

Intent

The aim of our curriculum is to provide children with a high-quality mathematics education to allow them to access the financial literacy, reasoning and problem-solving skill set that is critical in the modern world of science, technology, engineering and most forms of employment. Opportunities are identified which give children the confidence to work in individual and collaborative situations. In particular, children are taught to apply their knowledge and skills to a range of practical, real-life contexts, to ensure their learning is both purposeful and meaningful. Skills are linked and taught together to maximise teaching and learning time and to give context to learning. We emphasise the importance of times tables, mental maths skills and the ability to solve problems through mathematical concepts.

Implementation

The Accelerated Learning Cycle, based on the work of Alastair Smith, is applied in all lessons. It stems from the idea of a supportive and challenging learning environment. Implementation of accelerated learning, supported by EEF metacognition research, has ensured the pace of learning is appropriate and has enabled pupils to secure rapid and sustained progress which has improved outcomes and standards within each lesson. Within maths sessions differentiation is effective through the use of progressive opportunities. Children are provided with the chance to move through carefully selected tasks starting at the level most appropriate to their starting point; aiming to support pupils take ownerships of their learning and develop independence.

At Upperwood Academy, we give children the opportunity to develop their fluency, problem solving and reasoning skills throughout each concept in maths, ensuring deeper learning and understanding.

- The objectives of the National Curriculum form the basis of what is taught in mathematics at Upperwood Academy and teachers use the 'HCAT Year on a Page' to plan and sequence lessons to ensure there is sufficient progression between lessons and across year groups.
- Staff use materials from the range of resources to support planning for maths including White Rose maths hub, NCETM, NRich, Classroom Secrets, Gareth Metcalfe etc.
- EYFS staff encourage children to explore mathematics and mathematical ideas through child initiated independent play and problem solving in a carefully planned and resourced environment.
- Times tables are taught daily and weekly soundchecks take place in Y3 and Y4.
- At KS1 and KS2 Numeracy is delivered through whole class teaching, targeted group work and careful use of questioning.
- AFL informs our teaching and tailors learning to suit the needs of pupils.
- Classroom groupings are flexible with children moving groups to access support and challenge as necessary.
- Skills are taught through meaningful contexts and areas of maths are linked together to maximise learning time and to give context to teaching.



<u>Impact</u>

Formative assessment is ongoing throughout each lesson. It judges progress and enables the teacher to make flexible adaptations to their planned teaching.

Effective formative assessment, daily marking and feedback and adult interaction within lessons is firmly embedded into our approach when teaching maths. All pupils are supported to develop, progress and move their learning forward through support, questioning and feedback. Pupils demonstrate the impact this has on improving their learning through editing and response.

The use of clear learning objectives and success criteria ensures pupils to understand their learning and become self-regulated learners who aspire to achieve to their full potential Maths is assessed by teachers who use the HCAT trackers for their year groups to allocate a level and next steps for each pupil. From this gap analysis is done to inform future teaching and intervention. Cross moderation occurs in school to ensure moderation is carried out correctly. Assessment of times tables takes place weekly for Year 3 and 4 to ensure children are on track for testing at the end of Year 4.