



Maths Curriculum Year Group Overviews

(To be read alongside the White Rose Maths Curriculum)



Co-op Academy
Brownhill

Intent

In Maths we aim to ensure long term learning and progression is taking place from EYFS to Year 6 through our progression document and use of the White Rose Maths scheme. This scheme offers full coverage of the National Curriculum and is suitably ambitious for our pupils. Core knowledge is broken down into small steps which allow pupils to build on prior learning and both objectives and units are sequenced logically to develop children's knowledge effectively. This helps to support pupils with SEND, as does the cycle of revisiting prior learning through retrieval practice. We have adopted a mastery approach to maths teaching, which supports pupils in becoming fluent in the fundamentals of maths, including the ability to recall all age appropriate times table facts. The mastery approach also supports pupils to develop a deep, long-lasting conceptual understanding of mathematical principles.

Through effective planning, we intend that:

- Children will become fluent through varied and frequent practice, with increasing challenge over time, ensuring that this knowledge is secure and recall is rapid.
- Children will develop an ability to reason effectively and use mathematical principles, vocabulary and language to explain their understanding.
- Children will develop their problem-solving skills, applying prior learning and breaking down problems into a series of simpler problems.
- Maths will make a strong contribution to children's aspirations, so that children will see the value of maths in everyday life and will understand its importance in employability.



Implementation

Our curriculum design is based on evidence from cognitive science and this helps to inform the main principles used when implementing our curriculum. These are:

- Teachers will start every lesson by providing opportunities for the children to activate prior learning.
- Pupils will have regular opportunities to revisit knowledge from previous units and year groups through use of Flashback 4 resources, a minimum of three times per week (5-10 minutes).
- Pupils will complete an arithmetic test fortnightly. Teachers will use their marking of these, along with on-going assessment of pupils, to plan arithmetic sessions, which will take place at least four times a week (20 minutes).
- Children will be exposed to new knowledge and skills in small steps, which follow the intended learning of the curriculum and do not overload the working memory.
- Teachers will deliver new content in a concise way, using the concrete resources and pictorial representations detailed in the school's calculation policy, to support pupils' understanding.
- Lessons will involve regular varied fluency tasks, with pupils correctly answering a maximum of 10 questions at a particular level of difficulty. Daily opportunities for reasoning and problem solving are also provided.
- Teachers will provide effective support for those having difficulty with the learning, to ensure that the small step is met. This could include adult support, scaffolds, manipulatives, and extra fluency practice.
- Children with SEND who are working on specific maths targets can access the mastery content from a previous year group, if appropriate. These pupils will also have additional opportunities outside of lessons to work towards their targets.
- Arithmetic sessions will include oral rehearsal of times tables. Pupils in Years 2-6 are expected to practise times tables as part of their home learning, through Times Tables Rockstar and times tables are given a high profile through assemblies, prizes and displays.
- Vocabulary will be taught explicitly, in line with the planning.
- Termly assessments of pupils' knowledge will inform teachers' next steps in planning.
- Maths lead will analyse the results of assessments to inform evaluation of the maths curriculum and future actions.
- Maths content is identified on wider curriculum plans. Teachers plan pre-teach sessions before these lessons, to support pupils in accessing these maths objectives successfully, at an age appropriate level. This supports pupils learning in maths as well as the wider curriculum, whilst also supporting pupils in drawing links between different curriculum areas.

Impact

We expect that:

- Our children will have a deep understanding of core skills and knowledge, which then gives them confidence and ambition to access the world around them.
- Our children can recall all age appropriate times table facts.
- Children develop their fluency skills and can apply to a range of problems.
- Our children will develop a love of mathematics through understanding of core principles, and exploring the ways that they are used.
- Our children will develop a broad mathematical vocabulary and can use accurately and effectively to show understanding.
- Our children will demonstrate confidence, independence and resilience when approaching a range of problems.
- Our children will be well prepared to access the challenges of the secondary school curriculum.

