



## Reach 2 Maths Nursery Overview

These overviews are designed to support the planning of Maths activities within nursery provisions. They are generally broken up into two-week units based around a topic. There are also details of what is covered during these units as well as potential teach-led activities and linked resources to assist planning. Most units also have linkable texts and corresponding [Numberblocks](#) videos. These overviews also cover similar content to the White Rose reception schemes of learning so they introduce concepts that will be embedded and developed during reception. Finally, each topic has associated vocabulary, which should be introduced to children as part of the teaching of these units. The majority of this vocabulary is revisited and consolidated within reception so should be treated as vocabulary covered over a two year period.

Autumn 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
<b>Topic</b>	<b>Settling in/ number songs</b>	<b>Colours – focus on comparing and sorting before moving onto amounts</b>		<b>Matching</b>		<b>Sorting</b>	
<b>Weekly/fortnightly focus</b>	<ul style="list-style-type: none"> <li>- Opportunities for settling in</li> <li>- Introduction of Maths area</li> <li>- Group singing and reciting</li> </ul>	<ul style="list-style-type: none"> <li>- Recognise and name colours in a variety of contexts (toys, colours in nature, environment, on themselves)</li> <li>- Match colours</li> <li>- Identify objects that are the same colour and those that are not</li> </ul>		<ul style="list-style-type: none"> <li>- Explore and match objects that are the same</li> <li>- Find the same objects as their own</li> <li>- Explain how objects are the same</li> <li>- Find objects different to their own and others</li> <li>- Explain why these objects are different using descriptive language</li> </ul>		<ul style="list-style-type: none"> <li>- Sort objects into sets based on specific attributes such as colour, size or shape</li> <li>- Explore and explain what is the same about all the objects in one set</li> <li>- Begin to explore how the same collection of objects can be sorted in different</li> </ul>	
<b>Potential activity and linked resources (1)</b>	<p><b>Number songs</b></p> <p>Introduce and sing a variety of number-based songs such as 1,2, 3, 4, 5 or 5 little speckled frogs. Involve the children in the songs as props and have them actively engage.</p> <p>Props can also be used and children can pretend to be frogs or fish as they are counted.</p> <p>Can you be a little speckled frog? Show me how they would hop</p>	<p><b>Sorting 'dropped' items</b></p> <p>Exploring colours with counting objects or small world toys.</p> <p>Create a big rainbow in the environment and encourage children to add a different colour to it each day and carry out activities based around that colour.</p> <p>Also generic colour based questions can be explored like those below:</p> <p>What colours can we see in nature?            What colours do you know?            What is your favourite colour?            How many colours can you see in the ... (toys inside and out, nature and on you, hair, skin, clothes)            I'm looking for a red car, can you help me find them all?            I've got blue on my paintbrush, I wonder what will happen if I mix it with...            I'm looking for 2 green leaves, are these green? (one is not the colour you're looking for)</p>	<p><b>Matching numbers</b></p> <p>Using a set of snap cards, children to look at their card and then find a friend in the circle with the same card.</p> <p>Swap cards and repeat.</p> <p>Encourage children to name the number if they can when they find their partner.</p>	<p><b>Matching amounts</b></p> <p>Using numicon, give each child a couple of pieces, hold up a shape and ask the children holding the same shape to stand up and show us.</p> <p>Encourage those that can to identify the amount that their pieces represent.</p>	<p><b>Sorting objects (Duplo, cubes etc)</b></p> <p>Looking at the resources, encourage children to decide how they could sort the items.</p> <p>Good idea here to use Duplo or something of varying size if possible so children can sort by colour but also by size or shape</p>	<p><b>Sorting sets of items</b></p> <p>Rather than sorting individual items, the children can sort sets of items. For instance, packets of sweets, boxes of staples, packets of buttons. The idea here being that we can sort items as well as sets of items.</p> <p>Encourage children to explore the different way these can be sorted. What rule will we use?</p>	

Potential activity and linked resources (2)	Other songs that could be used:	Going on a colour hunt	Finding and sorting pairs	Building towers	Sorting a different object	Odd one out
	<p>5 currant buns in the bakers shop</p> <p>5 little speckled frogs</p> <p>1 2 3 4 5 once I caught a fish alive</p> <p>5 fat sausages</p> <p>5 little speckled frogs</p> <p>5 little ducks</p>	<p>Sing we're going on a colour hunt, We're going to find yellow! We'll look hard Everywhere!</p> <p>Oh look! Can you see it?</p> <p>-Explore inside and outside the nursery for the colour, can we make a collection?</p> <p>Items can also be sorted into different groups based on their colour. Coloured hoops can be used or large pieces of paper.</p>	<p>Using several pairs of socks, muddle them up. This could also be done with other items if you don't have socks such as gloves or objects. Extend by having an odd one out.</p> <p>Children to sort into pairs</p> <p>Talk about the colours, patterns and sizes of the socks.</p> <p>Is there a partner for every sock? It there an odd one?</p>	<p>Building on matching numicon, the children now need create or build something that matches an example:</p> <p>Can the children build towers that match one the teacher built?</p> <p>Can they make it the same height?</p> <p>Can they make it look exactly the same?</p> <p>Can they use the same amount of objects?</p>	<p>Using transport or animal counters discuss how teacher has sorted them. Then change the sets, as the children, 'how have I sorted them now?'</p> <p>This could be by colour, object and even extended to most and least for instance</p>	<p>Look at sets of 3 or 4 objects and encourage children to identify the odd one out. which one doesn't belong in the set? This could be anything, but would be good to use a mixture of resources used previously and those they may find in the real world.</p>
<b>Linkable texts/Numberblocks</b>	<p>We're going on a Bear Hunt – Michael Rosen</p> <p>Nursery Rhyme books – various authors</p> <p>Brown Bear, Brown Bear, What Do You See? – Bill Martin Jr</p> <p>Colour Me Happy - Shen Roddie and Ben Cor</p>		<p>Five Creatures - Emily Jenkins</p> <p>A Pair of Socks - Stuart J. Murphy</p>		<p>Sort it Out! - Barbara Mariconda</p> <p>All Sorts – Pippa Goodhart</p>	
<b>Vocabulary</b>	Count	<p>Variety of colours</p> <p>Match</p> <p>Sort</p>	<p>Match</p> <p>Sort</p> <p>Swap</p> <p>The same</p> <p>Equal</p> <p>Different</p> <p>Odd</p>		<p>Sort</p> <p>The same</p> <p>Equal</p> <p>Different</p> <p>Size</p> <p>Shape</p> <p>Odd</p>	

Autumn 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
<b>Topic</b>	<b>Compare amounts</b>		<b>Compare size, mass and capacity</b>		<b>Simple patterns</b>		<b>Consolidation</b>
<b>Weekly/fortnightly focus</b>	<ul style="list-style-type: none"> <li>- Compare and order sets of objects (only once they are confident sorting items should they compare and sort)</li> <li>- Understand that a set can have the more, the same or fewer than another set (begin by sorting groups where the difference is greater – for instance 2 and 5 rather than 5 and 6)</li> </ul>		<ul style="list-style-type: none"> <li>- Children compare and order objects according to their size</li> <li>- Use language such as big and little, small and large, long and short (extend to comparative language for those that can)</li> </ul>		<ul style="list-style-type: none"> <li>- Copy, continue and create patterns</li> <li>- Create patterns with three full units of repeat</li> <li>- Children to say patterns out loud and to add actions if applicable</li> <li>- Create ABAB and extend to ABCABC patterns if applicable</li> </ul>		Consolidate learning from Autumn term focussing on area children found more challenging.
<b>Potential activity and linked resources (1)</b>	<p><b>Shorter and taller:</b></p> <p>Teacher to build a tower out of blocks or a stack of objects and discuss the language shorter and taller.</p> <p>Ask children to build towers that are smaller and taller than the one teacher has made. For those that can, ask children how many blocks they used.</p>	<p><b>Sharing:</b></p> <p>Share a group of items between 2-4 children but give one of the children more than the others. Is this fair? Has everyone got the same amount? What do we need to do to make this fair?</p> <p>Re-do this sharing the items equally between the children.</p> <p>This can be extended by adding another child or more items.</p>	<p><b>Long and short:</b></p> <p>Using different construction materials encourage children to identify which are best for building a long road and which for a short.</p> <p>Extend by asking them to build the same length road using different materials</p>	<p><b>Tall and short:</b></p> <p>Developing on the activity done when comparing amounts, ask children to identify which construction materials would be best for building a tall tower and a short building.</p> <p>Again link this to counting where possible</p>	<p><b>Simple physical patterns:</b></p> <p>Sing the clap your hands and wriggle your fingers song and have the children copy. Incorporate other movements into the song and ask the children to add movements.</p> <p>This could also be done with other movements to music where children put together a series of movements in a pattern.</p> <p>Encourage them to repeat movements within a single pattern</p>	<p><b>Word and sound patterns:</b></p> <p>Model simple word and sound patterns such as: up, down, up, down back, forward, back, forward</p> <p>(Adding actions can be included to help the children remember and to make it more interactive)</p> <p>Ask children to create their own simple AB patterns and encourage them to add actions</p>	Activities could also be adapted to fit a Christmas theme
<b>Potential activity and linked resources (2)</b>	<p><b>Sorting in sets:</b></p> <p>Linking to sorting activities done last term ask children to sort items into different groups before asking them to compare them.</p> <p>Ask children to identify which group has the most and which has the least. This could be done purely by sights or by counting for those that can.</p> <p>Extend to ask children: Are there any sets that are equal? Can you put the sets in order of size? (this may be for the more able children)</p>	<p><b>Comparing Number (Initial exploration):</b></p> <p>With items (conkers or an item large enough so children can't take more than 5) allow children to grab a handful and place them in a five frame. Once they've put theirs in a frame the teacher or a partner to do the same and then the children compare.</p> <p>This will need modelling as the children won't have come across a five frame</p>	<p><b>Building a home (big and small):</b></p> <p>Using a variety of counters and different animal figurines ask children to explore which container would be the best house for particular animals.</p> <p>Which would you use for a horse, or a mouse or a giraffe?</p>	<p><b>Mystery box (capacity):</b></p> <p>Show the children a box or a variety of boxes and ask them what could be inside.</p> <p>What could it be? Would it fit? What wouldn't fit in this box? Is there a better box for the item we said wouldn't fit?</p>	<p><b>Colour patterns:</b></p> <p>Create simple patterns using different colours (this can be done with paint, or colouring pencils or with objects)</p> <p>Ask children to copy the patterns and continue them.</p> <p>Start with simple ABAB patterns and then extend to ABCABC if children are confident</p>	<p><b>Repeating patterns:</b></p> <p>Similar to the work done with colours the children not use objects such as Numicon or cube to create ABAB patterns</p> <p>Again this can be extended to include ABCABC patterns if children are ready</p>	

<b>Linkable texts/Numberblocks</b>		Shh we have a plan (characters all different sizes) – Actual Size – Steve Jenkins Prehistoric Actual Size – Steve Jenkins A Pig is Big – Douglas Florian Is a Blue Whale the Biggest Thing There Is? -Robert E Wells	Pattern Fish - Trudy Harris Pattern Bugs - Trudy Harris	
<b>Vocabulary</b>	Sort Share Group Set Fair Unfair Less More Greater The same Equal Unequal	Height long(er)/short(er) – can extend to longest/shortest tall(er)/short(er) – can be extended to tallest/shortest Little Small Big	Copy Continue Order Repeat Pattern	Consolidate vocabulary from units already taught

Spring 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<b>Topic</b>	<b>Number - 1</b>		<b>Weight</b>		<b>Number - 2</b>	
<b>Weekly/fortnightly focus</b>	<ul style="list-style-type: none"> <li>- Identify representations of 1, 2, 3.</li> <li>- Subitise or count to find out how many and make their own collections of 1, 2 or 3 objects.</li> <li>- Touch counting in different arrangements</li> <li>- Recognise that the final number is the quantity of the set</li> <li>- Explore the number 1 (counting, finding, representing, matching)</li> <li>- Understanding 1 is the first number</li> <li>- Find 1 in the environment</li> <li>- Represent 1 using marks, pictures and fingers</li> <li>- Match numeral to quantity</li> </ul>		<ul style="list-style-type: none"> <li>- Make direct comparisons by holding items (heavier, lighter, heaviest, lightest)</li> <li>- Estimate which feels heavier and then using balance scales to check</li> <li>- Explore using language such as heavy, heavier, heaviest, light, lighter and lightest</li> <li>- Understand that bigger items are not always heavier and smaller ones lighter</li> </ul>		<ul style="list-style-type: none"> <li>- Identify representations of 1, 2, 3.</li> <li>- Subitise or count to find out how many and make their own collections of 1, 2 or 3 objects.</li> <li>- Touch counting in different arrangements</li> <li>- Recognise that the final number is the quantity of the set</li> <li>- Explore the number 2 (counting, finding, representing, matching)</li> <li>- Composition of 2 (understanding that 2 can be made of 1 and 1)</li> <li>- Find 2 in the environment</li> <li>- Represent 2 using marks, pictures and fingers</li> <li>- Match numeral to quantity</li> </ul>	
<b>Potential activity and linked resources (1)</b>	<b>Count, find and represent:</b>  Children given opportunities to:  - Count to 1	<b>Using coins:</b>  Children introduced to a 1p coin and encouraged to identify its characteristics. They can also be encouraged	<b>Heavy:</b>  Encourage children to identify objects that they think may be heavy. Why do they think that?	<b>Using balance scales:</b>  Develop onto using balancing scales to compare the weight of objects. Emphasise that the heavier side goes down	<b>Count, find and represent:</b>  Children given opportunities to:	<b>Using coins:</b>  Children introduced to a 2p coin and encouraged to identify its characteristics. They can also be encouraged

	<ul style="list-style-type: none"> <li>- Find 1 object (encourage them to do this with a wide variety of objects)</li> <li>- Represent 1 in a 5 frame, using numicon, on a dice</li> <li>- Carry out 1 action (1 hop, 1 jump, 1 clap, 1 stomp etc)</li> </ul>	<p>to find 1p coins amongst others and use them in very basic role play if applicable.</p> <p>Can they identify the number 1 on the coin? What else do they notice? (Link to the Queen potentially)</p>	<p>What do they know that is heavy?</p> <p>Encourage discussion and use of language such as heavy, heavier than, the heaviest</p>	<p>showing which object is heavier.</p> <p>This also can be looked at in relation to a see-saw if children have been on one or you have access to one.</p>	<ul style="list-style-type: none"> <li>- Count to 2 forwards and backwards</li> <li>- Find 2 objects (encourage them to do this with a wide variety of objects)</li> <li>- Represent 2 in a 5 frame, using numicon, on a dice</li> <li>- Carry out 2 actions (2 hops, 2 jumps, 2 claps, 2 stomps etc)</li> </ul>	<p>to find 2p coins amongst others and use them in very basic role play if applicable.</p> <p>Can they identify the number 2 on the coin? What else do they notice? (Link to the Queen potentially)</p>
<b>Potential activity and linked resources (2)</b>	<p><b>Finding what is associated with 1</b></p> <p>Children are encouraged to identify what there is one of on their bodies, in their school and in their lives.</p> <p>Examples: Body: 1 mouth, 1 nose, 1 body, 1 belly etc</p> <p>School: 1 head teacher, 1 playground, 1 lunch hall etc</p> <p>Lives: 1 birthday, 1 Christmas, 1 house etc</p>	<p><b>Exploring circles</b></p> <p>Children are introduced to circles and the fact that they have 1 curved side. They can then carry out activities involving circles, such as:</p> <ul style="list-style-type: none"> <li>- Searching for circles in the environment both inside and out</li> <li>- Identifying objects they know of that are circles (plates, clocks, pizzas etc)</li> <li>- Explore different varieties of circles based on their size before sorting and matching them</li> </ul>	<p><b>Heavy or light</b></p> <p>Children to develop onto comparing the weights of objects using themselves as balancing scales.</p> <p>This can initially be done by using objects in carrier bags and asking children to identify which one creates a greater downward pull. The greater the downward pull, the heavier the object.</p>	<p><b>Finding heavier and lighter objects than...</b></p> <p>Choose an item and encourage children to find objects that are heavier than lighter than it.</p> <p>This can be extended to encouraging children to say whether they think objects will be heavier or lighter before they compare the weight</p>	<p><b>Finding what is associated with 2</b></p> <p>Children are encouraged to identify what there is one of on their bodies, in their school and in their lives.</p> <p>Example: Body: 2 hands, 2 ears, 2 eyes etc</p> <p>Encourage them to identify things they have 2 of in their lives</p>	<p><b>Exploring semi-circles</b></p> <p>Children are introduced to semi-circles and the fact that they have 1 curved side and 1 flat side. They can then carry out activities involving semi-circles, such as:</p> <ul style="list-style-type: none"> <li>- Search for semi-circles in the environment both inside and out (may be difficult so you may want to put print off some pictures of different objects for them to find)</li> <li>- Identify other objects they know that are semi-circles (watermelon, rainbow, fans)</li> <li>- Explore different varieties of semi-circles based on their size before sorting and matching them</li> </ul>
<b>Linkable texts/Numberblocks</b>	<p>Hickory Dickory Dock I'm number one – Michael Rosen One Bear at bedtime – Mick Inkpen One Gorilla – Anthony Brown Other number books - <a href="https://nrich.maths.org/14111">https://nrich.maths.org/14111</a></p> <p><a href="#">Numberblocks – One</a></p>		<p>Who sank the boat – Pamela Allen The Blue Balloon – Mick Inkpen Balancing act – Ellen Stoll Walsh</p>		<p>123 at the zoo – Eric Carle A Very Hungry Caterpillar – Eric Carle Number Farm – Stephen Holmes Other number books - <a href="https://nrich.maths.org/14111">https://nrich.maths.org/14111</a></p> <p><a href="#">Numberblocks - Two</a></p>	
<b>Vocabulary</b>	<p>count order/ordinal compare forwards backwards numerals circle shape</p>		<p>weight heavy/light heaviest/lightest heavier than lighter than</p>		<p>count order/ordinal compare forwards backwards numeral semi-circle</p>	

Spring 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<b>Topic</b>	<b>Number - 3</b>		<b>Length and Height</b>		<b>Number - 4</b>	
<b>Weekly/fortnightly focus</b>	<ul style="list-style-type: none"> <li>- identify representations of 1, 2, 3.</li> <li>- Subitise or count to find out how many and make their own collections of 1, 2 or 3 objects.</li> <li>- Touch counting in different arrangements</li> <li>- Recognise that the final number is the quantity of the set</li> <li>- Explore the number 3 (counting, finding, representing, matching)</li> <li>- Composition of 3 (understanding that 3 can be made of 2 and 1)</li> <li>- Find 3 in the environment</li> <li>- Represent 3 using marks, pictures and fingers</li> <li>- Match numeral to quantity</li> </ul>		<ul style="list-style-type: none"> <li>- Make direct comparisons by looking at different items</li> <li>- Begin by using bigger and smaller but encourage children to move onto using language such as longer, taller, shorter, wider and narrower</li> <li>- Find objects that are smaller or bigger than a given item</li> <li>- Use strategies like placing objects side by side to determine which object is longer</li> <li>- Extend to estimate which object they will be longer or shorter than another</li> </ul>		<ul style="list-style-type: none"> <li>- Count on and back to 4.</li> <li>- Subitise sets of up to 4 objects</li> <li>- Recognise that the final number is the quantity of the set</li> <li>- Explore the number 4 (counting, finding, representing, matching)</li> <li>- Composition of 4 (understanding that 3 can be made of 2 and 1, 3 and 1 or 2 and 2)</li> <li>- Find 4 in the environment</li> <li>- Represent 4 using marks, pictures and fingers</li> <li>- Match numeral to quantity</li> </ul>	
<b>Potential activity and linked resources (1)</b>	<p><b>Count, find and represent:</b></p> <p>Children given opportunities to:</p> <ul style="list-style-type: none"> <li>- Count to 3 forwards and backwards</li> <li>- Find 3 objects (encourage them to do this with a wide variety of objects)</li> <li>- Represent 3 in a 5 frame, using numicon, on a dice</li> <li>- Carry out 3 actions (3 hops, 3 jumps, 3 claps, 3 stomps etc)</li> </ul>	<p><b>Subitising:</b></p> <p>Children are shown 3 in different representations such as numicon and within a five frame and encouraged to subitise.</p> <p>This could be extended by showing this alongside 1 and 2 in numicon or a five frame to encourage children to identify 3</p>	<p><b>Long, tall and short:</b></p> <p>Remind children of the language of long, tall and short and how they are associated with length and height</p> <p>Carry out activities where children need to identify items, animals, people that are either long, tall or short (no comparison at this time) such as:</p> <ul style="list-style-type: none"> <li>-Find objects in the environment that are long and short</li> <li>- Link tall and short to animals and have children investigate tall and short animals</li> </ul>	<p><b>Things that are shorter than....</b></p> <p>Choose an item within the environment or that the children have (a shoe can be a good idea) that the children have to find things shorter than</p> <p>Encourage children to lay things side by side to compare length</p> <p>This could also be extended to shorter in terms of height rather than length. Children go around the environment finding children or objects that they are shorter than</p>	<p><b>Count, find and represent:</b></p> <p>Children given opportunities to:</p> <ul style="list-style-type: none"> <li>- Count to 4 forwards and backwards</li> <li>- Find 4 objects (encourage them to do this with a wide variety of objects)</li> <li>- Represent 4 in a 5 frame, using numicon, on a dice</li> <li>- Carry out 4 actions (4 hops, 4 jumps, 4 claps, 4 stomps etc)</li> </ul>	<p><b>Subitising:</b></p> <p>Children are shown 4 in different representations such as numicon and within a five frame and encouraged to subitise.</p> <p>This could be extended by showing this alongside 1, 2 and 3 in numicon or a five frame to encourage children to identify 4</p>

<p><b>Potential activity and linked resources (2)</b></p>	<p><b>Exploring what 3 is made of:</b></p> <p>Children begin to use 3 items to explore that it is made of 1 and 2 or could be made of three 1s</p> <p>This shouldn't be associated with addition but to begin to explore how one number can be made up of others.</p>	<p><b>Exploring triangles:</b></p> <p>Children are introduced to triangles and the fact that they have 3 straight sides. They can then carry out activities involving triangles, such as:</p> <ul style="list-style-type: none"> <li>- Searching for triangles in the environment both inside and out</li> <li>- Explore different varieties of triangles based on their size before sorting and matching them</li> <li>- Extend this to different types of triangles with different length sides</li> </ul>	<p><b>Things that are longer than...</b></p> <p>Choose an item within the environment or that the children have (a shoe can be a good idea) that the children have to find things longer than</p> <p>Encourage children to lay things side by side to compare length</p> <p>This could also be extended to taller than where children have to go around the environment finding children or objects they are taller than</p>	<p><b>Sorting objects:</b></p> <p>Children given a group of items that they have to sort by whether they are shorter or longer than another item</p> <p>This can also be done with height.</p>	<p><b>Exploring what 4 is made of:</b></p> <p>Children begin to use 4 items to explore that it is made of 1 and 3, or 2 and 2</p> <p>This shouldn't be associated with addition but to begin to explore how one number can be made up of others.</p>	<p><b>Exploring triangles:</b></p> <p>Children are introduced to squares and the fact that they have 4 straight sides of equal length. They can then carry out activities involving squares, such as:</p> <ul style="list-style-type: none"> <li>- Searching for triangles in the environment both inside and out</li> <li>- Identifying objects they know that are squares</li> <li>- Explore different varieties of squares based on their size before sorting and matching them</li> </ul>
<p><b>Linkable texts/numberblocks</b></p>	<p>The three bears The three little pigs The little bear and the wish fish – Debi Gliori Pink Tiara cookies for three – Maria Dismody The Three Billy Boats Gruff My hat it has 3 corners Other number books - <a href="https://nrich.maths.org/14111">https://nrich.maths.org/14111</a></p> <p><a href="#">Numberblocks - 3</a> <a href="#">Numberblocks – One, two, three</a></p>		<p>The giraffe who got in a knot - John Bush Titch – Pat Hutchens Jack and the Beanstalk</p>		<p>Pete the cat and his 4 groovy buttons – Eric Litwin Witches 4 – Mar Brown Washing line Jez Alborough Anno's counting book – Mitsumasa Anno Square – Mac Barnett and Jon Klassen Other number books - <a href="https://nrich.maths.org/14111">https://nrich.maths.org/14111</a></p> <p><a href="#">Numberblocks – 4</a></p>	
<p><b>Vocabulary</b></p>	<p>count order/ordinal compare forwards backwards numeral triangle shape</p>		<p>height length long(er)/short(er) – can extend to longest/shortest tall(er)/short(er) – can be extended to tallest/shortest little small big</p>		<p>count order/ordinal compare forwards backwards numerals square</p>	



Summer 1	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<b>Topic</b>	<b>Number - 5</b>		<b>One more, one less</b>		<b>Shapes</b>	
<b>Weekly/fortnightly focus</b>	<ul style="list-style-type: none"> <li>- identify representations of 1, 2, 3, 4, 5</li> <li>- Subitise or count to find out how many and make their own collections of 1, 2, 3, 4 or 5 objects.</li> <li>- Touch counting in different arrangements</li> <li>- Count backwards from 5</li> <li>- Recognise that the final number is the quantity of the set</li> <li>- Explore the number 5 (counting, finding, representing, matching)</li> <li>- Composition of 5 (understanding that 5 can be made of 4 and 1 and 3 and 2)</li> <li>- Find 5 in the environment</li> <li>- Represent 5 using marks, pictures and fingers</li> <li>- Begin to explore its place on a number line</li> <li>- Match numeral to quantity</li> </ul>		<ul style="list-style-type: none"> <li>- Use real objects to see that the quantity of a group can be changed by adding more.</li> <li>- The first, then, now structure can be used to create mathematical stories in meaningful contexts. (this is built on in reception)</li> <li>- Continue to count, subitise and compare as they explore one more and one less.</li> <li>- Identify link between counting forwards and the one more pattern and back and the one less pattern.</li> </ul>		<ul style="list-style-type: none"> <li>- encouraged children to notice and describe 2D shapes in the environment and talk about the properties using words such as 'straight/flat/round/ curved'.</li> <li>- Children should not be taught about the formal properties of a shape before they've fully explored them using language outlined above</li> <li>- Name of shapes introduced within the environment where children can hold them and see them in different contexts</li> <li>- Sort shapes</li> <li>- Children can also sort natural shapes such as stones, for example, into sets that have straight sides, sets that have curved edges etc.</li> <li>- <b>If 2D shapes have been secured and explored sufficiently during number weeks there two weeks can be used to look at 3D shapes as well using the same activities as outlined below</b></li> </ul>	
<b>Potential activity and linked resources (1)</b>	<p><b>Count, find and represent:</b></p> <p>Children given opportunities to:</p> <ul style="list-style-type: none"> <li>- Count to 5 forwards and backwards</li> <li>- Find 5 objects (encourage them to do this with a wide variety of objects)</li> <li>- Represent 5 in a 5 frame, using numicon, on a dice</li> <li>- Carry out 5 actions (5 hops, 5 jumps, 5 claps, 5 stomps etc)</li> </ul>	<p><b>Subitising:</b></p> <p>Children are shown 5 in different representations such as numicon and within a five frame and encouraged to subitise. This should also be done with a variety of other objects and resources.</p> <p>This could be extended by showing this alongside other representations they are already familiar with</p> <p>This week can also be extended by looking at the 5p coin. Can they recognise the 5 on the coin? What else do they notice about it? How is it different to the 1p and 2p coins we explored before</p>	<p><b>1 more:</b></p> <p>Children add one more to a an object or group of object and then count the total</p> <p>Start with one object and then add another and then count the new total. Emphasise the language of one more over and over. Progress onto more items.</p> <p>Using a washing line is a nice way of this with pegs. Add one more, how many are there now?</p> <p>Depending on how children get on, this can be progressed to one less or this can be saved for next week.</p>	<p><b>1 less:</b></p> <p>Children either embed their knowledge or one less or are introduced to it for the first time.</p> <p>This can again be taught in a variety of ways but start with a group of items and take one away and then count how many are left.</p> <p>This can be done with cakes, sweets etc in a shop setting.</p>	<p><b>Shape hunt:</b></p> <p>Introduce children to a variety of 2D shapes including those that will have been covered during number work</p> <p>Hide these shapes around the environment for children to find them</p> <p>Encourage them to discuss the features of a shape – strait sides, curved sides</p> <p>This can be extend to counting the amount of sides they have</p>	<p><b>Sorting shapes:</b></p> <p>Now children can name and identify different shapes they should be encouraged to sort them</p> <p>The can being by sorting them by types of shapes.</p> <p>This can be extended by having lots of different sizes and types of the same shape. If they are unsure of what the shape is encourage them to count the sides</p> <p>Children can also sort shapes and natural object based on whether they have straight sides or curved sides</p>

<p><b>Potential activity and linked resources (2)</b></p>	<p><b>Exploring what 5 is made of:</b></p> <p>Children begin to use 5 items to explore that it is made of 3 and 2 or 4 and 1. This can be extended for some children to find that it can be made of five 1s or other number combinations</p> <p>This shouldn't be associated with addition but to begin to explore how one number can be made up of others.</p>	<p><b>Exploring pentagons:</b></p> <p>Children are introduced to triangles and the fact that they have 5 straight sides. They can then carry out activities involving pentagons, such as:</p> <ul style="list-style-type: none"> <li>- Searching for pentagons in the environment both inside and out</li> <li>- Explore different varieties of pentagons based on their size before sorting and matching them</li> <li>- Extend this to different types of pentagons with different length sides</li> </ul>	<p><b>First, then, now:</b></p> <p>Introduce the language of first, then and now to help children imbed the idea of one more</p> <p>This can be done in a variety of different ways such as using stories or the children themselves on an imaginary bus journey.</p> <p>For instance, first there are 2 children on the bus then 1 more got on and now there are 3 on the bus. First there were two bowls of porridge then Goldilocks saw one more and now there are three etc</p>	<p><b>First, then, now (continue):</b></p> <p>Continue last week's work on first, then, now incorporating different scenarios and moving onto/consolidating one less</p> <p>Song such as Monkeys on the Bed and Ten Green Bottles can be used or modified to show relate the idea of first, then, now into a different context that children can learn and practice</p>	<p><b>Finding shapes in pictures or books:</b></p> <p>Once children have become more familiar with different 2D shapes, encourage them to find them in different pictures of buildings or transport</p> <p>You can also share books with them and have them identify the shapes as they come up (books listed below)</p>	<p><b>Shape pictures/buildings:</b></p> <p>Encourage children to use 2D shape to create their own pictures of rockets, houses, vehicles etc.</p> <p>Have lots of cut up paper shapes they can use to create a picture.</p> <p>If using 3D shapes they can be encouraged to build towers or buildings using shapes. Use questioning to encourage children to think about which shapes are most suitable etc</p>
<p><b>Linkable texts/Numberblocks</b></p>	<p>The Ugly 5 – Julia Donaldson  I Spy Numbers – Jean Marzello  5 little ducks – various authors  5 little speckled frogs – various authors (song can be learnt as well)  Other number books - <a href="https://nrich.maths.org/14111">https://nrich.maths.org/14111</a></p> <p><a href="#">Numberblocks - 5</a>  <a href="#">Numberblocks – Off we go</a>  <a href="#">Numberblocks – Stampolines</a></p>		<p>Mr Gumpy's outing – John Burningham  A Squash and a Squeeze – Julia Donaldson  Handa's surprise – Eileen Brown (1 less)  Other number books - <a href="https://nrich.maths.org/14111">https://nrich.maths.org/14111</a></p> <p><a href="#">Numberblocks – Holes</a>  <a href="#">Numberblocks – Just add one</a></p>		<p>Shape by Shape – Susan Macdonald  Color Zoo – Lois Elhart  Mouse Shapes – Ellen Stoll Walsh  Shapes that roll – Karen Nagel</p>	
<p><b>Vocabulary</b></p>	<p>count  order/ordinal  compare  forwards  backwards  numeral  pentagon  shape</p>		<p>Counting  Forwards  Backwards  Compare  Different  Same as  More  Less  One more  One less  Altogether  How many</p>		<p>Similar  Different  Compare  Flat  Curved  Straight  Long/short  Sides  Corners  Shape names</p> <p>If exploring 3D shapes, faces and edges can be introduced</p>	

Summer 2	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
<b>Topic</b>	<b>My Day</b>		<b>Capacity</b>		<b>Positional Language</b>	
<b>Weekly/fortnightly focus</b>	<ul style="list-style-type: none"> <li>- Explore night and day</li> <li>- Order key events in daily routines, such as waking up, coming to school, dinner, bed time.</li> <li>- Use language to describe when things happen e.g. day, night, morning, afternoon, before after, today, tomorrow.</li> <li>- Encourage the vocabulary of first, next, then and possibly last.</li> <li>- Begin to explore the idea measuring time</li> </ul>		<ul style="list-style-type: none"> <li>- Build on understanding of things being full and empty</li> <li>- Explore capacity with different materials such as water, sand, rice and loose parts</li> <li>- Explore to the comparison of full, half full, empty using the same container.</li> <li>- Explore different sized and shaped containers to investigate,</li> <li>- Compare capacities by pouring from one container to another to find which holds more or less water.</li> <li>- Compare amounts of water, sand etc in two of the same container using language of more and less etc</li> </ul>		<ul style="list-style-type: none"> <li>- Use the language of position and direction; Position: 'in', 'on', 'under'. Direction: 'up', 'down', 'across'</li> <li>- Use terms which are relative: 'in front of', 'behind', 'on top of'.</li> <li>- Explore language above through activities such as hunting for hidden objects with some prompts (e.g. look behind the shed).</li> </ul>	
<b>Potential activity and linked resources (1)</b>	<p><b>Familiar routines at home (bedtime etc):</b></p> <p>Encourage children to discuss and share their bedtime routines or their morning routine.</p> <p>Pictures can be used and ordered in pairs and groups and</p> <p>Teacher can also draw a group routine once the children have shared theirs</p> <p>Provide children with routines that are incorrect and encourage them to spot the mistake. Ask questions such as, can you get out of bed after cleaning your teeth? Do you have your breakfast after you leave to go to nursery?</p>	<p><b>Nursery routine:</b></p> <p>Encourage children to discuss and share how their day at nursery goes. Similar to last week, teacher can create a group routine of the activities the children do at nursery (again don't use too many)</p> <p>Similar to last week, mistakes can be made in the routine and question such as those below can be asked and explored: Can we tidy before we play? Do we have lunch before we hang up our coats and bags?</p>	<p><b>Introducing containers:</b></p> <p>Model filling and emptying containers modelling the language of full and empty. This can be done using rice or water etc</p> <p>Encourage children to practice filling and emptying containers and using the language</p> <p>This can then be extended onto half full/empty if children are ready</p>	<p><b>Using and comparing containers:</b></p> <p>Using a variety of different containers encourage discussions about which are the largest and smallest containers and which they think will hold those most or least water</p> <p>Before letting the children explore filling different containers from a bigger bowl or jug model the process yourself.</p> <p>Articulate your thought process about whether you think a particular container will over flow if you pour the whole jug in or how much you might need to pour in to fill another, for example: 'I think the water from this jug will fill that container to the top' or 'I think this tiny container will only need a little bit'</p> <p>Also encourage children to compare containers using comparative language</p>	<p><b>Using positional language:</b></p> <p>Using a toy or teddy model the use of positional language to children focusing on in, on, under etc</p> <p>Hide a variety of toys around the environment for the children to find. Once they find them they need to use the positional language to explain where they found the toys/items. It was on the pegs, it was behind the reading shed, it was under the slide etc</p>	<p><b>Exploring positional language in texts:</b></p> <p>Using a book like Ladybird Heard explore the positional language in the text and then have the children act out the story so they can find their way to the prize cow. You could also use We Are Going on a Bear Hunt etc</p> <p>Extend this onto showing the children a map. Can they draw their partner a basic map to follow?</p>

<p><b>Potential activity and linked resources (2)</b></p>	<p><b>Exploring routines/journeys in books:</b></p> <p>Read and share stories with the children looking at first, middle and last and relate it to the routines we explored last week</p> <p>Books such as Peace at Last and Night Monkey, Day Monkey can be used to show the passing of time and the actions/activities the character does.</p> <p>Children can be given pictures of events in a story to order (this should be quite basic at first, for instance with peace at last you could have going to bed, going to baby bears room, sleeping in the garden, his alarm clock going off)</p>	<p><b>Timing:</b></p> <p>Children to explore different ways of timing different actions</p> <p>Begin by exploring the use of a sand timer to measure actions such as how many hops they can do or how many times they can clap etc</p> <p>Move onto looking at a stopwatch on a board or iPad and count the seconds with the children.</p> <p>This can be done using a timer by counting actions children can do in ten seconds counting down as well as using a stop watch to count how many actions the children can do before it gets to 10.</p>	<p><b>Using different materials (capacity):</b></p> <p>Explore filling a variety of containers with different products such as rice, buttons, cubes, pinecones etc</p> <p>Encourage children to explain why they fit more of some things in a container than others.</p> <p>They can also be encouraged to predict whether they think they'll be able to fill a container with more or less of a particular item than another</p>	<p><b>Capacity roll play:</b></p> <p>Set up a café or restaurant with cups, bottles, bowls and jug</p> <p>Encourage children to take it in turns being waiters and have them serve the customers</p> <p>Encourage the customers to ask for the waiters to fill their cup to full, nearly, full, half full, a little bit</p> <p>This can also be combined with discussing why you don't fill drinks right to the top etc</p>	<p><b>Giving instructions:</b></p> <p>Taking all the children outside, give them, as a group, instructions using positional language. Go under the slide, go next to the fence, go on the grass etc</p> <p>Once they've done this have them direct each other around the environment</p> <p>Encourage them to link to language we've used before when doing 1 more and less such as first stand on the grass, next go under the slide, now go by the fence etc</p>	<p><b>Creating obstacle courses:</b></p> <p>Encourage children to create their own obstacle courses where they include carrying out all the positional language you've explored such as: over, under, in front of, behind, next to etc</p> <p>Have them verbalise what they are doing as they complete the course before then guiding a friend through</p>
<p><b>Linkable texts/Numberblocks</b></p>	<p>Peace at last – Jill Murphy  Night Monkey, Day Monkey – Julia Donaldson  Flora's Blanket – Debi Gliori  Maisey Goes to Bed – Lucy Cousins  On the Way Home – Jill Murphy</p>	<p>A Beach for Albert – Eleanor May  Mr Archimedes' Bath – Pamela Allen</p>	<p>Where is Bear? – Jonathon Bentley  Yellow Ball – Molly Bang  Rosie's Walk – Pat Hutchins  We're going on a Bear Hunt – Michael Rosen  Up, Down and Around – Katherine Ayres</p>			
<p><b>Vocabulary</b></p>	<p>First  Next  Middle  Last  After  Before  Later  Soon  Time  Timer</p>	<p>Capacity  Compare  Measure  Full  Empty  Half full  Nearly full  Nearly empty</p>	<p>Over  Under  Between  Around  Through  On  Into  Next to  Behind  Beneath  On top of</p>			