Intent, Implementation and Impact Statement - Mathematics

Intent

Learning for Living:

Maths is a journey and long-term goal, achieved through exploration, clarification, practice and application over time. At each stage of learning, children should be able to demonstrate a deep, conceptual understanding of the topic and be able to build on this through their primary school career and into further education or the workplace. Our overall aims for when children leave Brunswick Park Primary School are that they develop a positive attitude to mathematics as a subject in which all children gain success and pleasure. We aim to provide pupils with a variety of mathematical opportunities, which will enable them to make relevant connections in everyday life while developing confident mathematicians who are not afraid to take risks. To enable this, we aim for pupils to develop mathematical skills and knowledge and recall of basic number facts and the four operations whether using Concrete, Pictorial or Abstract representations or carrying out calculations mentally.

Respect:

The value of respect is woven through the Maths curriculum at Brunswick Park. Through the Mastery approach, children learn that there are many kinds of learners within Maths and the other STEM subjects. Children respect each other's learning styles and encourage each other's ideas as they develop an ability to express themselves fluently while using correct mathematical language and vocabulary. Pupils are encouraged to contribute to discussions, explore different strategies, and discuss their thinking and comment on each other's ideas and work collaboratively when appropriate. We aim to create a learning culture in which taking risks and making mistakes are valued as learning opportunities, and we teach children to support each other with their learning.

Support and Challenge:

All Maths Mastery lessons are designed so that children can access the same learning whether it is through the use of Concrete, Pictorial or Abstract representations. Pupil's access reasoning at all abilities to ensure there is a culture of 'challenge for all' across the Maths curriculum. Mantras or sentence stems are used to support pupils with reasoning while using correct mathematical language, where necessary. At Brunswick Park, White Rose Maths resources are used but adapted to meet the needs of individual children. All lessons are differentiated to cater to children's needs and teachers plan for all attainment groups. Children with more complex additional needs also access the Maths Mastery approach while being supported by the Inclusion team.

Implementation

We implement the White Rose Maths scheme through daily whole-class maths sessions. Teaching is expected to be well-paced, with a vocabulary focus and challenge for all pupils. During a carefully planned implementation process, staff have regular opportunities access maths CPD and share good practice with colleagues.

EYFS:

Reception access the NCETM Mastering Number programme during their daily carpet sessions. The aim of this project is to secure firm foundations in number sense for all children in EYFS and KS1. The aim of these sessions is to provide our pupils with fluency in calculation and a confidence and flexibility with number. Nursery begin to access Numberblock (NCETM) based carpet sessions from the start of the Summer term. Cross curricular links with mathematics are evident across EYFS at Brunswick Pak Primary School. Maths early learning goals are embedded into daily topic sessions on carpet where appropriate.

KS1

At Brunswick Park, maths is taught five days a week. These lessons are taught using the Maths Mastery approach. Mastering maths means pupils acquire a deep, long-term, secure and adaptable understanding of the subject. Concrete, Pictorial and Abstract (CPA) representations are used by pupils to confidently explain their learning. Our pupils are encouraged to use concrete and digital manipulatives, maths language and reasoning skills to develop a secure and adaptable understanding of mathematics. Year 1 and Year 2 are also accessing the NCETM Mastering Number programme. The aim of these sessions is to provide our pupils with fluency in calculation and a confidence and flexibility with number. The pupils have four fifteen-minute Mastering Number sessions a week. Pupils also access weekly arithmetic-based sessions and from Summer term in Year 1, pupils are encouraged to develop their times table knowledge through the use of Times Tables Rock stars.

KS2

In KS2 at Brunswick Park, maths is taught five days a week. These lessons are taught using the Maths Mastery approach. Mastering maths means pupils acquire a deep, longterm, secure and adaptable understanding of the subject. CPA representations are used by pupils to confidently explain their learning. Our pupils are encouraged to use concrete and digital manipulatives, maths language and reasoning skills to develop a secure and adaptable understanding of mathematics. Pupils also access weekly arithmetic-based sessions. These focus on number fluency and confidence on the key, operations-based areas of maths. Pupils develop their times table knowledge through the use of an engaging, fun website called Times Tables Rock stars (TTRS). There are four timetabled TTRS sessions per week from the start of Year 3.

<u>Impact</u>

EYFS

In the Nursery, staff observe children's participation in Mastering Number sessions and cross curricular activities with a link to the mathematic ELGs. This monitoring focused on how confidently children access mathematical linked tasks as well as their ability to use key mathematical vocabulary to

KS1

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KS2

In KS2 mathematic, work is teacher assessed during each lesson to inform planning. Pupils are regularly encouraged to use CPA to support or extend their learning. This often happens in the lesson to ensure challenge for all pupils. We use PUMA assessments to expose pupils to the experience of sitting



explain their understanding. In EYFS, staff use Tapestry to record data and this information is used to assess pupils against the ELGs and inform next steps in planning. At the end of the Reception Year, the Mathematics ELG forms part of the ELG judgement and is recorded by the Local Authority.

formal exams. These assessments happen near the end of each term and the results are used by class teachers to identify gaps in learning and to support and supplement teacher assessment judgements. The nature of the TTRS website means that pupils are exposed to consolidation and challenge throughout their sessions. Staff oversee pupils work and target learning when appropriate. At the end of Year 2, children's maths attainment is reported nationally as part of the KS1 SATs assessments.

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