

# Maths Curriculum Statement



## Intent, Implementation and Impact

At Danesfield, we aim to deliver a maths curriculum which is ambitious for all children and promotes a true love of the subject for boys and girls alike. We aim to teach a curriculum which is coherently planned and sequenced, successfully adapted, designed and developed for all children and underpinned by current research. More specifically, we **intend** to:

- teach through a Mastery approach, recognising that deep learning takes longer but lasts longer as children make connections between new knowledge and existing knowledge.
- understand that children make best progress through small, conceptual steps based on an assessed need. This is so that many more children will be able to 'keep up', rather 'catch up' through interventions.
- deliver a maths curriculum which is flexible and responsive to the needs of all children.
- teach with the understanding that the three aims of the National Curriculum, fluency, reasoning and problem solving, are highly connected and interdependent.
- use a concrete, pictorial and abstract approach as this best reveals the mathematical structures that we want children to learn.
- instil a 'we are all mathematicians' mindset in all children and encourage child dialogue and discussion in every lesson.
- make real life, cross-curricular links so that children understand how their maths skills can be applied in and outside of the classroom.
- enhance teachers pedagogical content knowledge to ensure they understand the content, the best ways to teach it, the common misconceptions and how to address them and the most appropriate models.

Danesfield teachers are passionate about our shared vision for maths and our intentions for our maths curriculum. We **implement** our intentions by:

- teaching maths topics in longer blocks and making links to previous learning and future learning explicit. This is so children understand concepts as interconnected rather than memorising disconnected facts.
- ensuring maths planning is flexible and adjusted. Whilst we use Power Maths in all year groups as our foundation, we adapt lessons and the length of time spent on topics in response to children's learning and feedback.
- teachers effectively modelling ideas using manipulatives. Teachers use conceptual and procedural representations to help children understand concepts more deeply and identify patterns in the number system.
- having regular, brief, retrieval opportunities to revisit previously learned material so that content becomes deeply embedded in children's memories.
- teaching using small steps, broken down further so that fewer children struggle and using same-day interventions to provide support when needed.

- keeping marking and feedback as 'live' as possible in order to address misconceptions in the moment, challenge children appropriately and to ensure marking is as specific and actionable as possible.
- using formative and summative assessment tools, with an acknowledgement of their limitations, to address identified gaps in mathematical knowledge which hinder the capacity to learn and apply new content.
- teaching children in mixed attainment groups to promote a growth mindset towards maths and to minimise the gender gap and the gap between vulnerable groups of children.
- regularly asking children about their own learning and sharing feedback with staff so changes can be put in place as and when needed and positive outcomes can be celebrated.
- using our local maths hub as part of staff CPD for teachers and teaching assistants. The reason behind this is because the training they offer has longer, linked sessions and provide support and tasks between face to face sessions.
- the subject leader having a thorough understanding of the pedagogy, current research and content of maths teaching across the school and using this knowledge to develop coaching relationships with teachers and teaching assistants.
- the subject leader regularly 'checking in' with teachers (as opposed to 'checking up') as part of supportive and collaborative relationship.

By teaching maths as we do, we believe we are achieving the best possible outcomes for all children. The **impact** of our teaching is evident in different ways.

- impact is apparent through book looks, short visits and pupil progress meetings. Together they are triangulated alongside class teachers to ascertain whether pupils have understood concepts that have been taught, the level of depth to which they have understood it and which gaps and misconceptions need addressing.
- attainment and progress are partly measured through summative assessments which are carried out termly. We use PiXL papers because we find that the question level analysis (QLA) gives teachers meaningful, useful insights. The subsequent intervention materials are matched to the gaps identified and keep interventions short and specific, as well as enabling teachers to plan for improvement at a whole class level too.
- we are aware of the limitations of all forms of summative assessment, for example, they may not tell us what misconception led to an incorrect answer, therefore we use teacher assessment alongside the PiXL tool.
- we moderate within year groups and the subject leader holds 1-to-1 meetings with teachers to support their judgments. This enables the subject leader to take deliberate action to improve the effectiveness of the maths curriculum.
- there will not be a significant difference between boys' and girls' attainment and progress in maths and pupil voice responses will reflect this.
- EYFS, end of KS1 and end of KS2 data will continue to show that children at Danesfield perform particularly well in maths, significantly higher than the national and local averages.

This intent-implementation-impact statement is a working document, one which is reviewed and adapted and reflects teaching improvement as an ongoing process.