Mathematics Policy
Worlds End Junior School

What is mathematics and why is it important?

Mathematics is a powerful, universal language used to make sense of the world, explain, predict and represent everyday problems. At **World's End we aim not only to prepare our children for the next stage of their education, but also to lay the foundations for successful lives after school.**

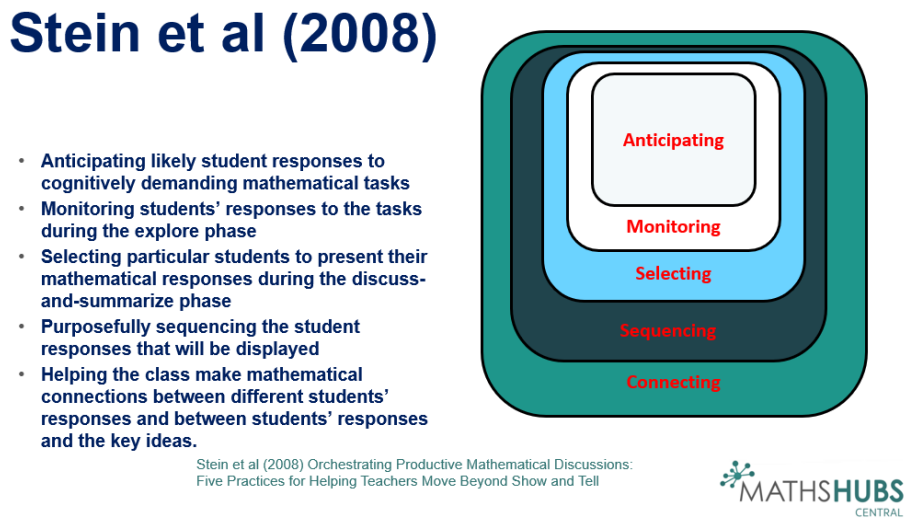
The aims of our maths curriculum are aligned with the aims of the National Curriculum: **fluency, reasoning** and **problem solving**. We recognise that pupils need to **learn basic number facts** and acquire **fluency in procedures**, alongside **developing conceptual understanding**.

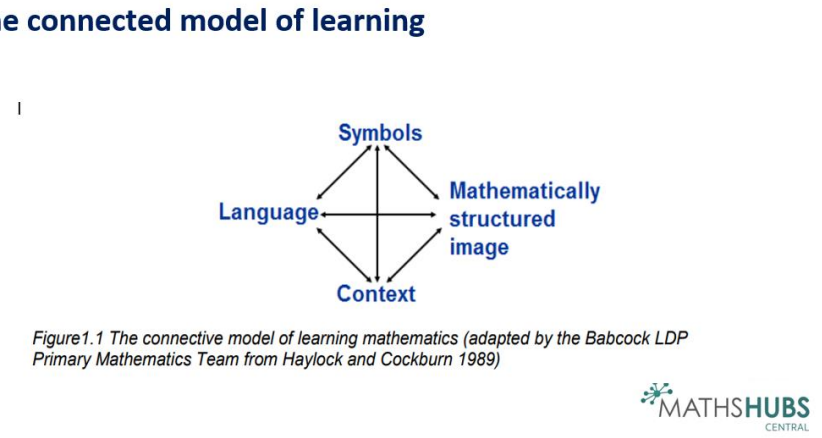
We use a **mastery approach** to the teaching of mathematics (see **NCETM Essence of Teaching for Mastery**). Therefore, the **NCETM's 5 Big Ideas** (**Representation & Structure, Mathematical Thinking, Fluency, Variation and Coherence**) underpin all of our lessons. We endeavour to make the mathematics curriculum accessible to all pupils; moving them through the programme of study at broadly the same pace, with opportunities to work on the objectives more deeply for those who rapidly grasp concepts.

There are aspects of mathematics teaching which will be seen in every classroom at World's End:

- **Explicit teaching of Oracy** skills are essential and are woven throughout (see Oracy in maths at World's End Junior School & NCETM Oracy exemplified in the Essence of Teaching for Mastery)
- A **positive attitude** toward and sense of excitement about mathematics
- The main teaching activity should be whole-class based with everyone covering the same content working in **mixed prior attainment pairs**
- **Anchor Tasks** are used to start the new learning for the day allowing the teacher to assess
- **Purposeful opportunities for mathematical discussion throughout –** we encourage the use of the **Stein Model** to generate high quality discussions (see below)
- Learning objectives are not shared with the children at the start of the lesson in order to encourage the children to think carefully about anchor tasks and what they are learning.
- A connected model to help children **understand mathematical structures** (see below)
- **Modelling** of thinking and representations via interactive white boards
- Adults use **skilful questioning** to reveal, probe and address misconceptions
- Children who grasp concepts rapidly are challenged to **think more deeply**
- **Scaffolding** is provided for children when required

- Skilful assessment identifies children who are struggling to grasp concepts leading to **guided groups with the teachers**
- Use of a **high-quality textbook**, supplemented by quality materials ensures a **coherent, progressive journey** through the curriculum
- There are opportunities to record in every lesson in either a maths journal or workbook (maths book in Year 6) or both (see journaling guidance)
- In years 3, 4, and 5, we use a **Split Lesson** approach (2 x 30 minute lessons with a break in between)





Planning

We believe that the key to success with all learners is quality first teaching. This is promoted through ongoing bespoke professional development for all staff from the maths leader who is a Cohort One NCETM Mastery Specialist, NCETM Intensive Support Partner and Assistant Maths Hub Lead.

The maths leader provides a yearly overview and written guidance to support planning. Progression is based on the – **Maths – No Problem! Scheme of work.** When planning, teachers use **'Ready to Progress'** resources from the **DfE Primary Guidance** to assess whether the children have the skills to begin the unit of work or whether additional lessons are required. They also use the **'Assessment Questions'** from the **DfE Primary Guidance** to understand the pitch of learning required by the end of the unit. In year 6, White Rose Medium Term Plans have been adapted. When supplementing the Maths – No

Problem! resources, teachers are further supported by **NCETM Prioritisation documents** and more recently the corresponding '**Oak Academy'** resources.

There are a small number of children who are working significantly below their age-related expectation. These children work on a curriculum that is personalised to their needs. It is the teacher's responsibility to ensure that these children are working to address their next step in learning – next steps are often linked to their Continuum targets. Input from the teacher can take place within the maths lesson or at a different part of the day but must be from a teacher. Practice of the skill can continue over more than one day to ensure the skill is embedded.

Lessons are planned directly onto ActivePrimary flipcharts which are saved together with other resources centrally. This allows the maths leader an opportunity to monitor them in order to support the teachers.

Role of the Teacher/Teaching Assistant

Teachers lead the whole class input, whilst teaching assistants may fulfil one or more of the following roles:

- support behaviour for learning
- circulate to assess the children's understanding – make notes in a book to feedback to teachers
- take the lead on some whole class activities
- update working walls

Guided groups are led by qualified teachers in the second part of the lesson.

Outside of the maths lessons, teaching assistants lead structured interventions such as the PPS Maths Programme, 'Catch Up Numeracy' programme, First Class @ Number and Success@Arthmetic, in order to close address gaps in learning.

Maths working walls are a used daily as a part of the maths lesson and so must be clearly visible and interactive. Key vocabulary, reference to the representation of the mathematical structures that the children have been working with during the lessons, and sentence stems should all be included.

Additional Fluency Sessions

In addition to the one-hour maths lessons (sometimes split into two half an hour sessions), children develop fluency in an additional daily session. There is a separate policy for this.

Homework

In order to support the children in becoming fluent mathematicians we recognise the need for regular practice of key skills such as times tables, number bonds, doubling, halving etc. We therefore encourage the children to practice such skills daily at home via bespoke homework set on Mathletics or Times Tables Rock Stars. If a teacher notices a specific gap in learning, they may send some addition homework home to address that gap.

Assessment

Assessment of the children's learning is ongoing and throughout every interaction. For information about summative assessment, see assessment policy.

Next Policy Review: Sept 2026