CURRICULUM STATEMENT FOR MATHEMATICS

AIMS

We aim to ensure that all pupils:-

- Become fluent in the fundamentals of Mathematics, including through varied and frequent practise with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.
- Can solve problems by applying their Mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions. Mathematics is an interconnecting subject in which pupils need to be able to move fluently between representations of mathematical ideas.

Our aims for Mathematics are all underpinned by our Christian values: Service, Faith, Determination, Love, Honesty, Friendship, Thankfulness, Respect and Forgiveness.

The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. Our curriculum ensures children apply mastery skills. We have a Mastery approach to the teaching of Mathematics which is supported by the use of White Rose Maths materials. Deeper Learning Challenges are used to extend fluency, reasoning and problem-solving. Children should also apply their mathematical knowledge to Science and other subjects.

The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage.
Pupils who grasp concepts rapidly should be challenged through being offered rich mastery and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.

The Mathematics leader is Mrs A Lumby.

Intent	At Lytham C of E Primary School, we believe that children should be able to select which mathematical approach is most effective in different scenarios rather than through a traditional approach by memorising key facts and procedures which can lead to superficial understanding. All pupils can achieve in Mathematics. We believe there is no such thing as a "Maths person" – the belief that some pupils can learn Maths whilst others cannot. A typical Maths lesson will provide the opportunity for ALL children, regardless of their ability, to work through fluency, reasoning and problem solving activities. Maths is a journey and long-term goal, achieved through exploration, clarification, practice and application over time. At each stage of learning, children should be able to demonstrate a deep, conceptual understanding of the topic and be able to build on this over time. There are 3 levels of learning:- • Shallow learning: surface, temporary, often lost • Deep learning: it sticks, can be recalled and used • Deepest learning: can be transferred and applied in different contexts The deep and deepest levels are what we are aiming for by teaching Maths using the Mastery approach.
Implementation	Our approach is that of multiple representations for all. ***Concrete, pictorial, abstract*** Objects, pictures, words, numbers and symbols are everywhere. The mastery approach incorporates all of these to help children explore and demonstrate mathematical ideas, enrich their learning experiences and deepen understanding. Together, these elements help cement knowledge so pupils truly understand what they have learned. All pupils, when introduced to a new key concept, should have the opportunity to build competency in this topic by taking this approach. Pupils are encouraged to physically represent mathematical concepts. Objects and pictures are used to demonstrate and visualise abstract ideas, alongside numbers and symbols. ***Concrete*** - children have the opportunity to use concrete objects and manipulatives to help them understand and be able to explain what they are doing. ***Pictorial*** – children build on this concrete approach by using

	pictorial representations, which can be then used to reason and solve problems. ***Abstract*** – with the foundations firmly laid, children can move to an abstract approach using numbers and key concepts with confidence.
Impact	All pupils will enjoy Maths, make links and apply their skills to all curriculum areas. Children will be able to:- • Quickly recall facts and procedures • Have the flexibility and fluidity to move between different contexts and representations of mathematics • Have the ability to recognise relationships and make connections in Mathematics • Master mathematical skills or concepts by demonstrating they can show it in multiple ways, using the mathematical vocabulary to explain their ideas, and can independently apply the concept to new problems in unfamiliar situations.
Coverage and Progression	Clear progression has been mapped out for Mathematics in the National Curriculum. Termly Curriculum Overviews act as a reference tool for teachers, pupils and parents to show clear expectations for what each year group should learn by the end of each term.
Assessment	Pupils' attainment in Mathematics is assessed continually. Unit and termly assessments track progress against age-related expectations; teachers use these to inform "next steps" in their planning for learning. Statutory data for pupils' achievement is reported at the end of Year 2 and the end of Year 6.