

Grange Primary School



Maths Intent Implementation Impact 2021-2022

Belong Believe Achieve

Intent

We want the children of Grange to develop a sense of curiosity and enjoyment about maths. The use of a mastery approach to the teaching and learning of maths is based on the belief that all learners can enjoy and succeed in maths. Grange has taken on a curriculum that is ambitious and designed to give all learners, particularly the most disadvantaged, the knowledge and cultural capital they need to succeed in life. Children take part in daily maths lessons which foster an enquiry approach, reasoning skills are built on and children enjoy a daily discussion around the maths they learn.

Implementation

Teachers' subject knowledge is developed through regular CPD supported by the Maths Hub and NCET. Senior leaders provide effective support for teachers and support staff who need additional development. The maths curriculum is coherently planned and sequenced towards cumulatively sufficient knowledge and skills for future learning. Mathematical concepts that are taught earlier in the curriculum are revisited in the context of a new area of mathematics. This helps learners to make connections between different mathematical concepts. Retrieving, using and applying concepts regularly, transferring to new contexts helps develop fluency as well as conceptual understanding.

This design helps learners to remember in the long term, the content they have been taught and to integrate new knowledge into larger concepts. Children are provided with the tools they need to develop their mathematical thinking, conceptual understanding and language and communication through the use of a concrete - pictorial – abstract approach to teaching and learning of maths. This serves our school community well as 51% of our children speak English as an additional language and the curriculum focus on language and communication allows pupils to deepen their understanding by explaining, creating problems, justifying and proving using mathematical language. This acts as a scaffold for their thinking and deepening their understanding further.

Impact

The impact of a mastery approach to the teaching and learning of maths is increasing enjoyment, resilience, understanding and attainment in maths for all children. Learners know more, remember more and are able to do more mathematics because the curriculum has developed their ability to take new ideas or relationships and incorporate them into their current understanding and see how they connect with ideas and relationships they have encountered previously. The greater their understanding of what has been taught previously, the more sense-making they will be able to do in the future with increasingly complex mathematics.

Because learners make sense of the mathematics they are learning, they have more memorable and enjoyable experiences that are more likely to be remembered in the long term. They will also be able to do more as they understand how to push the boundaries of what they know and apply it to solve problems. The curriculum provides opportunities and guides teachers in asking questions that will reveal learners'

understanding of a concept. It provides opportunities for meaningful dialogue to take place in lessons. It is by giving learners opportunities to talk, and by listening carefully to what they say, that teachers gather some of the richest data on their understanding. This data influences next steps, future planning, teaching and provides formative assessment. In addition, termly summative assessments provide information to further support teacher judgements and identify any gaps in learning.

