**Sandringham Federation Mathematics Curriculum**

**Intent, Implementation & Impact**

**Intent**

Our schools thrive on ensuring that Mathematics is engaging for all, in order for all children to develop the vital skills needed to progress through Primary school and giving them a solid foundation for high school. As well as this, we believe that teaching children vital mathematics skills will help them to access everyday thinking and give them confidence to apply their skills to everyday life. As, Mathematics is the foundation to understanding the world around them.

**Implementation**

Our Mathematics curriculum follows the aims of the National Curriculum for Mathematics 2014. The use of White Rose progression and small steps, which have been mapped along-side the National Curriculum have been closely used in order to create the curriculum coverage across the school, and the weight of each unit is also based on any weaknesses that have appeared through end of year assessments, KS2 SATs, e.g.These steps have also been closely mapped along-side the Government's Ready-to-Progress framework to ensure all children meet the skills needed to progress into the next year group.

Class teachers use yearly overviews to help plan their lessons, based on the needs of their class as the year progresses; using test outcomes as one piece of data to help plan lessons and also interventions for those who need it. The use of QLA’s is a helpful tool used to support class teachers to know who needs support and who needs extending within each Mathematical area of the curriculum. Support includes following our CPA (Concrete, Pictorial, Abstract) approach to support the teaching and learning of these skills.

Assessment is made using assessment for learning approaches to give teachers an idea of who has grasped new concepts taught and those who need further support. Weekly plans are then adapted accordingly.

The focus on developing fluency within each skills is at the forefront before being able to then apply our knowledge of the skills taught to problems and reasoning based tasks. There is also a fluency focus once a week based on arithmetic. Fluency skills are also practiced via online platforms, such as Sumdog.

Teachers also use quick activities to embed quick recall of fluency skills on a daily basis via the Number of the Day. This includes various different ways to represent a given number, give a percentage of, round it (depending on what skills is needed within each class).

Problem-solving and the opportunity to apply the skills taught in lessons are given in lessons, whether they are in a whole class basis or independently and then reviewed, as a class.

The ability to be able to know times tables, up to x12, by the end of year 4, is a big focus across the Federation. We use the Tackling Tables programme to practice recalling tables quickly. Each child, from Year 2, are also given a times tables book to practice tables, one at a time, and tested once a week also to help ensure retention of each table too. They are encouraged to learn them in order, in a random order, and the division to match. Children are encouraged to learn their tables at home, which also enhances the partnership between home and school.

In KS1, the same approach is also given for learning number bonds.

**EYFS at Sandringham:**

The approach to Mathematics has changed recently in EYFS. The approach used within this year is having regular ‘Maths Moments’, as part of the ‘Planning in the Moment’ curriculum. This encourages children to talk about their learning, therefore encouragement of vocabulary and ensuring everyone takes part is evident. It also boosts children’s confidence by focusing on the oracy side of the Mathematics curriculum and the opportunity to mark and make their maths is chosen independently by them. This is then observed by the teacher and recorded using Tapestry. It gives children regular short bursts of skill, and then throughout the day, opportunities for any type of Maths is available through their continuous provision. The use of the White Rose materials are strongly used to aide learning in maths for EYFS, with particular focus on the interactive resources.

**Impact**

The impact on our children is clear: progress, sustained learning and transferrable skills. With the implementation of the Mathematics Curriculum, it gives children confidence by the time they finish Primary school, especially with the key skills needed.

Also, with the new approach to Maths in EYFS, at Sandringham currently, it develops the use of oral rehearsal of skills and using vocabulary confidently to aid understanding, which then helps develop foundations to progress into KS1 and beyond.

As a result of the Federation’s use of the Tackling Tables programme, Sumdog and our new Individual tables book approach, confidence in the children’s ability to recall their tables, confidently and at speed will grow. This then, as a result, helps them access other areas in mathematics with ease, without the barrier of working out their tables, for example, written methods.

Through our rigorous approach to our planning and assessment approaches (via PiXL), we are able to plug at gaps in learning that appear, support those that need a little more than the lessons provided, and also helps the children to progress from fluency to problem-solving and the ability to apply skills learnt.