

## Nursery Mathematics SOL

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Getting to know you Routines	Colours Recognising, naming and matching colours		Matching Matching different objects to those that are the same.		Sorting Sorting by various attributes		Number and Place Value Understanding Number 1	Number and Place Value Subitising 2 Understanding number 2.		Pattern Continuing AB patterns	
Spring	Number and Place Value Subitising 3 Understanding the number 3.		Number and Place Value Understanding the number 4. Composition of 4.		Number and Place Value Understanding the number 5. Composition of 5.		Length and Height Long, short, tall and comparing lengths		Weight Light and heavy and comparison		Capacity Full, half full, empty and comparison	
Summer	My Day Ordering events of the day. Sequencing.		Positional Language Using language related to position and direction		Comparing Comparing amounts of objects. More/ fewer.		Shape. 2D/3D shape.		Number composition. Numbers to up 5.		What comes before/ after? One more/ one less up to 5.	

## Nursery Mathematics Medium Term Plan

Autumn		
Week	Focus	Additional
Week 1	<u>Getting to know you</u>  Take time to get to know the children and introduce them to routines.	
Week 2	<u>Colours</u>  Children should be taught to recognise and name colours in a variety of contexts e.g. toys within the classroom, colours in nature, colours in the environment, matching colours, colours on themselves such as hair, skin, clothes. Children should be able to say when objects are and are not the same colour. Link to expressive art and design through painting.	The Usborne Big Book of Colours  Monsters Love Colors - Mike Austin BBC - Colourblocks  Key Vocabulary: notice, match, same, colour
Week 3		
Week 4	<u>Matching</u>  Children to match items by shape (numicon,) size, colour, length, height and pattern. Children should be able to identify items that are the exactly the same, similar and different.	That's not my...  A pair of socks - Stuart J Murphy  Simon Sock - Sue Hendra  Exactly the opposite- Tana Hoban
Week 5		  Key Vocabulary: matching, same, different, pairs.

Week 6	<u>Sorting</u>  There should be a focus on reasoning within sorting i.e how have you sorted the animals/button etc? Children should be given the opportunity to sort the objects by their own rules and should be taught how to communicate that rule. This should be explored in many different contexts such as shapes, different coloured and size objects, different animals, objects found in the environment, appearance of various objects and people. Children should be taught to verbalise what is the same and what is different between sets of objects.	Sort it Out! - Barbara Mariconda  Sorting at the market - Tracey Steffora  White Rose - Just like me (match and sort section)  Key Vocabulary: sort, notice, groups, sets, same, different
Week 7		
Week 8	<u>Number and Place Value</u> <b>Number 1</b> <ul style="list-style-type: none"> <li>Counting to 1</li> <li>Finding 1 object</li> <li>1 being the first number, its position on a number line, ordinal numbers</li> <li>Numicon 1</li> <li>Dice 1</li> <li>Subitising 1</li> <li>Representing 1 on a 5 frame</li> <li>A circle - 1 sides shape (including in the environment)</li> <li>1 action e.g. 1 hop, 1 jump, 1 clap</li> <li>The numeral 1</li> <li>Number 1 in the environment</li> <li>Representing 1 using marks, pictures and finger</li> <li>Matching numeral to quantity</li> </ul>	Numberblocks - Season 1 episode 1  1 2 3 at the Zoo - Eric Carle  I'm number 1 - Michael Rosen  One Bear at Bedtime - Mick Inkpen

Week 9	<ul style="list-style-type: none"> <li>• <u>Number and Place Value</u></li> <li><b>Number 2</b></li> <li>• Counting to 2</li> <li>• Finding 2 objects</li> <li>• 2 being the second number, its position on a number line, ordinal numbers</li> <li>• Numicon 2</li> <li>• Dice 2</li> <li>• Subitising 2</li> <li>• Representing 2 on a 5 frame</li> <li>• 2 action e.g. 2 hops, 2 jumps, 2 claps</li> <li>• The numeral 2</li> <li>• Number 2 in the environment</li> <li>• Representing 2 using marks, pictures and fingers</li> <li>• Matching numeral to quantity</li> </ul>	Numberblocks Season 1 episode 2 and episode 3  The little bear and the Wish Fish - Debi Gliori
Week 10		
Week 11	<u>Pattern</u>  Developing an awareness of pattern helps children to notice and understand mathematical relationships. Children should initially be taught to continue an AB pattern. Children need the opportunity to see a pattern, talk about what they can see and to continue a pattern. At first, they may do this one object at a time e.g. red cube, blue cube, red cube... verbalising the pattern helps. Children may then be asked to say what they would add next to continue it.	Pattern Fish - Trudy Harris  Lots and lots of Zebra Stripes - Stephen R. Swinburne  <a href="https://nrich.maths.org/13250">https://nrich.maths.org/13250</a>  Key Vocabulary: pattern, continue, notice, next
Week 12	<ul style="list-style-type: none"> <li>• Continuing an AB pattern</li> <li>• Copying an AB pattern</li> <li>• Make their own AB pattern</li> <li>• Spotting an error in an AB pattern</li> </ul>	White Rose - Just like me (pattern section)

## Additional Stories Suitable for Autumn Term

Where's My Teddy/It's The Bear - Jez Alborough
The Bear In The Cave – Michael Rosen
Peace At Last - Jill Murphy
Seaweed Soup - Stuart J Murphy
Clean Up Everybody - Stacey Sparks
Beep Beep Vroom Vroom - Stuart J Murphy
The Button Box – Margarette S Reid.
Duck In the Truck - Jez Alborough
Dear Zoo – Rod Campbell
Mr Big - Ed Vere
Naughty Bus - Jan Oke
Crash Boom - Robbie R Harris
A New House For Mouse - Petr Horacek
The Right Place for Albert - Daphne Skinner

Spring		
Week	Focus	Additional
Week 1	<u>Number and Place Value</u> <b>Number 3</b> <ul style="list-style-type: none"> <li>Counting to 3</li> <li>Finding 3 objects</li> <li>3 being the third number, its position on a number line, ordinal numbers</li> <li>Numicon 3</li> <li>Dice 3</li> <li>Subitising 3</li> <li>Representing 3 on a 5 frame</li> <li>3 action e.g. 3 hops, 3 jumps, 3 claps</li> <li>The numeral 3</li> <li>Number 3 in the environment</li> <li>Representing 3 using marks, pictures and fingers</li> <li>Matching numeral to quantity</li> <li>Triangle has 3 sides</li> </ul>	Numberblocks Season 1 episode 4  Pink Tiara Cookies for Three-Maria Dismondy  Three Little Firefighters - Stuart J Murphy
Week 2	<u>Number and Place Value</u> <b>Number 4</b> <ul style="list-style-type: none"> <li>Counting to 4</li> <li>Finding 4 objects</li> <li>4 being the fourth number, its position on a number line, ordinal numbers</li> <li>Numicon 4</li> <li>Dice 4</li> <li>Subitising 4</li> <li>Representing 4 on a 5 frame</li> <li>4 action e.g. 4 hops, 4 jumps, 4 claps</li> <li>The numeral 4</li> <li>Number 4 in the environment</li> <li>Representing 4 using marks, pictures and fingers</li> <li>Matching numeral to quantity</li> <li>Squares and rectangle.</li> </ul>	Numberblocks Season 1 episode 6  Number Farm - Stephen Holmes  Pete the cat and his 4 groovy buttons - Eric Litwin  Witches Four - Marc Brown
Week 3	<u>Number and Place Value</u> <b>Number 4</b> <ul style="list-style-type: none"> <li>Counting to 4</li> <li>Finding 4 objects</li> <li>4 being the fourth number, its position on a number line, ordinal numbers</li> <li>Numicon 4</li> <li>Dice 4</li> <li>Subitising 4</li> <li>Representing 4 on a 5 frame</li> <li>4 action e.g. 4 hops, 4 jumps, 4 claps</li> <li>The numeral 4</li> <li>Number 4 in the environment</li> <li>Representing 4 using marks, pictures and fingers</li> <li>Matching numeral to quantity</li> <li>Squares and rectangle.</li> </ul>	Numberblocks Season 1 episode 6  Number Farm - Stephen Holmes  Pete the cat and his 4 groovy buttons - Eric Litwin  Witches Four - Marc Brown
Week 4	<u>Number and Place Value</u> <b>Number 4</b> <ul style="list-style-type: none"> <li>Counting to 4</li> <li>Finding 4 objects</li> <li>4 being the fourth number, its position on a number line, ordinal numbers</li> <li>Numicon 4</li> <li>Dice 4</li> <li>Subitising 4</li> <li>Representing 4 on a 5 frame</li> <li>4 action e.g. 4 hops, 4 jumps, 4 claps</li> <li>The numeral 4</li> <li>Number 4 in the environment</li> <li>Representing 4 using marks, pictures and fingers</li> <li>Matching numeral to quantity</li> <li>Squares and rectangle.</li> </ul>	Numberblocks Season 1 episode 6  Number Farm - Stephen Holmes  Pete the cat and his 4 groovy buttons - Eric Litwin  Witches Four - Marc Brown

Week 5	<p><u>Number and Place Value</u></p> <p><b>Number 5</b></p> <ul style="list-style-type: none"> <li>Counting to 5</li> <li>Finding 5 objects</li> <li>5 being the fifth number, its position on a number line, ordinal numbers</li> </ul>	<p>Numberblocks season 1 episode 7</p> <p>Kipper's birthday - Mick Inkpen</p>
Week 6	<ul style="list-style-type: none"> <li>Numicon 5</li> <li>Dice 5</li> <li>Subitising 5</li> <li>Representing 5 on a 5 frame</li> <li>5 action e.g. 5 hops, 5 jumps, 5 claps</li> <li>The numeral 5</li> <li>Number 5 in the environment</li> <li>Representing 5 using marks, pictures and fingers</li> </ul> <p>Matching numeral to quantity</p> <p>Pentagon</p>	<p>5 little friends - Sarah Dyer</p> <p>The Very Hungry Caterpillar - Eric Carle</p>
Week 7	<p><u>Length and Height</u></p> <p>In the first stage, children should be able to apply the attribute of long, short, tall etc to various examples (e.g. a bus is long; an adult is tall; grass is short). Adults should be continuously modelling this language. The children should then move on to finding objects that are longer/shorter than a given item. They should be encouraged to utilise strategies such as direct comparison (e.g. placing objects side by side to determine which is longer). When comparing length and height verbally children should be encouraged to use language such as 'taller than/longer than/shorter than'. When comparing lengths directly children need to ensure that they align the starting points and compare like-for-like (e.g. straightening skipping ropes before comparing lengths).</p>	<p>Key Vocabulary: long, short, tall, longer than, shorter than, taller than</p> <p>The _____ is longer/shorter/taller than the _____.</p>
Week 8		<p>Titch - Pat Hutchins</p> <p>Tall - Jez Alborough</p> <p>Jim and the Beanstalk - Raymond Briggs</p>

Week 9	<p><u>Weight</u></p> <p>Initially, begin with identifying objects the children think may be heavy - use lots of adult modelled language. Move on to comparing weights. One way to identify this is to identify that a heavier object creates a greater downwards pull. Ask children to hold a carrier bag; encourage them to notice if it feels as though their hand is being pulled down when something heavy is put in it. Place a carrier bag in each hand and identify which one is heavier by discussing which arm feels more pulled down. Explore the link to the balance scales to show that the heavier side goes down. Exemplify this with a see-saw 'What can we do to make this side of the see-saw go down?'. Ensure that children are presented with large but light objects and small but heavy objects to prevent the generalisation that big means heavy and small means light.</p>	<p>Key vocabulary: Heavy, heavier than, light, lighter than, balanced</p> <p>The _____ is heavier than/lighter than the _____.</p> <p>Who sank the boat - Pamela Allen</p> <p>Balancing Act- Ellen Stoll Walsh</p>
Week 10		
Week 11	<p><u>Capacity</u></p>	<p>Key vocabulary: full, half full, empty, most, least</p>
Week 12	<p>Children should be given daily opportunity for sand and water play which can provide lots of opportunities to explore capacity. Children should be able to identify when a container is empty and full and extend to half full. Initially children should be exposed to the comparison of full, half full, empty using the same container. However, this can be moved on by talking about different size containers (e.g. I wonder whose pot will hold the most water?) When comparing capacities directly children can pour from one container to another to find which holds more or less water.</p>	<p>The container is full/half full/empty. The _____ holds the most/least water.</p>

Summer		
Week	Focus	Additional
Week 1	<p><u>My Day</u></p> <p>Children should explore talking about and ordering the events of their day such as waking up, coming to school, dinner, bed time. Encourage the vocabulary of first, next, then and possibly last.</p>	<p>Key vocabulary: first, next, then, last</p> <p>Mr Wolf's Week - Colin Hawkins</p>
Week 2		
Week 3	<p><u>Positional Language</u></p> <p>Children need opportunities to be exposed to and to use the language of position and direction; Position: 'in', 'on', 'under'. Direction: 'up', 'down', 'across'</p> <p>Children also need opportunities to use terms which are relative: 'in front of', 'behind', 'on top of'.</p>	<p>Key vocabulary: in, on, under, up, down, across, in front of, behind, on top of.</p> <p>The _____ is (position) the _____.</p>
Week 4	<p>Create as many opportunities as possible to explore this language such as hunting for hidden objects with some prompts (e.g. look behind the shed).</p>	<p>We're going on a bear hunt - Michael Rosen</p> <p>Each peach pear plum - Alan Ahlberg</p>

Week 5	<p><u>Comparing/ More and Fewer</u></p> <p>Children need progressive experiences where they can compare collections and begin to talk about which group has more things. When talking about amounts of objects use the language of more and fewer. Children should initially be taught perceptual comparing (comparing without counting). Initially, the groups need to be very obviously different (e.g 2 objects and 7 objects). Move on to collections of small numbers of objects that are similar (e.g 1 and 3 objects) and then move onto different items but same quantity (using language of same or equal).</p>	<p>Key vocabulary: compare, more, fewer, same, equal</p> <p>There are more _____ than _____ / there are fewer _____ than _____.</p>
Week 6		
Week 7	<p><u>Shapes - 2D and 3D</u></p> <p>The primary focus in relation shapes should be on the properties of shapes. For example, children should be encouraged to notice and describe shapes in the environment and talk about the properties using words such as 'straight/flat/round/curved'. When teaching the names of shapes, wherever possible, real life shapes in the environment should be used. Note that only flat surfaces should be referred to as faces. Include sorting of natural shapes; the children may sort stones, for example, into sets that have straight edges, sets that have curved edges.</p>	<p>Key vocabulary: edge, curve, straight, round, flat, sides, face, corner, smooth</p> <p>Circle/Triangle - Mac Bennett and Jon Klassen</p> <p>The Mr Men Stories - Roger Hargreaves</p> <p>Round is the Moon Cake - Roseanne Thong</p>
Week 8	<p><u>Number Composition up to 5</u></p> <p>Children should deepen their understanding of numbers to 5 by learning different compositions. Children recognising that the amount is still the</p>	<p>One big hippo balancing - BBC song.</p>

Week 10	same even if the items are in different orientations. They are beginning to recognise and use practical resources to explore number bonds to 5.	
Week 11	<u>What comes before/ after? One more/ one less</u>	Nursery rhymes which count back from 5.
Week 12	Children to be able to recall what is one more and one less than a given number to 5. They should explore number tracks and other resources that involve adding or subtracting one item. They should build a number line by ordering numbers to 5 and stating which number is next in the sequence at that it is one more. They should be able to identify one less and count back from 5 explaining this relationship.	