

Maths

Intent, Implementation and Impact

Intent

Maths is everywhere and our aim at Smallthorne Primary Academy is to spark a love of Maths in all children. We endeavour to bring Maths to life so that our children are able to go into the outside world and confidently use Maths wherever they go. Through the curriculum, the children will learn the fundamental skills so that they all leave with the opportunity to become mathematicians, engineers, teachers, shop assistants or even, future "Countdown" presenters! As adults, we understand the importance of Maths, and we want children to see this too. Maths isn't just one subject at Smallthorne but a part of all our learning. We want our children to use their Maths skills in other subjects for example from data handling in Science, to calculating the amount of years the Romans inhabited Britain in History. We want children to see Maths as an adventure and during the adventure they are safe to be curious and take risks!

We want all of our children to learn, understand, apply, reason, master and conquer Maths and build the skills they need to solve Mathematical problems. Through the use of concrete materials, pictorial representations and abstract methods, children will be able to fully understand number and how to calculate the four operations by the end of Year 6. We believe that Times Tables are key to Maths development and therefore put great importance on all children learning these during the school day. We also encourage children to continue practising them at home. By working together with our children and parents/carers we can develop their mathematical understanding and support them in loving Maths.

Implementation

- To ensure full topic coverage, the school uses the 'Power Maths' scheme which is directly linked to the White Rose scheme. This is a whole-school primary maths curriculum that creates continuity and progression in the teaching of mathematics from Reception through to Year 6.
- Daily maths lessons include fluency, reasoning and problem-solving opportunities.
- Lessons follow the same structure of 'Discover, Share, Think Together, Practice, Reflect' but are adapted to ensure that all children receive the appropriate support or challenge required.
- Concrete manipulatives and pictorial representations are used to support conceptual understanding and to make links across topics. Children will be familiar with these from Reception until Year 6.
- Children have daily opportunities to practise the rapid recall of number bonds (KS1) and times tables (KS2). Our KS2 children have the chance to battle with other 'rockstars' across the city to develop their rapidity of these facts in preparation for the Year 4 Multiplication Check.
- We want our children to be able to demonstrate their understanding in the subject by using the correct mathematical language during discussions. Key vocabulary is introduced at the start of every lesson, which children are then encouraged to listen out for and use during Mathematical talk.
- At the end of each unit, the children complete an end-of-unit assessment, which allows teachers to plan subsequent lessons/interventions based on the gaps identified. Half-termly assessments are also completed and the analysis from these inform future lesson plans.
- Children have the opportunity to practise Maths every day at various different times.
- Through weekly Guided Reasoning sessions, all children from Years 1-6 have the opportunity to problem-solve using their Mathematical knowledge.
- Themed Maths days help to develop the children's love for the subject and see the importance of Maths in the real world.

Impact

- Children are confident problem solvers, who are able to use their mathematical skills in their everyday lives.
- Children enjoy Maths and make good progress, with most children reaching end of year expectations.
- Well-planned sequences of lessons support children to develop and refine their maths skills.
- All children have a secure knowledge of the fundamental Maths skills.
- Children are able to independently apply their knowledge to a range of increasingly complex problems.
- Children are reasoning with increased confidence and accuracy.
- Our children at Smallthorne will love Maths, take risks, be curious and embrace the adventure that Maths can bring!