

## Maths at Horncastle Primary School

At Horncastle Primary School we believe that all pupils can achieve in mathematics. We believe that at each stage of learning, children should be able to demonstrate deep, conceptual understanding of a topic and build on this over time. We want children to be able to not only recall and use the maths taught but to also be able to transfer and apply it in different contexts, being able to reason and problem solve. This deep learning is what we are aiming for by teaching maths using the mastery approach.

### Aims and purposes

- To have enjoyment and enthusiasm for mathematics.
- To develop confidence and fluency in mathematical knowledge, concepts and skills.
- To display an ability to use and apply mathematics across the curriculum and in real life.
- To reason, think logically and work systematically
- To show initiative and an ability to work independently and in cooperation with others

The only way  
to learn  
**mathematics**  
is to do  
**mathematics.**

PAUL HALMOS

### How we do it?

- Our maths curriculum is split into year group specific units that are taught in a sequence whereby previous learning can be used to support new learning and to create links between concepts.
- Each unit is then designed in small, carefully sequenced steps that pupils should aim to master before moving on to the next stage.
- The objective is explored using a range of representations and structures.
- Fluency is developed as well as the flexibility to move between different contexts.
- Variation is used to develop a deep understanding.



### The Fundamentals

- A belief that every child can and will become a competent mathematician.
- A daily focus on the teaching of arithmetic. (Teacher explains and models answers showing correct methods for calculating)
- Explicit teaching of mathematical vocabulary.
- Use White Rose resources to provide consistency of approach in activities at expected and greater depth levels.
- An engaging and up-to-date working wall – displaying appropriate aids and vocabulary for the current unit.
- Math resources (manipulatives) should be available to ALL children at ALL times.
- Tailored groupings where appropriate.

### Planning

- Each year group follows the teaching sequence outlined by the White Rose Maths scheme of learning to ensure a coherent, consistent approach.
- Teachers use the notes and guidance as a basis to enhance their teacher and learning of the subject along with key vocabulary, questions, discussion and teaching points.
- All children are to be included in whole class lessons with teachers planning provision for any relevant support.

### Strategies

- **Practical activities and games**
- **Problem solving**
- **Open and closed tasks**
- **Individual, groups and whole class discussions and activities**
- **A range of methods of calculating**
- **Use a wide range of support resources.**
- **Progression through concrete, pictorial and abstract approach**

### How do we support our SEND learners?

- Manipulatives are used to aid understanding and engagement through a hands-on approach.
- Visual and auditory learning styles are used.
- Teachers provide an inclusive learning environment, using clear and concise language to break down complex concepts into smaller, more manageable parts.
- Technology is used where required to add extra support and help understanding
- Teachers provide plenty of opportunities for practice, such as through games to reinforce what they have learnt.
- We celebrate successes!