



Ark Priory Primary Academy

Mathematics Curriculum Mission Statement

Intent

At Ark Priory, our aim is to provide every pupil with a comprehensive mathematical education to ensure that they feel empowered and confident in their pursuits.

The national curriculum for mathematics aims to ensure that all pupils:

- become fluent in the fundamental of maths
- are able to reason mathematically
- can solve a range of problems by applying their mathematical knowledge

In line with three aims outlined by in the national curriculum statements above, Ark Priory work with two programmes of study - Mathematics Mastery and White Rose Maths- to ensure that pupils develop the confidence to apply their mathematical knowledge in a range of situations and use their sound knowledge to reason and consistently challenge themselves to fully realise their potential. The central pillar that underpins the aim of Mathematics Mastery is for pupils to build strong mathematical problem solving. It is through the three pillars- conceptual understanding, mathematical thinking and language and communication- that pupils develop the skill of problem-solving. Similarly, it is White Rose Maths' intention to foster and 'build a culture of deep understanding, confidence and competence in maths.' Alongside these programmes of study, Ark Priory provide pupils with the opportunity to create links between mathematics and other areas of the curriculum such as geography and science in order for pupils to appreciate the significance of developing strong numerical skills and the transferable nature of a rich and varied mathematical education.

Implementation

At Ark Priory, we work with two programmes of study: Mathematics Mastery (EYFS- Year 4) and an amalgamation of both Mathematics Mastery and White Rose Maths in UKS2 (Year 5-6).

The Mathematics Mastery curriculum has been developed to ensure that every child can achieve excellence in mathematics. As such, it provides pupils with a deep understanding of the subject through a concrete, pictorial and abstract approach to ensure pupils have a strong understand of the learning taking place.

Key features of the Mathematics Mastery curriculum that is implemented at Ark Priory:

- High expectations for every child
- Fewer topics to be studied in greater depth
- Number sense and place value come first
- Research -based curriculum
- Objects and pictures presented before abstract approaches are used (numbers and letters)
- Problem solving is central
- Calculate with confidence– reason and explain why a method is successful

Mathematics Mastery places emphasis on the cumulative mastery of essential knowledge and skills in mathematics. In conjunction with the White Rose Maths programme of study, pupils are exposed to a range of methods to build a strong conceptual understanding of mathematics. Both fluency and mathematical reasoning is developed in daily mathematical lessons within each year group, in addition to regular Maths Meetings and Arithmetic Meetings across the school and Maths Do Now's. Times Tables Rockstar's is used as part of Maths Meetings in Years 2-6 to build speed and fluency and add a greater sense of excitement for pupils in relation to their multiplication knowledge. Additionally, we have weekly times tables test to further inform teachers of pupils' retention and fluency in relation to their multiplication facts.

Ark Priory utilises an online learning platform, Mathletics, to provide pupils with the opportunity to further consolidate mathematical skills explored at school as part of their home learning. This both engages pupils in a range of questions that deepen their understanding of mathematics whilst ensuring that home learning is enjoyable for the pupils by allowing pupils to take part in mathematical competitions with others and annual online tournaments with pupils around the world.

Ark Priory ensures that the implementation of these programmes of studies are embedded consistently across the schools so that all pupils have a strong foundation of mathematical skills and knowledge that can be built upon year after year as they progress through the school. To achieve this, teachers are supported through Mathematics Mastery training, regular feedback pertaining to planning and lesson observations alongside sessions developing teacher's subject knowledge and using data to inform planning.

Impact

Ark Priory produces confident mathematicians who are able to approach problems, of differing forms, with the resilience that will help to ensure Priory pupils' success in fulfilling careers of their choosing. Our curriculum ensures that children have a deep understanding of not only mathematical concepts, but the rich vocabulary which accompanies the skills and methods that they develop as mathematicians at Ark Priory. Pupils develop an appreciation of the role that mathematics plays in a range of subjects including geography, history and science, so that they can continue to make links across all areas of the curriculum and recognise the vital role of mathematics in a variety of careers that we want to see our pupils excel in.