

# Curriculum Subject Overview

## Subject: Maths

### Intent:

At Bramley Park Academy, we believe mathematics is an important part of children's development throughout school, right from an early age. We feel it is a subject that is a vital part of life and isn't just something that is taught because it's on the 'Plan For The Day', but a subject that serves a genuine purpose in their lives now and in the future. We intend on delivering a curriculum which:

Allows children to be a part of creative and engaging lessons that will give them a range of opportunities to explore mathematics following a mastery curriculum approach.

Gives each pupil a chance to **BELIEVE** in themselves as mathematicians and develop the power of resilience and be able to **PERSEVERE** when faced with mathematical challenges.

Recognises that mathematics underpins much of our daily lives and therefore is of paramount importance in order that children aspire and become successful in the next stages of their learning.

Engages all children and entitles them to the same quality of teaching and learning opportunities, striving to **ACHIEVE** their potential, as they belong to our school community.

Makes rich connections across mathematical ideas and offers a clear diet of the three fundamentals within the curriculum: fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.

Provides equal opportunities for children to apply their mathematical knowledge to other subjects (cross-curricular links).

### Early Years Maths Intent

In Early Years, Mathematics involves providing children 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 measure. At Bramley Park Academy, Mathematical resources are provided in all areas of the classrooms, indoors and outdoors to ensure children have ongoing opportunities to access Maths at all times. Practitioners are focused on making mathematics engaging and exciting and children's interests are followed to make their learning relevant. Practitioners offer a balance of child initiated and adult led learning using continuous play and small group activities. Activities are multi-sensory and 'hands on' – providing the opportunity for children to explore and develop their thought process, which enables children to become excellent problem solvers. Early Years pupils engage in daily Early Bird activities to offer consistency throughout the entire school, revisiting key mathematical information and concepts in order to embed the learning.

## **Implementation:**

Our mastery approach to the curriculum is designed to develop children's knowledge and understanding of mathematical concepts from the Early Years through to the end of Y6.

### **Teaching and Learning, Content and Sequence**

In school, we follow the national curriculum and use White Rose Schemes of Work as a guide to support teachers with their planning and assessment.

Our progression in calculations policy is used within school to ensure a consistent approach to teaching the four operations over time.

Each new Unit of learning is 'book ended'. Each child completes a Pre-Assessment activity in order to highlight specific areas of focus needed when teaching. Once the Unit is complete, each child will complete a Post Assessment activity which is used as a comparative tool to ascertain the progress made by each child and any issues still arising. As well as this, key vocabulary is introduced and revisited regularly to develop language acquisition, embedding as the topic progresses. These are also displayed on Working Walls within the classrooms.

Every school day begins with an 'Early Bird' activity which is designed to improve arithmetic skills and also settle the children quickly into effective learning behaviours.

The structure of our maths lessons are designed to offer a clear diet of the three fundamentals whilst also giving the opportunity of 'mid-session' instant marking and feedback in order to group the children based on their needs.

Maths lessons consist of 25 minute whole class teaching. Children are taught through clear modelling using the whole school – I do , We do, You do approach. During this whole class teaching session, children have the opportunity to develop their knowledge and understanding of mathematical concepts. The mastery approach incorporates using objects, pictures, words and numbers to help children explore and demonstrate mathematical ideas, enrich their learning experience and deepen understanding at all levels.

Children will then access the Varied Fluency task before heading down to assembly. Teachers at this point use their assessment from the whole class teaching session and how successfully they've completed the Varied Fluency task to place the children into 3 groups. Those children still struggling with the concepts are placed in a Same Day Intervention (SDI group) which is led by the teacher, whilst those that have been successful and mastered the concept are given the opportunity to apply their knowledge to a variety of different and challenging contexts by accessing the Reasoning and Problem Solving tasks. These are colour – coded so that once children return from assembly, they immediately know which task they're accessing and therefore eliminates any wasted learning time. We have recently introduced 'Infinity' which is a quiz based fluency programme designed to offer specific focus around key areas of learning where misconceptions are occurring. This gives additional opportunities to re-address misconceptions and greater exposure to master the skill.

### **Leadership, Assessment and Feedback**

Assessment informs the teaching and learning sequence, and children work on the objectives they are assessed as being at, with fluid boosting available within a 'keep up not catch up' culture.

Feedback is given on children's learning in line with our feedback and marking policy. Formative assessment within every lesson helps teachers to identify the children who need more support to achieve the intended outcome and who are ready for greater stretch and challenge through planned questioning or additional activities.

In order to support teacher judgments, children may be assessed using current and reliable tests in line with the national curriculum for maths. Gap analysis of any tests that the children complete is undertaken and fed into future planning.

Summative assessments are completed at the end of each term.

The maths leader has a clear role and overall responsibility for the progress of all children in maths throughout school. Working with SLT, key data is analysed and regular feedback is provided, to inform on progress and future actions.

The maths leader has also provided staff with Key Stage 2 SATs analysis from 2016 onwards which highlights the content domains as well as the % of the test which is made up from each year group. This gives staff a clear understanding that it's a Key Stage 2 test and not a Year 6 test.

### **Impact:**

Children and staff speak highly of the schools' approach to maths. They could see Early Bird was having a significant impact on lessons and this showed in the Maths Hub Summative Assessment analysis

The lesson structure allows staff the opportunity to assess immediately and pull children into the SDI group after assembly, meeting their needs immediately whilst allowing those children that have mastered the concepts the opportunity to extend their learning and not waste time waiting for others to 'catch up'

There is a belief that all children can have success in mathematical thinking and a more positive perception of the subject is developing.

There is clear consistency throughout school: from teaching sequence, to live, instant assessment and format of Working Walls.

During our regular QA Cycles (shared during SMT), phase leaders notice:

- The planning format and lesson structure is firmly embedded throughout school and being used consistently

- Skilful questioning- Adults don't jump in and give answers, they use talk phrases/sentence stems well to promote thinking

- Bramley Park Mindset and attitudes towards maths is clear –the belief that all children can have success in mathematical thinking and mistakes are being made, celebrated and learned from.

- 'Convince Me' and 'Why are they wrong / What common mistake have they made?' being used to disrupt children's mathematical thinking and develop explanation skills.

- Most classes using TA's effectively to support Reasoning and Problem-Solving groups whilst teacher focuses on SDI.

- Marking is consistent and effective. Most staff are using questioning/additional challenges to extend /further challenge the child's thinking.

- Expectations have increased. Children are regularly asked to 'Repeat by Refining' their original answers/explanations.

- Early Bird maths used effectively in every classroom to develop arithmetic ability as well as consolidate existing learning / introduce new concepts which lead into future lessons/teaching.

- Consistent approaches to Working Walls are more evident. They are up to date and used within lessons to support and develop learning.

- Opportunities for all abilities are evident. The SDI groups are fluent and not fixed.

- Opportunities for 'Talk For Maths' and reasoning in every classroom

## Data

Children achieving expected standard at the end of KS2 in 2024 was 76%. This is compared to 72% in Leeds and 73% National. GDS for Bramley Park Academy students was 25% compared to 24% for Leeds and National.

In addition to these results, we were very pleased to have our hard work acknowledged during our peer reviews and Outstanding Ofsted visit (March 2023).

