

Maths

These are the aims from our maths policy:



We aim to:

- Foster a positive attitude to maths for all children enabling them to approach mathematical activities with confidence, understanding and pleasure.
- Provide a curriculum which meets the needs of The Foundation Stage and KS1 of the National Curriculum, which is appropriate to the needs and learning styles of all children, and will develop enquiring, logical, investigative and problem solving approaches.
- Build upon and extend the children's previous experiences and ensure progression in the development of their understanding, knowledge and use of mathematical language.



Big Maths is a teaching programme used at Stannington Infant School to help children to become numerate. Problem solving and word problems cannot be solved until children can manipulate numbers and understand how the number system works.

Big Maths lessons are fast-paced and fun! The children are introduced to child-friendly terms such as 'Switchers' and 'Learn Its', to help them manipulate numbers and make them more confident and more successful. There is a strong emphasis on developing instant recall of number facts, including number bonds and doubles.

Maths lessons contain four elements - 'Counting', 'Learn Its', 'It's Nothing New' and 'Calculation' which we refer to as 'CLIC'

Counting

Children learn to count forwards and backwards in all kinds of steps e.g. in 1s, 2s, 5s and 10s!

'Learn Its'

'Learn Its' are addition facts and simple times tables facts. These are facts that children need to learn off by heart, so when they are asked 'What is $6+4$?' they are able to give the answer as quickly as they would be able to tell you their name. As soon as they know $6+4=10$ they also know $4+6=10$ (This is known as a 'Switcher').

It's Nothing New

This is the most important aspect of CLIC. It is the way children become successful and properly numerate. The idea that 5-things and 3-things are always 8-things is a fundamental concept. Once children understand this concept, we can change the 'thing' to other units, e.g. standard measures such as ml, m, cm, kg whilst understanding the underlying number concepts.

Following this principle with young children leads to a deeper understanding and of how numbers works (and they think it is fun too!) The idea is that the 'learning is nothing new' and children feel able to answer the all sorts of questions with real understanding e.g. If a child knows double 4, they can use that to find double 40 with confidence.

Calculation

This aspect of CLIC is when the teacher will focus on developing the children's understanding of addition, subtraction, multiplication and division.

Practical experiences and development of mathematical language underpin maths learning at all stages of development. In both FS and KS1 children are introduced to new mathematical ideas using physical resources and practical activities both indoors and outdoors.

Foundation Stage

In the Foundation Stage the yearly teaching programme for Reception is in line with the Early Learning Goals and provides a bridge from the goals to the National Curriculum that begins in Year 1. In Reception, a wide range of cross-curricular activities support the teaching and learning of mathematics, including stories, songs, rhymes, imaginative play, board games and outdoor play. Much of the maths is focused around daily routines, e.g. have we got enough snacks for everyone in our class? Over a week, the teaching of maths will include whole class activities e.g. counting, discussion of main teaching objectives and group activities. These are approached flexibly to accommodate the needs of the children.

The Foundation Stage environment includes maths areas with number challenges for children in independently access. Children also know where the counters and number lines are kept so that they can make independent choices about what resources they need to help them with their learning. This set up also encourages children to use and apply their developing mathematical ideas and methods, for example, by selecting resources to design and make a maths game.

Key Stage 1

In Years 1 and 2 maths sessions begin by focusing on developing mental and oral skills. All children are encouraged to develop mental methods of calculation, recall of number facts and mental imagery. The purpose of this part of the lesson is to keep skills sharp. There is a strong emphasis on developing instant recall of number facts, including number bonds and doubles and is delivered with a fun, fast pace. (CLIC session)

Mathematical activities are introduced to the children through concrete experience and at all levels abstract work is reinforced with practical activities. We encourage children to select and use appropriate equipment as much as possible.

Children work in groups, pairs or as individuals on differentiated tasks to meet their individual needs. Working in groups or pairs provides children with the opportunity to talk which develops their mathematical reasoning and understanding of concepts. Discussion with peers, describing, explaining, clarifying ideas, predicting and reporting outcomes and asking questions, all fosters the development of mathematical language and conceptual understanding.

The children work on a variety of activities, usually practically at first then with some recording. As children develop, they are encouraged to record their work in a variety of ways, develop personal methods of recording, compare and discuss alternate methods, refine and practice useful methods. These will vary according to the type of activity. They may include symbolic, statistical, diagrammatic, pictorial, verbal reporting or the construction of a model. As children become more involved in investigative activities the onus is on them to decide the most appropriate methods of recording.

The following calculation booklet may be helpful and can be found via information booklets in the parents area.

[Calculation Strategies](#)