The Maths Journey At Eastlea

We began our journey towards developing a new approach to teaching and learning maths in the summer term of 2017. White Rose Maths Hub plans were trialled. It was decided to roll out the use of the new White Rose small steps plans across Year 1 to Year 6. Initially our main focus was the use of manipulatives across all year groups and all abilities. Investment was prioritised in the acquisition of new resources. CPD was delivered by the maths lead to teaching assistants looking at the use of manipulatives and then followed up by external CPD hosted by a partnership school and lead by the local Maths hub lead. This session focussed on the importance of vocabulary and questioning. In June 2018 we were successfully accepted on to the next round of Maths Mastery teaching research groups. This is being attended by the maths lead, Year 3 and the Year 2 teacher. Maths is a key focus on the school improvement plan and the focus of whole staff training this year. Our focus this year has been developing maths mastery in Early Years and alongside this the promotion of the acquisition of mathematical language. We have introduced the use of sentences stems to encourage the children to explain their maths in full sentences using accurate mathematical language. We hope to continue into a second year with the maths TRG to enable us to embed further the strategies and skills we have introduced this year.

How Maths looks

We aim for the majority of children to move through the programmes of study at broadly the same pace. We stay within the programme of study for that year group looking to extend learning through depth rather than extension through progression to the year aboves curriculum. Some SEND children will be given appropriate and related work from a year group below where necessary. All children are given time to explore ideas and concepts using concrete resources. Time is used to discuss and practise their reasoning with a partner or group. Year 2 and Year 6 are monitored by SATs assessments throughout the year. Year 3,4,5 are monitored by the use of NFER assessments. Timings and lesson length are beginning to be adjusted to ensure the progression of all pupils. Outside of maths lessons we are replacing the Ninja Times Tables challenge with a Times Table Rockstars lead challenge. We will use this to promote the quick recall of multiplication and division facts. We have introduced the use of KIRFs as a consolidation and reinforcement tool for the instant recall of facts. A key focus is the accurate use of language in all aspects of maths planning, teaching and learning.

Deepening learning

When children are quick to grasp a concept within a lesson staff aim to deepen their understanding by asking children to explain a method they have used, convince someone they are correct, showing how they can solve a problem using different manipulatives or act as a teacher to support another child. Staff use a range of resources to support this in each class.

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Language and explaining is the key to deeper learning. Accurate use of language when teaching and sentence stems promotes this.

EYFS

Staff are working to the same goal of maths mastery where all children work through the curriculum using the CPA approach. It is a maths focus this year to develop teaching and learning to promote children's ability to explore and having a deeper understanding of numbers to ten. There is also a focus on the introduction of commonly used representations and vocabulary from the beginning of nursery. From September the Reception teacher will be using the newly published White Rose Reception scheme of learning.

Current areas of development 2018 – 2019

- Follow the White Rose mastery approach for delivery of lessons developing the approach across KS1 and KS2 incorporating Friday mornings to allow for at least 5 hours maths teaching time.
- Early Years developing mastery approach across this key stage by introducing representations in line with the rest of the school using Glow SOL.
- Developing mathematical language more consistently across the school using sentence stems to model reasoning skills and to develop children's independent verbal reasoning skills and explaining.
- o Mathematical language to be identified, modelled and a clear progression of expectations to be put in place.
- Extend pupils' ability to articulate their thinking through the use of a variety of representations and resources alongside the sentence stems and vocabulary.
- o Ensure consistency of use of resources/representations across the school and supplement where possible.
- Lead teachers to extend knowledge of what 'greater depth' means and how to recognise it. Diving deeper activities to be developed form Spring term.
- Develop mathematical fluency by introducing KIRFs to be taught alongside agreed teaching times/ homework or same day interventions to support the progress of WTS or SEN groups (identified groups)
- Continue the acquisition of fluent multiplication and division facts using TTRS.
- o Consider reorganisation of maths planning.
- Mixed ability lessons in all key stages
- o 'Surgeries' with the maths coordinator to allow for ongoing more formal evaluation of success and opportunities to discuss concerns

Miss E Fox, Maths Lead