# **Mathematics Curriculum Offer**

# Intent

At Eden Park Primary School, we recognise that mathematics is essential in everyday life. The intent of our mathematics curriculum is to provide children with a foundation for understanding number, reasoning, thinking logically and resilient problem solving so that they are fully prepared for the future.

Mathematics at Eden Park delivers a high-quality and consistent curriculum, from Early Years through to Key Stage 2, that is both challenging and enjoyable; we produce children who are confident in their own knowledge and eager to push their own boundaries. It is our intent to develop pupils who are flexible in their approaches and are driven by a sense of curiosity about this beautiful, complex and rewarding subject. We want children to make connections across mathematical ideas to develop fluency, to reason mathematically and to problem solve with increasing sophistication.

# **Implementation**

At Eden Park Primary School, we have adopted a coherent, rigorous and sequential approach to maths which is guided by the National Curriculum but shaped by "Power Maths."

### Power Maths

Power Maths is a set of textbooks, teacher support documentation and online resources recommended by the Department for Education, the NCETM and the recent government guidance on 'Ready-to-Progress' criteria. It is an inclusive and positive maths programme that nourishes real growth by helping children ask lots of questions, take risks and be unafraid of failure. It is a mastery scheme designed to spark curiosity and nurture confidence in maths. The programme, written by a group of leading experts, is aligned to the White Rose Maths progressions and schemes of learning. The high-quality textbooks provide a coherent structure and are designed to give children a deep understanding of mathematical principles, a precise and accurate vocabulary, excellent reasoning skills and a range of effective problem-solving techniques. Teachers adapt and innovate these lessons to ensure the needs of all the children are met.

In addition to their daily Power Maths lessons, times tables challenge lessons develop children's fluency, speed and accuracy with multiplication and the corresponding division facts. Weekly A.P.E (Answer. Prove. Explain) lessons also provide opportunities for children to develop their reasoning using mathematical language.

## Development

At Eden Park we believe it is essential to keep up to date with current research and development in Mathematical pedagogy. We have recently participated in two development projects:

- Eden Park was selected by NCETM to participate in The Mastering Number project. The project aims to develop solid number sense, including fluency and flexibility with number facts which will have a lasting impact on future learning for all children. Teachers in Reception, year 1 and year 2 deliver a daily session of 15 minutes.
- Oxford University invited Eden Park to take part in their Working Memory intervention project. This project involves a Teaching Assistant working with a small group of Year 3 children teaching them memory strategies using adaptive games played online.

All staff have received extensive professional development and have, as a result, developed a deeper understanding of the pedagogy associated with the mastery approach to maths teaching. Two subject leads guide our maths and support development as well as monitor the quality of education. It is never-ending and we continue to learn new things every day!

### Assessment

Children complete half termly summative assessments in the form of Power Maths (Year 1 - 6) and past SATs papers in Year 2 and 6. Teachers conduct detailed analysis of these assessments to inform their planning and guide future interventions and we use it as a guide for reporting to parents. At the end of each term in our reception classes, the teacher assesses each child using an assessment linked to the ELG.

Children in years 2-6 complete daily times table tests and year 4 children also complete weekly practice MTC tests on Sumdog. Additionally, year 6 children complete weekly arithmetic tests. The scores are tracked, and interventions are led by these results.

## Enriching the Mathematical Experience

Whilst we look to make every maths lesson engaging, fun and rich experience, we intend to take the opportunity to highlight the beauty of maths across the school for one special day each term. We have recently introduced:

Autumn

EP Beauty in Mathematics Day Explore an aspect of maths that you find beautiful in some way

## Spring Pi Day

Originating in the USA, Pi Day is held on 14<sup>th</sup> March (US date 3.14). Explore an aspect of maths to do with the world or the history of mathematics

#### Summer

National Numeracy Day This is observed on a Wednesday in May at Eden Park Explore an aspect of mathematics to do with number.

## <u>Impact</u>

We consider a skill has been mastered when:

- ✓ A child can show it in multiple ways, using mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.
- ✓ A child demonstrates quick recall of facts and procedures. This includes the recollection of the times tables.
- ✓ Children can recognise relationships and make connections in mathematics.
- ✓ Children show confidence in believing that they will achieve and demonstrate a high level of pride in the presentation and understanding of the work.

Successful implementation of the Maths curriculum will result in fluent, able and fearless pupils who leave Eden Park with a life-long love of Maths.

## **RECEPTION**

% expected or exceeding GLD						
2016	2017	2018	2019	2022		
56.1	66.1	67.8	72%	70%		

% of children achieving ELG in mathematics					
	NUMBER	SHAPE, SPACE AND MEASURE			
2016	78% expected and of these 2%	75% expected and of these 2%			
	exceeding	exceeding			
2017	74% expected and of these 12% 78% expected and of these 0				
	exceeding	exceeding			
2018	81% expected and of these 17%	80% expected and of these 8%			
	exceeding	exceeding			
2019	85% expected and of these 13%	83% expected and of these 8%			
	exceeding	exceeding			

## KEY STAGE 1

% achieving expected standard or above						
	2017-2018	2018-2019	2021-2022			
Eden Park	77%	77%	77%			
National	75%	76%				

## **KEY STAGE 2**

% achieving expected standard or above						
	2017-2018	2018-2019	2021-2022			
Eden Park	85%	76%	81%			
National	76%	79%	71%			

### A few examples of maths provision within our classrooms

