Reception Long-Term Plan September 2021

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Numerical patterns – Shapes and Measures

Curriculum Area	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Shape and Pattern	- Chooses items based on their shape which are appropriate for the child's purpose. - Responds to both informal language and common shape names. - Enjoys playing with shapes - partitioning and combining shapes to make new shapes with 2D and 3D shapes. - Shows awareness of shape similarities and differences between objects. - Can talk about and identify the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc.	- Talks about and explores 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids). - Uses informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'. - Can combine shapes with purpose to make new ones – an arch, a bigger triangle etc. - Spots patterns in the environment, beginning to identify the pattern "rule". **Aut 2 Threading and pegboard patterns**	- Talks about and explores 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids). - Uses informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'. - Enjoys composing and decomposing shapes, learning which shapes combine to make other shapes. - Enjoys identifying and recreating patterns with a rule, e.g., repeating patterns or symmetrical patterns.	- Uses informal language and analogies to name shapes, (e.g. heart-shaped and hand-shaped leaves), as well as mathematical terms to describe shapes. - Uses own ideas to make models of increasing complexity, selecting blocks needed, solving problems and visualising what they will build. - Enjoys identifying and recreating patterns with a rule, e.g., repeating patterns or symmetrical patterns.	- Uses informal language and analogies to name shapes, (e.g. heart-shaped and hand-shaped leaves), as well as mathematical terms to describe shapes. - Uses own ideas to make models of increasing complexity, selecting blocks needed, solving problems and visualising what they will build. - Creates their own spatial patterns showing some organisation or regularity. - Continue, copy and create repeating patterns.	- Uses informal language and analogies to name shapes, (e.g. heart-shaped and hand-shaped leaves), as well as mathematical terms to describe shapes. - Uses own ideas to make models of increasing complexity, selecting blocks needed, solving problems and visualising what they will build. - Verbally counts beyond 20, recognising the pattern of the counting system. - Explores and represents patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Measures	- Can compare quantities using language: 'more than', 'fewer than'. - Can compare length/size in relation to Goldilocks and the 3 bears and other fairy tales. **Aut 1 Three bears and Billy Goats Gruff story books**	- Make comparisons between objects relating to size, length, weight and capacity.	- Make comparisons between objects relating to size, length, weight and capacity.	- Can compare length, weight and capacity.	- Can compare length, weight and capacity.	- Compares quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
Spatial awareness	- Describes a familiar route.	- Understands position through words alone – for example, "The bag is under the table," – with no pointing. - Predicts, moves and rotates objects to fit the space or create the shape they would like	- Can discuss routes and locations, using words like 'in front of' and 'behind'. - Selects, rotates and manipulates shapes in order to develop spatial reasoning skills.	- Responds to and uses language of position and direction **Sp 2 Rosie's Walk** - Investigates turning and flipping objects in order to make shapes fit and create models; predicting and visualising how they will look (spatial reasoning)	- Uses spatial language, including following and giving directions, using relative terms and describing what they see from different viewpoints - May enjoy making simple maps of familiar and imaginative environments, with landmarks	- Uses spatial language, including following and giving directions, using relative terms and describing what they see from different viewpoints - Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.