# Maths at Ashbourne Primary School

## Intent

Maths at Ashbourne Primary School develops competent, confident and creative mathematicians. Our work is underpinned by our vision 'Excellent effort always matters'. Our Three Golden Threads run through our entire curriculum and our PRAISE aims are at the heart of every lesson. Our focus on the removal of barriers to learning is firmly embedded into all areas of the maths curriculum.

At Ashbourne Primary School, children are given the opportunity to experience maths in its rich variety. Our Maths curriculum aims to provide our children with a deep understanding of the fundamentals of mathematics, for example number sense and operations, so they can demonstrate fluency and can use mathematical skills to solve everyday problems. Children's understanding is deepened by using practical equipment, a range of representations and models. The curriculum at APS promotes proficiency and fluency in arithmetic skills which gives children the confidence to apply their learning in reasoning and problem solving situations. We intend that children master the skills at every stage of Maths. Whilst at APS, children will have the opportunity to enjoy and demonstrate their maths learning outside lessons through mathematical challenges such as problem solving mornings and external competitions. Maths at APS encourages children to work both independently and collaboratively and to practice their skills across the curriculum.

## Implementation

### Scheme of Learning

All Maths lessons should be planned using the White Rose Scheme of Learning, which is an evidence-led approach to the teaching of Mathematics. Objectives are broken down into small steps which should be followed to help retain prior learning and to ensure a logical teaching sequence. The White Rose Scheme of Learning is adaptable to meet the needs of all children and therefore teachers should use their own professional judgement where and when needed.

In addition to a daily, one hour Mathematics lesson, at Ashbourne Primary, children in Years 1-6 benefit from an additional Maths Skills session. Years 1-5 use the NCETM Mastering Number programme for their Maths Skills sessions. Mastering Number is an evidence based maths programme by the NCETM and the Maths Hubs Network designed to give children a deep understanding of numbers and strong fluency with calculation. It focuses on good number sense — understanding how numbers work, how they're connected, and being flexible and confident with them.

### Planning

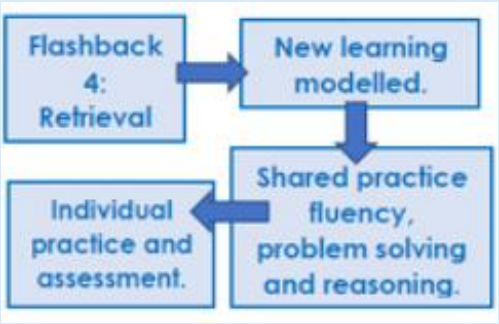
Class Teachers work from a medium-term plan, which then feeds into a weekly plan. Links may be made with other areas of the curriculum. The Maths coordinator collects MTPs at the beginning of each half-term and will feedback to staff where necessary. Planning is a flexible document and is used by the teacher and for the children to ensure at least good progress is made by all.

Teaching slides should be made using the White Rose lesson structure. These slides should be adapted where necessary to support and challenge all pupils. Individual work should be based on the small steps.

### Resources

White Rose is our main scheme of learning. Alongside this, we use the following resources to support the teaching and learning of maths:

### Lesson sequence




### Pedagogy

Maths is taught using a mastery approach, ensuring all pupils develop secure conceptual understanding, fluency, reasoning, and problem-solving skills. Teaching follows a Concrete–Pictorial–Abstract (CPA) progression and uses consistent representations and models to support understanding. Learning is carefully sequenced into small steps with whole-class teaching. Variation is used to deepen understanding. Mathematical reasoning and talk are embedded, enabling pupils to explain and justify their thinking using precise mathematical language.

**Three Golden Threads**

**Language and Literacy:** Learning mathematics relies on talking, listening, explaining, and representing ideas clearly. Our Maths lessons introduce children to precise mathematical vocabulary that children are encouraged to use to support their reasoning and explanations.
**Resilience and Regulation:** Our scheme of learning provides frequent opportunities for success through small, achievable steps. This develops children's confidence in their abilities which is linked to positive wellbeing. Suitable challenge is provided for all children, promoting resilience and perseverance.
**Becoming and Belonging:** In our Maths lessons, we recognise, value and support the wide range of learners, experiences, and ways of thinking that children bring into the classroom. Maths builds confidence, maintains high expectations, develops transferable skills, and helps children see meaningful futures for themselves.

**Environment**

All Maths lessons should give the teachers and children opportunities to use mathematical language to describe, discuss, explain, reason and justify. Concrete manipulatives, pictorial representations and abstract methodologies are used within Maths lessons.

Each classroom will have a Maths Working Wall which supports current learning in mathematics, changes frequently and is used actively during lessons.

**Feedback**

Teachers and Teaching Assistants provide feedback to the children in the lesson through discussion, questioning, observation and checking work. As stated in our Marking and Feedback policy, children mark their work where appropriate and make corrections in green pen.

**Monitoring**

Maths is monitored regularly across school through learning walks, lesson observations, book scrutinies, pupil voice, data analysis, planning reviews, assessments of key skills, moderation, evaluation of teaching resources and identifying teacher CPD and support.

**How groups are supported**

All children, except those working below age related expectations, should work on the same block, step and work. Concrete and pictorial resources, as well as additional time for discussion with an adult, should be given to enable all children to access the lesson. Children working above the expected standard (GDS) should be challenged during whole class teaching through targeted questioning. The work provided should offer challenge through the removal of scaffolds and include problem solving and reasoning questions that offer opportunities for children to extend their mathematical thinking.

**Interventions**

Our termly data analysis informs our interventions for the following term. Children identified as needing extra support with Maths after an assessment point are placed into intervention groups and given targeted support. The intervention is determined by what the children's next steps are and any gaps in their learning.

## Impact

**Evidence**

Medium term plans and weekly lesson planning will show small steps progression. Consistent representations will be used and will be progressive across year groups, as shown in our Calculations Policy.

Lessons will be structured with clear learning intentions and will use manipulatives and visual models (e.g. tens frames, bar models) to ensure all children can access the lesson. Teachers model mathematical thinking and multiple strategies and provide high-quality questioning to promote reasoning and explanation. Differentiation will be present through variation and depth.

The children's Maths books will show a range of mathematical concepts which include representations and diagrams as well as opportunities for reasoning explanations and problem-solving tasks. The children will be able to articulate what they are learning and different ways to solve problems using mathematical language.

**Assessment**

We assess the children's Mathematics against the National Curriculum objectives at 3 assessment points per year (December, March and July). We use the NFER summative assessments in Years 1, 2, 3, 4 and 5 and SAT papers in Year 6. During these assessment points, Foundation Skills assessments are also used in Year 1 and Year 2 to assess Number sense and Fluency. Children in Year 4 also sit the Multiplication Tables Check. The results help our teachers tailor lessons to meet the needs of each child, ensuring they receive the right level of support and challenge.

Formative assessments take place day to day. These are made by the class teacher about a child's attainment and progress and go on to inform planning, teaching and learning. These judgements are made through Flashback 4, talking and listening to the children, observations and daily marking and completion of our 'Marking and Feedback Books'.