

INTENT	
<p>Mathematics is an important creative discipline that helps us to understand and change the world. We want all pupils at Ireleth St Peter’s to experience the beauty, power and enjoyment of mathematics and develop a sense of curiosity about the subject with a clear understanding. At Ireleth St Peter’s we foster positive can do attitudes and we promote the fact that ‘We can all do maths!’ We believe all children can achieve in mathematics, and teach for secure and deep understanding of mathematical concepts through manageable steps. We use mistakes and misconceptions as an essential part of learning and provide challenge through rich and sophisticated problems. At our school, the majority of children will be taught the content from their year group only. They will spend time becoming true masters of content, applying and being creative with new knowledge in multiple ways.</p>	
Teaching of skills	<p>We aim for all pupils to:</p> <ul style="list-style-type: none"> • become fluent in the fundamentals of mathematics so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. Times Tables are a school focus with a new implementation plan being rolled out. • be able to solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios • reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language. • have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately to be successful in mathematics.
Application of skills	<p>By the end of KS2, we aim for children to be fluent in the fundamentals of mathematics with a conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. They should have the skills to solve problems by applying their mathematics to a variety of situations with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios. Children will be able to reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.</p>
Vocabulary	<p>All pupils will understand and use a range of appropriate mathematical vocabulary to discuss, communicate and model their ideas. They will also understand the vocabulary relevant to the mathematical method and associated with working mathematically.</p>
IMPLEMENTATION	
Curriculum approach	Stimuli – resources, trips and visitors
<p>Our whole curriculum is shaped by our school vision which aims to enable all children, regardless of background, ability, additional needs, and to flourish to become the very best version of themselves they can possibly be. We teach the National Curriculum, supported by a clear skills and knowledge progression. We use Hamilton for our planning</p>	<p>Pupils are taught using relevant links to the world around us and the technologies which the skills within the unit can be applied to. The children have visited local museums and had visitors into school to share learning and have hands on experiences. We have a great link with The Maths Hub who have provided training for the maths lead and also provided ideas for</p>

<p>approach and build in some mastery techniques higher up the school. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children. Maths Lesson: Unit planning based on National Curriculum Statements and manageable steps taken from Hamilton. Children are taught Mathematics for approximately 1 hour daily. Support is determined during each lesson to ensure secure understanding based on the needs of the child. Challenge is visible throughout the whole session, where children are asked to reason and prove their understanding at a deeper secure level. Higher up the school Year 6 are stretched and challenged in preparation for SATs and focused sessions are provided.</p>	<p>experiences with classes and the skills needed to achieve this in a safe environment. We take part in number day for The NSPCC. We will be looking to involve more people from our local community in maths in future</p>
<p>Local Context</p>	<p>Questioning</p>
<p>Pupils are taught using relevant links to the local area and the wider world and the technologies which the skills within the unit can be applied to. Using STEM kits borrowed from BAE systems, allowed pupils to use their previous knowledge on programming to question and build on this, whilst also learning some background information on the things BAE offer to our local area. This was a fantastic cross curricular link to computing. Children are also given the opportunity to take part in number day, various maths challenges set on dojo across the school year- a favourite was finding numbers in the local environment.</p>	<p>Questioning is a fundamental aspect of maths; it is integral to all types of mathematical enquiry and is developed through every stage of year group topic. Pupils often ask questions at the beginning of a topic to focus their learning as they progress through the unit. In lessons, some questions may be closed, requiring a specific answer based on mathematical knowledge. More often, questions are child-centred and open, allowing for i) a range of answers from children of all abilities and life experiences and ii) mathematical investigations. Children are encouraged to understand that some questions may require only one answer, unlike science. However they are encouraged to learn to answer a reasoning questioning in a variety of ways and to consider what mathematical approach is needed to support or refute an idea.</p>
<p>Sharing work</p>	<p>SMSC</p>
<p>Pupil's maths work is recorded in books and is shared between pupils and staff. In class, children also share their learning in a variety of ways: discussion, presentations (including PowerPoint and word processing), drawings and posters, information booklets; dance and drama. There are frequent opportunities to celebrate children's maths work and show the process of their learning via display boards in school. Occasionally, maths work is shown in assemblies alongside other curriculum subjects. Children's work is also responsibly shared online with parents using our social media platforms. Parents are further informed as to maths learning in school through a termly dojo update from the maths lead.</p>	<p>Pupils are encouraged to think creatively and think innovatively which in turn breeds self-confidence and belief in their own abilities. During the reasoning, we encourage pupils to think about their choice of method. There is an emphasis on collaboration and taking responsibility for accepting each other's responses. We also encourage conversations about self and peer evaluation to improve students learning outcomes.</p>
<p>IMPACT</p>	
<p>Pupil voice</p>	
<p>Talking to pupils throughout the school shows how pupils enjoy the units of work. They take pride in problem solving to ensure their answer is correct and enjoy reasoning to decipher the correct mathematical concept to use. When asked, pupils can explain how to clearly resolve a problem and what to do when they see something</p>	

in context. Children also enjoy having the choice to work with partners in varied carousel activities and working collaboratively with other year groups.

Evidence of Knowledge and skills

By the end of KS2 we aim for children to be fluent in the fundamentals of mathematics with a conceptual understanding and the ability to recall and apply knowledge rapidly and accurately. They should have the skills to solve problems by applying their mathematics to a variety of situations with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios. Children will be able to reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.

Breadth and Depth

Much opportunity is given for children to develop a deeper understanding, level of skill and appreciation of maths. Pupils have developed their mathematical ideas to the expected standard by the end of a unit. Further support is provided for those who don't achieve this. Challenges are available to extend mathematical skills within the classroom. Some children can use their skills and knowledge in other curriculum areas and to make links to other topics. Through reflecting on the subject, children are able to self-identify what skills they would like to improve and develop. Visits and visitors create further opportunities to consolidate and enrich mathematical understanding. A dedicated whole school number day is an ideal opportunity for maths to have a high profile and excellence in maths to be shared. Parents are invited into sessions in classrooms to model good practice and share support ideas for mathematics in the home environment.

*Inspiring Successful Partnership
through God's love*