



Parklands Primary School

Maths Policy

Purpose of Policy

Mathematics is a core subject in the National Curriculum. This policy will form the basis in which we outline the purpose, nature and management of how mathematics is taught and learned in our school, and will inform new teachers of expectations.

We recognise mathematics as a functional tool and valuable key life skill. We want all children leaving Parklands Primary School to not only be numerate, but to be able to transfer their mathematical knowledge to other curricular areas and into everyday life.

The policy reflects the views of all the staff of the school. It has been drawn up following consultation with all staff and children, and has full agreement of the Governing Body. Staff have access to the policy as well as parents who will be able to find the policy on our school website.

Aims and Outcomes

- To ensure a broad, balanced, creative and stimulating mathematical education in line with the mathematics National Curriculum.
- To present mathematics in meaningful contexts and to embed a range of practical activities designed to enhance children's mathematical experiences.
- To ensure continuity and progression in the children's learning as they progress.
- To instil in children a positive and confident attitude towards mathematics through the use of varied fluency, the stimulation of thinking and reasoning skills as well as the fostering of problem solving.
- To enhance pupil's use and understanding of the language and vocabulary of mathematics.
- To highlight cross-curricular links where appropriate.
- To involve our parents in their children's mathematical learning both in school and at home.

Mathematics and the Primary Curriculum

Teachers plan and deliver lessons using the White Rose schemes of learning. The maths leader provides a yearly long term plan (LTP) and termly medium term plans (MTP) for teachers to follow so that there is progression of the skills.

The teachers use a range of resources (such as activities from White Rose and Classroom Secrets) to plan their lessons, adapting them to suit the needs of their class. Our teachers review, adapt and/or adjust the daily lesson to meet children's individual learning needs. Teachers also incorporate opportunities for fluency, reasoning and problems in their daily lessons.

Children are taught in their class groups for maths lessons to ensure that there is a consistent approach of teaching with their class teacher. They participate in 5 lessons per week, each up to an hour long. This ensures that children have enough time to gain more from the lesson and to be able

to reflect on their learning prior and at the end of the lesson. Teachers in all year groups plan their weekly maths lessons (short term plans) within their year group.

The work is adapted into three main groups: 'I need help' (INH), 'I can give it a go' (ICGIAG), 'I am confident' (IAC). The children can choose which activity to work on based on their understanding and confidence in the lesson.

More able pupils (MAPs) are extended through the provision of extension challenges, mastery activities, work with differentiated outcomes, independent/paired problem solving and investigative activities or devising questions/problems for the class to solve.

Lower attaining and SEN children are supported through effective differentiation. Their teaching emphasis is on using manipulatives and visual aids (e.g. models and images, maths equipment and games to support learning etc.), to encourage an understanding of number beyond a process.

The Roles and Responsibilities of the Subject Leader

- To support and guide the classroom practice of teachers and support staff.
- To ensure coverage, continuity and progression in planning.
- To monitor and evaluate the effectiveness of mathematics teaching and learning through lesson observations, work scrutiny, planning scrutiny and pupil conferencing.
- To update documentation where necessary.
- To produce action plans for the School Development Plan, prepare bids and manage the mathematics budget effectively.
- To liaise and consult with outside agencies where appropriate.
- To prepare, lead and attend INSET/CPD training.
- To review regularly the mathematics curriculum.
- To ensure there is consistency across EYFS, KS1 and KS2.

Teaching and Learning

The 'Aim' of the lesson is displayed and shared with the children during each lesson and written into their books. The 'success criteria' is also shared with the children and referred to throughout the lesson by the teacher and the children. Relevant vocabulary is displayed and the children are encouraged to use it during the lesson. Visual aids, models and images, and concrete resources are always used to support teaching and learning.

In KS2, all children should be exposed to reasoning and problem solving tasks which is differentiated to the needs of the pupils. These skills should be embedded into daily maths lessons. They are encouraged to apply their fluency knowledge to the task and be able to explain their answers with reasoning. In KS1, tasks throughout the week will involve fluency and reasoning leading up to problem solving tasks at the end of the week to consolidate.

A variety of teaching strategies are used to engage and interest children in their learning. Consideration is given to different learning styles - visual, auditory and kinaesthetic. These could include:

- Peer teaching/evaluation and use of talk partners
- Individual work
- Paired work

- Group work
- Investigative work including exploring, pattern seeking, sorting and classifying, making a survey and problem solving
- Presentation of knowledge directly imparted by the teacher or another adult, incorporating children's experiences and making it relevant to their lives
- Demonstration and modelling of skills and techniques, and provision of time for practice
- Opportunities to communicate ideas to each other and to teachers
- Use of practical and concrete resources to help scaffold understanding of mathematical concepts
- Use of interactive teaching programmes (ITPs), relevant software and internet links.

Parklands provides a strong emphasis on high quality teaching and learning during lessons. Observations and drop-ins by subject leaders and senior members of staff ensure that teachers are given the relevant feedback and training to improve their practice.

Children's Work

Parklands believe that all children should take pride in the presentation of their work. Children must always work in pencil in their maths books and show their methods. Children should always write the short date in numerals and write the learning aim (see maths expectations sheet).

Assessment

The use of formative and summative assessment is an integral part of learning and teaching. Formative assessment takes place throughout the lesson against learning objectives and success criteria. This informal assessment notifies the teachers of the next step in their planning to address learning needs.

Where necessary, written feedback is given in children's books to help consolidate learning. This marking is related directly to the success criteria and learning objective, and where appropriate, may require an action or response from the child to rectify misconceptions.

In KS2, the children respond to teacher's feedback in marking using green pens provided, and teachers acknowledge all children's responses. In KS1, teachers should provide time for children to make any corrections as appropriate. Please refer to the Feedback Policy for more information.

Children are encouraged to self-evaluate their work to engage them in making judgements about the stages of their learning and consequently empowering them to become skilled reflective learners and critical thinkers. This is done through children assessing themselves against the success criteria and through self/peer marking.

Summative assessment is carried out every term using the Target Tracker assessment system. Using target tracker, teachers refer to the target statements and set steps to assess which stage the children are at. Teachers will regularly refer to these statements, sharing them with pupils as part of the daily lesson.

By double ticking the aim, the children know that they have achieved this target. If it is single ticked by the teacher, then this indicates that they are still working towards it. These targets are highlighted on the Target Tracker system so that teachers can clearly see the gaps in the children's knowledge and understanding.

Pupil progress meetings are held every term with a member of the SLT to identify gaps in progress and ensure that individual needs and targets of children are being met. See Assessment Policy for more information.

Homework

Parklands uses the Mathletics and Maths Seeds, which allows children to complete their homework online at home. The homework is differentiated and it is the teacher's responsibility to set this homework weekly. After children have completed their homework, they are given an overall percentage and a score of how well they did. They can redo the homework if they wish to do so. Children who do not have access to a computer or internet at home have paper copies provided for them.

Children in KS2 are also encouraged to participate on Times Table Rockstars each week to build on their instant random recall of times tables up to the 12 x 12. (See times table policy)

Resources

All classes are equipped with basic mathematical resources. Calculators, counters, dice, digit cards, rulers, protractors, dominoes, dienes, place value counters and number lines are clearly labelled and are readily available to the children in order to promote independent learning. New resources may be purchased when funding is available. The Subject leaders are responsible for completing an annual financial bid for the maintenance and development of the subject, in which new resources are highlighted.

Review

This policy is monitored by the maths Subject Leader and the Senior Leadership Team through:

- Looking at pupils' books
- Reviewing planning
- Evaluation and review of assessment data
- Lesson observations to monitor the quality of teaching and implementation of teaching plans
- Pupil interviews/surveys

This policy is reviewed by staff and governors at least once every two years, and reviewed whenever Government policy changes. The next review is due September 2024. Parents are most welcome to request copies of this document and comments are invited from anyone involved in the life of the school.

Date: 2nd February 2023

Updated by Lisa Farrow

Next review: September 2024