

Intent

By the end of year 6, we would like pupils at Osbourneby primary school to:

- Be **fluent** in the fundamentals of Mathematics
- Be able to **reason** mathematically
- **Solve problems** by applying their Mathematics

At Osbourneby Primary School, these skills are **embedded within Maths lessons** and **developed consistently** over time. We are committed to ensuring that children are able to recognise the importance of Maths in the wider world and that they are also able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts. We want all children to enjoy Mathematics and to experience success in the subject, with the ability to reason mathematically. We are committed to developing children's curiosity about the subject, as well as an appreciation of the beauty and power of Mathematics.

Implementation

The content and principles underpinning the 2014 Mathematics curriculum and the Maths curriculum at Osbourneby Primary School reflect those found in high-performing education systems internationally, particularly those of east and south-east Asian countries such as Singapore, Japan, South Korea and China. These principles and features characterise this approach and convey how our curriculum is implemented:

- Teachers reinforce an expectation that all children are capable of achieving high standards in Mathematics.
- The large majority of children progress through the curriculum content at the same pace.
- Differentiation is achieved by emphasising deep knowledge and through individual support and intervention.

To ensure whole school consistency and progression, at Osbourneby Primary School, we use **White Rose schemes of learning** to guide our curriculum. These schemes follow the philosophy that, **"anyone can achieve in maths."** We follow this same philosophy at Osbourneby.

White Rose schemes of learning break the learning of maths into small manageable steps to help children understand concepts better. **Mathematical talk, thinking and reasoning** is encouraged. **Problem solving is entwined with the learning**. Pupils are always encouraged to **think deeper**. **Teaching for Mastery** is encouraged.

We believe, that all children, when introduced to a new concept should have the opportunity to build competency by using **concrete objects, pictorial representations and abstract methods**.

Practice and consolidation play a central role. Carefully designed variation within this builds fluency and understanding of underlying mathematical concepts.

Teachers use precise questioning in class to test conceptual and procedural knowledge and assess children regularly to identify those requiring intervention, so that all children achieve.

Mathematical topics are taught in blocks so that thorough understanding can be achieved before moving on. Each lesson phase provides the means to achieve greater depth, with more able children being offered rich and sophisticated problems, as well as exploratory, investigative tasks, within the lesson as appropriate. In addition to the White Rose scheme, we use ‘**Oxford Owls**’ mastery questions, **STEM, Maths Frame** and **NRICH** to support deeper thinking.

We use **Times Tables Rockstars** (TTRS) to support pupils learning of timetables. Pupils in KS2 have the opportunity to use the TTRS programme in school at least twice a week. In addition, pupils are encouraged to use the programme at home.

As fluency in mental maths is essential in everyday life and crucial for understanding and solving more complex problems, at Osbourneby School, we have designed a list of ‘**non-negotiables**’ that we expect all pupils to achieve by the end of each academic year. We work hard to ensure that all pupils achieve these by working with parents and using ‘**maths packs**’ for pupils to take home or use in **intervention sessions**.

Impact

Pupils fluency in mental maths is improving. TTRS is well used and pupils enjoy battling each other and seeing how the school ranks locally. Osbourneby school is consistently in the top ten school within a 30-mile radius. Pupils are supportive of one another and enjoy celebrating each other’s success. Pupils have enjoyed taking part in TTRS ‘battles’ within school and nationally during ‘Maths week England’.

Regular and ongoing assessment informs teaching, as well as intervention, to support and enable the success of each child. These factors ensure that we are able to maintain high standards, with achievement at the end of KS2 well above the national average and a high proportion of children demonstrating greater depth.