

## Mathematics

### Intent

At Abbey Hey 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.

(National Curriculum 2014)

### Implementation

At Abbey Hey we use Maths No Problem in years 1-6, which have been written to support teachers in all aspects of their planning whilst delivering Singapore Maths Mastery methods 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.
- Low stake quizzes to support learner's ability to block learning and increase space in their working memory.
- Tasks and challenge questions to challenge pupils to apply and deepen their learning and mathematical reasoning.

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 practise 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.

Towards the end of Reception teachers aim to draw the elements of a daily mathematics lesson together so that by the time children move into Year 1 they are familiar with a structured lesson layout.

### Impact

Our mathematics curriculum is based upon 'Maths No Problem' resources which are fully supported by the Department for Education as they meet the requirements of the new curriculum. The [Maths No Problem primary school series](#) has been created specifically for children living in the UK and is fully aligned to the 2014 curriculum. It provides all the elements that 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 discussions about their learning.