

## Curriculum Area: Mathematics

Leader: Katherine Steventon

Quality Of Education
<b>Intent</b>
<p>Our school vision of '<b>living life in all its fulnesses</b>' is emulated throughout our curriculum – including Mathematics. Maths is important in everyday life and, with this in 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 to equip them to be successful in later life. All pupils are challenged and encouraged to excel in Maths to enable them to reach their full potential. 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 and allowing them to have clear models and images to aid their understanding or more abstract problems. 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. Through regular moderating meetings with Wrockwardine Wood Infant school and regular liaising with their Maths Leader, we ensure there is consistency with the use of manipulative and have a clear expectation for all learners.</p>
<b>Implementation</b>
<p>Sequencing of learning</p> <ul style="list-style-type: none"><li>• Our Long-Term Plan ensures Mathematical units are revisited regularly and include opportunities for consolidation, based on Teacher Assessment.</li><li>• Assessment for learning lessons take place when misconceptions are addressed and marking is used developmentally to move the learning forward and challenge all learners even those who have achieved their learning objective.</li><li>• 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.</li><li>• Planning follows a clear progression, in line with Age Related Expectations in line with the National Curriculum.</li><li>• Prior learning is revisited daily to embed previous maths skills using Flashback Four. In Upper Key Stage Two, Flashback Four takes place daily and in Lower Key stage Two, it is alternated with Times Table and number bond practice.</li><li>• Pupils are taught through mixed ability whole class lessons, as well as targeted differentiated small groups.</li><li>• Lessons use a Concrete, Pictorial and Abstract approach to guide pupils through their understanding of mathematical processes.</li><li>• 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, alongside the Ready to Progress documents. A range of arithmetic skills are also taught to ensure there are regular opportunities to revisit prior learning and secure the children's knowledge of core fluency skills.</li><li>• Reasoning resources are used to challenge all pupils and give them the opportunity to reason with their understanding. Through guided reading sessions, children are encouraged to annotate and pick apart the mathematical vocabulary to help them formulate a clear image of what the question is asking them.</li><li>• 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.</li><li>• Tuition sessions for Maths take place from the Autumn term for Year 6 to try and close the gap between PPG and non-PPG children.</li><li>• Where possible, links are made with other subjects across the curriculum and regular opportunities are used to share the maths learning with the wider world and everyday life ensuring that their learning is purposeful.</li><li>• Multiplication skills are taught daily after lunch and in Year 6 these skills are combined with arithmetic skills too. There is a clear sequence to teaching the multiplication across the school and children are given TTRockStar logons to support their learning at home.</li></ul>
<b>Impact</b>
<p>Assessment - <b>Do children know more and remember more?</b></p> <p>As a result of our Maths teaching at Wrockwardine CE Junior School, you will see:</p> <ul style="list-style-type: none"><li>• Engaged pupils' who are all challenged and making good progress with their learning.</li><li>• Confident pupils' who can all talk about Maths, their learning, the links between this learning and how it will help them in real life.</li><li>• Lessons that use a variety of resources to support learning.</li><li>• Learning that is tracked and monitored to ensure all pupils' make good progress.</li><li>• Lessons with high expectations where Quality First Teaching supports pupils' independence and resilience.</li></ul>

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**SEN Provision**

Pupils will have:

- Work is adapted 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.
- Pe-teach, allowing for more independence during the to prepare for the next day's lesson.
- Targeted interventions to support gaps in knowledge.
- There are opportunities for these learners to work independently to build on their own resilience and independence.

**Reading**

- Opportunities to read in every maths lesson with questions on the activities and the information on the working wall.
- 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 the explanations and reasoning.
- Reasoning and problem-solving questions will involve reading and solving contextual problems which pupils will need to read and understand.
- Guided reading takes place during problem solving lessons where children are encouraged to unpick the vocabulary that has been used to build a deeper understanding of what the question is asking them.

**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.
- 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.
- During Careers Week, professionals are invited in to talk to the children about how maths is used in their job so the children are aware of a range of jobs they could do when they're old that involve the maths skills they are learning about.

**British Values**

- Democracy- take into account 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.



## Wrockwardine Wood CE Junior School Curriculum Area Script

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- Learning about diverse figures within society that have had influence over maths, during Math's week and whole school assemblies.