

King Ina Church of England Academy

Mathematics Curriculum Overview Statement

Our curriculum approach to mathematics reflects our vision statement:
Within our secure Christian environment, our vision is to develop healthy, happy, motivated learners who aspire to achieve their full potential and who look to the future with confidence.

The name of the current curriculum lead is on the school website on the curriculum page.

Intent

As mathematics is so essential to everyday life, at King Ina Church of England Academy we want to maximise the development and academic achievement of every child, regardless of ability, through adopting a mastery approach in the subject. We want our children to develop rich connections across mathematical ideas, to develop fluency and mathematical reasoning, to think logically, to work systematically and accurately and to develop competence in solving increasingly sophisticated problems. As our economy depends on a numerate workforce, we want our children to apply their mathematical knowledge to other subjects and enable them to understand its importance in science, technology and engineering and how necessary it is to be financially literate. We want our children to be confident mathematicians, unafraid to take risks and to have a curiosity and enjoyment of the subject.

Implementation

Our implementation is developed through secure understanding of the curriculum and subject area, allowing the children to expand upon previous learning and ensure progression is built year on year.

- Our long term planning follows the White Rose scheme of learning which is based on the National Curriculum. Short term planning is also informed by the scheme and by our school calculation policy. Furthermore, NCETM Ready to Progress resources are available for use to review, practise and consolidate learning.
- In EYFS, the 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.
- Staff are supported in their planning, curriculum development and use of resources through training in staff meetings and on INSET days.
- Basic maths skills are taught daily, focusing on key mathematical skills including place value, the four operations and fractions.
- Prior knowledge is used to inform planning and teaching and a small steps approach is used to ensure objectives are mastered in order to progress onto more challenging lessons.
- Lessons use a Concrete, Pictorial and Abstract approach to guide children through their understanding of mathematical processes and to scaffold their learning.
- Regular assessment is used to inform the teaching and learning sequence. This takes the form of end of topic assessment or summative assessment at the end of each term. Informal assessment is also carried out through class quizzes and games to assess knowledge and understanding.
- Our cycle of planning ensures we can evidence progress over time but where children are making slower progress, they are identified for 1:1 or group intervention sessions within and outside of the lesson.
- Children are encouraged to use mathematical vocabulary to explain their methods and strategies and questioning is used to develop and support their mathematical reasoning.
- Online maths tools such as Times Table Rockstars are used for multiplication practice, application and consolidation and Mathletics is used in class and for homework to consolidate learning.

Impact

- Our mastery approach enables children to use their fluency, depth of reasoning and problem-solving skills across all areas of maths and other curriculum areas.
- Children can use mathematical vocabulary to explain their ideas and use methods independently, showing resilience when tackling problems.
- Children demonstrate a quick recall of facts and procedures, including recollection of the times table.
- Children are expected to make good progress. Children who have gaps in their knowledge receive appropriate support and intervention.
- Confident mathematicians who are fully prepared for the next stage of their education.