



What does Mathematics look like at Humberston Cloverfields?

Intent

At Humberston Cloverfields Academy, we want all children to experience the enjoyment of mathematics and develop a sense of curiosity about the subject with a clear understanding. We foster positive attitudes and promote the fact that 'We can all be successful mathematicians!' We believe all children can achieve in mathematics and teach for secure understanding of mathematical concepts through a mastery approach. We use misconceptions as an essential part of learning and provide challenge through rich problems.

Implementation

At Humberston Cloverfields, the majority of children are taught in mixed-ability classes and progress through the curriculum content at the same pace. Depending on the needs of the cohort, sometimes a decision has been made to group children for Maths. Differentiation is achieved by emphasising deep knowledge and through individual support, the use of resources and intervention. Teaching is underpinned by methodical curriculum design and supported by carefully crafted lessons to foster conceptual and procedural knowledge. Practice and consolidation play a central role. Teachers use questioning in class to assess children regularly to identify those requiring intervention. The Maths Lead, who is a Primary Mastery Specialist, supports staff with this.

To ensure whole school consistency and progression, White Rose Maths long and medium term plans are used. Mathematical topics are taught in blocks, to enable the achievement of 'mastery' over time and Flash Back 4 activities are used at the beginning of each lesson to support children in retrieving and remembering key knowledge and concepts previously taught. NCETM materials support staff with assessment and subject knowledge. The concept of teaching children to tell the time has been removed from the Mathematics curriculum and children are taught to do this continuously, by stopping at regular intervals throughout the day to practise this skill.

New concepts are introduced using small steps, where children are able to discuss and reason with their partners. Often, these concepts are introduced with objects (concrete manipulatives) or images. Independent learning provides the means for all children to develop their fluency further, before progressing to more complex problems. Each lesson provides the means to achieve greater depth, with children, who grasp concepts quickly, being offered sophisticated problems, as well as exploratory, investigative tasks.

To support children in developing their fluency, a regular lesson of 15 minutes exists outside of the maths lesson. In addition, 'Times Table Rockstars', is an online learning platform, which is used both at school and at home, to support children in practising their multiplication and division facts.

Impact

Our maths curriculum ensures children make good progress from their starting points. Our mastery approach enables all learners to confidently engage in maths lessons, understanding significance of the subject in the wider world. Children fluently recall number facts, making connections between different areas of maths; they reason, explaining their thinking and demonstrate enthusiasm and resilience when problem solving.

Pupil's skills and knowledge are assessed continually by the class teacher. This informs the Maths leader of any further areas for curriculum development, pupil support and/or training requirements for staff.