



# Yorke Mead Primary School

## Maths Curriculum in supporting Herts essentials



### Mathematics supplementary curriculum

**This supplementary curriculum is in addition to the Hertfordshire Essentials Learning Sequence**

<b>Nursery</b>		
<b>Key Theme : Number, shape, space and measure</b>		
<b>Previous Learning</b> To be reinforced	<b>Core Learning Intentions</b> Age Related	<b>Extension Opportunities</b> Next steps
<p><b>Number</b> Notices changes in number of objects/images or sounds in group of up to 3 Knows that things exist, even when out of sight. •Beginning to organise and categorise objects, e.g. putting all the teddy bears together or teddies and cars in separate piles. •Says some counting words randomly.</p> <p><b>Shape, space and measure</b></p>	<p><b>Number</b> Uses some number names and number language spontaneously. •Uses some number names accurately in play. •Recites numbers in order to 10. •Knows that numbers identify how many objects are in a set. •Beginning to represent numbers using fingers, marks on paper or pictures. •Sometimes matches numeral and quantity correctly. •Shows curiosity about numbers by offering comments or asking questions. •Compares two groups of objects, saying when they have the same number. •Shows an interest in number problems. •Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same. •Shows an interest in numerals in the environment. •Shows an interest in representing numbers. •Realises not only objects, but anything can be counted, including steps, claps or jumps.</p> <p><b>Shape, space and measure</b> Shows an interest in shape and space by playing with shapes or making arrangements with objects.</p>	<p>See Reception</p> <p><b>NRICH</b></p>



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Babies' early awareness of shape, space and measure grows from their sensory awareness and opportunities to observe objects and their movements, and to play and explore. See Characteristics of Effective Learning - Playing and Exploring, and Physical Development. Recognises big things and small things in meaningful contexts.

- Gets to know and enjoy daily routines, such as getting-up time, mealtimes, nappy time, and bedtime. Attempts, sometimes successfully, to fit shapes into spaces on inset boards or jigsaw puzzles.
- Uses blocks to create their own simple structures and arrangements.
- Enjoys filling and emptying containers.
- Associates a sequence of actions with daily routines.
- Beginning to understand that things might happen 'now'.
- Notices simple shapes and patterns in pictures.
- Beginning to categorise objects according to properties such as shape or size.
- Begins to use the language of size.
- Understands some talk about immediate past and future, e.g. 'before', 'later' or 'soon'.
- Anticipates specific time-based events such as mealtimes or home time.

- Shows awareness of similarities of shapes in the environment.
- Uses positional language.
- Shows interest in shape by sustained construction activity or by talking about shapes or arrangements.
- Shows interest in shapes in the environment.
- Uses shapes appropriately for tasks.
- Beginning to talk about the shapes of everyday objects, e.g. 'round' and 'tall'.



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Reception Key Theme : Number, shape, space and measure		
Previous Learning To be reinforced	Core Learning Intentions Age Related	Extension Opportunities Next steps
<p><b>Number</b> Uses some number names and number language spontaneously. •Uses some number names accurately in play. •Recites numbers in order to 10. •Knows that numbers identify how many objects are in a set. •Beginning to represent numbers using fingers, marks on paper or pictures. •Sometimes matches numeral and quantity correctly. •Shows curiosity about numbers by offering comments or asking questions. •Compares two groups of objects, saying when they have the same number. •Shows an interest in number problems. •Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same. •Shows an interest in numerals in the environment. •Shows an interest in representing numbers. •Realises not only objects, but anything can be counted, including steps, claps or jumps.</p>	<p><b>Number</b> Recognise some numerals of personal significance. •Recognises numerals 1 to 5. •Counts up to three or four objects by saying one number name for each item. •Counts actions or objects which cannot be moved. •Counts objects to 10, and beginning to count beyond. •Selects the correct numeral to represent 1 to 5, then 1 to 10 objects. •Counts an irregular arrangement of up to ten objects. •Estimates how many objects they can see and checks by counting them. •Uses the language of 'more' and 'fewer' to compare two sets of objects. •Finds the total number of items in two groups by counting all of them. •Says the number that is one more than a given number. •Finds one more or one less from a group of up to five objects, then ten objects. •In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting. •Records, using marks that they can interpret and explain. •Begins to identify own mat</p> <p>Early Learning Goal Children count reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count</p>	<p>Guess my rule Odd one out Sorting numbers NRICH</p>



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<p><b>Shape, space and measure</b> Shows an interest in shape and space by playing with shapes or making arrangements with objects. •Shows awareness of similarities of shapes in the environment. •Uses positional language. •Shows interest in shape by sustained construction activity or by talking about shapes or arrangements. •Shows interest in shapes in the environment. •Uses shapes appropriately for tasks. •Beginning to talk about the shapes of everyday objects, e.g. 'round' and 'tall'.</p>	<p>on or back to find the answer. They solve problems, including doubling, halving and sharing.</p> <p><b>Shape, space and measure</b> Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes. •Selects a particular named shape. •Can describe their relative position such as 'behind' or 'next to'. •Orders two or three items by length or height. •Orders two items by weight or capacity. •Uses familiar objects and common shapes to create and recreate patterns and build models. •Uses everyday language related to time. •Beginning to use everyday language related to money. •Orders and sequences familiar events. •Measures short periods of time in simple ways.</p> <p>Early Learning Goal Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.</p>	<p>Odd one out Guess my rule What is the same? What is different? NRICH</p>
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<b>Year 1</b> <b>Key Theme :</b> Times Tables, shape, measures, money, mental fluency project		
<b>Previous Learning</b> To be reinforced	<b>Core Learning Intentions</b> Age Related	<b>Extension Opportunities</b> Next steps
<b><u>Times Tables</u></b> <b>Recognise + and – signs</b> <b>Write numbers to 10 correctly</b>	<b>Represent and use number bonds and related subtraction facts within 20</b> Autumn term – focus on number bonds to 5, 10 and 20. 1 test every 4 weeks with a focus taught session for other 3 weeks.  Counting in 10's, 2's and 5's - monthly focus from Spring term. 1 test every 4 weeks with a focus taught session for other 3 weeks. Certificates given and ladders to be used to award working towards, bronze, silver, gold and platinum.	Where children meet platinum in all 3 tests progress to mixed tests.
<b><u>Measures</u></b> Children will have talked about when in time things have happened and have an awareness of the days of the week.	<b>Recognise and use language relating to dates, including days of the week, weeks, months and years</b> <b>sequence events in chronological order using language</b> Daily the teacher will discuss the date with the children getting the children to tell the teacher what the date should be today. Discuss	What is the date going to be on Monday? What was the date last/next week? How many days till.....?



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	<p>changes between months and years etc. Teachers to discuss the long and short dates and to explain what all parts represent.</p>	
<p><b><u>Morning maths, warm up etc.</u></b> Count reliably to 20. Order numbers 1 – 20. Say 1 more/1 less to 20. Add &amp; subtract two single digit numbers. Recognise + and – signs. Count on/back to find the answer. Use everyday language for shape, size, weight, capacity, time and money. Know and recognise the properties of 2D shape and begin to know 3D shapes. Double, half and share in practical activities. Write numbers to 10 correctly. Use simple apparatus e.g numicon, unifix cubes, numberlines. Recognise 1p, 2p, 5p, 10p coins.</p>	<p><b>Teachers should take regular opportunities during early morning maths (regularly from Spring term), starters, changing from PE, lining up etc to ensure the following are covered frequently.</b></p> <ul style="list-style-type: none"> <li>• count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number</li> <li>• given a number, identify 1 more and 1 less</li> <li>• identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least</li> <li>• read and write numbers from 1 to 20 in numerals and words.</li> <li>• represent and use number bonds and related subtraction facts within 20</li> <li>• add and subtract one-digit and two-digit numbers to 20, including 0</li> <li>• solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as <math>7 = ? - 9</math>.</li> <li>• recognise, find and name a half as 1 of 2 equal parts of an object, shape or quantity</li> </ul>	<p>What is 5 more/less? 10 more/less?</p> <p>Missing numbers on the number line.</p> <p>How does knowing <math>2+8=10</math> help solve <math>20+80=?</math></p> <p>Questions in words rather than numbers and symbols.</p> <p>Use shapes not split into halves/quarters.</p>



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	<ul style="list-style-type: none"><li>• Recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity.</li><li>• compare, describe and solve practical problems for:<ol style="list-style-type: none"><li>I. lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]</li><li>II. mass / weight</li><li>III. capacity and volume</li><li>IV. time</li></ol></li><li>• measure and begin to record the following:<ol style="list-style-type: none"><li>I. lengths and heights</li><li>II. mass/weight</li><li>III. capacity and volume</li><li>IV. time (hours, minutes, seconds)</li></ol></li><li>• recognise and know the value of different denominations of coins and notes</li><li>• tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.</li><li>• recognise and name common 2-D and 3-D shapes</li><li>• describe position, directions and movements, including whole, half, quarter and three-quarter turns.</li></ul>	<p>Problems involving money.</p> <p>Problems involving time. Real life time questions. Use irregular shapes or in real life context. Reverse questions e.g. If I am looking at the back wall and turned a quarter turn anti clockwise where did I start?</p>
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Year 2 Key Theme :		
Previous Learning To be reinforced	Core Learning Intentions Age Related	Extension Opportunities Next steps
<b><u>Times Tables</u></b> Focus on number bonds to 5, 10 and 20. Counting in 10's, 2's and 5's	Counting in 2's and 5's then 2, 5 and 10's times table - monthly focus from Spring term. 1 test every 4 weeks with a focus taught session for other 3 weeks. Certificates given and ladders to be used to award working towards, bronze, silver, gold and platinum.	
<b><u>Measures</u></b> <b>Recognise and use language relating to dates, including days of the week, weeks, months and years</b> <b>sequence events in chronological order using language</b> Daily the teacher will discuss the date with the children getting the children to tell the teacher what the date should be today. Discuss changes between months and years etc. Teachers to discuss the long and short dates and to explain what all parts represent.	Continue to address the date on a daily basis. Use times when discussing the day with the children. Use opportunities in early morning maths, starters and warm ups to revisit the following: Ma2/3.1a choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels  Ma2/3.1b compare and order lengths, mass, volume/capacity and record the results using >, < and =  Ma2/3.1c recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value	





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	<p>Ma2/3.1d find different combinations of coins that equal the same amounts of money</p> <p>Ma2/3.1e solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</p> <p>Ma2/3.1f compare and sequence intervals of time</p> <p>Ma2/3.1g 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.</p> <p>Ma2/3.1h know the number of minutes in an hour and the number of hours in a day</p>	
<p><b><u>Morning maths, warm up etc.</u></b></p> <ul style="list-style-type: none"><li>• count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number</li><li>• given a number, identify 1 more and 1 less</li><li>• identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least</li><li>• read and write numbers from 1 to 20 in numerals and words.</li></ul>	<p><b>Teachers should take regular opportunities during early morning maths, starters, changing from PE, lining up etc to ensure the following are covered frequently.</b></p> <p>Ma2/2.4a recognise, find, name and write fractions <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math> and <math>\frac{3}{4}</math> of a length, shape, set of objects or quantity</p> <p>Ma2/2.4b write simple fractions, for example <math>\frac{1}{2}</math> of 6 = 3 and recognise the equivalence of <math>\frac{2}{4}</math> and <math>\frac{1}{2}</math>.</p> <p>Ma2/3.2a identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line</p>	<p>Equivalent fractions</p> <p>Fractions of shapes on different papers.</p> <p>Draw symmetry. What is wrong questions?</p>



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<ul style="list-style-type: none"> <li>represent and use number bonds and related subtraction facts within 20</li> <li>add and subtract one-digit and two-digit numbers to 20, including 0</li> <li>solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as <math>7 = ? - 9</math>.</li> <li>recognise, find and name a half as 1 of 2 equal parts of an object, shape or quantity</li> <li>Recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity.</li> <li>compare, describe and solve practical problems for:             <ol style="list-style-type: none"> <li>lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]</li> <li>mass / weight</li> <li>capacity and volume</li> <li>time</li> </ol> </li> <li>measure and begin to record the following:             <ol style="list-style-type: none"> <li>lengths and heights</li> <li>mass/weight</li> </ol> </li> </ul>	<p>Ma2/3.2b identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</p> <p>Ma2/3.2c <b>identify 2-D shapes on the surface of 3-D shapes</b></p> <p>Ma2/3.2d compare and sort common 2-D and 3-D shapes and everyday objects.</p> <p>Ma2/3.3a order and arrange combinations of mathematical objects in patterns and sequences</p> <p>Ma2/3.3b use mathematical vocabulary to describe position, direction and movement including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise).</p> <p>Ma2/2.1a count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward</p> <p>Ma2/2.1e read and write numbers to at least 100 in numerals and in words</p>	<p>Real life symmetry.</p> <p>Irregular shapes.</p> <p>Questions about 3d shapes drawn flat on paper e.g. identifying faces that can't be seen.</p> <p>What is wrong with the pattern style questions.</p> <p>Reverse questions e.g. If I am looking at the back wall and turned a quarter turn anti clockwise where did I start?</p> <p>Starting at numbers other than 0.</p>
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<p>III. capacity and volume IV. time (hours, minutes, seconds)</p> <ul style="list-style-type: none"><li>• recognise and know the value of different denominations of coins and notes</li><li>• tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.</li><li>• recognise and name common 2-D and 3-D shapes</li></ul> <p>describe position, directions and movements, including whole, half, quarter and three-quarter turns.</p>		
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### Year 3

#### Key Themes: times tables, measures, mental fluency and shape.

Teachers need to ensure there are ongoing regular opportunities for reinforced learning to enable children have met these objectives by the end of the year. We recognise that topics such as time will not be secured unless children are regularly encouraged to use and develop their skills and knowledge. Opportunities should be taken in daily (3 times a week minimum) morning maths sessions and dedicated times tables sessions, during PE changing, lining up for assembly etc.

Previous Learning To be reinforced	Core Learning Intentions Age Related	Extension Opportunities Next steps
<p style="text-align: center;">From year 2</p> <p><b><u>Times Tables</u></b></p> <ul style="list-style-type: none"> <li>recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</li> </ul>	<p style="text-align: center;">Year 3 National Curriculum</p> <p><b><u>Times Tables</u></b></p> <ul style="list-style-type: none"> <li>recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables</li> </ul>	<p>Children to use knowledge of 3 times tables to learn 6 times tables and 4 times tables to learn 12 times tables. Once children have secured times tables individually they should practise and be tested on mixed times tables. Recall of times tables should be rapid and accurate. The “Times tables rock stars” programme should be used at home and in class time to support this learning.</p>
<p><b><u>Measure (money)</u></b></p> <ul style="list-style-type: none"> <li>recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</li> <li>find different combinations of coins that equal the same amounts of money</li> <li>solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</li> </ul>	<p><b><u>Measure (money)</u></b></p> <ul style="list-style-type: none"> <li>add and subtract amounts of money to give change, using both £ and p in practical contexts</li> </ul>	<p>Children should be encouraged to apply the use of their skills working with money outside of school in real life context such as shopping with an adult – this could be a homework task. In school, children should be encouraged to handle money when given the opportunity eg the KS2 Christmas café, charity stalls as part of financial awareness.</p>
<p><b><u>Measure (time)</u></b></p> <ul style="list-style-type: none"> <li>compare and sequence intervals of time</li> </ul>	<p><b><u>Measure (time)</u></b></p> <ul style="list-style-type: none"> <li>tell and write the time from an analogue clock, including using Roman</li> </ul>	<p>After explicit teaching of time children should be given regular opportunities to share their knowledge. Teachers asking questions such as:</p>



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<ul style="list-style-type: none"><li>• 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</li><li>• know the number of minutes in an hour and the number of hours in a day</li></ul>	<p>numerals from I to XII, and 12-hour and 24-hour clocks</p> <ul style="list-style-type: none"><li>• 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</li><li>• 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 taken by particular events or tasks].</li></ul>	<p>“What is the time now?” How long is it until playtime / lunchtime / home time / the next lesson” etc Can children write time word problems for others to solve?</p>
<p><b>Shape</b></p> <ul style="list-style-type: none"><li>• recognise and name common 2-D and 3-D shapes, including: 2-D shapes [for example, rectangles (including squares), circles and triangles]</li><li>• 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].</li></ul>	<p><b>Shape</b></p> <ul style="list-style-type: none"><li>• draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them</li></ul>	<p><b>Shape</b></p> <p>Give children regular opportunities to identify shape names, use cross curricular links eg making shapes in PE, identifying 3D shapes eg in DT construction, when using containers etc</p>
<p><b>Mental Fluency</b></p> <ul style="list-style-type: none"><li>• count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward</li></ul>	<p><b>Mental fluency</b></p> <ul style="list-style-type: none"><li>• count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number</li></ul>	<p><b>Mental fluency</b></p> <p>Once children can count in the multiples indicated extend their knowledge to counting to and from below 0 and counting from numbers other than 0.</p>



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### Year 4

#### Key Theme: times tables, measures, mental fluency and shape.

Teachers need to ensure there are ongoing regular opportunities for reinforced learning to enable children have met these objectives by the end of the year. We recognise that topics such as time will not be secured unless children are regularly encouraged to use and develop their skills and knowledge. Opportunities should be taken daily (3 times a week minimum) morning maths sessions and dedicated times tables sessions, during PE changing, lining up for assembly etc.

Previous Learning To be reinforced	Core Learning Intentions Age Related	Extension Opportunities Next steps
Times Tables <ul style="list-style-type: none"> <li>recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> </ul>	<ul style="list-style-type: none"> <li>recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> </ul>	The “Times tables rock stars” programme should be used at home and in class time to support this learning. Begin to give children opportunities to work beyond times tables eg calculating with simple fractions adding and subtracting and decimals.
Measure (money) <ul style="list-style-type: none"> <li>add and subtract amounts of money to give change, using both £ and p in practical contexts</li> </ul>	<ul style="list-style-type: none"> <li>estimate, compare and calculate different measures, including money in pounds and pence</li> </ul>	Apply to real life giving children opportunities through home learning to use money in real contexts such as shopping, measures in cooking and linking to other curriculum areas such as PSHE as part of financial awareness.
Measures (time) <ul style="list-style-type: none"> <li>tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks</li> <li>estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes</li> </ul>	<ul style="list-style-type: none"> <li>Convert between different units of measure [for example, kilometre to metre; hour to minute]</li> <li>read, write and convert time between analogue and digital 12- and 24-hour clocks</li> <li>solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</li> </ul>	Relate to previous learning in Y3 – Roman civilisation. Cross-curricular link to time in French. Bring telling the time into everyday life through questions such as on a child’s birthday – how many months / days / hours have you been alive?



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<p>and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight</p> <ul style="list-style-type: none"><li>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 taken by particular events or tasks].</li></ul>		
<p>Shape</p> <ul style="list-style-type: none"><li>draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them</li></ul>	<ul style="list-style-type: none"><li>compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</li><li>identify acute and obtuse angles and compare and order angles up to two right angles by size</li></ul>	<p>Give children regular opportunities to identify shape names, use cross curricular links eg making shapes in PE, identifying 3D shapes eg in DT construction, when using containers etc . Use language associated with shape which children often forget eg perpendicular, parallel, quadrilateral etc</p>
<p>Mental fluency</p> <ul style="list-style-type: none"><li>count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number</li></ul>	<ul style="list-style-type: none"><li>count in multiples of 6, 7, 9, 25 and 1000</li><li>find 1000 more or less than a given number</li><li>count backwards through zero to include negative numbers</li></ul>	<p>Extend to negative numbers and decimals.</p>



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### Year 5

#### Key Theme: times tables, measures, mental fluency and shape.

Teachers need to ensure there are ongoing regular opportunities for reinforced learning to enable children have met these objectives by the end of the year. We recognise that topics such as time will not be secured unless children are regularly encouraged to use and develop their skills and knowledge. Opportunities should be taken daily (3 times a week minimum) morning maths sessions and dedicated times tables sessions, during PE changing, lining up for assembly etc.

Previous Learning To be reinforced	Core Learning Intentions Age Related	Extension Opportunities Next steps
<p><b><u>Times Tables</u></b></p> <ul style="list-style-type: none"> <li>recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> </ul>	<ul style="list-style-type: none"> <li>Over learning of times tables mixed between different times tables to keep secure knowledge, accuracy and speed</li> <li>identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers</li> <li>know and use the vocabulary of prime numbers, prime factors and composite (nonprime) numbers</li> <li>establish whether a number up to 100 is prime and recall prime numbers up to 19.</li> <li>multiply and divide numbers mentally drawing upon known facts</li> </ul>	<p>The “Times tables rock stars” programme should be used at home and in class time to support this learning.</p> <p>Begin to move beyond times tables working with fractions, decimals and percentages.</p>
<p><b><u>Measures – money</u></b></p> <ul style="list-style-type: none"> <li>estimate, compare and calculate different measures, including money in pounds and pence</li> </ul>	<ul style="list-style-type: none"> <li>use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.</li> </ul>	<p>Apply to real life giving children opportunities through home learning to use money in real contexts such as shopping, measures in cooking and linking to other curriculum areas such as PSHE – financial awareness</p>
<p><b><u>Measure – time</u></b></p> <p>Convert between different units of measure [for example, kilometre to metre; hour to minute]</p>	<ul style="list-style-type: none"> <li>solve problems involving converting between units of time</li> </ul>	<p>Relate to previous learning in Y3 – Roman civilisation.</p> <p>Cross-curricular link to time in French.</p>





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## Maths Curriculum in supporting Herts essentials



		Bring telling the time into everyday life through questions such as on a child's birthday – how many months / days / hours have you been alive?
<b>Measure – shape</b> <ul style="list-style-type: none"><li>compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</li><li>identify acute and obtuse angles and compare and order angles up to two right angles by size</li></ul>	<ul style="list-style-type: none"><li>identify 3-D shapes, including cubes and other cuboids, from 2-D representations</li><li>know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</li></ul>	Give children regular opportunities to identify shape names, use cross curricular links eg making shapes in PE, identifying 3D shapes eg in DT construction, when using containers etc . Use language associated with shape which children often forget eg perpendicular, parallel, quadrilateral etc
<b>Mental fluency</b> <ul style="list-style-type: none"><li>count in multiples of 6, 7, 9, 25 and 1000</li><li>find 1000 more or less than a given number</li><li>count backwards through zero to include negative numbers</li></ul>	<ul style="list-style-type: none"><li>count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000</li><li>interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero</li><li>round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000</li></ul>	Extend to negative numbers, fraction and decimals.



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<b>Year 6</b>		
<b>Key Theme:</b> Times tables, money, time, shape, measures and angles.		
<b>Previous Learning</b> To be reinforced	<b>Core Learning Intentions</b> Age Related	<b>Extension Opportunities</b> Next steps
<p><b><u>Times tables</u></b></p> <ul style="list-style-type: none"> <li>Application and understanding of all 12 times tables including division facts.</li> </ul>	<ul style="list-style-type: none"> <li>Revision of all times tables facts.</li> <li>Monthly focus of a different times tables and one test within the month</li> <li>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 three decimal places</li> </ul>	<p>Further times tables beyond 12 times tables.</p> <p>Facts related to fractions, percentages and decimals.</p> <p>The “Times tables rock stars” programme should be used at home and in class time to support this learning.</p>
<p><b><u>Measures – money</u></b></p> <ul style="list-style-type: none"> <li>use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.</li> </ul>	<ul style="list-style-type: none"> <li>use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.</li> </ul>	<p>Apply to real life giving children opportunities through home learning to use money in real contexts such as shopping, measures in cooking and linking to other curriculum areas including PSHE – financial awareness</p>
<p><b><u>Measures - time</u></b></p> <ul style="list-style-type: none"> <li>solve problems involving converting between units of time</li> </ul>	<ul style="list-style-type: none"> <li>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 three decimal places</li> </ul>	<p>Bring telling the time into everyday life through questions such as on a child’s birthday – how many months / days / hours have you been alive? How many minutes are the same as 230 seconds? Questions in mental arithmetic.</p>
<p><b><u>Measures – shape</u></b></p> <ul style="list-style-type: none"> <li>identify 3-D shapes, including cubes and other cuboids, from 2-D representations</li> </ul>	<ul style="list-style-type: none"> <li>draw 2-D shapes using given dimensions and angles</li> <li>recognise and describe simple 3-D shapes</li> </ul>	<p>Give children regular opportunities to identify shape names, use cross curricular links eg making shapes in PE, identifying 3D shapes eg in DT construction, when using containers etc . Use language associated</p>



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<ul style="list-style-type: none"><li>• know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</li></ul>		with shape which children often forget eg perpendicular, parallel, quadrilateral etc
<p><b>Mental fluency</b></p> <ul style="list-style-type: none"><li>• count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000</li><li>• interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero</li><li>• round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000</li></ul>	<ul style="list-style-type: none"><li>• use negative numbers in context, and calculate intervals across zero</li><li>• perform mental calculations, including with mixed operations and large numbers</li></ul>	Extend to fractions, decimals, negative numbers and algebra