

<b>Name of Policy:</b> Mathematics Policy	<b>Version/Last Review Date:</b> May 2019
<b>Documents linked to this policy:</b> <a href="http://www.gov.uk/government/publications/national-curriculum-in-england-mathematics-programmes-of-study">www.gov.uk/government/publications/national-curriculum-in-england-mathematics-programmes-of-study</a> National Strategy WNA Calculation Policy Curriculum Map Year Group Long Term Plans Development Matters Welsh Foundation Stage Curriculum International Primary Curriculum End of KS Expectations	<b>Previous review date:</b> June 2016
<b>Other Policies linked to this policy:</b> Marking policy	<b>Next Review Date:</b> May 2022
<b>Governor Committee Responsible</b>	Curriculum/Research

WNA Vision: All children will achieve their full potential, with holistic support, whilst enjoying and driving their own learning, gaining self-respect, self-esteem and self-belief. Our classroom extends to rich, exciting environments within the forest, the beach, the city and the community as a whole.

## Why teach Mathematics?

Mathematics teaches us how to make sense of the world around us through developing a child's ability to calculate, to reason and to solve problems. It enables children to understand and appreciate relationships and pattern in both number and space in their everyday lives. Through their growing knowledge and understanding, children learn to appreciate the contribution made by many cultures to the development and application of mathematics.

## Aims and Objectives

- To promote enjoyment and enthusiasm for learning through cross curricular, practical and ICT activities, exploration and discussion
- To promote confidence and competence with numbers and the number system
- To develop the ability to solve problems and have the skills to make decisions and reason in a range of contexts
- To develop a practical understanding of the ways in which information is gathered and presented
- To explore features of shape and space, and develop measuring skills in a range of contexts
- To investigate and explore maths through the use of resources and role play to understand the importance of mathematics in everyday life.

## The Curriculum

We use the documents listed on the front page of this policy to construct our curriculum. This coverage ensures continuity, differentiation and progression in the teaching of mathematics.

Each lesson will focus on clear learning objectives for all children, although the work will be differentiated for differing ability levels, as appropriate. Experiences will be offered that will help develop the skills and concepts of mathematics through practical application.

## Teaching Methods and Learning Styles

The school uses a variety of teaching and learning styles in mathematics lessons. Our principal aim is to develop children's knowledge, skills, understanding and independence in mathematics. During these lessons we encourage children to question, discuss and justify mathematical ideas. They have the opportunity to use a wide range of resources such as ICT games, number lines, number squares, digit cards and small apparatus such as Numicon to support their work.

We encourage pupils to learn through the use of stage related equipment for play, practical activities, experimentation and investigation.

Mathematics is timetabled throughout the week and will also appear as a cross-curricular link with other subjects as appropriate.

Children use ICT in mathematics lessons to enhance their learning, as in modelling ideas and methods. We have several programmes which help to support children's basic understanding in maths as well as provide them with challenges to extend their thinking. Wherever possible, we encourage the children to use and apply their learning in everyday situations.

We use a range of strategies in lessons such as differentiated group work, paired work, whole class teaching and individual work. We use Teaching Assistants to support pupils and to ensure that work is matched and accessible to the needs of individuals. Teaching assistants are also trained in the use of APP and mathematics intervention programmes as part of Individual Learning Plans (ILPs).

## Mental and Oral Work

The importance of mental Maths has been emphasised. Sometimes the focus of the main part of the lesson will be to teach mental and oral methods. In the mental Maths starter, teachers and pupils will re-visit areas of Maths which have been taught and will concentrate on keeping skills sharp.

### **Moving into Written Methods**

We have used the advice of the National Strategy to develop our own calculation policy which identifies the written methods that are taught progressively across the school. In all instances, mental methods are the first resource. Standard written methods are reliable and efficient procedures for calculating which, once mastered, can be used in many different contexts, but they are of no use to someone who applies them inaccurately and who cannot judge whether the answer is reasonable.

### **Equal Opportunities**

As a staff we endeavour to maintain an awareness of, and to provide equal opportunities for all our pupils in mathematics. We aim to take into account cultural background, gender and Special Needs, both in our teaching attitudes and in the published materials we use with our pupils.

### **Special Educational Needs**

Wherever possible we aim to fully include SEN pupils in the mathematics lesson so that they benefit from the emphasis on oral and mental work by listening and participating with other children in demonstrating and explaining their methods.

Where necessary a child will work on an individualised programme written in consultation with the appropriate staff.

### **Display**

We recognise the important role display has in the teaching and learning of mathematics by having maths work displayed in the school. Every class has number lines (relevant to the work the children are doing), number grids, vocabulary and other display materials that provide a visual support for the children's mental processes. It is a key focus to ensure that all classrooms have an interactive maths display and that children are aware of where all resources are kept so that they can freely access them to support their work.

### **Marking**

Maths marking should be seen in the context of the school's Assessment Policy.

Teachers will respond to all Maths work by either oral, written comment or traffic lights. The use of self-marking work is encouraged as appropriate. Teachers mark based on Learning Intentions, ability and individual targets and there is an agreed format to follow (see Marking Policy). This way ensures that all children aware of what their next step is and whether they have achieved the learning objective.

### **Assessment and Recording**

We assess children's work in mathematics and track (half termly in KS21 and termly in KS2) using Scholar Pack. Learning in EYFS and KS1 is documented in Learning Journals. Progress is discussed in Pupil Progress Meetings. The children are made aware of their level and how to progress.