



Maths Expectation Document 2022-2023

Intent

At Broadway Infant School we strive to make maths engaging and interesting for all children so they develop a curiosity for the subject. We strive for all children to have a solid working knowledge of maths, to develop clear number sense and to be able to use manipulatives confidently and appropriately to support their learning. We also aim for our children to be confident in their ability to use maths in problem solving and reasoning. We also aim for our parents to be involved in and informed about their children's learning so they can feel confident to support them at home. Children will be prepared for the next stage in their education by giving them the skills, knowledge and attitude to help them succeed.

Implementation

Our curriculum is delivered through a topic led approach aimed at inspiring all children to be excited and inquisitive as well as to develop a love of learning. It gives opportunities, where possible, to use maths across the curriculum which give purpose for learning and time to practise mathematical skills.

We use aspects of various schemes in our planning and teaching of Maths to best suit our children and school community. Our Reception classes refer to the EYFS statutory framework and Key Stage 1 refer to the National Curriculum. We teach mini blocks and revisit and assess these areas of learning regularly throughout the year. This allows teachers to use regular formative assessment that is referred to in Target Tracker to recognise and address gaps in learning to better inform their planning. We take a number sense approach to teaching number. Children take part in daily Number Talks or Maths starters. They are encouraged to talk about what they see and teachers use their knowledge of each child to ask questions that deepen their understanding of number. It allows for all children, regardless of their attainment, to reason and provide justifications about number and numerical patterns and rehearse mathematical vocabulary. This in turn, helps children to become fluent in the fundamentals of mathematics, to reason mathematically in a range of situations and to develop skills in problem solving. Teachers are very competent in their ability to use questioning techniques and explain mathematical vocabulary to move children on in their learning as well as identifying children who are in need of support. Maths lessons have no ceiling for learning and support is given in class to those specific children who need it and highlights when interventions may be required. Maths Working Walls in each classroom are added to during the week so the children can refer to strategies and vocabulary being taught. Each mini block offers all children opportunities to reason about mathematics and thus opportunities to develop greater depth in their mathematical knowledge and skills.

Intervention groups targets those children who need extra support to develop their number sense and their understanding of mathematical concepts.

Practise and consolidation plays a central role in developing mathematical fluency. Mental mathematics in particular is a key skill children need to develop to be fluent in the fundamentals of mathematics. We use mental maths daily during our Number Talks/maths starters, during register, daily calendar talks and transition times. This highlights to the children the importance of maths to their everyday lives.

Children at Broadway Infant School are provided with a variety of different resources to enable them to access their mathematic learning. Fives and/or Tens Frames and counters, loose parts, number tracks, Numicon and Base 10/Dienes are vital resources used at our school. They can be found in areas of provision for children to access independently and are

available in every classroom throughout school. When accessing continuous provision, resources that support mathematical thinking can be seen across most areas.

At Broadway Infant School we recognise the importance of parents' involvement in their children's learning. Information is given to families new to Broadway and during parents' evenings on the strategies and methods used in school and how to help their children at home. Information for parents is also on our website. Parents are invited to take part in Stay and Play sessions (EYFS) and Stay and Count sessions (KS1) throughout the year. These include: time, money, subitising, calendars and shape and measurement. KS1 children are assessed against maths targets in number. The maths targets are in children's homework books so parents can support their child's mathematical learning at home and can see the progression of number skills.

At Broadway Infants we have recognised a need to develop our pupils' vocabulary which we view as a fundamental requirement for learn across all subjects.

Presentation and Recording

- EYFS learning journey recorded on Target Tracker with pictures and observation of children's learning. EYFS use maths books from T6
- KS1 have maths books for their maths recording - all books should have a marking policy stuck in the inside cover
- KS1 Recording frequency - recorded maths minimum 4x week, including one arithmetic
- Children should record in maths books, worksheets used only when necessary. There should be a balance between worksheets, pictures and work directly in the book.
- High expectation of presentation, teachers should model expectations for presentation and recording.
- KS1 squared maths books and maths jotters - children are taught to record one digit per square
- A sticker with the learning objective (LO) and date (may be added by the children) is stuck in the books. The date must be on the LO sticker (may be written by children)
- LO must match the learning activity.
- LO should be highlighted if it has been achieved.
- Incorrect answers need to be highlighted in pink and addressed.
- Number reversals should be pinked and addressed immediately
- Stem sentences will be used to support children during the lesson when speaking and writing. They will be used to extend the children's reasoning and will support children to form a sentence. Staff can scribe children's responses where writing is a challenge. We want children to use this vocabulary and staff will model it in their explanations.

Coverage:

- The EYFS curriculum, the National Curriculum breakdown and the progression of knowledge and skills documents show how the subject is planned and sequenced.
- All classes include number talk in their teaching every day.
- EYFS teach whole class maths every day, maths provision in child initiated learning included daily and children work in a group on a maths activity with an adult at least once a week.
- KS1 daily maths lessons (approx. 60 mins) begin with number talk (5-10mins) and follows on with whole class input using my turn, our turn, your turn and finally recording to demonstrate understanding.
- Photographic evidence should be used when writing outcome not appropriate.
- Problem solving and reasoning should be intertwined into every lesson.
- KS1 arithmetic tested a minimum of once a week
- Manipulatives to reinforce learning should be readily available within lessons and used explicitly to support children.
- There should be evidence of pictorial representations in calculation. This should be modelled by teacher and then children should be seen using it in their books.

Environment:

Working walls

- Use of working walls should be updated regularly to ensure relevant learning is displayed.
- Working walls should clearly show the area of learning currently being taught, key vocabulary used (see vocabulary progression), methods used – include pictures, concrete, pictorial and abstract examples.
- In KS1 the stem sentences will also be used on displays.

Displays/environment

- 1-100 number line in every classroom
- Numicon numberline above sink in every classroom
- Numbers and words appropriate to the year group should be clearly displayed

Resources

- Resources should be clearly available and drawers clearly labelled
- All manipulatives should be accessible at all times for children to use within maths lessons/provision
- Children will have a STEM sentence mat readily available to use as support.
- SEN children will have a maths resource pack and support folder.

Assessments:

- KS1 informal assessment of maths happens during 'your turn' and during the lesson to inform planning and address gaps or misconceptions.
- Formal assessment happens at 2 points during the year – mid-year (Term 3) and end of year (Term 6) where judgements are made on target tracker.
- In Reception, the children are assessed at a data point at baseline, mid-year and end of year due to maths being a specific area within the EYFS.
- Year 1 use teacher assessment to form judgements.
- Year 2 use sample, past SATs papers and teacher assessment to form judgement.
- In term 6, Year 2 make a judgement using the Teacher Assessment Framework. Parents are informed of judgement in final school report.
- KS1 all children have maths targets which are tested termly.
- Maths targets are shared at parent's evenings.
- Parents of EYFS children identified as emerging in maths, attend a meeting to be informed of support that will happen in Y1 and ideas for parents to use to support at home.

- **Within each lesson:** Assessment for learning strategies (questioning, oral feedback, self-assessment, peer assessment, observations) are used to adjust the teaching and learning for both individual pupils and the class as a whole. Class teachers will note areas of difficulty/misconceptions and make adjustments within the lesson or the following sequence of lessons to address these.
- **At the end of each lesson / unit:** teachers will use a tracker to identify children who have not met the learning objective within lessons and those who have demonstrated mastery. This tracker gives an overall assessment of the children within the topic assessed against the learning objectives covered.
- **At the end of each term:** children will take an end of term assessment which test the children on the knowledge and skills they have been taught so far.
- **At the end of the year:** In the summer term, teachers use their assessments from all the units of work to make an overall judgement upon whether each pupil is working at, above or below the expected level and reports this to parents.

SEND / Vulnerable Pupils

- SEND Strategies for use in Quality First Teaching and Support Plans document details support for SEND / vulnerable pupils in all curriculum areas.
- Individual SEN pupils have their own support plans and targets.
- For children who find reading or writing a challenge, maths word problems and reasoning should be read/written for them.
- Maths packs for SEN/LA children
- Maths intervention for children identified as needing extra intervention
- Where barriers have been identified children are to use manipulatives or representations to aid their learning.

Impact

To gain an overall picture of attainment in maths across the school, the subject leader regularly undertakes a range of monitoring including pupil voice, learning walks, book scrutiny and a review of planning. They also analyse the assessment data and identify areas where the subject needs to be further developed.

The children at Broadway Infant School demonstrate high levels of curiosity and engagement in Maths, develop a solid sense of number, become fluent in the fundamentals in maths and are confident in their mental maths abilities. Our children can discuss maths using the appropriate vocabulary, showing a deeper understanding of the subject and the ability to reason about mathematics. They see the value of mathematics in their daily lives and appreciate how maths is used across many subject areas. Our parents are more confident to support their children at home and feel comfortable asking for help when supporting their children's learning.