

## **Curriculum Design at Harthill**

## Our Maths curriculum enables children to:

* Become fluent and confident mathematicians with good reasoning and problem-solving skills
* Explore all strands of mathematics
* Embrace a growth mindset when faced with challenges

So that they:

* Develop a strong sense of belonging with a good understanding of the wider world.
* Are inspired to raise their ambition.
* Grow resilience as determined and independent individuals.
* Show kindness, respect and tolerance.

MATHS AT HARTHILL Through our White Rose Maths curriculum, children will make progress in their

mathematical fluency and understanding through the concrete, pictorial and abstract (CPA) teaching approach, leaving our school with the ability to problem solve and reason in all areas of mathematics. They will be inspired to ask questions, explain their reasoning, prove their thoughts with justifications and break down multi-step problems into sub-problems through our embedded mastery culture. Mastery is at the heart of our maths curriculum and children will master new concepts before moving on to new ones; curriculum design ensures knowledge is built progressively year on year. Maths Meetings will be used at least 3 times a week to consolidate learning outside of the core maths lesson and provide an engaging way for pupils to practise applying their knowledge and skills on a regular basis, build their mental fluency and continually build on their mastery of key concepts. With the underlying principle that everyone can access maths, the curriculum allows everyone the chance to succeed.

Our Maths curriculum has been designed with our children in mind to ensure it:

* Broadens pupil understanding and experiences of the world
* Promotes diversity through providing a choice of pathways for all learning styles and abilities
* Meets the needs of all pupils and supports long-term social mobility
* Challenges pupils and promotes resilience
* Exposes children to maths concrete manipulatives and a wide-range of visual concepts to support their understanding

Implementation:

**Through our maths** **curriculum children will:**

-be taught key addition and subtraction facts alongside a programme that reinforces speedy recall (Numbots)

-be taught times tables alongside a programme that reinforces speedy recall (Times Tables Rockstars)

-have the opportunity to apply their rapid recall of number facts through maths practice

-have gaps in fundamental number facts and calculations, including the four operations, quickly identified by classroom staff who will use responsive as well as planned interventions to address these

- use actual objects (concrete manipulatives) within the different strands of mathematics then progress to using pictorial representations of the object and abstract symbols/ideas

-have maths vocabulary and fluency taught through a whole-class approach

-engage in positive maths experiences to promote a love of maths.

-learn to problem solve and reason in a range of contexts

Impact:

**The impact of our maths curriculum is demonstrated in the following ways:**

- -pupil performance in summative and formative assessment (completion of workbook tasks, contributions in lessons, end of unit assessments, termly assessments, SATs)

-pupil voice and engagement with maths.