



MATHEMATICS STATEMENT

Our Vision is to inspire an enjoyment for Mathematics through positive attitudes, curiosity and discovery. Our aim is to equip all our pupils with a high-quality mathematics education that excites and engages them and develops confident, skilled Mathematicians who understand that maths is a fundamental part of everyday life and the world we live in. The language of mathematics is international, the beauty and power of Maths are integral to the world around us. As a school, we focus on mastering maths. This means our children acquire and achieve a deep, long-term, secure and adaptable understanding of the subject. Becoming fluent in the fundamentals of mathematics, with regular and challenging problems, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. We aim for our children to RESPECT Maths, be RESILIENT in Maths and be CHALLENGED by Maths.

Intent

At Sabden, Maths is given a high priority.

We believe mathematics is an important part of children's development throughout school, right from an early age. We intend on delivering a curriculum which:

- Allows children to be a part of creative and engaging lessons that will give them a range of opportunities to explore mathematics.
- Gives each pupil a chance to believe in themselves as mathematicians and develop the power of resilience and perseverance when faced with mathematical challenges.
 - Recognises that mathematics underpins much of our daily lives and therefore is of paramount importance, in order that children aspire and become successful in the next stages of their learning.
- Engages all children and entitles them to the same quality of teaching and learning opportunities, striving to achieve their potential.
- Makes rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems.
- Provides equal opportunities for children to apply their mathematical knowledge to other subjects (cross-curricular links).
- Is in line with the expectations in the National Curriculum 2014.

Implementation

At Sabden, we aim to ensure that lessons are engaging and challenging, drawing upon a wide range of teaching styles and strategies in order to cater for individual learners. Sabden is on a 4 year journey with the North North West Maths Mastery Working Group and as such is working with other schools across the North West to further develop our mathematics teaching and learning. September 2020 was the start of Year 1 – Mastery Readiness. Lessons will be vibrant and enjoyable, with teachers using a range of resources including models and images to develop children's mathematics within a concrete, pictorial, abstract approach. Children will be highly engaged and challenged through discussion and mathematical talk, utilising skills of reasoning and explanation alongside accurate use of mathematical vocabulary. We follow a clear policy for written and mental calculations that is in line with the new National Curriculum and this includes the use of practical resources to aid understanding at every stage. Teachers and teaching assistants intervene as needed to identify misconceptions and ensure progress. Each class are taught the objectives set out for their year and use as a starting point, the medium term plans set out by The White Rose Maths Hub and follow the mixed age lesson by lesson overview. These are supplemented with other resources such as NCETM.

In Foundation Stage we provide children with opportunities to develop and improve their skills in counting, understanding and using numbers and calculating simple addition and subtraction problems. Children are also given opportunities to explore and describe shape, space and measures. Learning takes place through a variety of well -planned experiences and children are encouraged to use and apply mathematical knowledge and vocabulary through practical and challenging activities. A mixture of whole class, group and independent learning opportunities are provided each day and the rich learning environment supports development in children's mathematical understanding. Maths is taught in line with the EYFS framework and early learning goals.

Teachers also use KLIPS and school calculation policy to ensure consistency and progress.

The Baseline assessment takes place in the Autumn term using PIPS and following this, on- going teacher assessments are made using the early learning goals and the Tapestry software.

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 involves working with numerals, words and the four operations, and includes practical resources such as base ten, Numicon and real life objects. Pupils develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. Teaching involves using a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money. By the end of year 2, we aim for all pupils to recall the number bonds and related addition and subtraction facts to 20 and be precise in using and understanding place value. Mathematical vocabulary is taught within lessons, and children are encouraged to be precise in the use of vocabulary to explain their mathematical reasoning.

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 ensures that pupils develop efficient written and mental methods and perform calculations accurately with increasingly large whole numbers. We follow a clear written calculations policy to ensure consistency throughout the school. At this stage, pupils develop their ability to solve a range of problems, including with simple fractions and decimal place value. Teaching ensures that pupils use mathematical knowledge with increasing accuracy and develop mathematical reasoning. Children are given opportunities to use measuring instruments with accuracy and make connections between measure and number.

By the end of year 4, we aim for pupils to have memorised their multiplication tables up to and including the 12 times table and show precision and fluency in their work. Mathematical vocabulary is taught within lessons, and children are encouraged to be precise in the use of vocabulary to explain their mathematical reasoning.

By the end of year 6, we aim for all pupils to be fluent in written methods for all four operations, including long multiplication and division, and in working with fractions, decimals and percentages. Maths is visually evident in each class with a working wall that is used on a daily basis to enrich, add to, support and lead the learning of Maths. Teachers ensure that the Working Wall is up to date and includes all of the tools needed for the subject.

Impact

- Children demonstrate a quick recall of facts and procedures. This includes the recollection of the times table.
- Children show confidence in believing that they will achieve.
- Each child achieves objectives (expected standard) for year group.
- The flexibility and fluidity to move between different contexts and representations of maths.
- The chance to develop the ability to recognise relationships and make connections in maths lessons.
- Mathematical concepts or skills are mastered when a child can show it in multiple ways, using the mathematical language to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.
- Children show a high level of pride in the presentation and understanding of the work