



Belswains Primary School Mathematics Guidelines

Intent

Mathematics is a fundamental part of our broad and balanced curriculum. We strive to ensure that all children develop a lasting enjoyment of and enthusiasm for mathematics, equipping them with essential skills for future life.

In line with the National Curriculum (2013), we aim for all pupils to:

- Become **fluent** in the fundamentals of mathematics through varied and frequent practice, developing secure conceptual understanding and the ability to recall and apply knowledge accurately.
- **Reason mathematically** by following lines of enquiry, making conjectures, and developing arguments and justifications using precise mathematical language.
- **Solve problems** by applying their mathematics to a range of routine and non-routine contexts, breaking problems into manageable steps and persevering in seeking solutions.

Our overarching aim is to foster a culture of deep understanding, confidence and competence in mathematics, leading to secure and sustained learning.

The Importance of Mathematics in the Curriculum

At Belswains Primary School, we recognise that mathematics is central to children's development. A strong mathematical foundation equips children with essential life skills, enhances logical reasoning, and supports analytical thinking necessary for both academic success and future careers.

Implementation

Mathematics is taught daily across Key Stages 1 and 2. Teachers use the White Rose scheme to support planning, ensuring that learning is broken down into small, manageable steps. Lessons are carefully adapted to meet the needs of the whole class, as well as targeted groups and individuals.

In **EYFS**, the focus is on number and shape, space and measure.

- In Nursery, 24 blocks of learning are used flexibly to support developmentally appropriate progression.
- In Reception, key concepts are taught and revisited regularly to embed understanding.
- Structured, teacher-led maths sessions take place 3–4 times per week, with continuous access to mathematical activities within provision, both adult-led and child-initiated.

In **Key Stage 1**, children develop understanding across four areas: Number, Measurement, Geometry and Statistics.

- Number includes place value, addition and subtraction, multiplication and division, and fractions.
- Learning is supported through concrete and pictorial representations before moving to abstract methods.

- In Year 1, children focus on numbers to 20; in Year 2, this extends to 100, with multiplication introduced in the Spring term.

In **Key Stage 2**, pupils deepen their understanding across all areas of mathematics.

- Number develops to include decimals, percentages, ratio and algebra.
- Pupils continue to use concrete and pictorial representations alongside abstract methods.
- By the end of Year 4, most pupils are expected to know their times tables up to 12×12 .
- Ratio, proportion and algebra are introduced in Year 6.

Across the school, we place strong emphasis on the use of concrete and pictorial resources to support conceptual understanding and ensure progression towards abstract reasoning.

Problem-solving and reasoning form an integral part of most lessons, providing opportunities for all pupils to apply and deepen their understanding.

We prioritise regular rehearsal and retrieval of key skills. “Flashback 4” is used consistently to revisit prior learning and assess retention.

Planning is structured in three phases:

- **Long-term** – outlines coverage across the year
- **Medium-term** – maps progression across units
- **Short-term** – provides detailed daily lesson planning

The school uses National Curriculum objectives to inform planning. The use of the White Rose scheme allows teachers to break learning down into small steps and to ensure continuity and progression throughout the school.

Pupils complete work into their books following the school’s EPOM presentation policy. When used, sheets are trimmed and stuck in neatly, children write one digit per square and challenges are stuck underneath the work and completed in books. Teachers model presentation expectations on squared flip chart paper or into maths books under the visualizer.

The aims of Mathematics

The school aims to:

- Develop an understanding of the importance of mathematics in everyday life
- Build fluency in mathematical fundamentals
- Ensure rapid and accurate recall of key knowledge
- Develop reasoning and communication skills, enabling pupils to explain and justify their thinking
- Promote problem-solving through logic, resilience and analytical thinking
- Foster curiosity and a positive attitude towards mathematics

Entitlement and Curriculum Provision

Maths is a core subject of the National Curriculum. Typically children will undertake a Mathematics lesson everyday in Key Stage 1 and 2. In EYFS, Mathematical activities and resources will be available in the provision and Mathematics will be taught at least three times per week.

Teaching and Learning Styles

We use a range of teaching approaches to develop pupils’ knowledge, skills and understanding.

Children may:

- Work independently, collaboratively, or in small groups
- Record their work in books, on whiteboards or on structured worksheets

- Access learning through concrete, pictorial and abstract representations

We ensure that all pupils are appropriately challenged through:

- Open-ended tasks
- Progressive levels of difficulty
- Differentiated resources
- Targeted adult support

Inclusion

We are committed to ensuring that all pupils can access the full mathematics curriculum.

- Planning takes into account the needs and interests of all learners
- Pupils with SEND are supported through appropriate scaffolding and adaptation
- Teacher assessment informs the level of challenge for individuals and groups

Assessment and Pupil Attainment

Using the planning tool (White Rose) teachers plan and deliver appropriately pitch lessons for their classes. Teachers are constantly using formative assessment to assess whether pupils are working below age-related expectations, at age-related expectations or at greater depth. Teachers scaffold tasks as necessary for their individual children.

Adults give feedback to pupils for every recorded lesson. This may be immediate, verbal feedback in a lesson or by marking books after a lesson. Teachers mark in red pen giving instant feedback during a lesson or when marking after a lesson. A tick is used to indicate a correct answer, a dot is used to indicate an incorrect answer. Teacher may also give additional feedback e.g. write an example calculation, write a calculation with missing numbers/symbols, draw a diagram/picture that might help. Where appropriate, children have chance to make corrections to their work (in green pen) once marked by a teacher. If necessary, a teacher or teaching assistant will go through the work with a child or group of children if they cannot correct it themselves.

At the end of a unit of work teachers can use the White Rose end of block assessments to take a quick 'snapshot' of what a pupil can do independently. This evidence can then be used to inform future planning, interventions that may be required and what skills the children need to rehearse more frequently.

Summative assessment is carried out termly when teachers assess whether their pupils are pre-year group, working towards, meeting age-related expectations or greater depth and record this data on Sonar.

Learning Resources

Each classroom is equipped with appropriate mathematical resources. Additional materials are centrally stored and accessible to staff as required.

Display

Working Walls are an integral part of teaching and learning. They are regularly updated to include key vocabulary, visual representations, modelled methods and useful facts and prompts.

Numbots and TTRS

Belswains uses Numbots and Times Table Rockstars to support the learning of basic maths skill and the recall of times table and division facts. Children in Year 2 upwards are given access to Numbots or TTRS at least once during the school week. Login details are sent home for all children from Reception to Year 6 and they are encouraged to complete some time on the appropriate programme as part of their weekly core homework.

Times Tables

It is essential that pupil's understand the concept of times tables and their related division facts. This begins in Year 2 when children learn about equal and unequal groups and go on to learn their 2, 5 and 10 times tables. From the middle of the Spring term in Year 2 children who are able to practice their times tables in a variety of ways. They have access to Times Table Rock Stars and paper-based times table challenges take place weekly. If necessary, children will receive extra support to understand, learn and practice their times tables. This continues across Key Stage 2. In the Summer term of Year 4 children take the Multiplication Time Table Check (MTC).

Impact

Monitoring Teaching and Learning in Science

It is the job of the subject leader, supported by the leadership team, to monitor teaching and learning in Maths. The subject leader writes an Action Plan each year linked to the school's improvement plan and evidence collected from monitoring.

The subject leader will carry out monitoring tasks such as lesson visits, work scrutiny and pupil voice to gain evidence of the learning taking place within classes.

Staff voice/questionnaires will be used to identify training needs which can then be addressed in an appropriate way.

After staff have recorded their data in the summer term the subject leader will analyse this and use this along with other evidence collected over the year to decide on priorities for the next action plan.