Mathematics Policy – 2021

Introduction

This policy outlines the teaching, organisation and management of the mathematics taught and learnt at Primrose Hill School. The school's policy for mathematics is based on the New National Curriculum. The policy has been drawn up as a result of staff discussion and has the full agreement of the Governing Body. This will be handed out to all staff at the staff meeting. The implementation of this policy is the responsibility of all teaching staff.

Teaching Time

To provide adequate time for developing mathematical skills each class teacher will provide a daily mathematics lesson. This may vary in length between key stages but will usually last for 60 minutes. Reception classes will teach mathematics for around 30/40 minutes varying between independent work and targeted teacher time. The children in Reception also always have access to math continuous provision.

Links should be made to mathematics within topic teaching of an afternoon so pupils can develop and apply their mathematical skills in different contexts.

Class Organisation

From year Reception, all pupils will have a dedicated daily mathematics lesson. Within these lessons there will be a good balance between whole class work, group teaching and individual practice.

Our curriculum intent and selected scheme of learning

The intent of our mathematics curriculum is to be accessible to all and maximise the development of every child's ability and academic achievement. We aim to deliver lessons that are creative and engaging whilst providing opportunities to problem solve and reason mathematically whilst increasing fluency. As a school we have provided our children with a scheme 'Power Maths' which subjects them to daily problems and challenges building their self-confidence and resilience. To make this scheme appropriate and effective for all of the children in our school I created a lesson structure for staff to follow during their sessions. This structure allows our children to all access the lesson at different levels and with different support creating a natural differentiation.

We also ensured the upkeep of arithmetic skills through daily arithmetic in class for 15 minutes. This is done in a separate maths book.

Why Power Maths?

The Power Maths Key Stage 1 and Key Stage 2 resources have been judged as fully delivering a mastery approach and placed on the DfE's list of recommended textbooks! Power Maths also delivers the National Curriculum for Mathematics by building up concepts in small, logical steps whilst developing and deepening children's understanding through representations that reveal the structure of mathematical concepts, and intelligent practice that builds procedural fluency and conceptual understanding.

How we cater for pupils who struggle

Due to the structure of the scheme, the daily expectation is to complete a lesson in their Power Maths journals. However, we are aware that sometimes Power Maths may have a few lessons whereby a few children may struggle to access. If this is the case it is down to the expertise of the class teacher to decide if this child/ group of children would benefit from the 'I do, we do, you do' approach whereby they work alongside the teacher and then complete the journal together. If this approach is still too difficult, it will be noted that the children are having a 'blue book lesson' in their Power Maths journal and the class teacher will complete a planned and specific session in the children's blue books instead. This should then fix the misconception quickly to get back on track to access Power Maths.

Pupils with Special Educational Needs and Individual Learning Plan

As a school we have introduced an assessment system called B-Squared. Through staff feedback forms I found that staff were finding it difficult to plan for those in their class who are working well below the age related expectations. B- Squared breaks down each curriculum step into much smaller chunks allowing staff to target the barrier directly and move learning on quickly. This is reviewed Termly by the SENDCo and Assessment Lead at staff Raising Attainment meetings.

How we provide challenge

Despite following a scheme, we have ensured at Primrose Hill that all children are accessing challenges. Each child has their Power Maths book but also their blue maths book. In their blue maths book they complete their arithmetic and if they complete their Power Maths work, they can access challenge and further learning in their blue maths books.

How we work in nursery and reception

Our nursery and reception classes are organised to promote social skills and the development of mathematical language and understanding. Mathematics lessons are very practical at this young age and a small amount of recording.

Reception:

In Reception the children are also accessing the Power Maths SoL and are completing a daily practical activity using the scheme alongside a weekly workbook activity.

Nursery:

The children are having daily mathematical sessions. These sessions are delivered to small groups and pitched according to ability. Session times vary according to ability, but mathematics sessions are between 15-25 minutes long.

Resources

Each year resource needs are reviewed and each teacher is asked which resources they feel they need to carry out effective teaching of mathematics. This list is then reviewed, discussed and ordered by the mathematics coordinator.

Information and Communication Technology

ICT will be used in various ways to support the teaching of mathematics and to motivate the children's learning. ICT will involve the computer, and audio-visual aids. They will however only be used in a daily mathematics lesson when it is the most efficient and effective way of meeting the lesson objectives.

Assessment

Assessment will take place at two connected levels: short-term and long-term. These assessments will be used to inform teaching in a continuous cycle of planning teaching and assessment.

Short term assessments will be used as informal practice throughout the school to check children's understanding against the learning objective and success criteria. Where the children then have not grasped a teaching concept the class teacher will address this issue imminently. Short term assessments are also to be logged and tracked on our school online monitoring system Classroom Monitor.

Long term assessments will be carried out twice yearly through sitting a White Rose SoL test appropriate to their needs to assess and track progress. This is a formative method of tracking progress effectively enabling teachers to see when completely independent, which areas of the curriculum need targeting as a whole class, small groups or individually to meet the children's needs.

Whereby a child appears to be stuck or struggling in their learning we have introduced a new assessment process whereby children can be assessed on the small steps of their learning through our B-Squared assessment system.

Management of Mathematics:

Role of Co-ordinator

Teach demonstration lessons.

Ensure teachers are familiar with the New National Curriculum framework and help them to plan lessons.

Lead by example in the way they teach in their own classroom.

Prepare, organise and lead INSET, with the support of the head teacher.

Work cooperatively with the SENDCo.

Observe colleagues from time to time with a view to identifying the support they need.

Support teachers in developing marking and planning strategies to support and enhance learning within the classroom. (Book scrutiny, classroom walk rounds, planning scrutiny- feedback on these delivered with action points)

Attend INSET provided by consultants.

Discuss regularly with the head teacher the progress of implementing the strategy in the school.

Support for parents.

Role of Head Teacher:

Lead, manage and monitor the implementation of the strategy, including monitoring teaching plans and the quality of teaching in classrooms.

Keep the governing body informed about the progress of the strategy.

Ensure that mathematics remains high profile in the schools development work.

Deploy support staff to maximise support for the strategy.