

Mathematics Intent, Implementation & Impact

Intent

At Bank End Primary Academy we recognise that Mathematics is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment.

We aim to provide a high-quality mathematics education with a mastery approach so that all children:

- become **fluent** in the fundamentals of mathematics.
- Reason mathematically
- can **solve problems** by applying their mathematics.

Implementation

Year 1 – 6

At Bank End we use white Rose Maths in years 1-6, which has been written to support teachers in all aspects of their planning whilst delivering a Maths Mastery curriculum effectively.

Teachers are provided with an **additional three planning** days per year in addition to their PPA, to plan. As part of this process, teachers need to plan the following for mathematics lesson.

Precise questioning to test conceptual and procedural knowledge.

- How and when manipulatives will be used within in each lesson to scaffold difficult tasks. Each table of four has a basic set of manipulatives to support the CPA approach.
- Low stake quizzes to support learner's ability to block learning and increase space in their working memory. For example, routine arithmetic and retrieval practice in KS2.
- Deepening questions are used to challenge pupils to apply their knowledge to their learning.

Factual Knowledge

In KS1 & KS2 we have daily routines of number bonds and timetables respectively to support factual recall.

Reception and Key Stage 1

Implement the NCETM Mastering Number programme to develop children's number sense.

Key Stage 2

Implement the UL Arithmetic and retrieval programme to support recall of previously taught materials and develop fluency of four rules.

EYFS

In the Early Years Foundation Stage (EYFS), we relate the mathematical aspects of the children's work to the Development Matters statements and the Early Learning Goals (ELG), as set out in the EYFS profile document.

Mathematics development involves providing children with opportunities to practice and improve their skills in counting numbers, calculating simple addition and subtraction problems, and to describe shapes, spaces, and measures. The profile for Mathematics areas of learning are:

Number (ELG 11) and shape, space and measures (ELG 12).

We continually observe and assess children against these areas using their age-related objectives and plan the next steps in their mathematical development through a topic-based curriculum.

There are opportunities for children to encounter Maths throughout the EYFS (both inside and outside) – through both planned activities and the self-selection of easily accessible quality maths resources. Whenever possible children's interests are used to support delivering the mathematics curriculum.

Impact

Our mathematics curriculum is based upon White Rose Maths (V3) resources which are fully supported by the Department for Education as they meet the requirements of the curriculum.

It provides all the elements teachers need to teach Maths mastery with confidence and encourage children to talk using maths language. We measure our impact of our curriculum through the following methods:

- A reflection on standards achieved against the planned outcomes.
- Termly assessment Progress in Understanding Mathematics Assessment (PUMA) which is a suite of termly standardised maths tests which enable school to track progress, predict future performance and benchmark against national averages.
- Pupil conferencing about their learning.

Click the link for our Standards Operations & Procedures Document.