p>shapes • calculate the area of parallelograms and triangles</p> <p>Small steps sequence Spring (Area, Perimeter and Volume) Step 1: Explore shapes – same area Step 2: Calculate area and perimeter Step 3: Calculate area of a triangle – counting squares Step 4: Calculate area of a right-angled triangle Step 5: Calculate area of any triangle Step 6: Calculate area of a parallelogram Step 7: Calculate volume – counting cubes Step 8: Calculate volume of a cuboid</p>
Strand: Measurement - Area					<p>Area find the area of rectilinear shapes by counting squares</p> <p>Small steps sequence Autumn Step 1: Understand area Step 2: Count squares Step 3: Make shapes Step 4: Compare areas</p>	<p>Area calculate and compare the area of rectangles (including squares) and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes</p> <p>Small steps sequence Spring (Perimeter and Area) Step 4: Calculate the area of rectangles Step 5: Calculate the</p>	<p>Perimeter and Area 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</p> <p>Small steps sequence Spring (Area, Perimeter and</p>	



							<p>area of compound shapes Step 6: Estimate area</p>	<p>Volume) Step 1: Explore shapes – same area Step 2: Calculate area and perimeter Step 3: Calculate area of a triangle – counting squares Step 4: Calculate area of a right-angled triangle Step 5: Calculate area of any triangle Step 6: Calculate area of a parallelogram Step 7: Calculate volume – counting cubes Step 8: Calculate volume of a cuboid</p>
<p>Strand: Measurement - mass and volume</p>	<p>• Make comparisons between objects relating to size, length, weight and capacity.</p>	<p>• Compare length, weight and capacity</p> <p>Small steps sequence Autumn (Talk about measure and pattern) Step 2 Compare mass Step 3 Compare capacity</p> <p>Small steps sequence Spring (mass and capacity) Step 1 Compare mass Step 2 Find a balance Step 3 Explore Capacity Step 4 Compare capacity</p>	<p>Using Measures compare, describe and solve practical problems for:</p> <ul style="list-style-type: none"> lengths and heights mass/weight capacity and volume time measure and begin to record the following: lengths and heights mass/weight capacity and volume <p>Small steps sequence Spring Step 1: Understand heavier and lighter Step 2: Measure mass Step 3: Compare mass</p>	<p>Using Measures choose and use appropriate standard units to estimate and measure mass (kg/g); capacity (litres/ml) to the nearest appropriate unit, using scales and measuring vessels</p> <ul style="list-style-type: none"> compare and order, mass, volume/capacity and record the results using >, < and = <p>Small steps sequence Spring (mass, capacity and temperature) Step 1: Compare mass Step 2: Measure in grams Step 3: Measure in</p>	<p>Using Measures measure, compare, add and subtract: mass (kg/g); volume/capacity (l/ml)</p> <p>Small steps sequence Spring (mass and capacity) 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</p>	<p>Using Measures Convert between different units of measure [for example, kilometre to metre; hour to minute]</p> <ul style="list-style-type: none"> estimate, compare and calculate different measures 	<p>Volume estimate volume [for example, using blocks to build cuboids] and capacity [for example, using water]</p> <p>Small steps sequence Summer - (volume) Step 1: Understand cubic centimetres Step 2: Compare volume Step 3: Estimate volume Step 4: Estimate capacity</p>	<p>Using Measures solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 d.p. where appropriate</p> <ul style="list-style-type: none"> 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 up to 3 d.p. convert between miles and kilometres <p>Volume</p> <ul style="list-style-type: none"> calculate, estimate



Hitherfield Primary School Progression Framework for: MATHS

			<p>Step 4: Understand Full and empty</p> <p>Step 5: Compare volume</p> <p>Step 6: Measure capacity</p> <p>Step 7: Compare capacity</p>	<p>kilograms</p> <p>Step 4: Four operations with mass</p> <p>Step 5: Compare volume and capacity</p> <p>Step 6: Measure in millilitres</p> <p>Step 7: Measure in litres</p> <p>Step 8: Four operations with volume and capacity</p> <p>Step 9: Temperature</p>	<p>in litres and millilitres</p> <p>Step 9: Equivalent capacities and volumes (litres and millilitres)</p> <p>Step 10: Compare capacity and volume</p> <p>Step 11: Add and subtract capacity and volume</p>		<p>and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm³) and cubic metres (m³), and extending to other units</p> <p>Small steps sequence Spring (Area, Perimeter and Volume)</p> <p>Step 1: Explore shapes – same area</p> <p>Step 2: Calculate area and perimeter</p> <p>Step 3: Calculate area of a triangle – counting squares</p> <p>Step 4: Calculate area of a right-angled triangle</p> <p>Step 5: Calculate area of any triangle</p> <p>Step 6: Calculate area of a parallelogram</p> <p>Step 7: Calculate volume – counting cubes</p> <p>Step 8: Calculate volume of a cuboid</p>	
Strand: Measurement - converting units							<p>Using Measures convert between different units of metric measure</p> <ul style="list-style-type: none"> • understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints • use all four operations to solve problems involving 	<p>Using Measures solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 d.p. where appropriate</p> <ul style="list-style-type: none"> • use, read, write and convert between standard units, converting measurements of length, mass,



Hitherfield Primary School Progression Framework for: MATHS

							<p>measure [for example, length, mass, volume, money] using decimal notation, including scaling</p> <p>Small steps sequence Summer Step 1: Convert kilograms and kilometres Step 2: Convert millimetres and millilitres Step 3: Convert units of length Step 4: Convert between metric and imperial units Step 5: Convert units of time Step 6: Calculate with timetables</p>	<p>volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 d.p.</p> <ul style="list-style-type: none"> • convert between miles and kilometres <p>Small steps sequence Autumn Step 1: Understand metric measures Step 2: Convert metric measures Step 3: Calculate with metric measures Step 5: Understand imperial measures</p>
<p>Strand: Measurement - money</p>			<p>Money recognise and know the value of different denominations of coins and notes</p> <p>Small steps sequence Summer Step 1: Unitising coins Step 2: Recognise coins Step 3: Recognise notes Step 4: Count in coins</p>	<p>Money recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</p> <ul style="list-style-type: none"> • 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>Small steps sequence Autumn Step 1: Count money - pence</p>	<p>Money add and subtract amounts of money to give change, using both £ and p in practical contexts</p> <p>Small steps sequence Summer Step 1: Understand pounds and pence Step 2: Convert pounds and pence Step 3: Add money Step 4: Subtract money Step 5: Find change</p>	<p>Money estimate, compare and calculate different measures, including money in pounds and pence</p> <p>Small steps sequence Summer Step 1: Write money using decimals Step 2: Convert between pounds and pence Step 3: Compare amounts of money Step 4: Estimate with money Step 5: Calculate with money Step 6: Solve problems with money</p>	<p>Money use all four operations to solve problems involving measure [for example, money]</p>	<p>Money use all four operations to solve problems involving measure [for example, money]</p>



Hitherfield Primary School Progression Framework for: MATHS

				<p>Step 2: Count money – pounds (notes and coins)</p> <p>Step 3: Count money – pounds and pence</p> <p>Step 4: Choose notes and coins</p> <p>Step 5: Make the same amount</p> <p>Step 6: Compare amounts of money</p> <p>Step 7: Calculate with money</p> <p>Step 8: Make a pound</p> <p>Step 9: Find change</p> <p>Step 10: Solve two-step problems</p>				
Strand: Measurement - time			<p>Time sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]</p> <ul style="list-style-type: none"> • 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 <p>Small steps sequence Summer</p> <p>Step 1: Understand before and after</p> <p>Step 2: Identify the days of the week</p>	<p>Time compare and sequence intervals of time</p> <ul style="list-style-type: none"> • 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 <p>Small steps sequence Summer</p> <p>Step 1: Understand o'clock and half past</p> <p>Step 2: Understand quarter past and quarter to</p> <p>Step 3: Tell the time past the hour</p> <p>Step 4: Tell the time to the hour</p> <p>Step 5: Tell the time to 5 minutes</p> <p>Step 6: Understand minutes in an hour</p>	<p>Time 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> <ul style="list-style-type: none"> • 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 	<p>Time read, write and convert time between analogue and digital 12- and 24-hour clocks</p> <ul style="list-style-type: none"> • solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days <p>Small steps sequence Summer</p> <p>Step 1: Explore years, months, weeks and days</p> <p>Step 2: Explore hours, minutes and seconds</p> <p>Step 3: Convert between analogue and digital times</p> <p>Step 4: Convert to the 24-hour clock</p> <p>Step 5: Convert from the 24-hour clock</p>	<p>Time solve problems involving converting between units of time</p> <p>Small steps sequence Summer</p> <p>Step 5: Convert units of time</p> <p>Step 6: Calculate with timetables</p>	<p>Time use, read, write and convert between standard units, converting measurements of time from a smaller unit of measure to a larger unit, and vice versa</p> <p><i>Note – In the White Rose Math schemes, time conversions are covered in Y5; the Y6 block concentrates on metric units.</i></p>



Hitherfield Primary School Progression Framework for: MATHS

			<p>Step 3: Identify the months of the year Step 4: Understand hours, minutes and seconds Step 5: Tell the time to the hour Step 6: Tell the time to the half hour</p>	<p>Step 7: Understand hours in a day</p>	<p>taken by particular events or tasks]</p> <p>Small steps sequence Summer</p> <p>Step 1: Identify 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 am and pm Step 6: Understand Years, months and days Step 7: Understand Days and hours Step 8: Hours and minutes - use start and end times Step 9: Hours and minutes - use durations Step 10: Understand Minutes and seconds Step 11: Understand Units of time Step 12: Solve problems with time</p>			
Strand: Statistics				<p><u>Present and interpret data</u> interpret and construct simple pictograms, tally charts, block diagrams and simple tables</p> <p><u>Solve statistical problems</u> ask and answer simple questions by counting the number of objects in each</p>	<p><u>Present and interpret data</u> interpret and present data using bar charts, pictograms and tables</p> <p><u>Solve statistical problems</u> • solve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?’]</p>	<p><u>Present and interpret data</u> interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs</p> <p><u>Solve statistical problems</u> • solve comparison,</p>	<p><u>Present and interpret data</u> complete, read and interpret information in tables, including timetables</p> <p><u>Solve statistical problems</u> • solve comparison, sum and difference problems using information presented in a line</p>	<p><u>Present and interpret data</u> interpret and construct pie charts and line graphs and use these to solve problems</p> <p><u>Solve statistical problems</u> calculate and interpret the mean as an average</p> <p>Small steps</p>



Hitherfield Primary School Progression Framework for: MATHS

				<p>category and sorting the categories by quantity</p> <ul style="list-style-type: none"> ask and answer questions about totalling and comparing categorical data <p>Small steps sequence Summer</p> <p>Step 1: Make tally charts</p> <p>Step 2: Understand tables</p> <p>Step 3: Understand block diagrams</p> <p>Step 4: Draw pictograms (1-1)</p> <p>Step 5: Interpret pictograms (1-1)</p> <p>Step 6: Draw pictograms (2, 5 and 10)</p> <p>Step 7: Interpret pictograms (2, 5 and 10)</p>	<p>using information presented in scaled bar charts and pictograms and tables</p> <p>Small steps sequence Summer</p> <p>Step 1: Interpret pictograms</p> <p>Step 2: Draw pictograms</p> <p>Step 3: Interpret bar charts</p> <p>Step 4: Draw bar charts</p> <p>Step 5: Collect and represent data</p> <p>Step 6: Two-way tables</p>	<p>sum and difference problems using information presented in bar charts, pictograms, tables and other graphs</p> <p>Small steps sequence Summer</p> <p>Step 1: Interpret charts</p> <p>Step 2: Comparison, sum and difference</p> <p>Step 3: Interpret line graphs</p> <p>Step 4: Draw line graphs</p>	<p>graph</p> <p>Small steps sequence Spring</p> <p>Step 1: Draw line graphs</p> <p>Step 2: Read and interpret line graphs</p> <p>Step 3: Read and interpret tables</p> <p>Step 4: Explore two-way tables</p> <p>Step 5: Read and interpret timetables</p>	<p>sequence Spring</p> <p>Step 1: Line graphs</p> <p>Step 2: Dual bar charts</p> <p>Step 3: Read and interpret pie charts</p> <p>Step 4: Pie charts with percentages</p> <p>Step 5: Draw pie charts</p> <p>Step 6: The mean</p>
--	--	--	--	---	--	---	--	--

Whole School Multiplication Programme			<table border="1"> <thead> <tr> <th>YEAR</th> <th>Term 1</th> <th>Term 2</th> <th>Term 3</th> <th>Term 4</th> <th>Term 5</th> <th>Term 6</th> </tr> </thead> <tbody> <tr> <td>1</td> <td colspan="6">Experience counting in 1s, 2s, 5s, 10s</td> </tr> <tr> <td>2</td> <td>1x</td> <td>(1x) 2x</td> <td>5x</td> <td>(5x) 10x</td> <td>0 x and revision</td> <td>revision</td> </tr> <tr> <td>3</td> <td>(2x) 4x</td> <td>(4x) 8x</td> <td>3x</td> <td>(3x) 6x</td> <td>(6x) 12x</td> <td>revision</td> </tr> <tr> <td>4</td> <td>9x</td> <td>7x</td> <td>11x</td> <td>squares</td> <td>revision</td> <td>Test: June</td> </tr> <tr> <td>5</td> <td>Audit individual classes to identify gaps</td> <td colspan="5" rowspan="2">Times tables sessions - at least 10 minutes per week focusing on key T.T chn find challenging</td> </tr> <tr> <td>6</td> <td>Audit individual classes to identify gaps</td> </tr> <tr> <td colspan="7">One explicit times tables sessions per term focusing on patterns, connections and developing problem solving and reasoning (conceptual understanding - the why!). Options: choose a focus T.T or a range of T.Ts for each session.</td> </tr> </tbody> </table>	YEAR	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6	1	Experience counting in 1s, 2s, 5s, 10s						2	1x	(1x) 2x	5x	(5x) 10x	0 x and revision	revision	3	(2x) 4x	(4x) 8x	3x	(3x) 6x	(6x) 12x	revision	4	9x	7x	11x	squares	revision	Test: June	5	Audit individual classes to identify gaps	Times tables sessions - at least 10 minutes per week focusing on key T.T chn find challenging					6	Audit individual classes to identify gaps	One explicit times tables sessions per term focusing on patterns, connections and developing problem solving and reasoning (conceptual understanding - the why!). Options: choose a focus T.T or a range of T.Ts for each session.						
			YEAR	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6																																													
			1	Experience counting in 1s, 2s, 5s, 10s																																																		
			2	1x	(1x) 2x	5x	(5x) 10x	0 x and revision	revision																																													
			3	(2x) 4x	(4x) 8x	3x	(3x) 6x	(6x) 12x	revision																																													
			4	9x	7x	11x	squares	revision	Test: June																																													
			5	Audit individual classes to identify gaps	Times tables sessions - at least 10 minutes per week focusing on key T.T chn find challenging																																																	
			6	Audit individual classes to identify gaps																																																		
One explicit times tables sessions per term focusing on patterns, connections and developing problem solving and reasoning (conceptual understanding - the why!). Options: choose a focus T.T or a range of T.Ts for each session.																																																						