

DEEP DIVE:

Curriculum area: Maths



'Excellence Every day'



INTRODUCTION

Our curriculum is at the heart of our educational provision, offering a broad and exciting daily offer to ignite a love of learning in all of our pupils.

Our vision is focused on ambition, aspiration and progression and this is delivered through our curriculum model.

All of our pupils have the opportunity to experience hands-on learning and experiences which enrich their classroom activities. This may be through trips, external visitors to the schools or virtual experiences as well as workshops. Our aim is to close the gap in disadvantage and offer all pupils an inspiring provision which gives equal access to all.

Learning in **Illuminate Minds Trust schools** is more than the acquisition of skills and knowledge. It is also the chance to widen opportunities and expose pupils to a world beyond their lived experiences. We see our role as preparing children and young people for life and society, helping to build sustainable communities where people care about each other and the world around them.

Every subject area has a curriculum which is constructed carefully around sequential learning, revising prior learning and recognising the links between this and future steps. Embedded within each area are enrichment experiences, references to career choices and links to cultures and backgrounds which reflect our pupil population.

Choice is central to our learning offer. Our schools want to equip pupils with the confidence to make their own choices and exposure to experiences which inform those choices. You cannot consider a path in life of which you are unaware.

In order to grow and develop, it is vital that our pupils have the confidence and motivation to accept challenges and recognise that learning is not always easy. We want our pupils to face challenges without fear and know that they can make mistakes, because life will throw things at them and they have the ability to solve problems and overcome them. Success breeds success. Having confidence through actually seeing you can achieve and you can find a way through difficulties is key in continually building the self-awareness and resilience which will enable our pupils to manage themselves through life. Recognising the value of education and knowing that life is about continual learning means that loving learning from the outset is vital. Our curriculum in every subject is shaped to take children on that journey....

CURRICULUM AREA: MATHS

Intent

At Illuminate Minds we aim to ensure that all children develop a deep understanding of mathematics. We understand the importance of children knowing more than isolated facts, methods, and the ability to recall facts and times tables. We ensure that children have a full understanding of mathematical concepts, methods, and relationships between the different areas of maths, such as addition, subtraction, division and multiplication. We believe that mastering maths means children are acquiring a deep, long-term, secure and adaptable understanding of the subject.

Implementation

Learning rules and facts are the tools by which children learn to use maths fluently. In order to develop children's conceptual understanding in maths, we ensure that all teachers plan lessons using the concrete, pictorial, abstract approach. Teachers use a range of manipulatives before moving onto calculation methods, using real life scenarios to support children master core concepts.

We ensure that children can explain the 'hows' and 'whys' of maths. Through reasoning and higher order questioning, children are able to generalise and justify their thinking. Children are provided with opportunities to express their mathematical reasoning through the use of speaking frames, the hook at the beginning of a session, and by addressing misconceptions and plenaries.

We understand that mathematical language is crucial to children's mathematical thinking and understanding. As a result, key vocabulary is displayed on our maths learning walls and discussed in every lesson.

We believe that an integral part of maths is being able to solve problems. We ensure that real life problem-solving activities are planned into every maths lesson. Each child takes part in termly problem-solving investigations linked specifically to a problem-solving skill or strategy or, linked to the area of learning for that unit.

Impact

- By the time children leave our schools, they understand the relevance and importance of what they are learning in relation to real world concepts.
- Children know that maths is a vital life skill that they will rely on in many areas of their daily life. Children have a positive view of maths due to learning in an environment where maths is promoted as being an exciting and enjoyable subject in which they can investigate and ask questions; they know that it is reasonable to make mistakes because this can strengthen their learning through the journey to finding an answer.
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CURRICULUM AREA: MATHS

Cultural Capital

Throughout the year children are provided with additional opportunities to celebrate and apply their maths learning. We hold termly inter trust times table tournaments as well as themed days such as Number Day or Times Table Rockstars Day. We provide children with opportunities to attend clubs linked to maths, such as maths Boosters, chess and number 24.

Equality and Diversity

By linking our maths to a real life context, we provide children with scenarios and characters who are diverse and inclusive. We support children in class through our carefully arranged talk partners and encourage collaboration within our planning sequence. Vulnerable children are prioritised for clubs linked to maths.

Our SEND Approach

Children are able to make connections between different time periods and core themes through our carefully sequenced curriculum. Each lesson begins with a form of retrieval, supporting all learners to acquire sticky knowledge to help them succeed within the lesson. Quality First Teaching is at the heart of all lessons, with adaptations made to support all learners.

