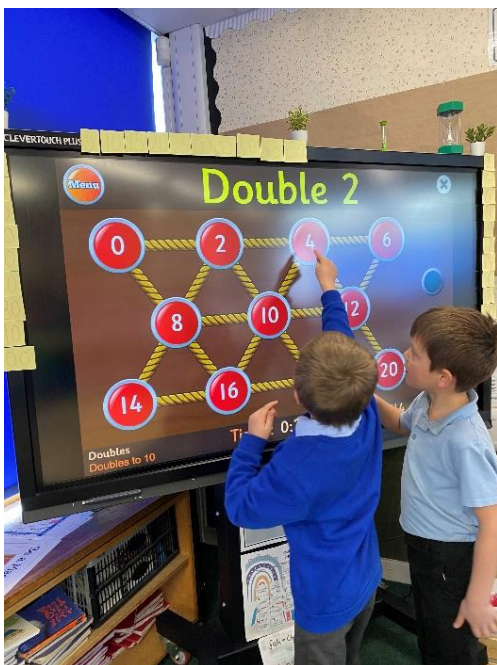


## Curriculum Statement for Maths

**Our principle aims, following the National Curriculum in England for Mathematics are:**

- For all children to be fluent in the fundamentals of mathematics
- For all children to reason and solve a range of problems
- For all children to be confident Mathematicians, who seek to challenge themselves without fear of failure

**The core of our Mathematics curriculum is the National Curriculum for England, which is primarily supplemented by White Rose.**



**The curriculum has been specifically sequenced in a logical progression** to ensure that new knowledge and skills build on what has been taught before: Early Years to Year 6. This, and regular opportunities to consolidate and practise prior learning, enables our pupils to know more and remember more. End points are clearly identified for each year group; time allocation has been carefully considered to provide children with opportunities to master key concepts.

**All children have access to a high-quality, ambitious Mathematics curriculum** that is both challenging and enjoyable and raises pupil's aspirations. We widen their horizons through a context rich curriculum, that gives purpose to their learning, through high expectations for every child to succeed.

Our 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 are always based on the security of pupils' understanding and their readiness to progress to the next stage. Throughout school, we develop resilience that enables all children to reason and problem solve with increased confidence. A high focus on reading fluency throughout school enables our children to read, comprehend and solve mathematical problems with a clear understanding of vocabulary.

Recent Ofsted research reminds us of the importance and impact of an early and thorough emphasis on core content. At Dothill, we fully understand this; our KS1

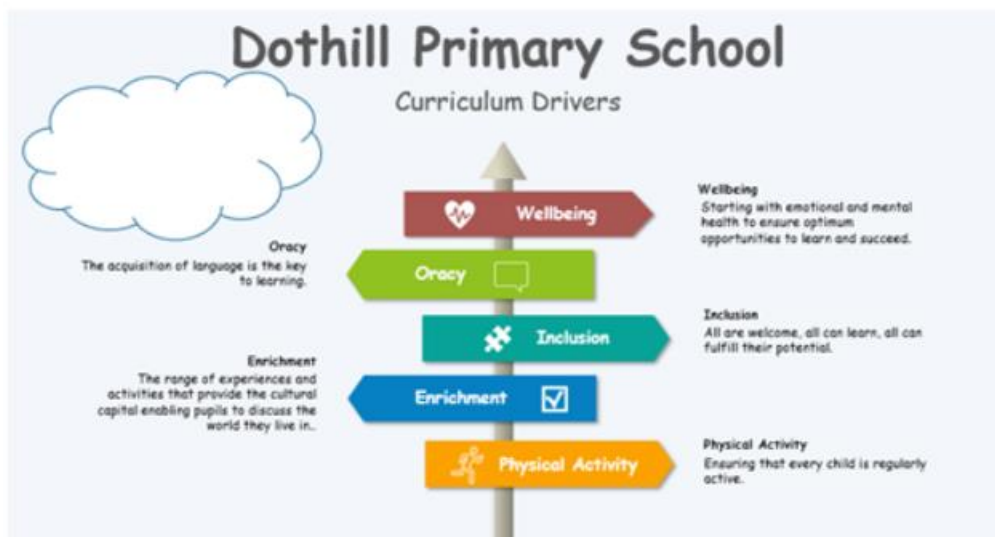
and EYFS children take part in NCETM's Mastering Number Programme, which is a daily programme designed to build children's proficiency in number. This early start in securing foundational knowledge and proficiency in number will give our children the ability to progress through the curriculum at increasing rates as they progress through school.

Because we recognise that multiplication tables knowledge is a fundamental part of maths, we ensure that children are securing this understanding by practising the multiplication and division skills through regular use of Times Tables Rockstars at home.

**Every year group has a yearly curriculum map** that outlines the key areas of Mathematics which will be taught throughout the year. This ensures that an adequate amount of time and coverage is allocated to each key area.

**Detailed medium-term planning** supports teachers to plan a sequence of progressive weekly lessons and over time, giving the children time to master new concepts. Within this document, key objectives and vocabulary are outlined with fluency, problem solving and reasoning suggestions for each area. Progression documents and the calculation policy are used to support the medium-term plan, to ensure that staff are delivering a consistent and challenging curriculum.

**At Dothill we have five curriculum drivers** that are central to our school vision and ethos. They help to drive and shape the curriculum and are incorporated across all subjects and themes.



**Enrichment** - A range of visits or visitors into school are planned across the curriculum. These are organised by teachers, in order to offer a range of experiences that help to broaden the understanding of curriculum content, enrich

the curriculum delivery with real-life experiences and most importantly help the children embed and retrieve their learning. In mathematics, enrichment includes after-school clubs, engaging resources to use at home and visits from external companies. An example of this would be a recent visit by staff from HSBC Bank, who worked with all year groups to develop an understanding of money and budgeting.

**Wellbeing** - We place emphasis on a curriculum that develops the whole child. Through our core values - happiness, respect, responsibility, creativity, honesty, enthusiasm, confidence, kindness, cooperation and fairness - we ensure that the wellbeing of all members of the community is at the centre of our life in school and the key to raising academic success. Our children gain a sound knowledge of their own value and purpose, with the ability to make choices and decisions. In mathematics this is developed by encouraging children to 'have a go', without fear of failure. Through a growing self-confidence in their ability and gaining enjoyment in being successful in mathematics, their mental wellbeing is positively impacted.

**Oracy** - Our curriculum aims to develop learners who can think critically, reason together and have the vocabulary to express their knowledge and understanding. In mathematics, oracy is developed through the provision of opportunities to reason and discuss their learning. Children are encouraged to talk to their peers, explaining the reasoning behind their chosen strategies and their answers.



**Physical activity** - Sport England Survey shows that active children are happier, more resilient and more trusting of others and it's also shown a positive association between being active and higher levels of mental wellbeing, individual development and community development. At Dothill we build physical activity into mathematics by actively encouraging children to seek out their own choice of resources from within the classroom, the use of Calm Brain or active breaks when needed and giving the children the opportunity of working with talk-partners across the classroom.

**Inclusion** - All pupils participate in mathematics. Each learner is an individual and we use a child centred approach to adapting our teaching to meet their need.

We make the following adaptations to the curriculum to ensure all pupils needs are met:

- Differentiating our curriculum to ensure all pupils are able to access it, for example, by grouping, 1:1 work, teaching style, content of the lesson etc.
- Adapting our resources and staffing.
- Using recommended aids, such as laptops, coloured overlays, visual timetables, larger font etc
- Differentiating our teaching, for example, giving longer processing times, pre-teaching of key vocabulary, reading instructions aloud, visual cues to accompany verbal instructions.

We use the NASEN 'Teacher Handbook: SEND' (2021) to further inform our inclusive practice by considering specific adaptations for each curriculum area.



Maths lessons are structured consistently throughout school with the use of instructional, qualifying and depth activities, which allow children to access fluency, problem-solving and reasoning tasks with increasing complexity. During lessons, practical apparatus (such as Numicon) and visual representations are utilised in order to secure children's understanding before moving to abstract concepts and children are encouraged to seek out these resources for themselves as an aid to learning. Our lessons, where possible, are contextualised to further engage the children with their learning and they are given opportunities to develop their oracy and reasoning skills by having regular

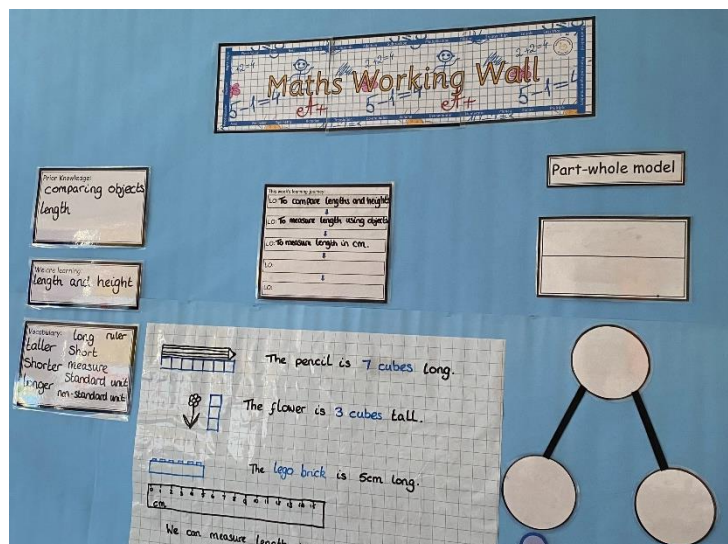
opportunities to talk about maths. In Fluency Friday lessons, children are also given opportunities to practise, helping them to attain automaticity and increase their levels of procedural fluency. Most lessons begin with a recap of previously learned concepts, helping to embed these into their long-term memory.

Within the lesson, teachers check pupils understanding effectively and address any misconceptions swiftly. The curriculum is designed and delivered in a way that allows pupils to know more and remember more. Key concepts are embedded in their long-term memory so they can apply them fluently.

**The EYFS curriculum** includes rich opportunities for children to develop their understanding of number and the fundamental knowledge of maths. We have undertaken NCETM's Mastering Number programme to ensure that we give them the best possible start to their journey in mathematics. Throughout the whole of the Foundation Stage, the pupils will have opportunities to build and apply their mathematical understanding both inside and outside.

**In Key Stage 1 and 2** fundamental skills are developed through the use of practical resources, moving on to pictorial representations and then onto more abstract concepts.

**Assessment** is woven throughout the curriculum and is used by staff to check pupil's understanding of key concepts. At the beginning of each lesson the class teacher will share a learning objective and success criteria with the children. This informs them what they are learning and the steps they need to take to be successful. The teacher will assess the pupils against the success criteria.



The assessment will be based on the pupil's application of taught knowledge through class discussion, answering questions, practical activities and if appropriate written work. This supports in identifying gaps in knowledge and understanding enabling teachers to respond appropriately. We also recognise the value of assessment as an important learning tool which provides opportunities for pupils to strengthen their memories through concerted effort.

Assessment tasks are used daily (recall starters, rapid recall of knowledge, Flashback 4) in strengthening memory by providing children with the opportunities to 'struggle' and make a sustained effort in trying to retrieve information, the process of which strengthens their memory. It is through this effort within tasks that strengthens memory recall and creates the strongest

connections in their learning. More formal assessments are carried out at the end of each term, which are used to support teacher judgements and inform future planning.

**The impact of our mathematics curriculum is that:**

- Our pupils love mathematics and can explain the importance of the subject in their everyday lives. They can also explain how the subject will help them in their future careers.
- Our pupils have a sound understanding of the knowledge and skills they have been taught which prepares them for their next stage of education.
- Our teachers have high expectations for every pupil which is evident throughout the high standards of work which pupils clearly take pride with.
- Our teachers have good subject knowledge and are aware of the resources available to help them plan well-structured lessons.
- Our subject leaders have a clear understanding of the schools' strengths and areas for improvement. There is a constant drive to ensure that we can be the best we can be.