

QUEEN'S DRIVE INFANT SCHOOL



MATHEMATICS POLICY

February 2020

Vision

We intend to provide children with the confidence and skills to build secure mathematical foundations for their future.

Aims and Intent

Mathematics is a tool required for every day life. Children learn how to make sense of the world around us. Through developing a child's ability to calculate, to reason and to solve problems, children come to understand and appreciate relationships and patterns and variations in both numbers and space in their daily lives.

It is our aim to develop the children's skills and understanding of mathematics by:

- nurturing a positive attitude towards mathematics and an awareness of the fascination of mathematics;
- developing competence and confidence in using numbers and the number system;
- developing an ability to solve problems, to reason, to think logically and to work systematically and accurately;
- Exploring shape and space, including developing measuring skills;
- Developing their ability to work co-operatively with others and independently;
- learning to use and apply mathematics across the curriculum and in real life.

Implementation

At Queens Drive we use a variety of teaching and learning styles in mathematic lessons. Daily lessons have a high proportion of whole class and group direct teaching and lots of practical activities. During these lessons we encourage children to ask as well as answer mathematical questions. The children use a wide range of resources to help them in their understanding of the mathematical concepts being investigated and discussed. (Whenever possible, the mathematics is set in everyday situations, so that the children can apply their learning to everyday life). Keep IT used to engage and enhance where suitable

In all classes there are children of differing mathematical ability. We recognise this fact and provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child through regular pre-assessment. We achieve this through a range of strategies – through differentiated group work activities, by organising the children to work in pairs and by providing adult support. We use classroom assistants, including bi-lingual assistants, to support some children according to their needs and to ensure that all children, whatever their first language, develop correct mathematical vocabulary. Grouping is fluid and may change frequently on AFL. When deemed necessary, children in Year 2 are set for maths.

Each classroom has a maths working wall, which displays the relevant mathematical vocabulary for the current unit of work. It also models with pictures or other resources how to accomplish the task set for the children. In every lesson the teacher shares with the children what they will be learning and what they will be expected to achieve by the end of the lesson.

All lessons contain an element of fluency to maintain core skills / knowledge and a main whole class teacher lead activity. The children then pursue their own learning in differentiated, often adult supported groups. We ensure the more able pupils are challenged and the less able are supported and able to access the learning objective.

Lessons are as practical as possible, white boards are often used for informal recording. By year two children are expected to record their methods of working and "jottings", such as their own number lines and arrays for

multiplication. All children are encouraged to set out their work neatly. Other work, such as pattern or shape work and computer work may be recorded by photographs.

Teachers mark according to the Marking Policy. Feedback is offered during lessons to support learning, i.e. clarify misconception or move children forward in their learning.

Mathematics Curriculum Planning

Mathematics taught at Queen's Drive Infant school is based on the National Curriculum and the Foundation Stage Curriculum guidance /EYFS 2014. Teachers refer to the expectations for year groups written in light of the new curriculum planning linked to subjects. Planning is reviewed by the subject leader and feedback is given to staff. All key objectives are taught to each year group.

Teachers use the unit order from the long term plan and create a linear plan of skills prior to pre-assessing the point at which their teaching sequence will begin. We recognise the importance of basic skills being consolidated and so plan these as fluency at the start of lessons.

The Foundation Stage

Mathematics is taught under the headings of number and shape, space and measure in the Foundation Stage. The children are given plenty of opportunities to develop their understanding of number, calculation, measurement, pattern, shape, space and problem solving through varied practical activities that allow them to enjoy, explore, practise and talk confidently about mathematics both indoors and outdoor. These are a mixture of adult led and independent choice activities.

Mathematics across the Curriculum

Mathematics contributes significantly to the teaching of English in our school by actively promoting the skills of reading, writing, speaking and listening. We recognise the importance of Mathematics within many other curriculum areas e.g. measuring in Science, position in Geography, PE and Coding, chronology in History and Literacy.

Impact

Teachers pre-assess at the start of a unit including variation. Teachers assess pupils during each lesson to inform their teaching and their planning. The teaching assistants help by making written observations which are also used to inform planning. Pupil's work is marked regularly with oral or written feedback and praise.

Children's individual progress is added to the Insight tracker as units are taught. Gaps are identified and planned to be taught while working towards end of KS1 expectations.

Year 2 use PIXL tests to identify Key Marginals and their focussed tasks.

SATs are undertaken in May and inform TA. Co-ordinator collates termly data and checks trends and groups.

Some identified groups may be given further support