Maths

At Poulton Lancelyn, our curriculum has been designed to ensure that all children have the opportunity to reach the expected standard (and beyond) at the end of Year 6. We do not follow a specific scheme of learning, however planning is constructed using White Rose Maths materials, Maths No Problem strategies and other resources including Classroom Secrets, NCETM activities, NRich problems and TTS reasoning cards to ensure variation, challenge, flow of topics, pace of progression and exposure to mathematics in a variety of contexts. We strive to enable children to:

• become fluent in the fundamentals of mathematics so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately;

• reason mathematically to make sense of mathematics and understand problems in a variety of contexts and forms and to justify or prove ideas using mathematical language;

• 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.

Staff are given creative freedom to create their own long term plan so that mathematical elements are spiralled in order to ensure concepts and knowledge are returned to throughout the year in order to create repetitive, spaced learning. Staff then produce weekly plans that are adapted to their classes needs so that all learners are catered for through scaffolded learning and, where appropriate, differentiated activities. To support pupils learning we have a range of mathematical resources in classrooms including Numicon, Base 10 and counters to support concrete learning. The school has a calculation policy to ensure methods are progressive as pupils move through the school.

Daily lessons last between 40 minutes and 1 hour. Each lesson will have a clear learning intention, taken from National Curriculum 2014, and learning will be structured for pupils to achieve this. Teachers use of effective questioning and modelling and strategies will support pupils to develop effective understanding. In each classroom, maths displays are developed as working walls as learning build. They are rich in current mathematical vocabulary to support the lessons being taught.

In Key Stage Two, staff build a second twenty-minute session into the day so that feedback and misconceptions can be addressed promptly. To add to this, pupils complete Fluent in Five and Rapid Reasoning from 3rd Space Learning to further develop basic skills and reasoning strategies.

Where teachers want support to develop their subject knowledge, the school encourages are range of strategies including peer support, CPD opportunities, co-ordinator support and access to the NCETM self-evaluation tool, which provides effective links to develop subject knowledge. Evaluation of the quality of teaching and learning is conducted termly through methods include lesson observations, book scrutiny, pupil/teacher voice and planning reflections conducted by SLT.

Teachers constantly reflect on pupil understanding and progress and use the Maths Feedback book regularly to write formative assessment notes that aid the development of further activities. Teachers moderate work internally and through MAT moderation meetings to ensure assessments are accurate. Summative assessments are completed termly, using Rising Stars PUMA tests. The data from these tests are discussed in termly progress meetings, and in combination with teacher assessments, provision maps are produced to create interventions. Where more than quality first teaching is required, staff implement maths interventions, including daily homework, 3rd Space Learning 1:1 tuition, No Nonsense Number Fluency. Teachers are able to use End of Unit assessments - available from White Rose Maths - if required to confirm assessments.

In order to develop a mastery approach to learning, teachers ensure age appropriate cross-curricular links to other areas of the curriculum during topic work to identify whether pupils are able to transfer mathematical skills to other areas of learning. In Year Six, this is signified through the £5 Challenge, during which pupils are encouraged to become young entrepreneurs and create profit using their original money. In the past two years, this challenge has both extended mathematical skills in real life situations and raised over £2000 for school projects.

Maths is developed at home using online resources for the majority of the year. Online products including Mathletics, MyMaths and Sats Companion are set based on what has been taught in the class to consolidate pupils' opportunities to practise learning. In Lower Key Stage Two, Times table Rock Stars is completed to ensure that pupils have a repetitive practise at times tables to correspond with the National

Curriculum 2014 statement that by the end of Year Four, pupils should know all multiplication facts to 12x12.