Maths Policy

Brierley CE (VC) Primary School

Approved by:	Governing Body	**Date:**
Last reviewed on:	September 2024	
Next review due by:	September 2025	

Contents

1. Aims

This policy is for the staff in our school. It aims to set out:

- Our approach to teaching, monitoring and assessing Maths knowledge and skills
- How we will make sure our provision for the teaching of Maths is of consistently high quality

2. Legislation and guidance

This policy reflects the requirements and expectations set out in:

- The National Curriculum programmes of study for Maths
- The Special Educational Needs and Disability (SEND) Code of Practice 2014
- The Equality Act 2010

3. Our vision for Maths in our school

Maths at Brierley School provides children with a foundation for understanding the world, the ability to reason mathematically, an appreciation of the power of number and a sense of enjoyment and curiosity about the subject. We encourage our children to be enthusiastic about maths, with a thirst for knowledge and resilience for challenge.

Our school aims to develop pupils' skills in maths. By the time that pupils move on from our school, our aim is for them to:

- become increasingly confident in handling number, calculation, shape, measures and data
- become numerate and tackle mathematical problems with confidence
- develop the skills which are needed to meet the demands of adult life
- develop the ability to think logically and clearly
- use mathematical language and reasoning effectively and confidently
- develop positive attitudes to mathematics, recognising that mathematics can be both useful and enjoyable
- be able to use and apply the skills in other curricular areas

4. Our guiding principles for the teaching of Maths

We teach Maths best when:

- There's a joyful culture around maths and number in school

- All staff feel they have the knowledge, skills, understanding and professional support they need to teach Maths effectively
- There's sufficiently detailed and frequent ongoing assessment of pupil progress
- We expose pupils to different types of maths lessons and activities following concrete, pictorial and abstract along with introducing real life problems in context
- We involve families in supporting their child's maths at home
- The Maths curriculum is coherently planned and sequenced following the NCETM programme
- We identify where pupils have learning gaps or aren't making the expected progress, and make sure interventions target these
- Teaching resources are available, up to date, varied and diverse, and match pupil and curriculum needs
- We engage pupils in high-quality back-and-forth interactions
- We model new language and accurate maths vocabulary to pupils

5. Roles and responsibilities

5.1 The headteacher

The headteacher is responsible for:

- Building a team of expert teachers who know and understand the processes that underpin learning in maths
- Providing teachers with the appropriate training and resources so that they can competently deliver the Maths curriculum
- Creating a stimulating school environment where pupils are exposed to a variety of maths concepts through displays, manipulatives and other classroom resources

5.2 The Maths leads

Our Maths subject leaders are Sharon Gough and Lucie Matterson. They're responsible for providing leadership and management for Maths to secure:

- High-quality teaching and subject knowledge of staff
- A coherently planned and sequenced Maths curriculum
- Consistent assessment and accurate teacher judgements within Maths
- Effective use of resources

5.3 Teachers

Teachers are responsible for:

- Planning effective Maths lessons
- Providing opportunities for pupils to apply their Maths skills in a variety of ways
- Completing the relevant marking and assessment
- Making sure that support staff have:

- Access to planning materials and resources
- The knowledge and skills they need to support and challenge pupils

6. Curriculum

Our maths curriculum is both creative and engaging for all pupils and endeavours to ensure all children achieve. We encourage children to develop the necessary skills to allow them to become 'deep thinkers' acquiring math skills to a range of practical, real life contexts to ensure their learning is both purposeful and meaningful.

Our teaching sequence follows ours Brierley maths curriculum for each individual year group, ensuring pace and progression in all strands of learning across school. We use the NCETM curriculum to help support the teaching of Maths and to develop resources, tasks and activities.

The Mastery approach to the teaching and learning of maths is applied in all lessons. It stems from the idea that all children can achieve in maths through scaffolding, challenge and the use of concrete, pictorial and abstract teaching methods. This approach has helped to improve outcomes and standards in each lesson.

We ensure that maths is taught in creative and engaging lessons, using a wide array of maths manipulatives in concrete, pictorial and digital form. ICT is used widely across each year group to deliver the maths curriculum and to offer our pupils a range of exciting activities to challenge and inspire. Maths is widely promoted across the school and our classrooms have working walls that the children can utilise to support their learning through the use of vocabulary, models and images and methods.

Reasoning is a key area within all our lessons. Mathematical vocabulary is an essential part of each lesson, we begin all lessons with a 'Maths Chat' activity where pupils are encouraged to describe, explain, convince, justify and prove using STEM sentences to answer in full. Mathematical vocabulary is a focus in each lesson and is displayed on each teaching slide so that children can refer to it throughout the lesson when answering questions. We hope to build problem solvers of the future and develop resilience in our children; essential skills that they can use in all aspects of their learning.

6.1 Timetabling

Maths is taught daily throughout the school.

<u>Structure of a Brierley Maths lesson</u>

Times Tables – explicit teaching of times tables supported through chants and games

Arithmetic - 5 questions linked to previous learning to ensure recap and consolidation

Math's Chat - children are encouraged to describe, explain, convince, justify and prove using STEM sentences to answer in full.

Model and Teach to introduce new concepts - concrete, pictorial and abstract teaching. This input is given in small sections throughout the lesson using the “I do , we do, you do” approach.

Practice and Apply - children are given chance to apply their skills to problems and questions, we apply the ‘Five is Fine rule’ in order to ensure pupils are moved on in their learning.

Reasoning – Reasoning questions are built into daily maths lessons, children are taught how to apply their knowledge of maths concepts in order to answer reasoning questions.

Challenge - all children are given the opportunity to reach the challenge activity within the lesson. This allows pupils to apply the skills learnt within different contexts.

6.2 Cross-curricular links

We facilitate cross-curricular learning of Maths skills, making sure that the links with other curriculum areas are natural and not forced. This is achieved through activities in other subjects such as:

- Enterprise
- Design technology lessons
- Science

6.3 Differentiation

We provide suitable differentiation to make sure that every pupil makes maximum progress in Maths by:

- Recognising where some pupils need specific help with their Maths skills
- Providing resources and manipulative to scaffold pupils’ learning
- Identifying pupils who would benefit from more support in an area of their Maths learning, and running small intervention groups for targeted support each day to aid their progress and attainment. We monitor these closely to move pupils in and out of these groups as needed
- Making sure pupils who need it are extended through the use of additional, more-demanding and open-ended tasks and planned challenges within each lesson

7. Marking and feedback

Feedback clearly explains to pupils what they’re doing well, and what they need to do next to continue to improve their work.

It is given throughout the lesson in live marking by teachers and teaching assistants and follow the school marking policy.

8. Monitoring, assessment and moderation

8.1 Monitoring

We monitor teaching and learning of Maths in our school to make sure that all of our pupils make the best possible progress from their starting points.

Subject leaders and the Senior Leadership Team monitor and evaluate the impact of teaching on pupils' learning through:

- Conducting learning walks
- Reviewing marking and feedback
- Termly pupil progress meetings
- Gathering input from school data
- Planning scrutinies
- Book scrutinies
- Pupil voice

8.2 Assessment

We track pupils' progress using a combination of formative and summative assessment

Formative assessment is ongoing throughout each lesson. It helps to judge progress and allows teachers to make flexible adaptions to their teaching in order to allow all pupils to achieve in each lesson. Effective formative assessment, daily marking within lessons and adult interaction, is firmly embedded into our approach to the teaching and learning of maths. All pupils are supported within the lesson to develop, progress and move their learning forward through questioning and feedback. Pupils demonstrate the impact this has on improving their learning through editing and response. The use of concise Curriculum Learning Goals ensures pupils are aware of what they are learning and supports the sequencing of lessons.

Summative assessment is carried out termly using Insight Tracker. Teachers use the bespoke Brierley curriculum to ensure pupils have met the key end points for each strand/unit of learning before moving on to the next strand of maths. Cross moderation occurs in school to ensure moderation is carried out correctly. Moderation throughout the collaboration also supports this.

8.3 Moderation

We standardise Maths work samples to:

- Demonstrate how pupils' work meets National Curriculum attainment targets for KS1 and KS2, to help with assessment
- Make sure staff have a consistent approach to marking pupils' work

We refer to the Standards and Testing Agency (STA)'s exemplification materials for KS1 and KS2 to support with this.

We moderate teacher assessments of maths termly.

9. Learning environment

Pupils learn Maths in spaces that:

- Are well-organised
- Contain appropriate and good-quality resources for pupils to refer to (in a space where they can find or see them easily)
- Display Maths working walls which reflect current teaching, vocabulary, relevant methods and models and images. Working walls should also show pupils' work.

10. Resources

All pupils work in maths books.

At Brierley school, we use a selection of manipulative that are well chosen to support the teaching and learning for each lesson when necessary to support pupils' understanding. We also use a digital manipulative programme called Braining Camp.

We use a range of different online resources to support the teaching of maths and the resources/activities chosen for pupils.

11. Review

This policy will be reviewed yearly by subject leader. At every review, the policy will be shared with the full governing board.

12. Links with other policies

This policy links with the following policies and procedures:

- Curriculum policy
- SEN/SEND policy and information report
- Marking and feedback policy
- Assessment policy
- Behaviour policy
- Early Years Foundation Stage (EYFS) policy