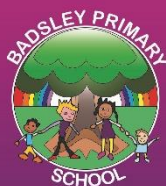


# BADSLEY PRIMARY SCHOOL



## Mathematics Policy

<b>Policy Date</b>	April 2024	<b>Review Date</b>	April 2025
<b>GB Responsible</b>	Full GB	<b>Written by</b>	Tom Doran
<b>Approved</b>	19.3.24	<b>Website</b>	Yes



Growing Together; Aiming High



Article 31  
A right to rest, play culture and the art.

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# 1. Curriculum intent, aims and drivers

## Curriculum intent

Our intent at Badsley is providing 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 obstacles in mathematics and across the curriculum.

## Aims

Badsley Primary fully supports the National Curriculum by providing opportunities for its pupils to:

- 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 nonroutine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions

## Ultimate End Goal

At Badsley Primary we believe that mathematics is a subject for everyone. We want to ensure that each and every pupil who leaves Badsley has a good understanding of the key principles linked to maths and can apply them independently. As educators, we strive to foster a love of mathematics and that children are confident enough to make mistakes and use those as drivers to enhance their own learning. We provide early years children with the building blocks of mathematics, creating a solid foundation for their mathematical journey ultimately leading to confident and adaptive mathematicians.

## Curriculum Drivers

Our curriculum is built on our Key Drivers:

- **Oracy**
- **Aspiration**
- **Equality and Diversity**
- **Experience**

## - **Curiosity and Discovery**

To ensure our curriculum offers enrichment, these drivers underpin everything we do in all areas of school life. These form the foundations of our curriculum and are threads throughout our teaching including the teaching of pupils' spiritual, moral, social and cultural (SMSC) development and the teaching of British Values.

## **2. Legislation and guidance**

This policy reflects the requirements of the National Curriculum programmes of study, which all maintained schools in England must teach.

It also reflects requirements for inclusion and equality as set out in the Special Educational Needs and Disability Code of Practice 2014 and Equality Act 2010, and refers to curriculum-related expectations of governing boards set out in the Department for Education's Governance Handbook.

In addition, this policy acknowledges the requirements for promoting the learning and development of children set out in the Early Years Foundation Stage (EYFS) statutory framework.

## **3. Roles and 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 Growth Mindset.
- To promote the ability to solve problems through connecting ideas, decision making and applying 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 child's learning in mathematics through the 'Class Dojo' communication platform.
- Parents/ Carers are encouraged to speak to their child's 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 homework.

## **4. Organisation and Planning**

### **Curriculum Planning**

#### 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-stutory 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.

### Arithmetic Ninja

To continually enhance pupil's arithmetic skills and strategies, each year group complete arithmetic quizzes throughout the week. These quizzes build on prior learning, revisit previously taught content and challenge pupils as they move through the curriculum. KS2 pupils complete the quizzes each day with each session being more challenging. KS1 pupils build up gradually, completing fewer questions each week to create an increased stamina for learning.

## 5. Inclusion

Teachers set high expectations for all pupils. They will use appropriate assessment to set ambitious targets and plan challenging work for all groups, including:

- More able pupils
- Pupils with low prior attainment
- Pupils from disadvantaged backgrounds
- Pupils with SEND
- Pupils with English as an additional language (EAL)

Teachers will plan lessons so that pupils with SEN and/or disabilities can study every National Curriculum subject, wherever possible, and ensure that there are no barriers to every pupil achieving. Teachers will also take account of the needs of pupils whose first language is not English. Lessons will be planned so that teaching opportunities help pupils to develop their English, and to support pupils to take part in all subjects.

Further information can be found in the school's SEND policy.

## 6. Monitoring Arrangements

The headteacher, together with the Curriculum Strategic Lead and individual subject leaders monitor the curriculum to ensure it meets the needs of our pupils.

We monitor the curriculum using a variety of methods including:

- Pupil voice
- Staff voice
- Learning walks
- Lesson observations
- Book scrutinies
- Data analysis

### 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 accurate 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 specific, 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 an 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, pictorial and abstract representations alongside relevant vocabulary linked to that area of learning.

Each classroom should also have a maths area with 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.

This policy will be reviewed as stated on the front of the policy by the Curriculum Strategic Lead in consultation with the Headteacher and Senior Leadership Team. At every review, the policy will be shared with the full governing board.

## **7. Links with other policies**

This policy links to the following policies and procedures:

- EYFS policy
- Assessment policy
- SEN policy and information report
- Teaching and learning policy