

Intent

At Chorlton Park, our aims are to ensure that every child:

- Develops fluency and can make connections between mathematical ideas
- Can reason using correct mathematical language
- Can apply conceptual understanding to solve problems
- Has a love of maths and will challenge themselves
- Is a resilient mathematician

By following the Maths No Problem scheme of work- we are following a scheme which not only is DFE approved, but built on research about how children learn maths and metacognitive practices. It:

- Supports staff in the confident and consistent delivery of the Maths curriculum, with age appropriate lesson outcomes, vocabulary and support materials and is clearly linked to the NC.
- Supports the various needs of an inclusive classroom and adaptations and scaffolds are made to support and challenge all learners.
- Promote collaborative learning behaviours leading to more independence and confidence in maths.

Assessment in Maths

EYFS/KS1 – baseline assessment reception alongside regular teacher assessment and the use of journals to show an independent learning journey in readiness for KS1.

KS1- teacher assessments and the introduction of arithmetic and problem solving assessments towards the Summer term. Teachers use the review lessons in the maths workbooks in KS1 at regular intervals and bridge back to prior learning.

KS2 - use half termly arithmetic assessments – recorded centrally alongside termly formative assessment in Autumn term and summative assessment at the end of the Spring and summer term. These are recorded on the whole class assessment spreadsheet. Teacher assessment is on- going throughout lessons and concepts, via reviews, in daily marking of workbooks and questioning during lessons.

Year 2 and Year 6 –

Complete end of key stage statutory national assessments.



Maths



Implementation

- Maths is taught through the Maths No problem scheme of work
- Children are taught maths for 45mins -1hour a day
- The curriculum is designed with a spiralsed learning structure which supports our work on Metacognition as it doesn't strain cognitive load and ensures pupils revisit knowledge and skills so that they can retain them.
- Children are taught using a slow steps approach which enables all learners to access the maths curriculum.
- Knowledge and skills are mapped out so that there ensure progression from EYFS to the end of KS2
- Lessons follow a familiar structure centred around a word problem or equation. Building up to independent learning and demonstration of individual understanding.
- To support learning in maths, children use a range of manipulatives to help solve a problem and to explain their understanding.
- Mastering Number is a project taught additionally to the maths lesson in year 1 and 2, 4 x per week, it is designed to develop fluency and composition of numbers to 20. It was developed by the NCETM and first implemented in school in 2021. Mastering Number in Key Stage 2 has been introduced in Year 4 and 5 in September 2023.



Pedagogy

At Chorlton Park we follow a Mastery approach curriculum – inspired by leading maths teaching from Shanghai & Singapore. Lessons are designed following the 5 big ideas – **variation, fluency, representations, mathematical thinking and problem solving**, underpinned by small steps and children being able to make connections.

The maths no problem scheme is an evidence-based approach to teaching Maths, which helps pupils develop a deep, long-term and adaptable understanding of Maths sharing our schools intent.

During maths lessons we design lessons to promote metacognitive practice following the EEF – ‘7 steps to independence’ model.

Impact

- Staff are confident teaching maths and have been following the maths no problem scheme since its phased introduction in 2016 (recently updated 2022)
- Staff are clear how to deliver the curriculum for their year group, this was shown during a learning walk in Autumn 2021. A recent staff voice questionnaire in 2023 found that confidence levels teaching maths averaged 8/10 on the scale.
- Children demonstrate excellent reasoning during lessons and can explain concepts using mathematical vocabulary.
- Pupil Voice Spring 2023– “I like maths more as I get to work with a partner and we share our ideas.”
- “I love guided practice- my teacher takes his turn to work out an answer, then I do my turn- it really helps me.”
- “I like to use objects to help me work out answers”
- “I love writing in my journal, no one tells me what to write and I can show my own answers”
- “If I find maths challenging I ask a friend, join my teachers group and use my perseverance.”

Maths in Early Years

The early years curriculum is centered around the following 6 areas:

Cardinality & counting	Pattern
Shape and space	Comparison
Measure	Composition

In Early Years we work towards the Early Learning Goals through a maths mastery approach in preparation for Key stage 1. Learning is play based in the continuous provision and sustained, shared thinking takes place both indoors and outdoors. Teachers deliver a skill to the whole class which is developed by all practitioners throughout the continuous provision and small groupwork.

Nursery: develop a secure understanding of decomposition of numbers to 5, counting to 10 and maths in the real world- play centred maths.
Reception: Have a daily Mastering number lesson (NCETM project) which focus's on securing number confidence to 10 and beyond with the aim that children will become more fluent, in readiness for KS1. Alongside this, maths is accessed through play and designated lessons based on shape, measure and pattern enhance the number based learning.