

Autumn -Nursery

Program of Study	Knowledge, Skills and Understanding	Possible activities
<p><b>Comparison</b></p>	<p>Knows that things exist, even when out of sight</p> <p>Compares amounts using words like 'lots' or 'more'</p> <p>Beginning to compare and recognise changes in numbers of things, using words like 'more', 'lots' or 'same'</p> <p>Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. 'You've got two, I've got two. Same!'</p>	<p>Encourage children in their own ways of recording (for example) how many beanbags they managed to throw in the hoop. Compare with how many a friend has.</p> <p>Explore dice and game that you play.</p> <p>Talk about the patterns and spots.</p> <p>If you count three spots can you find 3 things?</p> <p>Can you jumps 3 times?</p> <p>Is 3 more than 4?</p>
<p><b>Counting</b></p>	<p>Says some counting words</p> <p>Engages in counting-like behaviour, making sounds and pointing or saying some numbers in sequence</p> <p>Says the number sequence, maybe skipping some numbers (e.g. 1-2-3-5) and beginning to count on their fingers</p> <p>Enjoys reciting numbers from 0 to 5 and back from 5 to 0</p> <p>Has fun counting as far as they can go and is fascinated with large numbers</p> <p>Shows interest in meaningful numbers</p> <p>'Tags' (reliably points or touches each item), saying one number for each item, using the stable order of 1,2,3,4,5 at first, and then later, to 10.</p>	<p>Discuss mathematical ideas throughout the day, inside and outdoors. Suggestions: - "I think Adam has got more crackers..." - support children to solve problems using fingers, objects and marks: "There are four of you, but there aren't enough chairs..." - draw children's attention to differences and changes in amounts, such as those in stories like 'The Enormous Turnip'.</p>

<p><b>Cardinality</b></p>	<p>Uses number words, like 'one' or 'two' and sometimes responds accurately when asked to give one or two things</p> <p>Gets 2 or 3 objects from a group. Beginning to notice numerals (number symbols)</p> <p>Uses some number names and number language within play</p> <p>Begin to recognise numerals and make marks to represent amounts. Subitises: e.g. instantly recognising under 5 objects without counting</p> <p>Recognises that the last number said represents the total counted so far (cardinal principle) with numbers to 5</p> <p>Shows 'finger numbers', up to 5</p> <p>Links numerals with amounts up to 5</p> <p>Explores using a range of marks and signs to which they ascribe mathematical meanings.</p>	<p>Provide numerals nearby for reference. Suggestions: wooden numerals in a basket or a number track on the fence.</p>
<p><b>Shape</b></p>	<p>Arranges objects using flat surfaces to stack.</p> <p>Responds to changes of shape</p> <p>Attempts, sometimes successfully, to match shapes with spaces on inset puzzles</p> <p>Attempts to fit shapes into spaces on inset boards or puzzles, beginning to select a shape for a specific space</p> <p>Uses blocks to create their own simple structures and</p>	<p>Encourage children to play freely with blocks, shapes, shape puzzles and shape-sorters. Sensitively support and discuss questions like: "What is the same and what is different?" Encourage children to talk informally about shape properties using words like 'sharp corner', 'pointy' or 'curvy'. Talk about shapes as you play with them: "We need a piece with a straight edge."</p>

	<p>arrangements including lines of identical shapes</p> <p>Chooses puzzle pieces and tries to fit them in</p> <p>Recognises that two objects have the same shape</p> <p>Makes simple constructions</p>	
<b>Measures</b>	<p>Shows an interest in size and weight</p> <p>Compares sizes, lengths, weights and capacities using gesture and informal language</p> <p>Finds the longer or shorter, heavier or lighter and more/less full of two items</p>	<p>Look at heavy/light</p> <p>Weighing amounts- balancing scales.</p>
<b>Spatial Awareness</b>	<p>Enjoys filling and emptying containers.</p> <p>Investigates fitting themselves inside and moving through spaces</p> <p>Pushes objects through different shaped holes, moving them around to see if they fit</p> <p>Moves their bodies and toys around objects and explores spaces, e.g. squeezing into a tiny gap</p>	<p>Play hide and seek- talk about places we can hide.</p>

**Spring Term - Nursery**

Programme of Study	Knowledge, Skills and Understanding	Possible activities
<b>Comparison</b>	<p><i>Beginning to compare and recognise changes in numbers of things, using words like 'more', 'lots or 'same'</i></p> <p><i>Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. 'You've got two, I've got two. Same!'</i></p>	<p>Counting amount such as stones and comparing- I have 3 white stones, you have 3 black stone. That is the same.</p> <p>I have 3 leave and you have 5 leaves. You have got more than me.</p>
<b>Counting</b>	<p><i>Enjoys reciting numbers from 0 to 5 and back from 5 to 0</i></p> <p><i>Has fun counting as far as they can go and is fascinated with large numbers</i></p> <p><i>Shows interest in meaningful numbers</i></p> <p><i>'Tags' (reliably points or touches each item), saying one number for each item, using the stable order of 1,2,3,4,5 at first, and then later, to 10.</i></p> <p><i>Uses some number names and number language within play</i></p> <p><i>Begin to recognise numerals and make marks to represent amounts.</i></p>	<p>Representing amounts using fingers and marks.</p> <p>Model this in different areas.</p> <p>How many sticks have you found? Can you draw how many you have using the chalk?</p>

<p><b>Cardinality</b></p>	<p>Subitises: e.g. instantly recognising under 5 objects without counting</p> <p>Recognises that the last number said represents the total counted so far (cardinal principle) with numbers to 5</p> <p>Shows 'finger numbers', up to 5</p> <p>Links numerals with amounts up to 5</p> <p>Explores using a range of marks and signs to which they ascribe mathematical meanings</p>	<p>Explore patterns of numbers in the environment up to 5. Uniform on a 5 frame and not in a line. Look I have lined up the people waiting for the bus. How many people are there?</p> <p>Look at those flowers can you see how many have little flowers on? 2/3</p>
<p><b>Spatial Awareness</b></p>	<p>Moves their bodies and toys around objects and explores spaces, e.g. squeezing into a tiny gap</p> <p>Begins to remember their way around familiar environments, e.g. knows where to find their favourite activity</p> <p>Responds to spatial and positional language when used in conversation, e.g. pointing things out</p> <p>Explores how things look from different viewpoints including things that are near or far away</p> <p>Responds to and uses language of position and direction Explores from different viewpoints and points to things that are far away</p> <p>Predicts, moves and rotates objects to fit the space or create the shape they would like</p>	<p>Discuss position in real contexts. Suggestions: how to shift the leaves off a path, or sweep water away down the drain.</p> <p>Use spatial words in play, including 'in', 'on', 'under', 'up', 'down', 'besides' and 'between'. Suggestion: "Let's put the troll under the bridge and the billy goat beside the stream."</p> <p>Set up obstacle courses, interesting pathways and hiding places for children to play with freely.</p> <p>When appropriate, ask children to describe their route and give directions to each other. Provide complex train tracks, with loops and bridges, or water-flowing</p>

		challenges with guttering that direct the flow to a water tray, for children to play freely with.
<b>Measures</b>	<p>Shows an interest in size and weight</p> <p>Compares sizes, lengths, weights and capacities using gesture and informal language</p> <p>Finds the longer or shorter, heavier or lighter and more/less full of two items</p>	<p>Provide experiences of size changes. Suggestions: "Can you make a puddle larger?", "When you squeeze a sponge, does it stay small?", "What happens when you stretch dough, or elastic?" Talk with children about their everyday ways of comparing size, length, weight and capacity. Model more specific techniques, such as lining up ends of lengths and straightening ribbons, discussing accuracy: "Is it exactly...?"</p>
<b>Pattern</b>	<p>Becoming familiar with patterns in daily routines</p> <p>Joins in with and predicts what comes next in a story or rhyme</p> <p>Notices, predicts and continues patterns in familiar contexts</p> <p>Beginning to arrange items in their own patterns, e.g. lining up toys</p> <p>Joins in and anticipates repeated sound and action patterns</p> <p>Is interested in what happens next using the pattern of everyday routines</p>	<p>Provide a range of natural and everyday materials, as well as blocks and shapes, to make patterns with.</p> <p>Plan opportunities for children to experience pattern such as percussion, music and action games that involve repeated sounds or actions.</p>

**Summer Term - Nursery**

Programme of Study	Knowledge, Skills and Understanding	Activity/Links to Topics
<p><b>Counting</b></p>	<p>Enjoys reciting numbers from 0 to 10 and back from 10 to 0</p> <p>Has fun counting as far as they can go and is fascinated with large numbers</p> <p>Shows interest in meaningful numbers</p> <p>'Tags' (reliably points or touches each item), saying one number for each item, using the stable order of 1,2,3,4,5 at first, and then later, to 10.</p> <p>Uses some number names and number language within play</p> <p>Begin to recognise numerals and make marks to represent amounts.</p>	<p>Point to small groups of two or three objects: "Look, there are two!" Occasionally ask children how many there are in a small set of two or three.</p> <p>Regularly say the counting sequence, in a variety of playful contexts, inside and outdoors, forwards and backwards, sometimes going to high numbers. For example: hide and seek, rocket-launch countdowns.</p>
<p><b>Cardinality</b></p>	<p>Subitises: e.g. instantly recognising under 5 objects without counting</p> <p>Recognises that the last number said represents the total counted so far (cardinal principle) with numbers to 5,</p>	<p>Count things and then repeat the last number. For example: "1, 2, 3 - 3 cars". Point out the number of things whenever possible.</p> <p>Having numerals available for children to use alongside.</p>

	<p>then beyond</p> <p>Shows 'finger numbers', up to 5 then beyond</p> <p>Links numerals with amounts up to 5, then beyond</p> <p>Explores using a range of marks and signs to which they ascribe mathematical meanings</p>	
<p><b>Shape</b></p>	<p>Chooses puzzle pieces and tries to fit them in</p> <p>Recognises that two objects have the same shape</p> <p>Makes simple constructions</p> <p>Chooses items based on shape so they are appropriate for specific tasks</p> <p>Responds to both informal language and common shape names</p> <p>Shows awareness of similarities and differences between natural and manufactured shapes in the environment</p> <p>Partitions and combines shapes to make new shapes with 2D and 3D shapes</p> <p>Creates arches and enclosures when building, using trial and improvement to select blocks</p>	<p>Provide a variety of construction materials like blocks and interlocking bricks. Provide den-making materials. Allow children to play freely with these materials, outdoors and inside. When appropriate, talk about the shapes and how their properties suit the purpose.</p> <p>Provide shapes that combine to make other shapes, such as pattern blocks and interlocking shapes, for children to play freely with. When appropriate, discuss the different designs that children make.</p> <p>Occasionally suggest challenges, so that children build increasingly more complex constructions. Use tidy-up time to match blocks to silhouettes or fit things in containers, describing and naming shapes. Suggestion: "Where does this triangular one /cylinder /cuboid go?"</p>



<p><b>Pattern</b></p>	<p>Becoming familiar with patterns in daily routines          Joins in with and predicts what comes next in a story or rhyme          Notices, predicts and continues patterns in familiar contexts          Joins in and anticipates repeated sound and action patterns          Is interested in what happens next using the pattern of everyday routines          Creates their own spatial patterns showing some organisation or regularity          Adds to simple linear patterns of two or three repeating items (AB or ABC)          Join in with simple patterns in sounds, objects, games and stories dance and movement, predicting what comes next</p>	<p>Talk about patterns of events, in cooking or getting dressed.          Suggestions: - 'First', 'then', 'after', 'before' - "Every day we..." - "Every evening we..." Talk about the sequence of events in stories.          Use vocabulary like 'morning', 'afternoon', 'evening' and 'night-time', 'earlier', 'later', 'too late', 'too soon', 'in a minute'.          Provide a range of natural and everyday objects and materials, as well as blocks and shapes, for children to play with freely and to make patterns with.</p> <p>When appropriate, encourage children to continue patterns and spot mistakes. Engage children in following and inventing movement and music patterns, such as clap, clap, stamp.</p> <p>Use different materials to make repeating patterns such a leaves and stones.</p>
<p><b>Measures</b></p>	<p>Associates a sequence of actions with daily routines. Beginning to understand that things might happen 'now' or at another time          Beginning to understand some talk about immediate past and future          Anticipates times of the day such as mealtimes or home time          Sequences a small number of familiar events and beginning to respond to and use words such as 'before', 'after', 'soon' or 'later'</p>	<p>Talk about patterns of events, in cooking or getting dressed.          Suggestions: - 'First', 'then', 'after', 'before' - "Every day we..." - "Every evening we..." Talk about the sequence of events in stories.          Use vocabulary like 'morning', 'afternoon', 'evening' and 'night-time', 'earlier', 'later', 'too late', 'too soon', 'in a minute'.          Provide a range of natural and everyday objects and materials, as well as blocks and shapes, for children to play with freely and to make patterns with.</p>

## Vocabulary

Number names to 10

Count on/back

Before, after, above, below

More, less

The same as

Add, more, altogether

Subtract, take away

Equals

Days of the week: Monday, Tuesday, etc.

Seasons: spring, summer, autumn, winter

Day, week

Birthday, holiday

Day, night

Bedtime, dinnertime, playtime

Today, yesterday, tomorrow

Before, after

Next, last

Now, soon

Old, new

Always, never, sometimes,

Once, twice

First, second, third, etc.

Too many, too few, not enough, enough

Long, longest, short, shortest, tall, tallest, high, highest

Money, coin, penny, cost, buy, sell, spend.

Under, above, below, top, bottom, side

on, in, outside, inside

around, in front, behind

Front, back

Before, after

Beside, next to

Forwards, backwards

Cube, cuboid, pyramid, sphere, cone, cylinder, circle, triangle, square

Shape