

Brown's Maths Policy 2023

Intent

Here at Brown's we recognise that maths is a part of everyday life. We intend to provide a curriculum that caters for all individuals. We aim to develop a balance of fluency, reasoning and problem solving throughout teaching and learning. Believing that all children can be mathematicians, we aim to provide opportunities for children to use mathematics across all areas of our school curriculum. We want our children to become confident, independent learners capable of using maths to help solve real life problems. Throughout the school, we want to see children enjoying maths and develop a sense of excitement around the subject. Fostering an environment of trust within our classrooms encourages discussions between children where they can share their ideas together and not be afraid to make mistakes. In line with our whole school approach to metacognition, we want to develop children's resilience and ability to problem solve, gaining an understanding of how and why they are learning what they are. The main purposes of maths at our school are:

- To develop foundational knowledge, including proficiency of number, to give pupils the ability to progress through the curriculum.
- An ability to communicate, read, write and apply mathematics.
- Develop mathematical resilience and an ability to break problems down, think logically and work systematically.
- Develop a confidence within maths and ability to work fluently and accurately.
- Promote enjoyment and positive attitudes towards maths across school.

Our curriculum

Our curriculum has been carefully designed to support the progression of skills and knowledge across the whole school. We take an approach that plans for all learners and builds on skills that will help them move forward in their learning from reception through to year 6. Within each year group, we have a spiral curriculum that provides opportunities to revisit learning across all areas of mathematics. This gives the children chance to both retrieve knowledge and build on skills across the entire year, whilst helping to commit more learning to their long-term memory. The long-term plans for each year group are broken down into weekly blocks to support our teachers and children in being able to focus on the key objectives that need to be taught and learnt in that week. Children are aware of their learning and how it builds on what they have learnt previously, helping them gain a wider understanding mathematics. Added to our curriculum are our Key Instant Recall Facts (KIRFS) that underpin the children's fluency in mathematics. Our curriculum provides a termly breakdown of KIRFS across all year groups that we support the children with that will be vital in supporting their understanding of different mathematical concepts.

Implementation: At Brown's Church of England Primary School, staff will:

- Engage with the new curriculum being set out across the school.
- Have sufficient understanding of mathematical concepts and be able to deliver knowledge in a child-centred approach.
- Take on board CPD opportunities and link these to the development of maths in school.

- Plan and deliver learning that suits the needs of all children regardless of race, gender or ability are given access to quality first teaching.
- Model new learning effectively giving children the support to be able to make independent choices about their work.
- Develop children's fluency skills and understanding of the relevant KIRFS.
- Provide a balance of fluency and problem solving within lessons.
- Promote an enjoyment of maths across the school.
- Engage with parents over maths in the school.
- Support parents in being actively involved in their child's maths education.

In mathematics Teaching and Learning will:

- Provide children with at least one hour of maths per day.
- Be inclusive to all children taking into account all needs.
- Provide opportunities for daily counting in line with the counting progression document.
- Develop the children's mathematical vocabulary. This will be explicitly taught and reflect on in lessons.
- Provide retrieval opportunities in every lesson. Using our new curriculum, retrieval opportunities are planned in to each week to support the children into gaining more knowledge in their long term memory.
- Cover the national curriculum requirements for each year group.
- Follow the carefully sequenced long term plan from reception to year 6.
- Ensure that teaching falls in line with the calculation policy set out in Jenny Cook's 'A Journey to Written Calculation.'
- Encourage children to develop their mental method through the teaching and learning of KIRFS.
- Require support staff to work in line with the direction of the teacher.
- Provide practical opportunities for learning as well as written ones.
- Identify areas of need for children and provide rapid intervention or support within lessons.
- Make use of fluid groupings and activities within lessons that reflect the needs of the children.
- Have high expectations of children including: Children are to complete all work in pencil within their books. Any corrections or alterations after the lesson to be completed in purple pen. Children are expected to understand the importance of presentation. All lines to be drawn with a ruler. One digit per square is expected in their work.
- All children's work is to be dated with a clear learning question in their books. Success criteria to be added for year 5 and 6 to support their understanding.
- Children are given a wide range of tasks within their maths learning. Teachers are not overly reliant on one resource to support learning.

- Children have access to resources within the classroom throughout the whole school.
- Children will have access to concrete resources in every lesson
- Children are given opportunities to explore different strategies of finding an answer to a problem.
- All children are given regular opportunities to develop their fluency skills within lessons.
- It is the expectation that children will be provided with continued opportunities to understand how maths learning relates to careers and real-life experiences which are age-appropriate to their level of understanding of the world.
- Children will be given a range of strategies to support their learning including: working in small groups or with a partner, mixed ability pairs, use of the working wall, using maths resources or a supportive adult.
- Lessons are planned to involve a range of fluency, reasoning and problem-solving skills.
- Differentiation takes place in every lesson to support those who are less confident but also to challenge the most able children.
- Learners are given the opportunity to share their thinking with others through peer marking, group tasks, partner work, presentations,
- Times tables are taught and practiced regularly through explicit teaching and the use of TT Rockstars or the 5 minute challenge.

Assessment:

- All children in years 1-5 to take part in the PUMA (Progress in Understanding Maths Assessment) tests in Spring 2023 and Summer 2023.
- Year 6 children will be assessed on previous SATS papers in Autumn 2022 and Spring 2023.
- Year 2 and 6 children will take SATS tests in May 2023.
- All children will be tracked alongside the national curriculum objectives for their year group. Regular assessments to be made to track the progress of children throughout the year. This will be done through the use of the maths assessment tracker and updated throughout the year.
- Boss the blue: Within our assessment, we have highlighted key parts of the curriculum that all of our children should achieve. These statements are in blue on our assessment tracker and form part of our boss the blue. Children will be able to show progress within a national curriculum statement even if they are not able to achieve the whole element.
- This tracker will then be used to support teacher assessments alongside the PUMA assessments for years 1-5.
- The tracker will also be used to support pupil progress meetings and identifying areas of intervention that need to take place. Alongside this, they will be used to help transition from year groups to different teachers.
- Formative assessment to take place in every lesson to support fluid groupings and planning for the following lesson.
- Pre assessments are used to support the teachers understanding of where children's knowledge is at before the start of a new topic.

- Post assessments are done through the use of quizzes, super 6 questions, morning tasks, arithmetic tests and short tests.
- Assessment will not be used to place an extra burden on staff. Assessment is part of everyday teaching and used to support the children's ongoing development.
- Children are encouraged to self-assess their own learning encouraging them to take responsibility for their own work. This can be through comments, traffic lights, smiley faces or verbal feedback on their own learning.
- Assessment and marking will be done in green and pink. Green is used to identify good practice and understanding. Pink will be used for misconceptions and designed to support the children in their learning.
- Assessment in books is not focused on scores or number of correct answers. Assessment is focused on the children's progression and understanding through a topic.

Impact: monitoring and review

- The maths leader will be responsible for the moderation of maths within the school. This will be done through: book looks, lesson visits, pupil progress meetings, assessment reviews and discussion with members of staff.
- Maths lead will attend Hub maths training to support the development and understanding of maths within primary schools.
- Monitoring will also take place through planning scrutinies, coverage check points and assessment check points.
- Monitoring of teacher assessments will take place after PUMA data has been submitted.
- The school will take part in a peer moderation alongside other schools within the LAAT hub.
- The impact of the new curriculum will be monitored and evaluated by all staff.
- Pupil voice will also be used to hear the pupils' views on maths throughout the school.