

Mathematics

Intent

At Stanton St Quintin School maths rationale is deeply embedded in the way in which we teach the subject. Our shared vision is for children to develop an appreciation for mathematics and see it as a subject where they can explore and be creative. Children are expected to gain and become fluent in new knowledge by exploring concepts in detail, in an inclusive manner. They should be curious and enjoy their mathematical learning, understanding that it will play a significant role in their future. Children are equipped with the skills, attitudes and dispositions to solve problems, both independently and in partnership with others, demonstrating their growth in our values. Children will show initiative, perseverance, and have commitment to self-improvement. Children will be identified, supported and challenged in order to maximise and reach their full potential. At the end of each year, children should attain and master their age-related expectations and have a firm foundation upon which to build.

Implementation

Every child from Year 1 up, takes part in a daily Maths lesson, using the Maths— No Problem! scheme as a basis for our planning and teaching. Lessons include a range of: problem solving, discussion time, paired work, practical activities, journaling, guided and independent practice. This is all aimed at developing the children's mastery of mathematics. Depending on the topic being taught, lessons may vary in terms of content, being more practical or discussion-based when appropriate in order for the children to deepen their understanding. All children are encouraged to use practical equipment in lessons to help secure the learning. Children have the opportunity to record their work in a variety of ways, e.g. workbooks, whiteboards, exercise books and journaling,

Impact

The use of the CPA (concrete, pictorial and abstract) model enables children to embed and remember key concepts. The use of concrete resources across all year groups is having a positive impact on the children's confidence and mastery of each topic. The use of the Maths—No Problem! scheme has ensured a consistent approach across the school in methods of calculation and this allows the children to make good progress year on year. The use of the bar method for problem solving has given children a tool to anchor and visualise how to solve problems and is proving to have a positive impact on the children's attitude to applying their mathematical knowledge in a problem solving context. The introduction of the Year 4 times table test has had a positive impact on our school so that most children know and are able to apply their times tables up to 12×12 . This good foundation enables them to tackle more challenging and complex mathematics as they move further up the school, and beyond, into secondary education.

The aim of our maths provision will impact the children in the following ways:

- Learners demonstrate an increasing mental fluency. They are able to select and apply appropriate mental strategies accurately.
- Lesson observations and pupil voice will show that all pupils show confidence in their ability as mathematician and demonstrate an innate desire to challenge themselves and make progress.
- Evidence in maths books shows that there is a balance between fluency, reasoning and problem solving opportunities. Lesson observations will show that pupils are adept at using reasoning to explain mathematical concepts.
- There will be evidence that as pupils get older, they will tackle increasingly more sophisticated problems.
- Book scrutiny and lesson observations will demonstrate that nearly all children access objectives for their chronological year group.
- Pupils will demonstrate the resilience, flexibility and fluidity to represent a mathematical concept in different ways and apply these concept in different contexts.

- There will be evidence of progress within lessons and across a series of lessons. They will be able to apply mathematical concepts they have taught in the long term.
- Lesson observations and pupils voice will demonstrate that pupils value each other ideas when discussing mathematical concepts.
- Pupils will be confident in selecting and using a range of concrete and pictorial resources to support them in their learning.

We monitor the impact of our maths provision through termly assessments, lesson observations, pupil voice and moderation of maths books.

Attainment in maths is measured in the school and reported annually. In Year 2, this is through the National SAT tests and teacher assessment. In Year 6 this is through the National SAT tests.