Early Maths

Young children, throughout the EYFS and beyond, learn through investigating, exploring, talking, problem-solving and hands on learning. In the Reception year, we aim to create a continuous learning environment that supports children's growing mathematical understanding, and also provide experiences which focus specifically on aspects of maths learning.

- Children will be encouraged to 'use everyday language to talk about size, weight, capacity, position.' Adults regularly model mathematical vocabulary and provide practical experiences that promote mathematical talk.
- Children have opportunities to investigate collections of interesting objects that can be sorted in a variety of ways – things that can be explored, moved, played with, talked about and organised.
- Story and picture books are used to engage children with basic maths concepts. We explore mathematics through different contexts, including storybooks, puzzles, songs, rhymes, puppet play, and games.
- CBeebies Number Blocks programmes are used to support teaching of number and mathematical concepts where appropriate. The animation, loveable characters and engaging storylines can help to introduce concepts of number to support early mathematical understanding.
- Children are encouraged to represent problems in their own way, for example, with drawings and marks.
- Manipulatives and representations are used to support children to engage with mathematical ideas.
- Our Number of the Week and display linked to this help to support and promote how numbers and amounts can be represented in different ways.
- The outdoor environment is also used to promote mathematical skills for example measuring beanstalks or animals of different sizes which have been chalked on the playground, playing number games, number hunts, water and sand play to explore measures etc….
- We also integrate maths into different activities throughout the day – for example, at registration and snack times, through continuous provision and focused 1:1, group or whole class activities – to familiarise children with maths language and make the most of all opportunities to learn.
- Focus is given to the Five Counting Principles to help to develop the children's understanding of number. These Five Counting Principles are set out below:

One-to-One Principle	Children ensure they count each object only once, say one number name for each object and ensuring every object has been counted.	• Recite number names in order. The number of objects a child can count will be limited to the list of numbers they can say. • Coordinate both their counting and their motor movements, so that the object is counted and touched at the same time. • Keep track of objects that have been counted and those that need to be counted.
The Stable Order Principle	Children understand when counting, the numbers have to be said in a certain order	• Know the names of numbers in order. • Understand that these numbers are always said in the same order. • Count aloud to larger numbers.
The Cardinal Principle	Children understand that the number name assigned to the final object in a group is the total number of objects in that group.	• Have a good understanding of both the one-one principle and the stable order principle. • Be able to recall the final number that they counted. • Understand that this final number tells us 'how many'
The Abstraction Principle	Understanding that anything can be counted, including things that cannot be touched, moved or seen. (including sounds and movements e.g. jumps)	• Have a good understanding of the previous three principles. • Able to keep track of their counting without being able to see or touch each item being counted. • Understand that objects in a set can be different sizes, colours and shapes.
The Order-Irrelevance Principle	Understanding that the order in which objects are counted is not important. There will still be the same number.	• Have a good understanding of the one-one, stable order and cardinal principles. • Understand that the number they previously assigned each object is temporary and a different number can be assigned the next time the group is counted.

Homework activities encourage children to engage in activities such as number hunts, shopping games, baking etc…to practice, develop and apply their mathematical skills in real life contexts.