

Maths at Horncastle

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.

For the things of this world cannot be made without a knowledge of Mathematics

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.



How we do Arithmetic

- Daily 10 minute practice of arithmetic skills (5 to 8 questions per session – dependent on year group).
- Teacher explains/shares answers showing correct methods for working out according to the school calculation policy.
- Planning should include all question varieties found in arithmetic tests for your year group.

The Fundamentals

- A belief that every child can and will become a competent mathematician.
- A daily focus on the teaching of arithmetic.
- 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.
- Knowledge of multiplication & division facts reinforced through TT Rockstars.
- Progression through concrete, pictorial and abstract approach