Maths Curriculum statement

Intent
The 2014 National Curriculum for Maths aims to ensure that all children:

* Become fluent in the fundamentals of Mathematics
* Are able to reason mathematically
* Can solve problems by applying their Mathematics

At Sandringham Federation, these skills are embedded within Maths lessons and developed consistently over time. We are committed to ensuring that children are able to recognise the importance of Maths in the wider world and that they are also able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts. We want all children to enjoy Mathematics and to experience success in the subject, with the ability to reason mathematically. We are committed to developing children’s curiosity about the subject, as well as an appreciation of the beauty and power of Mathematics.

Implementation
The content and principles underpinning the 2014 Mathematics curriculum and the Maths curriculum at our Federation reflect those found in high-performing education systems internationally, particularly those of east and south-east Asian countries such as Singapore, Japan, South Korea and China. These principles and features characterise this approach and convey how our curriculum is implemented:

* Teachers reinforce an expectation that all children are capable of achieving high standards in Mathematics.
* The large majority of children progress through the curriculum content at the same pace.

Differentiation is achieved by emphasising deep knowledge and through individual support and intervention.

* Teaching is underpinned by methodical curriculum design and supported by carefully crafted lessons and resources to foster deep conceptual and procedural knowledge.
* Practice and consolidation play a central role. Carefully designed variation within this builds fluency and understanding of underlying mathematical concepts.
* We are passionate to embed learning through CPA methods – Concrete, Pictorial and Abstract.
* Teachers use precise questioning in class to test conceptual and procedural knowledge and assess children regularly to identify those requiring intervention, so that all children keep up.

To ensure whole consistency and progression, the school uses the DNEAT calculation policy

and the White Rose Maths scheme .New concepts are shared within the context of an initial related problem, which children are able to discuss in partners. This initial problem-solving activity prompts discussion and reasoning, as well as promoting an awareness of maths in relatable real-life contexts that link to other areas of learning. In KS1, these problems are almost always presented with objects (concrete manipulatives) for children to use. Children may also use manipulatives in KS2. Teachers use careful questions to draw out children’s discussions and their reasoning. The class teacher then leads children through strategies for solving the problem, including those already discussed. Independent work provides the means for all children to develop their fluency further, before progressing to more complex related problems. Mathematical topics are taught in blocks, to enable the achievement of ‘mastery’ over time. Each lesson phase provides the means to achieve greater depth, with more able children being offered rich and sophisticated problems, as well as exploratory, investigative tasks, within the lesson as appropriate.

Impact
The school has a supportive ethos and our approaches support the children in developing their collaborative and independent skills, as well as empathy and the need to recognise the achievement of others. Children can underperform in Mathematics because they think they can’t do it or are not naturally good at it.  Regular and ongoing assessment informs teaching, as well as intervention, to support and enable the success of each child using PIXL and QLA tracking to inform teaching.