Padiham Green CE Primary School Mathematics Policy

**Introduction**

This policy outlines the teaching and learning of mathematics at Padiham Green CE Primary School. The school's policy for mathematics is based on ‘The 2014 National Curriculum’ for Year 1 to Year 6 and from Development Matters Guidance for EYFS. We aim to ensure that all children have the opportunity to experience a broad Mathematics curriculum in which every child can make progress.

**Aims**

The ‘National Curriculum 2014’ for mathematics aims to ensure that all pupils:

* become **fluent** in the fundamentals of mathematics, through varied and frequent practice so that they are able to recall and apply their knowledge rapidly and accurately;
* **reason mathematically** by following a line of enquiry, connecting ideas, developing an argument and making justifications using mathematical language;
* can **solve problems** by applying their mathematics to a variety of problems in range of contexts including through other subjects such as science;
* develop the ability to think clearly and logically with independence of thought and flexibility of mind.

**Objectives**

* Meet the statutory requirements of the National Curriculum 2014 and Early Years Framework.
* Teachers adopt a Mastery Approach to teaching Maths
* To develop positive attitudes towards mathematics and lifelong learning.
* To develop confidence and resilience in their own abilities.
* To develop the ability to solve problems, to reason, to think logically and to work systematically and accurately.
* To use and understand appropriate Mathematical Vocabulary.
* To develop the ability to use and apply mathematics across the curriculum to ensure children see a purpose and relevance to their learning e.g. linking to real life situations.
* To develop an understanding of mathematics through the five key areas of Mastery Maths
* To use a variety of approaches to find the most appropriate method.
* To foster the attitude that everyone can do Maths, we just have to find out how we do it.

**Planning**

**EYFS**

The Early Learning Years Framework provides the programme of study for our reception class. From 2024, the teacher will use White Rose Maths as a scheme of learning to help guide learning. Maths is interwoven through Continuous Provision which is constantly updated in line with learning and prior learing. Planning is adapted for individual needs of the class and for individual children where appropriate. EYFS also take part in the Mastering Number programme which is planned and provided by the NCETM.

**Key stages 1 and 2**

The National Curriculum 2014 provides the programme of study for years 1-6. At Padiham Green we follow the White Rose Maths Scheme which teaches in a linear sequence with a discreet spiral. Planning is adapted for individual needs of the class and for individual children where appropriate. Years 1, 2, 4 and 5 are all taking part in the Mastering Number programme which is planned and provided by the NCETM.

**Organisation of Mathematics**

Mathematics is taught daily in KS1 and KS2. In EYFS Maths is taught discreetly four times a week but is developed through the Continuous Provision. Lessons will follow the White Rose Maths scheme but may be broken down into even smaller steps where the teacher deems appropriate.

Additionally, each class has 20 minutes of arithmetic daily to improve fluency and flexibility of number. In Years 1, 2, 4, 5 and EYFS this is covered during Mastering Number. Year 3 also uses some of the Mastering Number materials and then focuses on multiplication and division. Year 6, uses arithmetic time to re-cap all calculations and application.

Outside of the mathematics lesson opportunities are used to draw mathematical experiences out of a range of activities in other subjects, such as in PE, Science and topics, to enable children to apply and use Mathematics in both real life and academic contexts. Teachers utilise small snippets of time to consolidate mental maths skills.

As part of our Mastery approach to Maths, children are encouraged to use, ‘talk partners’ to develop and explain their ideas. A Maths classroom should not be a silent classroom as children work collaboratively to share and explain their ideas. At all times children are asked to explain what they are doing to develop their own understanding and that of those around them.

**Assessment**

Assessment has two main purposes:

* assessment of learning (also known as summative assessment);
* assessment for learning (also known as formative assessment).

**Assessment of Learning (AoL) – summative assessment**

Teachers will assess each pupil at the start and at the end of a unit. This shows the progress that has been made but also highlights the need for intervention where necessary. Children also participate in termly assessments which assess more than one unit of learning. This helps to inform teachers of who is on track and of any units that need re-capping. Termly assessment data is uploaded onto Insight.

**Assessment for Learning (AfL) – formative assessment**

At Padiham Green Primary School we recognise that AfL lies at the heart of promoting learning and in raising standards of attainment. We further recognise that effective AfL depends crucially on actually using the information gained. Teachers assess continuously throughout lessons to determine if children have understood and who may need support. This can be carried out in many ways; expert questioning, whiteboards, thumbs up/thumbs down, hands on heads. This assessment is quick, discreet and often informs the direction of the lesson.

The assessment procedures within our school consist of:

* making on-going assessment and responding appropriately to pupils during ‘day-to-day’ teaching. These immediate responses are mainly verbal and not normally recorded;
* using pre-topic assessments to inform planning
* Using post-topic assessments to assess progress and understanding
* adjustment of planning and teaching within units in response to children’s performances;
* use of ongoing teacher assessments and the The Ready to Progress document to identify gaps in attainment on a half termly basis and record a child’s level of attainment.
* information gathered from statutory and optional tests. Analysis is done at both quantitative and qualitative level. Information gained is used to set focused curricular targets (what to teach) and also to determine which strategies or methods are particularly effective in respect of specific areas of mathematics (the how and why).

**Resources**

There is a range of resources to support the teaching and learning of mathematics across the school. Staff are encouraged to use practical equipment to teach a new concept as it is proven that children learn best when they have experienced the Maths practically first. The use of Mathematics resources is integral to the concrete – pictorial – abstract approach and thus planned into our learning and teaching. White Rose Maths provides visual PowerPoint Slides to support learning which teachers use and edit to support the needs of their children.

**Calculation Policy**

Our teachers are asked to follow the school’s Calculation Policy when teaching calculations. Our Calculation Policy explains the key written methods that need to be taught in each year group, to support the planning, delivery and assessment of learning and teaching in Mathematics and to ensure consistency and progression across the School. As a school we follow White Rose Maths therefore our Calculation policies are in line with White Rose Maths.

**Subject Leader Monitoring and Review**

Throughout the year the subject leader will conduct; walkthroughs, pupil interviews, lesson observations and book scrutinies. Reports will be complied, highlighting good practice and areas for development. These will be shared with all staff and school governors.

**Governors**

Governors receive a report on Mathematics termly from Mathematics Subject Lead, Miss Mitchell.

**Monitoring and Review**

The Head teacher, Senior Leadership Team and Mathematics Subject Leaders will monitor the effectiveness of this policy on a regular basis. The Head teacher and Mathematics Subject Leader will report to the governing body on the effectiveness of the policy at least annually and, if necessary, make recommendations for further improvements.

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