

**WIDNES ACADEMY**

MATHEMATICS POLICY

|  |  |
| --- | --- |
| Recommended by | K. Highcock/A Myles |
| Approved by | Local Governing Body |
| Approval Date |  |
| Version Number | 1.4 |
| Review Date | July 2020 |

**Introduction**

This policy outlines what we are aiming to achieve in respect of pupils’ mathematical education.  It also describes our agreed approach to the monitoring, planning, delivery and assessment of the mathematics’ curriculum.  The mathematics taught and the methods used reflect the recommendations outlined in the following documents:

* Development matters for EYFS
* New Curriculum 2014
* Singapore Maths resources for Y1-Y6
* Early Years EYFS Guidance

**Aims**

Mathematics helps children to make sense of the world around them through developing their 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. At Widnes Academy we aim through our teaching of Maths to:

* develop an enthusiasm for Maths through practical activities
* develop mathematical understanding through systematic teaching of learning objectives;
* encourage the effective use of Maths as a tool in a wide range of subjects and everyday life
* develop an ability in the children to express themselves fluently by giving them the correct terminology and recording systems to show what they have learnt
* develop children’s ability to use and apply mathematical skills independently
* develop mathematical skills and knowledge and quick recall of basic facts in line with recommendations.

**Teaching of Maths**

We use a variety of teaching styles to cater for the variety of learning styles of pupils in mathematics lessons. Our principle aim is to develop children’s knowledge, skills and understanding in mathematics and how they can apply this to a range of problems during practical activities. We do this through a daily Maths lesson and also through the use of mathematics in other subjects for example date collection and graph work in Science. The children have the opportunity to use a wide range of resources such as number lines, number squares, digit cards and small apparatus to support their work. The school’s use of the Singapore Maths scheme, Maths No Problem, for Maths planning ensures that within each year group all topics are taught and the children acquire the skills necessary for the following year. Children are taught within their year group with support and extension work given as appropriate.

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.  We achieve this through a range of strategies – in some lessons through differentiated group work, the use of equipment to support learning and in other lessons by organising the children to work in pairs on problems or games.

**Maths No Problem**

In Widnes Academy the children from Year 1 - g all follow the Maths No Problem scheme. The scheme is split into different chapters which focus on the different areas of mathematics. Each chapter begins by recapping what the children already know and then lesson by lesson builds on this knowledge culminating in a problem solving and application activities at the end of each chapter.

The children are taught as a whole class and the teachers will differentiate lessons according to the needs of each child. In addition to this teachers will ensure that children have understood new methods before moving on, this could be through intervention or adding in an extra lesson on the topic.

To ensure that the children have understood {mastered} each topic the children will complete a review, which will be at a distance from learning to ensure children have understood the topic, we recommend leaving 2 weeks before completing a review. Additionally children will be encouraged to apply their mathematical skills in their foundation lessons.

**Mathematics Curriculum Planning**

Mathematics is a core subject in the National Curriculum, and we use this as the basis for implementing the statutory requirements of the Programmes of Study for mathematics.

We carry out the curriculum planning in mathematics in line with the structures and recommendations outlined in the Renewed Framework for Mathematics. Teachers plan each lesson a day in advance to ensure skills are built upon and skills are mastered.

The Principal and Mathematics Subject Co-ordinator are responsible for monitoring of mathematics within the school.

**Problem solving**

In Widnes Academy, we understand how important fluency is in regard to the teaching of Maths. For this reason, we have introduced a counting element in each Maths lesson. All classes from EYFS to Year 6 will teach an element of counting as part of their Maths lesson, with EYFS and Year 1 focusing on counting and Year 2 -Year 6 focusing on their times tables. During these lessons the teachers will develop counting strategies and connections between numbers. The children will also be provided with a TT Rockstars account where they can practice their times tables.

**Assessmen**t

* The children are continuously assessed during their Maths sessions as the teacher floor sweeps to gauge the children’s understanding of the topic.
* Regular reviews of the each chapter ensure that we are monitoring the children’s understanding of the topics.
* Throughout the year the children from Y1-Y5 complete NFER tests which provides them with a standardised score. Year 2 and Year 6 use practice SATS papers to provide their standardised scores.
* Teachers will also provide termly teacher assessments to the Principal

**Homework**

All children from Reception to Year 6 will receive weekly Maths homework, this homework will focus on something that the children will have covered in class during the week.

**EYFS**

Within the EYFS the children work on objectives from the Development Matters Framework. The children are given a baseline assessment at the beginning of Nursery and are then taught skills to match their development band. At the end of the EYFS all of the children are assessed against the Early Learning Goal (ELGs) which determine whether they are leaving the EYFS at the expected level. During their time in the EYFS the children will complete adult directed tasks which will teach them the skills and how to apply these within their play. In addition to this the children will be observed during their play with an emphasis on how they apply the mathematical skills they have learnt. These observations will take place across the environment not just within the maths area.

This policy will be reviewed in July 2020.