



West Heselton CE Primary School Curriculum statement for the teaching and learning of Maths

ETHOS	<p style="text-align: center;">"Children are at the centre of all we do"</p> <p>We encourage everyone in our school community to live life well reflecting Christian attitudes and values and working in partnership with families as part of a wider, caring community.</p> <p>The hallmarks of a Christian life lived well are –</p> <p>· Love · Joy · Self-control · Peace · Kindness · Patience · Generosity · Gentleness · Faithfulness</p> <p>Galatians 5:22 – 23</p>
SCHOOL INTENT	<p>As a family-orientated church school, children have opportunities to build positive relationships across a multi-generational community, equipping them to be role models in society.</p> <p>To achieve their academic potential on their life-long learning journey, we provide a safe and supportive environment for children to take risks, make their own learning decisions, work collaboratively and independently.</p> <p>Whilst making the greatest use of the wide-open spaces in our community and the outdoor education this provides, we balance this with a range of visits and experiences, during and beyond the school day, to enhance our understanding of the opportunities and diversity in the UK and wider world.</p>
SUBJECT INTENT	<p>At West Heselton our intent of our mathematics curriculum is to ensure that every child enjoys mathematics and becomes an enthusiastic mathematician by developing their skills, knowledge and understanding through practical experiences that have relevance and purpose in everyday situations. Our intention is to produce an ambitious, connected curriculum accessible to all pupils in school. It is important that children develop the skills of numeracy to become lifelong learners. They should be able to apply these skills in different situations across the curriculum and in daily living outside school.</p> <p>Mastery</p> <p>Pupils are required to explore maths in depth, using mathematical vocabulary to reason and explain their workings. A wide range of mathematical resources are used and pupils are taught to show their workings in a concrete, pictorial and abstract form wherever suitable. They are taught to explain their choice of methods and develop their mathematical reasoning skills. We encourage resilience, adaptability and acceptance that struggle is often a necessary step in learning. Our curriculum allows children to better make sense of the world around them relating the pattern between mathematics and everyday life.</p> <p>We aim to ensure that all pupils:</p> <ul style="list-style-type: none">• develop a positive attitude towards mathematics.• develop and consolidate basic mathematical skills and become numerically fluent.• promote confidence and competence with numbers and the number system.• develop the ability to solve problems through decision making and reasoning in a range of contexts.• develop a practical understanding of the ways in which information is gathered, presented and interpreted.• explore features of shape and space, and develop measuring skills in a range of contexts.• develop mathematical communication through speaking and listening, practical activities and recording work.• develop an ability to use and apply mathematics across the curriculum and in real life.

UNDERPINNED BY	High expectations	Modelling	Fluency	Vocabulary
	All pupils are expected to make at least good progress from their starting point and achieve their full potential.	Staff teach the skills needed for children to succeed by providing quality first teaching and having high expectations.	Pupils apply the skills taught confidently and independently across the curriculum.	Ambitious vocabulary is taught explicitly and can be used by pupils appropriately.
	Fluency (Conceptual Understanding)	Reasoning (Mathematical Thinking)	Problem Solving	Pattern and Connection Identification
We intend for all pupils to become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, which link to real life situations. This enables pupils to develop conceptual understanding and apply their mathematical thinking, allowing them to develop their ability to recall and apply knowledge rapidly and accurately.	We intend for all pupils to think mathematically and reason mathematically. The pupils have opportunities to develop their mathematical thinking in every Maths lesson and we support pupils to develop mathematical 'habits of mind'- to be systematic, generalise, make conjectures and seek out patterns.	We intend for all pupils to solve problems by applying their mathematics to a variety of problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.	All pupils will have opportunities to identify patterns or connections in their maths; they can use this to predict and reason and to also develop their own patterns or links in maths and other subjects.	
IMPLEMENT ACTION	Skills, knowledge and vocabulary are taught following the National curriculum.			
	In EYFS we use the 'Birth to 5 Matters' guidance and the Development Matters Checkpoints to track progress, these are non-statutory - only the 'Early Years Framework' is statutory. EYFS number concepts are taught through the 'Mastering Number' programme. In addition to this the Shape Space and Measure aspects are followed from the White Rose Maths Scheme.			

<p>Schemes of Work <u>NCETM Mastering Number</u> <i>EYFS, Year 1, Year 2, Year 4, Year 5, Year 6 (consolidation)</i> Pupils taking part in a Mastering Number program from the NCETM. This aims to secure firm foundations in the development of good number sense for all pupils and multiplicative reasoning. The aim over time is that pupils in these year groups will develop a greater fluency in calculation and a confidence and flexibility with number.</p> <p><u>Times Table Rockstars</u> <i>Year 2, Year 3, Year 4, Year 5, Year 6</i> Times Tables Rock Stars is a carefully sequenced programme of times tables practice. When it comes to times tables, speed AND accuracy are important – the more facts your child remembers, the easier it is for them to do harder calculations. Times Table Rock Stars is a fun and challenging programme designed to help students master the times tables! To be a Times Table Rock Star you need to answer any multiplication fact up to 12×12 in less than 3 seconds!</p> <p><u>White Rose Maths (V3)</u> <i>EYFS - Y6</i> Every class from EYFS (SSM) to Y6 follows the White Rose scheme of learning which is based on the EYFS framework and the National Curriculum. Lessons may be personalised to address the individual needs and requirements for a class but coverage is maintained.</p>	<p>Concrete Pictorial Abstract (CPA) We implement our approach through high quality teaching delivering appropriately challenging work for all individuals. To support us, we have a range of mathematical resources in classrooms including Numicon, Base10 rekenreks, counters etc (concrete equipment).</p> <p>When pupils have grasped a concept using concrete equipment, images and diagrams are used (pictorial) prior to moving to abstract questions. Abstract maths relies on the children understanding a concept thoroughly and being able to use their knowledge and understanding to answer and solve maths without equipment or images.</p>	<p>Assessment, Interventions and Challenge Through our teaching, questioning and use of ongoing and unit assessments, we continuously monitor pupils' progress against expected attainment for their age, making formative assessment notes where appropriate and using these to inform our teaching. Summative assessments are completed at the end of each term using appropriate assessments for the cohort. At the end of every term, we assess Y2-Y6 using NFER assessments as these give us detailed data to track children's progress across the year and put appropriate support in place Year 6, only sit NFER assessments at the end of the Autumn term to support them with their SATS preparations. Knowledge of children's attainment and progress along with formative assessment data in EYFS, KS1 and KS2 contributes to discussions in termly pupil progress meetings and an update of our school tracker. The main purpose of all assessment is to always ensure that we are providing excellent provision for every child. In Reception, summative assessments take the form of termly 'Checkpoints'. Staff use their knowledge of the children alongside recorded evidence to make a judgement as to whether they are 'On Track' to reach the Early Learning Goal at the end of their Reception year. These judgements are accompanied by contextual discussions on children's achievements and next steps for learning.</p>	<p>Online Maths Tools (including home learning) In order to advance individual pupil's maths skills in school and at home, we utilise Times Tables Rock Stars in Y2-Y6 for multiplication practise, application and consolidation and Numbots in R-Y1 for number practice application and consolidation. Various other applications are also utilised within classes when appropriate.</p>
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	<p>Inclusion All children receive a high-quality and ambitious education regardless of need or disability, both in and out of the classroom. In Maths we support these children</p> <p>At West Heselton, pupils are given time and opportunities to fully explore mathematical concepts. The challenge comes from investigating ideas in new and complex ways – rather than accelerating through new topics. While there is only one curriculum, we recognise that not all learners come to each lesson at the same starting point. Therefore, staff adapt tasks by increasing/decreasing scaffolding and may put constraints in place to ensure each child is working at the correct level of challenge to maximise their personal potential.</p>	<p>Continuing Professional Development (CPD) We continuously strive to better ourselves and frequently share ideas and strategies that have been particularly effective. Ongoing, sustained and subject-specific professional development is at the heart of the Maths curriculum and therefore all staff and the Maths Subject Leader attend a range of CPD opportunities across the academic year. We also look out for other CPD opportunities from other organisations such as Maths Hub, Research School, EYFS Hub and the NCETM.</p>	<p>Nurture The six principles of nurture are woven throughout our curriculum.</p> <ul style="list-style-type: none"> • Learning • Wellbeing • Behaviour • Language • Safety • Transition 	
<p>IMPACT</p>	<p>We strive to create a supportive and collaborative ethos for learning by providing a variety of opportunities to help children gain a coherent knowledge of understanding of each unit of work covered. Our curriculum is high quality, well thought out and is planned to demonstrate progression. We focus on the progression of knowledge and skills, and discrete vocabulary progression also forms part of each unit of work.</p> <p>We measure the impact of our curriculum through monitoring methods and by carrying out teacher assessment. EYFS checkpoint assessments are monitored at the end of each term.</p>			

MONITORING METHODS	Pupil Voice	Evidence in knowledge	Evidence in skills	Outcomes
	<p>Through discussion and feedback, pupils talk enthusiastically about their maths lessons and speak about how they love learning about maths. They can articulate the context in which maths is being taught and relate this to real life purposes.</p> <p>Pupils show confidence and believe they can learn about a new maths area and apply the knowledge and skills they already have.</p>	<p>Pupils know how and why maths is used in the outside world and in the workplace. They know about different ways that maths can be used to support their future potential.</p> <p>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.</p> <p>Pupils demonstrate a quick recall of facts and procedures. This includes the recollection of the times table.</p>	<p>Pupils use acquired vocabulary in maths lessons. They have the skills to use methods independently and show resilience when tackling problems.</p> <p>The flexibility and fluidity to move between different contexts and representations of maths.</p> <p>Pupils show a high level of pride in the presentation and understanding of the work.</p> <p>The chance to develop the ability to recognise relationships and make connections in maths lessons.</p> <p>Where appropriate, staff plan a range of opportunities to use maths inside and outside school.</p>	<p>At the end of each year we expect pupils to have achieved their academic potential, with the majority in line with National Age-Related Expectations. Some children will have progressed further and achieved above National Age-Related Expectations. Children who have gaps in their knowledge receive appropriate support.</p> <p>Mastery All pupils secure long-term, deep and adaptable understanding of maths which they can apply in different contexts.</p>