MATHEMATICS POLICY

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| **Approval Date:** | **Autumn 2023** |
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# POLICY

**The Importance of Mathematics**

Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history’s most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, and appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

(National Curriculum 2014)

**Aims**

At Churchfields, the Village School we aim to help all children to reach their full potential in mathematics by :

* developing their confidence and competence with numbers and measures to calculate accurately and efficiently, both mentally and with pencil and paper
* encouraging them to reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof, communicating effectively using mathematical language
* providing opportunities to apply their mathematical learning to a range of real-life problems
* fostering a sense of inquiry and an enthusiasm and enjoyment for the nature of mathematics

# PROCEDURE

**Organisation**

The school follows the objectives set out in the Mathematics programmes of study for the National Curriculum in England.

**Planning**

Long term planning is based on the yearly teaching programmes set out in the school’s framework. This is based on the White Rose plans, with adjustments made for the year groups within each class. The expectation is that the majority of pupils will move through the programmes of study related to their year group. However, decisions about when to progress will be based on the security of pupils’ understanding.

Short term planning is completed weekly. These plans include teaching and learning objectives and activities, differentiated as appropriate. Plans may be subject to change as the week progresses, dependent on pupils’ responses to previous learning.

Planning is monitored on a regular basis by the subject leader and headteacher.

**Teaching Mathematics**

Throughout the school mathematics will be taught

1. as a discrete subject
2. for a minimum of 45 minutes a day.
3. with differentiation appropriate for children’s needs
4. with an emphasis on mental calculations and reasoning skills.

**The Classroom/Resources**

Each classroom will be organised in such a way as to encourage independent learning and to reflect the importance of Mathematics, e.g. displays sharing children’s learning, sharing mathematical concepts.

Organisation of the classroom will include

* adequate space for individual, paired, group or whole class activities.
* room for relevant mathematical resources although certain shared items will be stored centrally in the school.
* use of appropriate practical apparatus

**Target Setting and Assessment**

Assessment to monitor children’s progression is recorded systematically.

Children’s targets are placed in their home-school books through the passport system

**Short Term Assessments**

These are an informal part of every lesson and take the form of

1. observation of children at work
2. discussion with children about their learning
3. appropriate/constructive marking of children’s learning
4. end of unit assessments

Short term assessments need not be recorded but individual teachers may decide to keep informal jottings in mark books.

**Medium Term Assessments**

Children’s progression through the National Curriculum programmes of study are recorded in a variety of ways

1. individual progression through objectives recorded on Insight pupil tracker
2. through individual work books
3. NFER tests every long term for Years 2 – 5 and Year 1 in the summer term only
4. Year 6 children will complete SATs tests from previous years
5. SEN children will be assessed using the Sandwell test.

Parents are kept informed of their child’s progress. They receive a copy of their child’s targets through the passport system and a written report at the end of the academic year.

Pupil’s progress is regularly monitored by the headteacher to ensure that timely intervention can be administered if required.

**Specific Issues**

**ICT** - Children will experience a variety of software, mathematical or otherwise, to support their learning in Maths.

**Foundation stage** - Emphasis here is placed upon practical play activities designed to develop mathematical knowledge.

**SEN** - Children with special needs are integrated into the classroom and may sometimes be withdrawn for one to one teaching. Outside agencies may be employed to assist the class teachers and each child will be encouraged to his/her full ability.

**Intent**

Maths is all around us and a key element of everyday life. At Churchfields we want to ensure that children have a deep understanding of maths and are confident mathematicians, able to apply their knowledge to reason and problem solve in different contexts. We firmly believe that all children can enjoy and excel in maths.

**Implementation**

Maths lessons are taught daily in all classes throughout the school, in mixed ability whole class lessons and in targeted scaffolded groups. A variety of manipulatives are used within lessons, within a concrete, pictorial and abstract approach enabling all children to have clear models and images to aid their understanding.

Arithmetic and basic maths skills are practised daily to ensure key number work is embedded and children are able to fluently recall key skills across different topics in maths. This is supported by our use of maths passports and mathletics which also help to consolidate learning and allow parents to understand more about their children’s work.

Teachers regularly assess and monitor work to ensure that all children make good progress and cover the full range of national curriculum objectives.

**Impact**

As a result of our maths teaching you will see enthusiastic learners who are well-motivated and engage with their maths learning. Children have a deep understanding of maths and as a result are able to tackle questions in different contexts. They are able to articulate their understanding and explain their choice of methods in tackling a problem.