



Curriculum Statement – Mathematics

Our Mathematics Curriculum

Intent

When teaching mathematics at Strawberry Fields Primary school, we use a variety of teaching methods and resources that allow all pupils equal access to mathematics and to experience success and enjoyment. Over time, children will become resilient learners who are able to overcome challenges which they face within their learning, recognising that there could be more than one way to solve a problem. Children will be appropriately challenged and supported through varied fluency, reasoning and problem solving. Irrespective of personal starting points, children will explore maths in depth, and use a range of mathematical vocabulary to reason and explain. Pupils will consolidate their learning by building on prior knowledge and skills from previous lessons, terms and year groups, exploring and discovering links to wider maths topics.

Implementation

At Strawberry Fields, we implement our approach to maths through consistent high quality teaching and the delivery of appropriately pitched work for all groups of learners, supported by the materials from 'White Rose Maths'. Our lessons follow a clear progression ensuring that the representations used are consistent throughout school. Children are taught concepts initially using concrete materials, which then move into pictorial representations and finally into abstract concepts. From one lesson to the next, there are small steps, which enable children to work with confidence and to grasp concepts clearly. All resources are closely matched to the national curriculum, providing full coverage.

Pupils in Foundation Stage and Key Stage 1 will access part of their maths learning through continuous provision. Mathematical concepts are introduced and built upon through a series of direct teaching sessions. Within the provision, children have the freedom to further explore these mathematical concepts through concrete resources and creative opportunities. In addition to this, they are encouraged to follow their own mathematical lines of enquiry, which are supported through effective adult modelling and interactions.

Each classroom has a range of mathematical reasoning and problem-solving questions made available for children to further extend their thinking and consolidate learning. In addition to daily maths lessons, Y1 through to Y6 provide weekly opportunities for all children to practise their mental and calculation knowledge through arithmetic lessons. This serves to reinforce and consolidate previous learning; increase fluency, speed and accuracy; and improve confidence. Children also have daily opportunities for retrieval practice of key facts. Regular use of 'TT Rockstars' within school and home enables children to practise multiplication and division knowledge.

Impact

Ongoing formative assessment takes place within each maths lesson. This includes: teacher observations, questioning, discussions and marking and feedback. Where misconceptions have been identified, these are addressed in the subsequent lesson to ensure gaps in knowledge are closed and progress is not limited. This may be through a whole class approach or small group intervention.

Frequent assessments of mastery within mathematics are carried out across the school. These include using the PUMA assessment materials from Y3 – 6, White Rose 'end of block' assessments and past papers where appropriate. Year 4 will be assessed on their times table knowledge. Outcomes from assessments are used to identify gaps in knowledge, inform future planning and create targeted interventions. Following on from assessments, pupil progress meetings take place to monitor children's attainment and progress towards end of year targets.

Monitoring of maths takes place as part of SLT meetings, Phase Leader meetings, learning conversations, learning walks and book scrutinies.