Curriculum Area: Mathematics

Leader: Cara Leck

Quality Of Education

Intent

When planning in Mathematics, we aim to ignite the ability in all to 'Love, Laugh and Learn'. This is achieved through recognising the extraordinary and wondrous in everything that we plan across our rich Mathematics curriculum. When coupled with our Christian values and Jesus's promise 'I have come to give life and life in all its fullness'. (John 10:10) we provide the children with experiences that will inspire them and ultimately support them to flourish and reach their own potential. Mathematics is important in everyday life and, with this is mind, the purpose of Mathematics at Wrockwardine Wood CE Junior School is to develop pupils' mathematical fluency, provide them with the ability to solve problems, reason, to think logically and to work systematically and accurately. All pupils are challenged and encouraged to excel in Maths. New mathematical concepts are introduced using a 'Concrete, Pictorial and Abstract' approach; enabling all pupils to experience hands-on learning when discovering new mathematical topics, allowing them to have clear models and images to aid their understanding. Arithmetic and basic maths skills are practised daily, to ensure key mathematical concepts are embedded and pupils can recall this information to see the links between topics in Maths, linking their learning to real life experiences. It is with these experiences that we can show our children that we are loving out loud; supporting their development, fostering positive futures and opening their minds to a future without limits. 'I have come to give life and life in all its fullness'. (John 10:10)

Implementation

Sequencing of learning

- Our Long-Term Plan ensures Mathematical units are revisited regularly and include opportunities for consolidation, based on Teacher Assessment.
- At the beginning of each Mathematical unit, pupils are reminded of the previous learning needed to be successful, and how this unit helps with maths in everyday life and all related mathematical vocabulary.
- Planning follows a clear progression, in line with Age Related Expectations.
- Prior learning is revisited to embed previous maths skills using Flashback Four.
- KIRFs (Key instant recall Facts) are practised as a starter, twice a week. These are designed to support the development of the mental skills and key knowledge that underpin much of the maths work in school.
- Pupils are taught through mixed ability whole class lessons, as well as targeted differentiated small groups, to allow them to flourish.
- Lessons use a Concrete, Pictorial and Abstract approach to guide pupils through their understanding of mathematical processes.
- An Arithmetic lesson is taught every Friday. We use the data analysis from the previous term's assessments, to see where the gaps are in pupils' learning and use this to inform what is taught in the arithmetic lesson.
- Maths pre-teach and interventions are used to support pupils to ensure they are ready for their next Maths lesson, or need any support following the current maths lesson.
 - Where possible, links are made with other subjects across the curriculum.

Impact

Assessment - Do children know more and remember more?

As a result of our Maths teaching at Wrockwardine CE Junior School, you will see:

• Engaged pupils' who are all challenged and making good progress with their learning.



Curriculum Area: Mathematics

CHINICR SCHOOL

Leader: Cara Leck

- Confident pupils' who can all talk about Maths, their learning, the links between this learning and how it will help them in real life, supporting them to reach their full potential.
- Lessons that use a variety of resources to support learning.
- Learning that is tracked and monitored to ensure all pupils' make good progress.
- Lessons with high expectations where Quality First Teaching supports pupils' independence and resilience.

SEN Provision

Pupils will have:

- work differentiated to ensure they are working from their starting point with challenge still provided.
- full access to concrete resources throughout the lesson to support themselves when necessary.
- Pre-teach, allowing for more independence during the lesson and to prepare for the next lessons.
- Targeted interventions to support gaps in knowledge.

Reading

Reading skills are crucial in the mathematics curriculum and there will be opportunities to read in every maths lesson, with questions on the independent activities and the information on the working wall. The curriculum is used to help teach a range of the reading domains. Along with decoding and reading for information, children build their skills of:

- Inference, when looking for clues in a worded problem to help decide exactly what mathematical skills pupils will need to apply.
- Predicting and estimating when thinking about an answer. Being able to use the evidence to decide if our answers are reasonable.
- Summarising when explaining to a peer, adult and in pupils' books why they have made a particular choice when reasoning mathematically and explaining the choices they have made.
- Retrieval when looking at word problems, being able to retrieve the vital information to decide what they need to do to solve it.
- Vocabulary is critical, as the pupils learn and understand a range of new mathematical vocabulary. Vocabulary will be introduced and used in every lesson. This will also be on the working wall. Pupils will be encouraged to read the vocabulary, understand and use it in their explanations and reasoning.

Cultural Capital

Pupils will have:

- Increased knowledge of mathematical vocabulary as it is introduced for the unit, which help to articulate their thinking. They will be encouraged to use this and have opportunities as we develop our maths across the school, to use Stem sentences to embed this.
- A good understanding of the purpose of the maths and how it links to real life situations and real-world contexts.

Curriculum Area: Mathematics

Leader: Cara Leck

- Learning about influential mathematical figures within our society, during Math's week and whole school assemblies.
- Understand how maths is used for different careers and the opportunities, how it will help them in the future world of work and to be successful.

British Values

- Democracy- consider the views and ideas of others, allowing everyone to have their say and give their explanations.
- Rule of Law follow the class rules during tasks and activities to benefit everyone, understanding the consequences of rules are ignored.
- Respect and Tolerance pupils behave appropriately allowing everyone involved the opportunity to work at the best of their ability, take turns sharing equipment and reviewing each other's work respectfully.
- Individual Liberty being allowed to make mistakes and then learn from them, devising own ways to present ideas and solutions and working within the rules to make a personal choice.

Equality and Diversity

Equality and diversity can be achieved by:

- Quality first teaching
- SEN and EAL provision with an emphasis on equity for all
- Providing opportunities for teamwork for all and recognising each other's strengths
- Promoting equal opportunities for all i.e. everyone can be good at maths and will have support to achieve regardless of their gender, race, religion or ability.
- Learning about diverse figures within society that have had influence over maths, during Math's week and whole school assemblies.

