



Believe. Achieve. Succeed Together.

Iver Village Junior School

Mathematics Policy

Head Teacher: Jill Digweed

Deputy Head: Paul Clifford

Written by: Miss Zughaid

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Articles 28/29 - Every child has the right to a good quality education and it should help children use and develop their talents and abilities.

Purpose

The purpose of this policy is to ensure that the principles of mastery of maths is being taught consistently across the school to ensure that all learners make good progress and levels in attainment is raised in all pupils.

Aims & Objectives

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.

Our objectives in the teaching of mathematics are:

- To help children to acquire a deep, long term secure and adaptable understanding of the subject.
- To help them make connections, explore the chains of reasoning and develop their fluency, reasoning and problem solving ability.
- To promote enjoyment of learning through practical activity, exploration and discussion.
- To help children understand the importance of mathematics in everyday life.
- To develop 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 developing measuring skills in a range of contexts.

Teaching and Learning.

- The school rejects the idea that a large group of children 'just can't do maths' which we embed this concept in the way that we teach maths by promoting the belief that by working hard at maths they can succeed
- The school encourages a whole class interactive teaching, where the focus is on **all** pupils working together so that all can master the concepts before moving on to the next part of the curriculum sequence, allowing no pupil to be left behind.
- The school plans to give children concrete and pictorial examples before abstract concepts are introduced
- The school uses a variety of teaching and learning styles in mathematics lessons to make it interactive. Our principal aim is to develop children's knowledge, skills and understanding in mathematics.

- Children are encouraged to ask as well as answer mathematical questions. Through the use of STEM sentences, pupils are encouraged to explain their mathematical reasoning in full sentences rather than one word answers.
- They have the opportunity to use a wide range of resources such as Numicon, number lines, number squares, digit cards and small apparatus to support their learning.
- Children and teachers use ICT in mathematics lessons where it will enhance their learning, and to assist with modelling ideas and methods.
- Wherever possible, we encourage the children to use and apply their learning in everyday situations.
- Throughout lessons a range of strategies are used to ensure appropriate levelled learning. Children are asked to undertake independent work but other strategies are also utilised. In some lessons group work is undertaken, and in other lessons, children are organised to work in pairs on open-ended problems or games.
- Children are set a weekly homework task in order to strengthen their learning in mathematics.
- The times tables mastery league challenges children across the school to improve their recall of multiplication facts.
- Arithmetic is taught on a Friday, with weekly tests and analysis of results.

The teaching mathematics to children with special needs

It is part of the school curriculum policy to provide a broad and balanced education to all children. We provide learning opportunities that are matched to the needs of children with learning difficulties. Work in mathematics takes into account the targets set for individual children in their Educational Health Care Plans (EHC). Additional intervention sessions take place outside of the maths lessons to ensure gaps are closing and knowledge is secured.

Mathematics curriculum planning

We carry out the curriculum planning in mathematics in three phases (long-term, medium-term and short-term). Using the WhiteRose resources, we develop the following:

- Our long term teaching programme identifies the key objectives in mathematics that we teach throughout each year and ensures progression from one year to the next.
- Our medium-term mathematics plans give details of the main teaching objectives for each term. These define what we teach and ensure an appropriate balance and distribution of work across each term. These plans are kept by both the class teachers and the subject leader.
- Our short terms, or daily plans, are the responsibility of the class teacher who completes the plans for the teaching of mathematics. These plans are on Powerpoints and can be discussed on an informal basis with the subject leader.

Assessment and recording

Assessment in maths forms part of the assessment for learning cycle. It is an on-going process which takes a number of different forms.

- Daily assessments are used to help regularly adjust plans and review progress against specific objectives. Learning questions and skills based success criteria are shared with the children in every lesson, while marking is developmental. SIR marking provides the opportunity to identify strengths, areas for improvement and for the children to respond, with the aim to review and extend their learning at least once a week. Teachers then monitor the acquisition of skills, knowledge and understanding through appropriate teacher intervention, observations and discussions with groups and individuals.
- Daily assessments are made in mark books by highlighting on the learning pit to show the understanding of every child in the lesson.
- Half termly assessments are made using travel tracker. Class teachers highlight the objectives that the children have achieved or are working towards.
- Final assessments of the children's learning are made towards the end of the school year, and we use these to assess progress against school and national targets. We can then set targets for the next school year and make a summary of each child's progress before discussing it with parents. We pass this information on to the next teacher at the end of the year, so that s/he can plan for the new school year.
We use the national tests for children in year 6.

Monitoring and Review

Monitoring of the standards of children's work and of the quality teaching in mathematics is the responsibility of the mathematics subject leader. This will be monitored each half term in four ways:

- Book scrutinies,
- Learning walks/observations.
- Planning scrutines and
- Data analysis.

The mathematics subject leader will give the Headteacher half termly, termly and an annual evaluation of the subject, identifying strengths and weaknesses and areas for further improvement. The head teacher allocates regular management time to the mathematics subject leader so that the subject can be monitored. Finally, a named member of the school's governing body is assigned to oversee the teaching of numeracy and this governor meets regularly with the subject leader to review progress.