

## BURE PARK PRIMARY SCHOOL

### MATHEMATICS POLICY

**The National Curriculum for Mathematics aims to ensure that all pupils:**

*Become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately;*

***Reason** mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language;*

*Can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.'*

The content of our strategic vision as outlined in this policy, through our school's '**Intent, Implementation and Impact**', is aligned with the statutory requirements of The National Curriculum.

#### **Intent:**

**That every child who attends our school has access to a high-quality Mathematics education, which will lead them to develop their confidence and feel successful, developing both a growth mind-set and the ability to challenge any preconceptions that they may encounter with regard to their own mathematical potential. That any decisions regarding the teaching and learning of Maths, have at their heart, a clear purpose leading to a meaningful impact.**

Our children will be:

- Exposed to well-structured, well thought-out lessons and first quality teaching, where their learning needs are at the forefront.
- Fluent in the taught strategies that can then be applied to every aspect of Mathematics
- Equipped with a strategy for every aspect of Mathematics
- Able to develop a greater mathematical understanding where connections between number can be identified
- Able to justify and explain (reason) their thinking using the correct mathematical terminology
- Embedded with a deep conceptual understanding of mathematical concepts

- Access the language of routine and non-routine problem-solving, understand problem-solving skills, decide on a way of 'getting started', and decide on the correct mathematical procedures

## **Implementation:**

In order for our 'Intent' to be realised, the following points highlight its 'Implementation':

- There will be 'small steps' of learning built in to lessons and sequences of lessons, where any progression will be in line with children's understanding
- Daily structured Maths lessons to include, rapid recall of times-tables, a recap of taught strategies and opportunities to reason ('Prove-it')
- A focus on number/place-value in the Autumn term (illustrated through each year group's Long Term Plan), with opportunities to continue in to the Spring Term if needed
- The use of pictorial and concrete models in order to develop a deep conceptual understanding and enable them to make connections across varying contexts
- 'depth' not 'acceleration' through the curriculum
- A level of questioning that enables children not only to explain their thinking and their strategies, but also gives them an insight into their true potential
- Feedback, both verbal and written, that is purposeful and supports the early identification of errors and/or misconceptions
- The timing of the Maths lesson to ensure that any errors and/or misconceptions are addressed before the next lesson
- All children, including those identified as having special educational needs, will have access to first quality teaching
- Regular opportunities for Continued Professional Development (CPD) and feedback (Staff and Non-teaching Staff) with regards to pedagogy and subject knowledge
- Support, through mentoring and coaching, of Newly Qualified Teachers (NQTs) and those second-year teachers in the early stages of their career development

## **Impact:**

The following points, along with some examples of pertinent questions, will allow us to evaluate the success of our 'Intent' through its 'Implementation':

- Evaluation of Work Books - *Is there progression in strategies and learning across all year groups? Is there parity between parallel year groups? Has there been a focus on number/place-value in line with the long-term plan? Are the calculations strategies in line with calculation policy? Are the models and images replicated in line with the calculation policy? Are children given enough opportunities to develop fluency with strategies? Does the use of sentence starters support children in their jottings used to support their explanations? Are children able to use their correct mathematical language within their written explanations? How valuable is any written feedback to the children's learning?*
- Lesson Observations/Learning Walks/Evaluation of Planning – *How is questioning used effectively to promote leaning and to facilitate children's explanations? How do their use of models and images support children's learning, and how to they support a deeper conceptual understanding? How is language used to develop children's*

*learning and their ability to communicate effectively their understanding? What support do teachers need in order to improve their pedagogy and/or their subject knowledge? How does the 'small steps' of learning, the rapid intervention of adults and the use of verbal feedback support children in embedding and/or moving their learning on?*

- *Conversations with Children – How do you feel about Maths? What do you enjoy about Maths? What helps you to move your learning on? When do you feel most confident and successful in Maths? What would you like to improve on in Maths?*
- *Conversations with Teachers – What, in your practice, most develops confidence and/or provides opportunities for success? What are the recurring gaps in children's learning?*
- **Summative and Formative Assessment**

This policy is intrinsically linked with and is informed by other school policies, including:

- **Calculation Policy**
- **Teaching and Learning Policy**
- **Marking and Feedback Policy**
- **Early Years Policy**
- **Special Educational Needs Policy**
- **Homework Policy**