## Curriculum Intent, Implementation and Impact 2022-23
## Maths

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| Curriculum Intent | At St Cuthbert's Junior School, we are committed to developing children's curiosity about the subject, as well as an appreciation of the beauty and power of mathematics. We believe mathematics is of central importance to our modern society and is a powerful, universal language used to explain, predict and tackle everyday problems. Therefore, at our school, our intent for mathematics is to teach a rich, balanced and progressive curriculum using maths to reason, problem solve and develop fluent conceptual understanding in each area to help children makes sense of the world. Our curriculum is frequently reviewed to ensure that is it current and effective and teachers are supported and aided in their teaching of mathematics through appropriate high quality CPD, ensuring confidence in the skills and knowledge that they are required to teach. Our curriculum allows children to better make sense of the world around them by making connections between mathematics and everyday life. The structure of the mathematics curriculum across school shows clear progression in line with age related expectations. Teaching curriculum content in blocks allows children to explore skills and knowledge in depth and gain a secure understanding of particular subject matter. A concrete, pictorial, abstract approach provides children with a clear structure in which they can develop their depth of understanding of mathematical concepts in a sequence of small-step lessons. We aim to ensure that mathematics is a high-profile subject, which children view positively and with a 'can do' attitude. |

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| Curriculum Implementation | Staff subject knowledge allows the intentions of our mathematics curriculum to be delivered successfully. We continually strive to build upon our understanding of the mathematics curriculum and the expectations that come with it. We achieve this through regular quality CPD, which is provided by the subject leader and through support from the Boolean Maths Hub Teaching for Mastery Programme, as well as external advisors as appropriate. All staff are encouraged to raise questions, seek support and request further training if needed, in order to ensure everyone is confident in what they teach. Good practice is shared between staff and all CPD is used to inform teaching and learning across school. Resources and equipment are audited regularly so that children have materials of high quality and accuracy to support their learning. Our resources allow us to better use models and images to support learning in each area and enable the progression from concrete to pictorial to abstract. Each class has a Maths Floor Book, which is used to record and celebrate the use of manipulatives for all children in an array of topics. Our maths curriculum is based on the White Rose yearly overviews which set the curriculum out in blocks enabling children to get to grips with different areas of maths through extended periods of time. Alongside the White Rose materials, we use many other resources to ensure that our offer is rich and varied. These include, however are not limited to, NCETM, NRich and ISeeReasoning. These are used across KS2 allowing children to be exposed to a variety of different types of learning and to ensure coverage of fluency, problem solving and reasoning in different formats. Teachers also implement the schools agreed calculation policies for progression in written and mental calculations. Termly assessments are used to help teachers to gather an understanding of their pupil's existing and developing knowledge and skills. Children are expected to speak and write in full sentences when explaining a concept, using the correct mathematical vocabulary, which is displayed in classrooms and key stem sentences provided by the teacher to further embed understanding. Timetabled early-morning interventions for maths are in place for identified children who are working below ARE; all other children receive regular group support as part of their maths lessons, with further support for individuals or small groups where a need is identified. In order to meet the needs of all pupils, children working above ARE within an area of mathematics have 'thinking deeper' opportunities in each lesson planned by staff. Fluency is developed through repeating, reinforcing and revising key skills through Fluent in Five and weekly arithmetic tests, which take place in all classes. Children are given time to practice and perfect their calculation strategies, including giving pupils the opportunity to make appropriate decisions when estimating, calculating and evaluating the effectiveness of their chosen methods. In addition to this, all classes use the first ten minutes of the maths session to focus on times tables. TT Rockstars is used by the children to practise times tables in a fun and engaging way in and out of school, with fortnightly battles organised to keep children focused and excited. Feedback is given in a variety of ways to ensure pupils are well-informed and making visible progress. Discussion is essential to learning and children are encouraged to discuss their thoughts, ideas and methods with a partner, group or the teacher. Pre-planned hinge questions are used, based around a common misconception, in order to provide the teacher and support staff the opportunity to quickly assess the children's understanding of a concept or procedure. Investigative tasks are designed to allow pupils to follow lines of enquiry and develop their own ideas, justifying and proving their answers. Children work both collaboratively and independently when solving problems, which require them to persevere and develop resilience. Children are encouraged to 'RAG' their understanding at the end of each lesson, by placing their book in the corresponding-coloured tray. This allows children the time to reflect on their own progress in the lesson, as well as providing teachers a visual guide to the children' confidence in a particular area of mathematics. |

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| Curriculum Impact | The impact of our mathematics curriculum is that children know that maths is a vital life skill that they will rely on in many areas of their daily life. Children generally have a positive view of maths, due to learning in an environment where maths is promoted as being an exciting and enjoyable subject, in which they can investigate and ask questions; they know that it is OK to be 'wrong' and that this can strengthen their learning because the journey to finding an answer is most important. This has been reflected in a recent Pupil Voice questionnaire (Nov 2022). Children are confident to 'have a go' and choose the equipment they need to help them to learn along with the strategies they think are best suited to each problem. Our children have a good understanding of their strengths and are willing to take on feedback in order to develop the areas they need to improve. Our maths books are scrutinised frequently both internally and by external specialists. These books evidence work of a high standard of which children clearly take pride, whilst the range of activities demonstrate good coverage of fluency, reasoning and problem solving. Our feedback and interventions support children to strive to be the best mathematicians they can be, ensuring a high proportion of children are on track or above. |