Caslon Primary Community School, Beecher Bear Daycare and Nursery, Beech Tree SEMH Base and Tree Acre (Early Years Inclusion Hub)

Maths Policy

September 2025 – 26

Purpose of Policy

Mathematics is a creative and highly inter-connected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. A high-quality mathematics education therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

Intent

The National Curriculum for mathematics aims to ensure that all pupils:

- Become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils have conceptual understanding and are able to recall and apply their knowledge rapidly and accurately to problems
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- Can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of smaller steps and persevering in seeking solutions
- Within Beech Tree SEMH Base, pupils will be taught a broad curriculum which will cover age and stage appropriate skills. Staff discretion will be used to determine the approaches used to teach these skills and always aim to build on prior learning. Although it will be the intention to cover as much of the National Curriculum content as possible, meeting the pupils' SEMH needs will take priority.

Implementation

The Maths curriculum is devised in EYFS to develop early mathematics skills which are embedded during continuous provision and Maths based table activities. Our Mathematics curriculum provides a strong basis for more complex learning later on. High quality learning environments and meaningful interactions with adults, support children in developing mathematical thinking and discussion. Children learn through games and tasks using concrete manipulatives and pictorial structures and representations which are then rehearsed applied and recorded within their own child-led exploration. Children in Reception have daily direct Maths teaching focus to develop fluency, revisit key concepts and address misconceptions. In Nursery, children develop a love of maths through games, songs, rhymes, and play using concrete manipulatives. There is a focus on the following counting principles; one to one correspondence, stable order and cardinal principle.

Children's fine manipulative skills are a focus to develop 1-1 correspondence so children count each object only once.

- Our Children will be taught in line with the National Curriculum objectives for their year group
- They will access a range of resources which will come from different publications and sources appropriate for their age group
- Lesson starters will allow children to revisit, consolidate and extend learning in a range of mathematical topics
- Well targeted questioning will assess understanding and challenge mathematical thinking.
- Formative and summative assessment will enable the next steps of learning to be planned for
- Links with other curriculum areas will be made as appropriate- including date handling in science and representing data using computer programmes.
- Class display, working walls and targeted resources will support and enrich learning
- Quality First teaching will enable all pupils to make progress

The maths curriculum in Year 1 – 6 is aimed to support the children's understanding of mathematical concepts, operations and relationships. The children develop efficient recall of the basic number facts such as number bonds, times tables, doubling and halving through maths lessons. In order to develop the children's procedural fluency, we teach a range of procedures and spend a lot of time discussing and exploring the most efficient procedure to use so that when children come across a question in a different context, they can apply their knowledge and skills in the most efficient way possible

Our Maths curriculum is planned and sequenced so that new knowledge and skills build on what has been taught before. We dedicate more time to teaching each areas of mathematics so that we can ensure that the relevant knowledge, skills and understanding are embedded and re-visit key concepts and procedural knowledge at the start of each Maths lesson so that retention of knowledge is a key focus. Children's chances of success are maximised if they develop deep and lasting understanding of mathematical procedures and concepts we therefore ensure that learning is deep and sustainable.

Our Maths curriculum incorporates objects, pictures, words, numbers and symbols to help children to explore and demonstrate mathematical ideas (This can be seen in our Calculation Policy) All pupils, when introduced to a new concept, should have the opportunity to build competency in this topic by using the CPA approach. Pupils are encouraged to physically represent mathematical concepts. Objects and pictures are used to demonstrate and visualise abstract ideas, alongside numbers and symbols. We firmly believe that the CPA approach can be used alongside all areas of the learning journey and apparatus can be used to challenge for all learners.

Each class in both Reception, Key Stage 1 and Key Stage 2 will be providing children with a daily lesson for mathematics. The structure of the lessons will have flashbacks, fluency, problem solving and reasoning at the heart of every lesson and use a variety of teaching and learning styles, resources and contexts to develop children's knowledge, skills and understanding in mathematics. We will do this through a daily lesson that has a high proportion of whole-class and group-direct teaching. During these lessons, we will encourage children to ask as well as answer mathematical questions to challenge their thinking and allow them to reason mathematically. They will have the opportunity to use a wide range of resources and apparatus appropriate to the learning to make the learning opportunities concrete and expose the mathematical structures being taught.

Concrete: children have the opportunity to use concrete resources to help them to understand and explain what they are doing. Children might begin by handling real objects, such as apples, and then move on to using physical representations of those objects, for example counters.

Pictorial: children then build on this concrete approach by using pictorial representations, which can then be used to reason and solve problems. Drawings act as a bridge between the concrete objects that the children have been using and the abstract symbols that they must learn to use.

Abstract: With the foundations firmly laid, children can move to an abstract approach using numbers and key concepts with confidence

Planning and Calculations

We use bespoke curriculum overviews that provide coverage outlines for each year group from Reception to Year 6. These are designed using the ready to progress resources from the NCETM. At Caslon Primary Community School we have created a Calculations policy for Years Reception to Year 6 to work through the CPA approach and provide our children with a solid understanding of number and calculation. It will provide children with the ability to recall key facts and strategies, use efficient and effective methods and to problem solve systematically.

We complete a plan for each unit of the overview and use our calculation policy in order to help us plan appropriately using a CPA approach to cover all areas of the National curriculum.

Times Tables

The National Curriculum expectation for Primary Schools across the UK is that, by the end of Year 4, pupils can recall all 12 times tables up to 12x2. With this in mind, we ensure that by the end of year 2, children are able to recall multiplication facts for the 2, 3, 5 and 10 times table accurately and promptly. By the end of year 3, we expect children to build on their multiplication knowledge from year two and recall multiplication facts for the four and eight times tables as well as the 2, 3, 5 and 10 times table.

The children have access to Timestables RockStars. This is used to support children's accuracy and prompt recall of multiplication facts. All of the children in year two, three, four, five and six have access to TT Rockstars.

Towards the end of the academic year, children in year four will complete the Multiplication Tables Check. The online check will test the children on their multiplication tables up to 12 x 12.

Technology in Maths

In order to compliment our quality first Maths teaching at Caslon Primary Community School we use a range of online resources to help our learners. NumBots focuses on building solid foundations in early maths by developing key mental strategies and number fluency. With engaging robot characters and clear levels to work through, children stay motivated as they progress from counting to calculating. CENTURY uses the latest in AI technology to analyse each student's learning behaviour, identify their strengths and gaps in knowledge, then provide the right resources to remedy misconceptions and enable teacher-led interventions. LBQ provides the children with individual questions set by the teacher that assess and use AI technology to address any gaps in knowledge.