

"Where responsible, respectful, caring and resilient children and adults strive to be the best versions of themselves."

Responsibility

Respect

Care Resilience

### Intent

# Why teach mathematics in this way?

Mathematics is a way of understanding the world around us. Wherwell children will find maths accessible, no matter their age or ability, through balanced and connected learning journeys across the mathematics curriculum. They will consistently make progress as a result of carefully planned, resourced and effective teaching, which fosters a reflective and confident approach to lessons. Children will learn to be fluent in number as a basis for all further topics, in carefully ordered and sequenced lessons, in which teachers use exemplars to provide clear instruction, models and explanation, giving children opportunities to think, question and practise new skills. Children will be given the opportunity to retrieve, rehearse and consolidate their knowledge of mathematics topics, by making links from new to prior learning.

At Wherwell we aim for children to:

- Ask questions to seek clarification or extend their understanding of learnt and new topics ٠
- Learn key skills to reason and problem solve; independently and with help, without fear of mistakes
- Use concrete, pictorial and abstract methods to work efficiently and deepen understanding
- Make links between topics and suggest explanations for the most efficient way to find answers
- Approach maths learning journeys with enjoyment and motivation to succeed at all levels
- Feel supported yet challenged in lessons, to become responsible and resilient mathematicians

# Implementation

# How is mathematics taught at Wherwell?

Wherwell children are always encouraged to be the best version of themselves, through emphasis on our core values of respect, resilience, responsibility and care. Our teaching is planned and delivered - according to the requirements of the National Curriculum - with this in mind.

We use resources from White Rose Maths, supplemented by other excellent provision from Nrich and NCETM (National Centre for Excellence in the Teaching of Mathematics) and we follow a planning sequence written by the Hampshire Maths Team. This is carefully designed to support both single and mixed year planning and consists of 'blocks' of topics, delivered throughout the year.

Daily maths lessons involve the teaching of a series of 'small steps' from a learning journey which typically cover between 2 – 3 weeks, depending on the size of the topic and the response of the children to the learning. In each lesson, children will have the opportunity to revisit prior learning and then practise a new skill, through targeted CPA resources, using concrete (C- physical items such as multilink cubes, counting

frames, 3-D shapes, fraction walls etc.), pictorial (P - images, models or drawings on paper) before moving on to apply their learning in abstract form (A - answering written questions and solving problems).

Teachers will set targets which are ambitious and plan lessons to enable all children to study and achieve, encouraging them to become independent learners through classroom resources, learning partners and class displays (working walls).

A typical maths lesson will involve:

- recall of prior learning through open questions and discussion
- teachers model a question and children practise the skill
- children are given opportunities to learn and apply the skill through varied fluency questions
- provision of reasoning and problem solving activities to challenge and vary the original task
- short Q & A session to conclude the lesson

### Impact

### What will this look like?

At Wherwell, we aim for our pupils to achieve age related expectations in the Early Years curriculum and at the end of Key Stage 1 and Key Stage 2, with many reaching greater depth and **all pupils making progress whatever their prior attainment or barriers to learning.** Wherwell mathematicians will be increasingly fluent in number, with good knowledge and recall of number facts and the ability to use them in the application of maths concepts. They will use mathematical language when reasoning and problem solving, and apply their knowledge to real-life scenarios. Children will make progress across the key stages according to their age and ability, by visualising, describing and experimenting with maths concepts, to gain a wide experience of maths through each term and year group. We want our children to love maths, not fear it, and be ready to learn more about the subject.