



## Mathematical Knowledge and Skills

### The Overarching Intent for our Curriculum is 'School Readiness'.

We know that the actual learning of young children is not neat and orderly. For that reason, accurate and proportionate assessment is vital. It helps us to make informed decisions about what each of our children need to learn and be able to do next.

We know how important it is to give our young children multiple opportunities of each of the targets listed below in order to deepen their understanding. We are aware that using 'Food' as a theme provides a powerful engagement hook for our children.



Our Intent for Mathematical Knowledge and Skills is that all children, no matter what their baseline or first language, will possess the knowledge and skills required to access their primary school curriculum when they begin in September.

We know that developing a strong grounding in number is essential so that our children develop the necessary building blocks to excel mathematically.

We will provide frequent and varied opportunities to build and apply mathematical understanding. By using manipulatives, our children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. We will provide opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures.

Our intent is that our children will develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.

#### **[Knowledge] Children will know:**

That the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').

## [Skills] Children be able to:

Develop fast recognition of up to 3 objects, without having to count them individually ('subitising').

Recite numbers past 5.

Say one number for each item in order: 1,2,3,4,5.

Show 'finger numbers' up to 5.

Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.

Experiment with their own symbols and marks as well as numerals.

Solve real world mathematical problems with numbers up to 5.

Compare quantities using language: 'more than', 'fewer than'.

Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language eg sides, corners, straight, flat, round.

Understand position through words alone eg The bag is under the table (no pointing).

Describe a familiar route.

Discuss locations, using words like 'in front of' and 'behind'.

Make comparisons between objects relating to size, length, weight and capacity.

Select shapes appropriately eg flat surfaces for building, a triangular prism for a roof.

Combine shapes to make new ones.

Talk about and identify the patterns around them. eg stripes on clothes, designs on rugs and wallpaper.

Use informal language eg pointy, spotty, blobs.

Extend and create ABAB patterns eg stick, leaf, stick, leaf.

Notice and correct an error in a repeating pattern.

Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then'

