St Michael's Mathematics' Curriculum



Intent

At St Michael's V.A. Junior, mathematics is a core subject and has high priority within our school curriculum. Through our proactive approach, we aim to develop a love of mathematics and create an atmosphere where all children strive to learn. To achieve this, we constantly review our practice to incorporate research and development in the field of maths teaching. We intend to deliver a curriculum which:

- Allows children to be a part of creative and engaging lessons that will give them a range of opportunities to explore mathematics.
- Gives each pupil a chance to believe in themselves as mathematicians and develop the power of resilience and perseverance when faced with mathematical challenges.
- Recognises that the habits of thinking mathematically are life-enriching, as mathematics underpins much of our daily lives and it is therefore of paramount importance to become numerate in order to participate fully in society and democratic processes.
- Makes rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.
- Enables children to build a deep conceptual understanding of concepts which will enable them to apply their learning in different situations (including crosscurricular links).
- Is in line with the expectations in the National Curriculum 2014.

Implementation

- In school, we follow the National Curriculum and use a variety of resources to support teachers with their planning. We deliver the curriculum following a mastery approach.
- Teachers use the school's Maths Progression Map and year group Medium Term Plans to ensure consistency in sequencing and progression.
- The calculation policy is used within school to ensure a consistent approach to teaching the four operations over time.
- Daily lessons include a fluency starter; problem solving and reasoning are integral throughout lessons. Daily challenges are prepared to deepen understanding.
- Children are taught through clear modelling. Using a CPA (concrete, pictorial and abstract) approach, concrete manipulatives and pictorial representations are used to support conceptual understanding.
- Teachers know where their children are through the use of assessment; this knowledge informs the teaching and learning sequence.
- Formative assessment within every lesson helps teachers to identify the children who need more support to achieve the intended outcome and those who are ready for further challenge.
- Summative assessment takes place at the end of each half term and children's

- attainment and progress is discussed within year group meetings.
- The teaching and learning of mathematics is monitored by leaders through learning walks, lesson observations, book scrutinies and pupil discussions.
- Continuous professional development is provided by subject leaders to keep staff abreast of mathematical developments and provide training.

Impact

The quality of teaching and learning in maths is monitored constantly throughout the year. This is achieved through termly formal book scrutiny, year group monitoring and pupil perception interviews as well as analysis of assessment data. Through this monitoring we have observed:

- Lessons align with the mastery approach which enables children to think mathematically, develop conceptual understanding and communicate mathematical ideas.
- Children are taught to recall of facts and procedures and use fluency.
- Children show evidence of applying their knowledge to a range of problems and making mathematical connections.
- Children show a positive mathematics mindset.
- Maths within school is highly valued and there is a culture of recognising its importance in our everyday lives.
- SEND children show evidence of making progress towards their specific outcomes.
- Children perform broadly in line with, or above, national expectations.

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