



College Park Infant School

Mathematics Policy



Rationale

College Park Infant School recognises that Mathematics is a fundamental life skill. It is used to analyse, predict and communicate ideas and information and to tackle a range of practical tasks and real life problems. Pupils are expected to develop an appreciation of the power of mathematics as well as a sense of enjoyment and curiosity.

Mathematics is a key element of the Early Years Foundation Stage and a core subject of the National Curriculum at Key Stage 1. Mathematics is taught within a clearly planned programme with time given to each element every school term from Year R.

The Key Stage 1 curriculum is based upon 3 key aims for pupils:

- to become fluent in the fundamentals of mathematics which includes the ability to recall and apply knowledge rapidly and accurately.
- to reason mathematically by following a line of enquiry to develop proof using mathematical language.
- to solve problems by applying their mathematics skills and knowledge.

Every class teacher will have responsibility for the teaching and learning of their own class in Foundation Stage and a maths targeted teaching group within Key Stage 1. Pupils are taught within targeted groups which allows whole class, individual, paired and group work to be planned to the needs of the group. There is flexibility within the groups and pupils move between them according to their needs and also based upon teacher assessment. Each year group plans together for Maths lessons ensuring that all children are covering the same skills at the same time.

We will actively involve parents in the development of their child as a numerate person. Impact Maths activities are sent home every two weeks from Autumn Term in Year R and returned with parental comments. Termly parent meetings and pupil progress updates inform parents of their child's progress.

Aims

- ✓ To enable all pupils to become numerate with a quick mental recall of number facts.
- ✓ To develop children as mathematical thinkers with a positive attitude towards mathematics.
- ✓ To foster an enjoyment of mathematics.
- ✓ To provide opportunities for pupils to think logically and clearly and to explain their ideas and reasoning to others.
- ✓ To promote an awareness of the uses of mathematics in everyday life and other curriculum areas.

Early Years Foundation Stage (Year R)

Maths elements are taught using the Early Years Foundation Stage Framework (2014). Maths lessons are taught twice weekly lasting up to 45 minutes to the whole class with further discrete maths learning opportunities built in daily through Plan-Do-Review sessions. Pupils are able to choose a variety of Maths activities linked to a common theme and take ownership of their own learning. The Framework states that Maths learning involves providing pupils with opportunities to develop and improve their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems; and to describe shapes, spaces, and measures.

Key Stage 1 (Years 1 & 2)

Within Key Stage 1 the school has adopted the 'Inspire Maths' Approach which has been correlated to fit the National Curriculum 2014. This approach follows the principles used by Singapore Schools to teach Maths and is widely recognised as a successful approach to teaching and learning Maths.

Maths is taught daily, lasting up to 60 minutes, with the exception of Fridays when it alternates with English. Each lesson involves teaching the whole class together. A new concept or skill is taught involving lots of mathematical discussion supported by concrete and visual/pictorial representations. This is followed by guided practice where pupils work collaboratively to solve problems. Pupils are encouraged to use concrete apparatus and share ideas as they work in groups. This is followed by individual practice to develop fluency and build confidence, ultimately leading to abstract representations. The concrete - pictorial - abstract approach ensures deep understanding of all mathematical concepts. A carefully-designed spiral progression builds up knowledge over time with concepts revisited frequently.

Objectives

There will be an emphasis on developing use of mental calculation and a flexibility in calculating with numbers. Pupils will be taught a balance range of maths involving counting, ordering and place value, calculation skills, money, measures and time, shape and space.

It is essential to practise differentiation in the tasks presented. The Policies for Inclusion and Gifted & Talented will be consulted accordingly. Pupils who do not meet the expected level (Early Learning Goal) at the end of Year R continue to be taught using this framework as they enter Year 1. At the end of Key Stage 1 pupils are expected to know, apply and understand the skills and processes specified in the National Curriculum 2014.

Assessment will be continuous and progress ensured at regular intervals. There will be some tasks/tests used within each year group to aid assessment and guide teaching.

As a school we have also incorporated the concept of 'Maths Mastery' into our curriculum. This approach is a teaching methodology that builds pupils' conceptual understanding, language and communication enabling them to understand a concept so that they can apply it to a new problem in an unfamiliar setting.

Within each classroom there is a Working Wall dedicated to the current maths learning. The relevant learning objective is displayed and referred to within lessons. Examples of strategies and pupils' work can also be displayed.

There will be a representative for Maths from each Year Group to liaise with the Maths Manager, the Senior Leadership Team and the Headteacher as necessary.

Resourcing will be evaluated regularly by the Maths Manager and Headteacher and a budget for these resources will be included in the amount allocated, after consultation with the Finance Committee of the Governing Body.

Review details

This Policy will be reviewed and evaluated by the Maths Manager in consultation with the Headteacher and the wider school teaching staff.

Policy amended and agreed: January 2017

Review date: January 2019

Links to other documents

Homework Policy

Calculation Policy

Gifted & Talented Policy

SEND Policy