



At Walsden St Peter's we believe that mathematics provides children with a powerful set of tools including logical reasoning, problem-solving skills and the ability to think in abstract ways. These tools enable children to view and make sense of the world, communicate their ideas and tackle a range of practical tasks and real-life problems. Mathematics is not only taught because it is useful; we believe that it should be a source of delight and wonder, offering pupils intellectual excitement. We aim to develop children's mathematical skills and an enthusiasm for the subject by providing a challenging and stimulating mathematics curriculum.

We aim that all pupils:

- 'become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.
- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.'¹(Department for Education, 2013, p.99)
- enjoy, succeed and develop enthusiasm and confidence for maths.

We believe that:

- ability in mathematics is not fixed and children follow their maths learning journey together.
- developing a positive mind set - a "Can Do" attitude - to mathematics is essential for success.
- timely intervention addressing misconceptions is essential for success.
- the opportunity to "go deeper" must be offered to all children to broaden their understanding.

To support this, we aim to develop teachers who ensure that:

- quality first teaching is carefully planned to match the ability and prior learning of the class.
- in EYFS, this follows the EYFS Maths area of learning.
- in KS1 and KS2, this follows the White Rose Maths Schemes of Learning.
- appropriate elements of the maths curriculum are delivered and applied with a cross-curricular approach.
- the concrete, pictorial, abstract model is our starting point for learning.

¹ Department for Education (2013) *The National Curriculum in England – Mathematics programmes of study: Key stages 1 and 2.*

- lessons include opportunities for children to discuss, reason and explain their learning.
- lessons promote an environment for children to be challenged and persevere to find solutions.
- lessons are interactive and fun and promote engagement.
- lessons include the use of manipulatives and/or representations in all year groups to develop fluency, reasoning and problem solving.
- lessons directly address children's misconceptions.
- lessons centre on the use of questioning to explore and deepen the knowledge and understanding of the children.
- children are given time to explore, think and reflect.
- all children are given the opportunity to grapple and "go deeper" into mathematical concepts.
- for those learners with high levels of special educational needs and/or disabilities – a curriculum is designed to be ambitious and to meet their needs.

Our journey towards a mastery curriculum:

What is teaching for Mastery?

At Walsden St Peter's, we are developing a set of core principles that we believe will ensure that our children achieve mastery in mathematics. This means that the children will acquire a "deep, long-term, secure and adaptable" understanding of mathematics.

Mastery is not simply about memorising facts and procedures to answer test questions; mastery is about knowing why and how, being flexible and creative in approaching the familiar and unfamiliar. Depth is more important than speed.

Developing Teaching for Mastery

At Walsden St Peter's, we have embarked on a project to ensure that there is a smooth transition to develop and embed teaching for mastery. This is being supported by the West Yorkshire Maths Hub Mastery Readiness programme (2018-19) and will be followed by participation in the WYMH Teaching for Mastery programme (2019-2021). All teachers are further developing their understanding of mastery over 2019 to 2021. During 2018-19 the focus will be on developing fluency; using the White Rose SOL (including development of our use of manipulatives/representations); establishing positive mathematical mind sets for staff and pupils; and reviewing our lesson structures and class organisation.

In 2019/20, we aim to further develop our teachers' subject knowledge and ability to plan for deeper understanding. We will also review our interventions and assessments.

Structured Interventions to provide additional support:

We aim to work towards a position where our lessons are pitched in such a way that all children are expected and enabled to achieve regardless of their individual starting

point. Less confident children may receive additional support within the lesson. Pupils that are experiencing difficulties and have misconceptions are identified through immediate teacher assessment and addressed with timely intervention. This style of intervention aims to enable the pupils to 'keep up' rather than 'catch up'.

Challenging Learners:

Challenge for **all** groups of learners must be an intrinsic part of maths lessons. It is expected that most of the children will be taught the same content at the same time. Challenge can be incorporated into lessons by skilful questioning; pupils who grasp concepts quickly should be challenged through rich and sophisticated problems – “go deeper” – rather than accelerating into new content. All pupils should encounter such problems: different pupils will engage with problems at their own depth.

Outcomes for our children:

At Walsden St Peter's, we want our children to leave school as knowledgeable, positive and confident mathematicians; we want each child to fulfil their potential. We want each child to have the skills to be resilient when presented with the unfamiliar and the ability and confidence to question why. Therefore, our aspiration is for almost all our pupils to achieve at least the end of KS2 expected standard for maths.