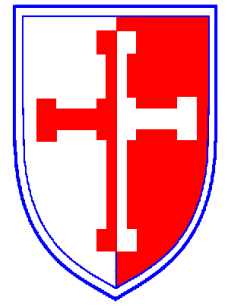




Mathematics



Intent

The intent of our mathematics curriculum is to design a curriculum, which is accessible to all and will maximise the development of every child's ability and academic achievement. We deliver lessons that are creative and engaging. We want children to make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. We intend for our pupils to be able to apply their mathematical knowledge to science and other subjects. We want them to know that mathematics is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and most forms of employment. As our pupils progress, we intend for our pupils to have the ability to reason mathematically and develop a sense of enjoyment and curiosity about the subject.

Implementation

Mathematics is taught in year groups in KS1, following the Powers of Maths scheme which is linked to White Rose scheme of work. It is taught daily, as a discrete subject, and work is differentiated within each class. The principal focus of mathematics teaching in key stage 1 is to ensure that pupils develop confidence and mental fluency with whole numbers, counting and place value. This should involve working with numerals, words and the four operations, including with practical resources [for example, concrete objects and measuring tools].

In KS2, mathematics is taught in ability groups across the year group. The Power of Maths & White Rose scheme of work is again being followed, but with more support given to those groups of children that need it. Again, it is taught daily. The principal focus of mathematics teaching in lower key stage 2 is to ensure that pupils become increasingly fluent with whole numbers and the four operations, including number facts and the concept of place value. This should ensure that pupils develop efficient written and mental methods and perform calculations accurately with increasingly large whole numbers. The principal focus of mathematics teaching in upper key stage 2 is to ensure that pupils extend their understanding of the number system and place value to include larger integers. This should develop the connections that pupils make between multiplication and division with fractions, decimals, percentages and ratio.

Chadsmoor Junior School operates a 'keep up not catch up' approach to mathematics where misconceptions are addressed immediately. This involves the use of 'feed-forward marking' where common errors are addressed at the beginning of the next session with the whole class, as well as the use of Teaching Assistants to take small intervention groups with those children that need that bit of extra help. An assessment cycle is also used to identify 'gaps' in children's learning, and teaching is then adapted to fill these gaps.

A calculation policy has been developed and agreed after using the National Curriculum objectives and methods. By agreeing on the use of strategies and mathematical language the children will be taught in a consistent way in all classes, developing their understanding as they progress through school. This will hopefully cause less confusion for the children and ensure they have the necessary strategies and scaffolding to enable them to solve mathematical problems.

Impact

Throughout each lesson formative assessment takes place and feedback is given to the children through marking and next step tasks to ensure they are meeting the specific learning objective. Teacher's then use this assessment to influence their planning and ensure they are providing a mathematics curriculum that will allow each child to progress.

The children are assessed three times a year, using Cornerstones Maths, Assessment and a gap analyse tool is to identify gaps. Children are tracked using an online tracking programme, and there are pupil progress interviews where individual children are discussed and strategies put in place for those children falling behind.

The teaching of maths is also monitored through book scrutinies, learning walks and lesson observations.



"Enjoying Achieving Together"