

Early Years, Year 1

Mathematics



What does Mathematics look like in Early Years at Castle School?

Intention

All learning is differentiated to need.

Mathematical learning opportunities are incorporated in our daily routine. A cross curricular approach is adopted involving learning through structured mathematical sessions with specific focus, through stories, songs and rhymes and games to support children with understanding number systems. Children learn mathematical language through daily routine, experiences and play in a way which is hands on and meaningful to them.

We provide learning opportunities where children can explore, sort, compare, count, calculate and describe. We support them to be creative, critical thinkers, problem solvers and to have a go. Number involves children learning to recognise numbers, count and understand the value of numbers. These skills support them to solve problems, use money and calculate as they develop and progress through school.

Our curriculum provides opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. This involves children mouthing, handling and exploring objects. As understanding of mathematical concepts develop pupils begin to use their body movements and senses to learn further concepts. These skills support children to understand a range or mathematics skills which they can then apply to everyday life as they progress through school.

Children will develop positive attitudes and interests in maths, matching and looking for patterns and relationships. Developing understanding of numbers and have opportunities and sensory experiences relating to shape space and measures during indoor and outdoor play.

Numicon is used to teach number and numerical pattern across the school.

Children are grouped according to assessed ability to ensure optimisation of learning.

Children's ability is baselined early in the autumn term. This establishes the planned pathway of learning using Cherry Garden resources. Within our setting we may have pupils who have splinter skills in maths and if so, it is important to extend aspirational mathematical learning within the context of working on all areas of math to ensure a breadth of understanding and ability to apply learning in purposeful activity.

Implementation – Click on learning map to see implementation

Impact

Children within EYs and Year 1 have a wide range of ability in mathematics. 100% of the cohort are not learning commensurate to peers in mainstream schools but a small proportion will have developed early mathematical understanding including number and shape. Our role is to assess levels of understand and plan programmes of intervention to optimise pupils learning ability in understanding and applying mathematic knowledge in purposeful activities. We assess and plan learning sequentially using Cherry Garden and this ensures we are working at a level commensurate to a child's ability. Evidence supports achievement and the planning of next steps. We record and share achievements with parents/carers who support targets setting.

The Cherry Garden system of assessment provides Castle with a child centred, flexible approach to assessing children with learning differences, which is proven to enhance parental engagement. We ensure all children make measurable progress which we build upon across the school year. Those children at risk of not achieving targets access highly structured interventions to boost learning potential.

Our approach:

• Provides teachers/support staff with key milestones in typically developing young children, we use this information to establish developmental stages of the children we work with in order to plan highly structured steps to learning. As such, we establish a child's developmental stage in order to plan a progressive and sequential approach to learning from their starting points. We measure progress and provide updates on achievement in line with the whole school's approach. Every child makes progress and for those with 'splinter skills' in areas of learning, usually linked to autistic strengths and motivations, we measure progress using the EYFS framework as well as Cherry Garden.

• Demonstrates not only linear but also lateral progress – this is highly supportive of children with complex needs. 100% of learners within EYS,Y1 have complex needs associated with their diagnosis of SEND. As a result, it is important to provide a broad and balanced curriculum offer commensurate to ability. If a child makes linear progress by generalising taught skills in functional situations this is an achievement we celebrate. This is linked to the whole school curriculum approach 'spiralised learning model'.

• Enables parents to explore and understand their child's learning through the unique Cherry Orchard approach. We value parental partnerships which are invaluable in achieving success for our learners. The impact of our work is shared with parents who are involved in joint target setting activities in school.