

Intent

Our Maths provision at St Weonards Academy aims to build a curriculum which develops learning and results in the acquisition of knowledge and skills so that all pupils remember more, understand more and can apply their mathematical knowledge in everyday situations in order to be successful in life beyond school. In order to successfully deliver a structured, rich curriculum with a clear progression of skills, we follow the statutory requirements of the National Curriculum for mathematics.

When teaching mathematics, we intend to use a variety of teaching methods and resources that allow all pupils equal access to mathematics and to experience maths success and enjoyment. Over time, children will become more resilient learners who are able to understand that to make mistakes or become stuck is a necessary step in any learning. 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 their own thinking. Pupils will continue to build their knowledge by recalling and adding to previous knowledge and skills, then apply these new skills to a wide variety of contexts both within maths and across the curriculum.

It is our vision to instil a lifelong love of mathematics through the use of engaging and collaborative lessons. When carrying out mastery problems, children are encouraged to promote our school values of teamwork and co-operation - emphasising "growing together and learning together."

Implementation

We implement our approach through quality first teaching and the delivery of appropriately pitched work for all groups of learners supported by the materials from White Rose, NCETM, Power Maths and Tara Maths. Medium term planning is adapted to create a bespoke curriculum designed to meet the needs of our children and to allow for opportunities for revisit and retention, ensuring full coverage of the national curriculum for mathematics. Teachers are confident to manipulate this planning in the short term in order to interest, inform and inspire our children. Using the progression of skills document and calculation policy, the teaching of mathematics builds progressively on the skills taught in previous years. Teachers use assessment for learning to tailor lessons and help plan for next steps.

Maths lessons are planned and delivered in accordance with NCETM small steps progression, which is underpinned by the concrete, pictorial, abstract (CPA) approach. Each classroom has a range of mathematical resources made available for children to self-select. These include, but are not limited to, Numicon, Base 10, place value counters, bead strings, number lines and hundred squares. Varied starting points and timely teacher interventions are utilised in response to teachers' ongoing formative assessments. Interventions are put in place, such as 123 Maths to support children where necessary.

Y1 through to Y6 provide opportunities for all children to practise their mental and calculation knowledge through Basic Skills. This serves to reinforce and consolidate previous learning; increase fluency, speed and accuracy; and improve confidence. Regular use of 'TT Rockstars' within school and home enables children to practise multiplication and division knowledge. The children enjoy challenging their friends to fun competitions, which enhances rapid recall.

We place a large emphasis on pupil engagement and design lessons which involve all pupils using questioning and modelling at the centre of every lesson. All pupils are encouraged to use specific strand related vocabulary.

Opportunities to collaborate in pairs/small groups are given regularly so that children can learn from and support each other. Knowledge organisers are available to assist with the acquisition of new knowledge and mathematical 'working walls' are in each classroom to provide key information and vocabulary with modelled examples to support learning. To implement our intent, we ensure that our children are invested in their learning and are making a positive contribution to their lessons.

EYFS

As identified in the EYFS statutory educational programme; 'Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers.'

Number fluency is continually developed within early years: our Mathematical curriculum covers 'Number' and 'Spatial Reasoning'. Reception children participate in short maths sessions daily and all children are given time to explore mathematical concepts, test ideas, develop their understanding and practise taught skills through play. Maths can be found in all areas of our provision and children experience it in a purposeful and meaningful context within their play and daily routines.

Our mud kitchen, construction area, sand and water tray, domestic role play area are just some of the areas in which children can explore number, shape, space and measures. A focused 'maths challenge' area provides the children with access to specific mathematic resources such as ten frames, Numicon and part whole diagrams which they are encouraged to use to increase their familiarity with and confidence in manipulating. Children are encouraged to use their mathematical understanding and skills to solve real-life problems and practitioners are trained to identify and extend opportunities to foster this.

In addition to maths lessons, EYFS and Y1 use the NCETM Number Blocks program (created by maths mastery specialists) which feature loveable characters, who introduce the concept of number to young children gently through engaging storylines.

Impact

Throughout each lesson, formative assessment takes place and feedback is given to the children through marking, and next steps set. Teachers then use this assessment to guide their planning and ensure that they are providing a mathematical curriculum which will allow all children to make progress. The teaching of maths is monitored on a termly basis via book scrutiny, learning walks, pupil interviews and lesson observations. Each term children from Year 1 and above complete a summative assessment (White Rose) to demonstrate their understanding of the topics covered. Years 2 and 6 also use previous SATs papers. The results from both the formative and summative assessment determines pupil progress and attainment which is noted on individual records.

By the end of KS2, we aim for children to be fluent in the fundamentals of mathematics with conceptual understanding, and have the ability to recall and apply knowledge rapidly and accurately. They should have the skills to solve problems by applying their mathematics to a variety of situations with increasing sophistication, including unfamiliar contexts and real-life scenarios. Children will be able to reason mathematically by following a line of enquiry and present a justification, argument or proof using mathematical language.

Our teaching of, and curriculum for, mathematics will lead to progress over time across all key stages relative to each individual child's starting point. It is designed to prepare children for their future, both in and outside of education so they can become successful in whatever they pursue by leaving our school at least at the expected standard for their age. Our rich and broad mathematics curriculum aims to make the children enthusiastic about learning mathematics and gain an understanding of its importance in everyday life.