



The Meadow Community Primary School and Pre-School

Maths Policy

This policy is intended for all teaching and non-teaching staff; local governors; parents and other interested parties.

Aims	<p>To ensure that each child leaves our school numerate and able to apply Mathematics skills with confidence and enthusiasm in the outside world.</p> <p><u>Intent</u></p> <p>Mathematical skills and knowledge should be delivered, explored and revisited through an awareness of learning and application of skills. Children should develop resilience and self-confidence in applying their skills. The collaboration between peers, and the relationship between learners and their class teacher should drive the learning and inform the content, strategies and real-world contextualisation to maximise on the progress and learning opportunities.</p> <p><u>Implementation</u></p> <p>A deepening understanding and securing knowledge approach has been adapted and implemented in planning, delivery and engagement with mathematics. Review and feedback following the implementation of lessons are repeated over the academic year, which are related to placing a greater emphasis on promoting problem-solving and reasoning skills in mathematics.</p> <p>We have used a variety of approaches including suggestions from reliable sources such as a silver star challenge, NCETM and nrich challenges.</p> <p>When planning for problem solving and reasoning skills, teachers are expected to take the following strategies into account:</p> <ul style="list-style-type: none">• Small steps• Implementing the Concrete, Pictorial and Abstract (CPA) approach to introducing, exploring and applying mathematical concepts• Applying/using the Bar Model approach as a strategy to approach calculation/problems• Considering key questions and mathematical vocabulary at the point of unit planning• Multiple opportunities for verbal and written/drawn reasoning (explaining and using mathematical vocabulary to explain methods or reasoning) within exploration• Inclusion of relevant problem-solving opportunities, where children are expected to draw on and apply multiple concepts to address or approach a challenge• Modelling of all skills and approaches• Modelling and sharing of efficient and accurate application of methods• Opportunities to explore maths concepts/objectives at 'greater depth'• Include all learners, providing relevant support for those with additional needs (educational, medical or otherwise) <p><u>Impact</u></p> <p>The exploration of mathematics should be interactive and engaging, with content made relevant to children's real-world experiences and contextualised thus to support consolidation and retention of knowledge and skill.</p>
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	<p>Children should approach mathematical learning with confidence and enthusiasm, and view tasks and challenges that call for application of varied knowledge across lessons and the selection of multiple skills with self-assuredly and a willingness to collaborate.</p> <p>Approach and response to reasoning activities should improve term on term, with the expectation that by the end of the year, children are happy to accurately define and use mathematical vocabulary introduced by their teacher.</p>
Objectives	<p>All teachers implement the National Curriculum to:</p> <ul style="list-style-type: none"> • Develop fluency, reasoning and understanding of word problems • Show that maths is an essential part of everyday life to help children see the relevance of what they are learning • Encourage children to develop their own mental strategies for rapid recall of number bonds and times tables facts • Look for patterns and create rules that will help with their understanding
Curriculum content	<p>In the Foundation Stage, teachers follow the Early Learning Goals (ELG).</p> <p>The National Curriculum sets out statutory requirements for each year group. These are broken down into the following areas of maths:</p> <ul style="list-style-type: none"> • Number and place value • Addition and subtraction • Multiplication and division • Fractions • Measurement (including time) • Geometry (properties of shape / position and direction) • Statistics <p>The school has an agreed calculations policy that shows progression in the key skills.</p>
<p>Planning and Teaching Including: - inclusion for SEND</p> <p>Opportunities for Gifted, Talented and More Able children</p>	<p>Maths is taught every day with full maths lessons taking place at least four times a week. In all of our teaching we aim for the children to develop their fluency in maths, their reasoning and their problem solving skills.</p> <p>Teachers plan using the National Curriculum. In years 2 and 6 teachers also use the Teacher Assessment Frameworks (TAFs). Planning will differ year on year depending on the children and their needs. Ongoing assessments may show the need to revisit particular concepts and therefore the planning has to be flexible.</p> <p>A range of teaching styles will be used including communication so that children are able to explain their results/thinking verbally using mathematical vocabulary. Where possible, activities will be practical so that children have a 'hands on' approach to maths. This also enables children to discuss their findings with their peers. It is important that children start with the concrete before moving on to pictorial and abstract representations. Children will be taught the statutory requirements for their year group however there may be the need for some children to be consolidating key concepts from previous year groups. To develop children's understanding further, teachers will look at ways in which children can show 'mastery' of mathematics. Children will sometimes work in ability groups but will also have the opportunity to choose their own level of challenge. Through promoting the 'growth mindset' children are encouraged to challenge themselves, learn from one another and through their mistakes.</p>

	<p>We look for opportunities to use maths in other areas of the curriculum. Children are encouraged to use their maths skills when collecting data in science or geography, working out periods of time in history etc.</p>
<p><u>Assessment, Recording and Reporting</u></p>	<p>In the Foundation Stage the Early Learning Profiles are used. Throughout the rest of the school we use the Symphony Learning Framework (SLF) and Symphony On Track (SOT).</p> <p>Assessment is regarded as an integral part of teaching and learning and is a continuous process. Assessment will inform planning, allow the correct level of work to be matched to the needs of the pupils, therefore ensuring progress. Teacher assessments can be gathered in various ways: by talking to the children, listening to their reasoning, observing their involvement in group and independent work, marking and specific assessment tasks. Marking should be positive and constructive, giving next steps where possible. These next steps should be something the child can easily achieve and should help them to make progress.</p> <p>In years 2 and 6 children sit their SATs. Arithmetic tests occur regularly as do times tables tests. In years 2 - 5 PUMA tests are used to assess whether the children are on track to meet the end of year expectations. Year 1 do a PUMA test in the summer term only, the other year groups mentioned do them once a term.</p> <p>Monitoring is carried out by the maths co-ordinator as well as the senior leadership team. Moderation of children's work is carried out regularly with work being shared across the Symphony Learning Trust.</p>
<p><u>Professional Development</u></p>	<p>Mathematics updates are shared at a termly meeting run by maths consultants. Information is shared with all staff during staff meetings or key stage meetings. All maths co-ordinators in the Symphony Learning Trust meet each term to share good practice, resources, moderate work etc. Staff meeting time is designated for assessment and data input / sharing. Inset for LSAs takes place each year or when appropriate. Staff have opportunities to attend training and observe each other whenever possible.</p>
<p><u>Monitoring and Evaluation</u></p>	<p>Teaching and Standards are monitored through:</p> <ul style="list-style-type: none"> • annual lesson observations by the leadership team • work sampling - moderation with whole staff to ensure levelling is accurate. This also takes place with schools in the trust. • review of planning by the co-ordinator each year • pupil interviews • termly data
<p><u>Additional arrangements for children in receipt of 'Pupil Premium'</u></p>	<p>Children have small group support if there is a need in this area.</p>
<p><u>Health and Safety (including e-safety and safeguarding, if applicable)</u></p>	<p>Risk assessments are carried out when using measuring equipment outside etc. I-pads are used and apps are checked. Children are reminded about how to use the i-pads and what to do if they have any concerns.</p>

<u>Resources and displays</u>	Resources are checked annually and ordered as the need arises. We try to make maths as practical as possible and therefore need to ensure that we have the equipment appropriate for all year groups. There are two class sets of ipads with maths apps that are used in the appropriate sessions. There is a maths display/working wall in each classroom. This will be a mixture of information and children's work. Key mathematical facts such as times table facts are also displayed around the school.
<u>Partnership with parents/carers</u>	Homework is set weekly this can be by task, using prodigy and TT Rockstars. It is expected that the homework will cover concepts that the children have covered in class or are about to. Maths evenings for parents are offered. Year 2 and year 6 parents also have access to the T.A.F.s.
<u>Partnership with other agencies</u>	We have close links with the other schools in our trust.

Version 1