

Mathematics is essential to everyday life and here at Upton-Upon-Severn Primary School we strive to help our pupils to develop a positive and confident attitude towards mathematics. We aim to achieve this by fostering a climate where children and adults understand that making mistakes allows us to improve and make progress. The curriculum we deliver, allows children to make connections with real situations, applying the key skills they have learned in a range of contexts and across the curriculum.

The teaching of Maths at Upton-Upon-Severn Primary School follows the programmes of study and objectives set out in the 2014 National Curriculum. The objectives are grouped into units of study and the mathematical skills of fluency, reasoning and problem-solving are taught throughout each unit.

The National Curriculum for mathematics aims to ensure that all pupils:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils have conceptual understanding and are able to recall and apply their knowledge rapidly and accurately to problems
- **reason** mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

At Upton-upon-Severn Primary School we use The White Rose Maths Hub scheme of work to support teachers to plan Maths lessons so that objectives are covered in small steps over several days. This allows children to achieve fluency and depth in their learning. Nursery and Reception continue to follow the Early Years guidance.

We adopt a Concrete, Pictorial, Abstract approach that builds on children's existing knowledge by introducing abstract concepts in a concrete and tangible way. This involves

moving from concrete materials (the doing stage – using physical objects and equipment), to pictorial representations (the seeing stage – where pictures, diagrams and models are used to represent the physical object) to abstract (the symbolic stage, where children use mathematical symbols) to model problems. Children will not progress to this stage until they have demonstrated that they have a solid understanding of the concrete and pictorial stages of the problem. We value the importance of encouraging children to explain their thinking both orally and in a written form.

In addition to this, a strong emphasis is placed on developing the children's mental Maths skills. Additional daily practice takes place across key stages 1 and 2 where children are given discrete opportunities to improve their recall of number bonds/times-tables and a wider range of mental Maths skills using weekly Big Maths challenges.