



At Tibshelf Infant and Nursery School our aim is to ensure that all children have the best grounding in mathematics. Through Mathematics we aim to provide a relevant, challenging and enjoyable mathematics curriculum for all children. Children will develop their mathematical vocabulary through hearing, learning and using new words, by speaking and listening, and by reasoning and explaining their understanding. Mathematics will enable all children to form strong connections across mathematical ideas, and understand the value of using and applying their mathematical knowledge in everyday situations.

### Intent

At Tibshelf Infant and Nursery School we want all children to acquire a deep, long term, secure and adaptable understanding of Mathematics. We believe that for this to happen children need lots of opportunities to 'over learn' knowledge, and opportunities to practise and apply skills learned in a range of meaningful contexts. New mathematical concepts are introduced using a sequenced 'concrete, pictorial and abstract' approach, enabling all children to experience hands on learning when discovering new mathematical topics, and allowing them to have clear models and images to aid their understanding. Children in the Foundation Stage and Key Stage 1 have opportunities to practise and apply mathematical skills across the curriculum during continuous provision times.

The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged by being offered rich and sophisticated problems. Those who are not sufficiently fluent with earlier material should have opportunities to consolidate their understanding. Teaching teams identify children needing extra support in Mathematics promptly. In the Foundation Stage teams use curriculum intent maps to support this. Children identified receive additional adult led mathematical support through play in continuous provision times. Across Key Stage One small group support sessions are led by experienced staff who lead effective, brief, regular interventions at least three times a week. Interventions are delivered using teachers planning which ensures explicit connections are made between targeted support, teaching and everyday activities. Progress is measured using formative assessments.

At Tibshelf Infant and Nursery School we believe the most valuable resource in a classroom is the adult. To maximise the utilisation of adults and their effectiveness we plan their deployment lesson by lesson, dependent on the needs of children. To support children to develop their confidence in mathematics, practitioners need to be confident in their own abilities. Practitioners need to have the skills and resources to provide the best possible mathematical opportunities for all children in their care. All staff have opportunities for Continued Professional Development, this might be external (such as attending a training course, working with cluster schools or visiting another school) or internal (such as team teaching, observing a colleague or sharing good practise with colleagues).

## Implementation

Teaching and learning in maths lessons is structured, but is also flexible to meet the learning needs of all children. Within lessons there is a good balance between whole-class work, group teaching and individual practice. Links are made between mathematics and other subject areas so pupils can develop and apply their mathematical skills. This allows children to begin to use and apply mathematics in real contexts. These opportunities are identified in planning. Practical equipment such as concrete objects and measuring tools support children to gain a deeper conceptual understanding before being challenged through tasks and questioning to explain their reasoning and solve a range of problems.

During the Foundation Stage children are given a wide range of exciting opportunities inside and outside to develop early mathematics skills. Through purposeful play and a mix of adult led and child initiated activities children explore their skills in counting, representing numbers and exploring patterns. They are given opportunities to explore the properties of shape, space and measures and encouraged to develop their use of mathematical language when talking about what they can see in relation to these. In Foundation Stage 2, teachers plan Curriculum Intent Maps supported by The Early Years Foundation Stage Profile, Development Matters and Birth to 5 Matter. For their daily Maths lesson, lasting approximately 30 minutes, children work in 3 groups. Disadvantaged children work in a smaller group with the support of an additional adult to ensure they make expected progress.

In Key Stage 1 children have a daily lesson for mathematics (between 30 and 45 minutes) where they are taught the knowledge, skills and understanding set out in the National Curriculum. Teachers follow White Rose Math schemes of learning and use the schemes and additional resources, including NCETM Recovery/Mastery Documents, to help them to plan purposeful, well-directed teaching and well-planned learning opportunities for all children. Disadvantaged children remain a focus and are supported during math's lessons. In addition, through formative and summative assessments identified children receive additional targeted support.

## Impact

At Tibshelf Infant and Nursery School we believe that assessment should be meaningful. Meaningful assessment enables practitioners to find out what children know; informing of content missed and gaps in knowledge. A variety of methods are used to find out what children know and understand.

Mathematics lessons allow for collaborative learning, and encourage children to talk in pairs, small groups and through class discussion to share their understanding. Assessment for Learning is an informal part of every lesson to check pupils' understanding and give information. Informal notes are recorded and shared with staff on the weekly/daily planning sheets to inform future planning and teaching. Children who grasp concepts rapidly are challenged through a range of problems. Planning for individual children or groups of children is based on informed observation and assessment for learning. Individuals or groups of children are identified on the teacher's planning. A pupil whose difficulties are severe or complex may need to be supported with an individualised programme and with Teaching Assistant support. Children's understanding of taught concepts are assessed during lessons and using end of block assessment tasks that provide opportunities for children to demonstrate their understanding fully. Evidence of children's learning journey

through Mathematics topics are recorded on working walls and displays, and in maths books. Children in the Foundation Stage are assessed using Tapestry against the Early Years Learning Goal. Children in Year 1 and 2 are assessed against the End of Year 1 and 2 frameworks.

Mathematics monitoring includes, learning walks, books looks, pupil voice and lesson visits which ascertains correct curriculum coverage, children's attitudes towards mathematics, retention of learning and quality of teaching and learning. Information gleaned is shared with staff as well as being used to inform curriculum developments, actions plan and provision tweaks. Moderation of Maths happens on a regular basis within school, as part of the cluster, and as part of moderation at the end of FS2 and Year 2. These opportunities are planned for over the year so they are meaningful for staff.

**'Tibshelf Infant & Nursery School is committed to all aspects of safeguarding and promoting the welfare of children and young people, and expects all staff and volunteers to share this commitment.'**

APPROVED: NOVEMBER 2021

DUE TO BE REVIEWED: NOVEMBER 2023