



Mathematics

Curriculum Statement

INTRODUCTION

Mathematics helps children to make sense of the world around them through developing their ability to calculate, to reason and to solve problems. It enables children to understand and appreciate relationships and pattern in both number and space in their everyday lives. Through their growing knowledge and understanding, children learn to appreciate the contribution made by many cultures to the development and application of mathematics.

AIMS

Within The Warriner Multi Academy Trust we aim to:

- Develop a positive attitude to maths
- Develop mathematical understanding through systematic direct teaching of appropriate learning objectives.
- Encourage the effective use of maths as a tool in a wide range of activities within school and, subsequently, adult life.
- Develop children's ability to express themselves fluently, to talk about the subject with assurance, using correct mathematical language and vocabulary.
- Develop an appreciation of relationships within maths.
- Develop ability to think clearly and logically with independence of thought and flexibility of mind.
- Develop an appreciation of creative aspects of maths and awareness of its' aesthetic appeal.
- Develop mathematical skills and knowledge and quick recall of basic facts in line with recommendations.

TEACHING AND LEARNING

Within The Warriner Multi Academy Trust we aim to make Maths lessons engaging and relevant learning experiences. Our principle aim is to develop children's knowledge, skills and understanding in mathematics. We do this through ensuring that all pupils have the same opportunities, ensuring that we are deepening children's understanding, using the Concrete-Pictorial-Abstract approach and constantly assessing progress. We provide opportunities for children to ask as well as answer mathematical questions and support their mathematical language by teaching key vocabulary and sentence stems. Children have the opportunity to use a wide range of resources such as number lines, number squares, digit cards and small apparatus to support their work.

Our research- based guidance on the most effective teaching and learning strategies recognises that teachers and schools must be deliberate about what they teach and how they do it and so our guidance supports staff to deliver lessons appropriately modelled and scaffolded in order that children's learning is developed. These teaching and learning strategies are further developed and refined in our subject specific Professional Learning Groups where we are able to develop subject pedagogy to support teaching across our schools.

CURRICULUM PLANNING

Mathematics is a core subject in the National Curriculum, and we use the resources from The White Rose Maths Hub along with resources from the NCTEM as the basis for implementing the statutory requirements of the programme of study for Mathematics. We carry out the curriculum planning in Mathematics in three phases (long-term, medium-term and short-term). Both White Rose Maths and The NCTEM give detailed outlines of what we teach in the long term, while our three termly teaching programmes identify the key objectives in Mathematics that we teach in each year.

Our medium-term Mathematics plans, are adopted from the White Rose Maths Hub and NCTEM materials and give details of the main teaching objectives for each term and define what we teach. They ensure an appropriate balance and distribution of work across each term.

EARLY YEARS FOUNDATION STAGE

We know that our children in EYFS need to establish and develop firm foundations in their understanding of number and mathematics. Their ability to reason, articulate their thinking, problem solve and explore mathematical concepts starts in the EYFS and so we ensure that our long-term planning reflects the appropriate descriptors from the Birth to 5 document alongside the White Rose guidance to enable us to produce a deliberately sequenced and appropriately progressive approach to our teaching.

SPECIAL EDUCATIONAL NEEDS

We have high expectations for all of our children and work to ensure that barriers are able to be overcome. To that end we expect our staff to plan and deliver lessons where pupils with SEND are able to access their learning in an appropriately supported manner.

SPIRITUAL, MORAL, SOCIAL, AND CULTURAL DEVELOPMENT

The teaching of mathematics supports the social development of children through collaborative learning. Children are often grouped so that they can work together and they are given a chance to discuss their ideas and results. The study of famous mathematicians around the world and historical methods of the number system and calculating, contributes to the cultural development of our children. Mathematics contributes to children's spiritual development - children can find shapes and pattern in nature. They can see the order, logic and pattern that numbers offer. Opportunities for moral development are also offered – children are encouraged to discover how logical reasoning can be used to consider the consequences of particular decisions and the value of mathematical truth.

ICT

ICT is used in various ways to support teaching and motivate children's learning. ICT involves the computer, calculator, and audio-visual aids. These technologies will however only be used in the daily mathematics lesson when it is the most efficient and effective way of meeting the lesson objective.

ASSESSMENT & RECORDING

Teachers assess children's work in Mathematics by making informal judgements as they observe them during lessons and by providing written and or verbal feedback throughout a unit of work. At the end of the year, the teacher

makes a summary judgement about the work of each pupil in relation to the skills they have developed in-line with the National Curriculum in England 2014 and these are reported to parents as part of the child's annual school report. We use this as the basis for assessing the progress of the child and we pass this information on to the next teacher at the end of the year.

MONITORING & REVIEW

Class teachers are responsible for the standard of children's work and for the quality of their teaching in Mathematics lessons. Subject leaders work with their school teams to develop subject pedagogy across the school and to monitor the Mathematics teaching and learning taking place through book looks, pupil interviews, learning walks and data analysis. Where strengths and examples of good practice are noted, they are shared and where areas requiring additional support are highlighted, the necessary CPD is provided.