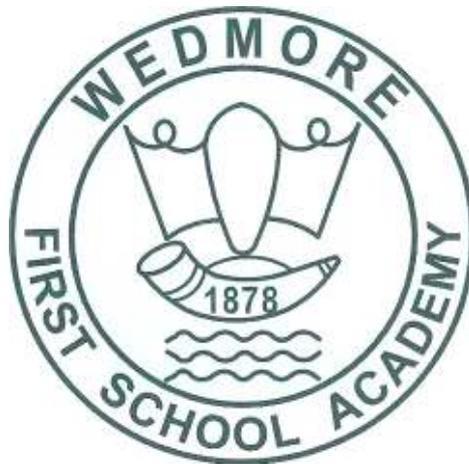


Wedmore First School Academy



Mathematics Policy

Date: January 2017

Review Date: January 2020

Wedmore First School Academy

Mathematics Policy

At Wedmore First School Academy we believe that children's learning is maximised when their learning environment and opportunities are relevant and enjoyable. We make every effort to ensure this is possible. In mathematics we aim to develop lively, enquiring minds, encouraging pupils to become self motivated, confident and capable in order to solve problems that will become an integral part of their future.

Maths aims and objectives are subject specific and are therefore taught discretely. However, children are encouraged to apply this knowledge in other areas of the curriculum .

1 Aims and objectives

Mathematics teaches children how to make sense of the world around them through developing their ability to calculate, reason and solve problems. It enables children to understand relationships and patterns in both number and space in their everyday lives.

Our objectives in the teaching of mathematics are:

- to promote enjoyment of learning through practical activity, exploration and discussion
- to promote confidence and competence with numbers and the number system
- to develop the ability to solve problems through decision-making and reasoning 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 help children recognise the relevance of mathematics in everyday life
- to develop the cross-curricular use of mathematics in other subjects

2 Teaching and learning

We use a variety of teaching and learning styles. Our principal aim is to develop children's knowledge, skills and understanding. During our daily lessons, we encourage children to ask as well as answer mathematical questions through Guided Group teaching and investigation based activities and develop their ability to work independently. They have the opportunity to use a wide range of resources, such as Numicon, number lines, bead strings, number squares, digit cards and small apparatus to support their work. ICT is used in mathematics lessons where this serves to enhance learning. Wherever possible, we encourage the children to apply their learning to everyday situations.

We recognise that in all classes, children have a wide range of mathematical abilities and we ensure that we provide suitable learning opportunities for all children by matching the challenge of the task to the ability of the child. We achieve this in a variety of ways:

- setting tasks which are open-ended and can have a variety of responses
- providing tasks of increasing difficulty (we do not expect all children to complete all tasks)
- having a flexible approach to grouping children based upon ongoing teacher assessment
- where possible we provide resources of different complexity, matched to the ability of the child
- using classroom assistants to support the work of individual children or groups of children.

3 Mathematics curriculum planning

Mathematics is a core subject in the National Curriculum. We are adopting the Mastery approach in Maths in line with the 2014 revised National curriculum We carry out the curriculum planning in mathematics in three phases:

- Long term - The National Curriculum Mathematics Programmes of Study give a detailed outline of what we teach in the long term, along with the key objectives we teach in each year.
- Medium Term - Our medium term plans are adopted from those produced by White Rose Maths hub, which map out the mathematics curriculum for each year group. They give details of the main teaching objectives for each term and ensure a mastery approach to teaching and learning

- Short term - Class teachers are responsible for the relevant provision for their own classes and individually develop weekly and daily plans which give details of learning objectives, details of how the lessons are to be taught and appropriate activities which build on children's prior learning.. Although planned in advance, they are adjusted on a daily basis according to teacher assessment to meet the needs of the class and individual pupils.

We strive to use every available opportunity to make relevant and valuable links with other areas of the curriculum.

4 The Foundation Stage

The children begin to develop their numeracy skills through the specific area: Mathematical Development. Please refer to the Foundation Stage policy for further information.

5 Mathematics and ICT

The effective use of ICT can enhance the teaching and learning of mathematics when used appropriately. When considering its use, we take into account the following points:

- ICT should enhance good mathematics teaching. It should be used in lessons only if it supports good practice in teaching mathematics
- Any decision about using ICT in a particular lesson or sequence of lessons must be directly related to the teaching and learning objectives for those lessons
- ICT should be used if the teacher and/or the children can achieve something more effectively with it than without it

6 Mathematics and inclusion

Mathematical skills are taught to every child; we strive to meet the needs of all pupils, including those with any additional educational needs through Quality First Teaching and we take all reasonable steps to achieve this. Trained teaching assistants deliver intervention sessions for small groups of pupils requiring extra support. We enable all pupils to have access to the full range of activities. For further details see relevant policies.

7 Assessment for learning

We assess children against school and national targets termly. We pass this information on to the next teacher at the end of the year,. Teachers assess children's understanding by making informal observations and judgements during lessons, with a flexible approach to grouping to ensure all needs are met. We use end of unit formal assessments (Maths No Problem in February and June for Y1 and Y2: Maths Frame at the end of a teaching sequence in Y3 and Y4). We also use the statutory national tests for children in Year 2.

Moderation of pupils' work in mathematics is carried out each term in staff meetings. The mathematics subject leader keeps the samples of children's moderated work in a portfolio.

Written or verbal feedback is given to children to help guide their progress. From Year 1 upwards children are encouraged to self assess their understanding at the start of a new topic and then at the end, indicating this with an appropriately coloured dot (traffic light system).

8 Resources

All classrooms have a number line and a wide range of appropriate concrete apparatus. (See Calculation Policy for further detail) Calculators and a variety of support materials are stored in KS2 classrooms and a range of software is available to support work with the computers.

9 Marking

Teachers indicate with a green dot work demonstrating sound understanding, a yellow dot for emerging understanding and a red dot for those who need further guidance.

Feedback and marking should be both diagnostic and summative and our school believes that it is best done through conversation with the child but acknowledges that constraints of time do not

always allow this. When appropriate the children themselves can mark exercises which involve routine practice with support and guidance from the teacher and self assess their own work..

10 Calculation Policy

The policy is reviewed every three years and is shared with all teaching staff. This document identifies the means and methods of calculation and steps in progression across the school. A copy of this has been included as Appendix 1.

Parents are informed of this document on our website.

11 Homework

Starting in Year 2, it is our school policy to provide parents and carers with opportunities to work with their children at home. These activities may only be brief, but are valuable in promoting children's learning in mathematics.

12 Reporting to Parents

Parents are given the opportunity to discuss their child's progress on three official occasions but understand that the school's 'open door' policy enables them to address concerns throughout the year.

Reports are completed towards the end of the summer term. Teachers use the information gathered from their assessments to help them comment on individual children's progress.

Parents are invited into school twice yearly to look at their children's work and time is given to parents who wish to discuss their child's report.

13 Monitoring and review

The coordination and planning of the mathematics curriculum are the responsibility of the subject leader, who also:

- supports colleagues in their teaching, by keeping informed about current developments in mathematics, and by providing a strategic lead and direction for this subject
- gives the headteacher/LMT an annual evaluation of the strengths and weaknesses in mathematics and indicates areas for further improvement through their Subject Leader Raising Attainment Plan (RAP)
- uses allocated time to carry out scrutiny of children's work and to observe mathematics lessons across the school
- takes responsibility for the provision of resources for mathematics in consultation with colleagues
- attends Cheddar Valley School cluster meetings to discuss and develop the teaching of maths
- liaises with the governors' curriculum committee as required

The quality of teaching and learning in mathematics is monitored and evaluated by the head teacher as part of the school's agreed cycle of lesson observations. At Pupil Progress meetings, held each term, the class teacher and head teacher monitor and evaluate the progress of children in mathematics.

This policy will be reviewed at least every three years.

Approved by governing body:

Date:

