

# Crabtree Farm Primary School

## Maths Intent, Implementation and Impact

***Our children will be enthusiastic and confident when talking about and using number. They will have a firm grasp of the fundamental principles of mathematics and be able to use these and apply them in varied, real-life scenarios. We want to nurture curious children who see maths as an exciting, creative subject which can open the door to a world of opportunities.***

### Intent

- To ensure our children have covered the skills required to meet the aims of the National Curriculum.
- At Crabtree we follow a mastery approach based on the White Rose scheme of work.
- We aim to give our children opportunities to improve their fluency, reasoning and problem-solving skills every day by using consistent planning and lesson structures.
- We want to improve number fact fluency and times table knowledge throughout the school and to improve the children's mathematical vocabulary and ability to explain their knowledge and understanding both verbally and in writing.
- We want our children to enjoy maths and to be able to see the positive impact being a good mathematician can have on their lives.
- We want to improve the engagement of girls in maths in order to improve their attainment.
- We want all our children to take pride in their maths work, whether using calculations, writing explanations or undertaking practical work. We encourage correct use of mathematical vocabulary and well-presented work in maths books.

### Implementation

- At Crabtree we follow a mastery approach based on the White Rose scheme of work. Our children find knowledge retention difficult and through our mastery approach we aim to give children a solid understanding of the ideas in each topic that can be revisited and built on in subsequent topics. We use the White Rose small steps to help structure our learning sequence within a topic.
- Teachers have skills ladders to identify where their objectives fit into the children's sequence of learning as they move through the school. We utilise the White Rose small steps to give our short-term planning structure.
- We plan our maths weekly using the White Rose scheme of work, however tailoring the teaching and learning based on assessment for learning.
- All classrooms have a selection of maths resources available to children at all times. We have access to manipulatives e.g. Base 10, Dienes rods, money, clocks and ten frames.
- We use the idea of a concrete, pictorial and abstract development of a skill.
- Using the White Rose scheme helps children to build on their previous learning to undertake something new. Teachers are able to refer back to previous lessons and topics to build links as they are integral to their current learning.
- We use end of topic revision tests as well as end of term tests to understand the children's level of retention. This identifies gap and misconceptions that must be revisited. Children also self-assess at the end of each lesson so that teachers can identify individuals for intervention or focused group work.
- Differentiation is achieved through streaming of maths groups, where appropriate, the types of activity different groups undertake and the scaffolding and resources given to different groups. All children are given the opportunity to work collaboratively and to access reasoning problems.
- Children working below age-related expectations are targeted for intervention and focused group work to give the best chance of achieving ARE.

- We have a large focus on Mathletics and Times Table Rockstars to improve childrens fluency and times table knowledge. Parents are aware of these programmes and are encouraged to sit with their children and engage with these programmes at home.
- We monitor planning, undertake book scrutinies and observe teaching throughout the school. Teachers and Teaching Assistants have been observed using a wide variety of teaching styles and methods to make sure children have the best chance to succeed.
- The subject leader and other staff members attending maths CPD feedback their findings and share subject knowledge to ensure consistency.

### **Impact**

By the end of Year 6, we aspire that our children will have developed a bank of efficient and accurate skills that make them effective mathematicians. Children will be able to apply their maths skills and understanding of other areas to become confident and resilient problem-solvers with the ability to reason and articulate their ideas mathematically.

The year on year progression of skills enables children to build on previous learning so they are tackling age appropriate skills and challenges.

Our maths curriculum ensures our children have covered the skills required to meet the aims of the National Curriculum and attain age related expectations at the statutory end points:

- EYFS Profile
- Key Stage 1 SATs
- Year 4 Multiplication Tables Check
- Key Stage 2 SATs