BADSLEY PRIMARY SCHOOL



Teaching of Mathematics Policy

Policy Date	Jan 2023	Review Date	Jan 2024
GB Responsible	Full Governing Board	Written by	T Doran
Approved	24.1.23	Website	Yes

Note: To be read in conjunction with the calculation policies.

Introduction

Mathematics provides children with a set of skills that will enable them to understand the world around them. Mathematical understanding is an integral part of life and everybody at Badsley Primary School works towards helping our children to develop a positive, enthusiastic attitude towards maths that will stay with them throughout their lives. It is our intention that no child develops a belief that they "can't do maths" but recognises that, with effort, they can overcome difficulties, learn from mistakes and become a "successful mathematician" who fulfils their potential. At Badsley, we endeavour to instill the 'Growth Mindset' principles into our children to ensure they persevere over obastacles in mathematics and across the curriculum.

Mathematics at Badsley

To ensure all staff, children, parents/carers and governors are aware of the aims for learning and teaching Mathematics at Badsley Primary School and that these are consistently applied.

Responsibilities

Headteacher and SLT

- Set high expectations and monitor the teaching and progress.
- Consistently highlight the school motto of 'Growing together; Aiming High'.
- Encourage a whole school approach to Maths teaching and learning.
- Monitor and review progress on the Maths Action Plan.

Governors

- Stay informed and up to date with what is happening with maths in school.
- Liaise with Head Teacher, SLT and Maths subject lead to stay informed.
- Monitor and review progress in maths.

Maths Subject Lead

- Lead the maths team to write, evaluate and review the action plan.
- Lead by example showing a thorough understanding of the subject.
- Offer support to other teachers/ staff in planning, teaching and assessment.
- Work alongside the Head Teacher and SLT to monitor and evaluate maths.
- Identify whole school and individual CPD needs and plan for these.
- Work alongside other schools, outside agencies and consultants to develop maths in school.
- Keep up to date with current thinking and research in maths and use these findings to continue to adapt the teaching and learning of maths in school.

School Staff

- To promote a confident, positive attitude towards the learning and use of Mathematics making it an enjoyable experience.
- Use instant feedback methods in classroom settings to quickly address misconceptions within a lesson.
- To promote confidence and competence with numbers, the number system and the linked apparatus used to deliver strategies.
- Encourage pupils by believing that every child, with hard work, can be good at Mathematics through promoting a <u>Growth Mindset</u>.
- To promote the ability to solve problems through connecting ideas, decision making and appplying their mathematical skills in a range of contexts.

Pupils

- To develop an enjoyment of learning through practical activity, investigation, exploration, mental exertion and discussion.
- To develop confidence and competence with numbers and the number system.
- To reflect on their learning using feedback given within a lesson.
- To develop a positive attitude towards Mathematics by developing their understanding of Growth Mindset.

Parents/Carers

- The school aims to keep parents/carers informed regularly about their childs learning in mathematics through the 'Class Dojo' communication platform.
- Parents/ Carers are encouraged to speak to their childs maths teacher at any point during the school year to discuss further support at home with maths.
- Use online resources provided by school to support current learning within school.
- Parents/Carers are encouraged to support their children with home learning.

<u>Planning</u>

Long term planning

The National Curriculum for Mathematics 2014, Development Matters and the EYFS Framework provide the long term planning for mathematics taught in the school.

Medium term planning

EYFS-6 use the White Rose Maths Hub schemes of learning as their medium term planning documents.

The schemes provide teachers with exemplifications for maths objectives and are broken down into fluency, reasoning and problem solving. They support the mastery approach to teaching and learning and have number at their heart. They ensure teachers stay in the required key stage and support the ideal of depth before breadth. They support pupils working together as a whole group and provide plenty of time to build in reasoning and problem solving elements into the curriculum. EYFS enhance their planning using the 'Development Matters' document which is a non-stautory document and DFE approved.

Short term planning

The short term planning is done weekly, listing specific learning objectives that are to be covered in each class for each lesson that week.

Teaching and learning is planned to best meet the needs of the class and individuals within it using Concrete, Pictorial and Abstract representations (see calculation policy).

Resources

- The use of Mathematics resources is integral to the concrete pictorial- abstract-approach and thus planned into our learning and teaching.
- We have a wide vareity of good quality equipment and resources to support our learning and teaching.
- These resources are used in a variety of different ways including demonstrating and modelling ideas.

Times Tables Rockstars

At Badsley, we realise the importance of having a secure understanding of multiplication knowledge and the linked division facts. The MTC (Multiplication Tables Check) is a statutory assessment to be administered officially for the forst time in 2022. This will assess Y4 times table knowledge in the form of 25 question test covering all times tables up to and including 12X12. Using Times Tables Rock Stars (TTRS) across all year groups will help to develop children's understanding. TTRS provides pupils with the opportunity to practise, learn and develop their knowledge of times tables. This can be achieved through the TTRS website, mobile app or using tailored resources created for the classroom. Ultimately, having a solid understanding of these facts will help the pupils progress in many other facets of mathematics.

Assessment and Feedback

Throughout EYFS, KS1 and KS2, the delivery of feedback to pupils during lessons is essential in moving their knowledge and progress forward. We use a variety of strategies from live marking, verbal feedback and written comments where necessary. This ensures the children understand misconceptions immediately and can quickly move on in their learning.

Assessments are vitally important to understand how the children are accessing the curriculum in the short and long term. They are used to inform teaching and learning in a continuous cycle of planning, teaching and assessment. Day to day assessments are an informal part of every lesson and enable us to monitor children's learning and progress. An in-depth understanding of progress indicates any areas of mathematics which may need to be re-focussed on. Each class completes the WRM end of block assessments at the appropriate intervals followed by more comprehensive assessments at the end of each term. Badsley Primary School uses the NTS Mathematics assessment at the end of each term for Years 1-6. This assessment generates a standardised score for each pupil giving an accuarate indication of their knowledge and understanding compared with thousands of other pupils across the country. The assessments are combined with the MARK system which identifies pupils from their assessments who require specfic, focussed interventions in all areas of mathematics.

National curriculum tests are used at the end of KS1 and KS2; teachers use past and sample papers to inform their assessments as they prepare pupils for these tests.

Learning Environment

At Badsley Primary School we recognise that the learning environment plays and important role in the teaching and learning of Mathematics and we continually look to develop this. Every classroom has a working wall designed in a specific and consistent layout that displays models and images that are related to current teaching and learning. These will show concrete, pcitorial and abstract representations alongside relevant vocabulary linked to that area of learning. Each classroom should also have a maths area wirh a range of maths resources and equipment that children can independently choose to access to enhance their learning. These should be appropriate to the age and needs of the children in the class and children of all abilities should be encouraged to make use of equipment.

Around school, we intend to develop displays and areas in corridors to provide further opportunities for children to engage in maths. Another area of school to be developed further is the outdoor area in order to give teachers another way to engage children in maths learning through outdoor space.