



At St Andrew's



Implementation

- Teachers use the resources from The White Rose Hub, NCETM and Focus maths as a starting point and we confidently use these resources as tools. Our teachers have long term overviews that meet the needs of our St Andrew's learners. These are designed to support a mastery approach to teaching and learning and fully cover the aims and objectives of the National Curriculum
- At St Andrew's we prioritize number as research shows that children who have an excellent grasp of number make better mathematicians.
- A large proportion of time is spent building competency. Our planning supports the idea of depth before breadth.
- Reasoning and problem solving are key and are built into the curriculum so children use and apply their developing skills.

Multiple representations for all! Concrete, pictorial, abstract

- All pupils, when introduced to a key new concept, will have the opportunity to build competency in this topic by taking the mastery approach to cement knowledge so pupils truly understand what they've learnt.
- Pupils are encouraged to physically represent mathematical concepts. Objects and pictures are used to demonstrate and visualise abstract ideas, alongside numbers and symbols.

Concrete - children have the opportunity to use concrete objects and manipulatives to help them understand and explain what they are doing.

Pictorial - children then build on this concrete approach by using pictorial representations, which can then be used to reason and solve problems.

Abstract - With the foundations firmly laid, children can move to an abstract approach using numbers and key concepts with confidence.

- Our maths curriculum is a tool to inspire our children to be confident and passionate when using maths in the everyday world. We hold a bi-annual inspirational maths week and maths focus days throughout the year to create positive attitudes to learning and to show Maths in the wider world.

Intent

At St Andrew's we understand that maths is a journey and long-term goal, achieved through exploration, clarification, practise and application over time. At each stage of learning, children should be able to demonstrate a deep, conceptual understanding of the topic and be able to build on this over time.

There are 3 levels of learning:

- **Shallow learning:** surface, temporary, often lost
- **Deep learning:** it sticks, can be recalled and used
- **Deepest learning:** can be transferred and applied in different contexts

The deep and deepest levels are what we are aiming for by teaching maths using the Mastery approach.

Impact

The impact of our maths curriculum will show in the children's attitude to learning alongside their progress. As a result of our curriculum we expect the children to show confidence with quick recall of facts and procedures, the flexibility and fluidity to move between different contexts and representations of mathematics and the ability to recognise relationships and make connections in mathematics. A mathematical concept or skill has been *mastered* when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations. Our maths curriculum meets the needs of our learners and our priority is to challenge and support our