



Mathematics Vision Statement

The language of mathematics is international. The basic skills of mathematics are vital for the life opportunities of our children. Our aim is for all children to think mathematically, enabling them to reason and problem solve in a range of contexts. We believe that all children can achieve excellence in mathematics and are constantly pushing to achieve this.

At The Academy of Woodlands we use White Rose Maths schemes of learning in order to provide a comprehensive and expertly designed journey through the world of Mathematics. White rose is based on a small steps approach that keeps all learners together. By using the resources across the school we can ensure consistency of the mathematical elements and comprehensive coverage of the curriculum. We believe that this approach will facilitate consistent delivery of Mathematics across the school and across the inevitable ability range within year groups. It is also designed to support mathematicians who require more time and visual representation to grasp fundamental concepts and those who require challenging further to achieve Greater Depth.

Key features of our Maths curriculum:

- High expectations for every child,
- Number sense and place value come first,
- Fluency of times tables,
- Focus on mathematical thinking and language,
- Resources to support,
- Problem solving,
- Calculate with confidence- understand why it works

Aims

- To implement the current legal requirements of the Early Years Foundation Stage (EYFS) and the National Curriculum

(NC).

- To acquire appropriate and necessary mathematical skills and be able to apply them confidently and accurately.
- To develop fluency of key mathematical concepts such as number bonds and times tables.
- To be able to demonstrate skills and knowledge and talk about work using appropriate mathematical language.
- To be able to clearly explain approaches using both verbal reasoning and pictorial representations.
- To develop thinking skills and logically apply mathematical knowledge to solve problems.
- To enjoy Mathematics, be successful and have a positive attitude to the subject.
- To use Mathematics as part of everyday life in school and home.

What does effective Maths learning look like at The Academy of Woodlands?

- Lessons have elements of fluency, problem solving and reasoning;
- Access to manipulatives and children demonstrating independence in using them;
- Stem sentences being modelled and used by the class teacher and children to reinforce learning;
- Engagement of all- teacher, additional adults and children;
- Challenge throughout the lesson;
- Effective questioning by the teacher and TA;
- Children being encouraged to explain their answers;
- Age appropriate mathematical vocabulary being modelled and used by all;
- Children are exposed to conceptual variation;
- Intelligent practice is evident through teacher's choice of activities and questions;
- Evidence of concrete, pictorial and abstract within a unit of work;
- A relevant learning wall which is used to support learning;
- A range of feedback within the lesson.

Early Years Foundation Stage

In the Early Years Foundation Stage (EYFS), teaching is planned through adult supported teaching and learning. Daily opportunities to informally develop mathematical understanding through both child-initiated and focused activities and routines are capitalised upon, alongside a daily discreet maths lesson.

Key Stage 1 and 2

In Key Stage 1 (KS1) and 2 (KS2), teaching follows the National Curriculum and this involves a daily mathematics lesson. Five lessons per week will be taught.

Alongside this, a weekly times tables test will be undertaken from Year 1 upwards.

Resources

- Each class has a range of resources to support learning. These are easily accessible for the children so that they can lead their own learning.
- Different environments - classrooms, outdoor learning spaces and the hall.
- A range of ICT software to support the teaching of specific concepts including TimeTables RockStars which we encourage the use of at home alongside school.
- White Rose Maths resources are used to support teaching and learning and to help teachers for planning and activities.

Times Tables (120/90/60/30 Club)

Effective understanding and recall of times tables is the foundation of most of the mathematics children will do at primary school and the mathematics curriculum involves children being fluent in number skills. The children are tested weekly and our challenge is to beating their previous time or score.

Children move through the times tables, as they increase their knowledge and fluency.

- 30 questions- 2s, 5s, 10s.
- 60 questions- 2s, 5s, 10s, 3s, 4s and 6s.
- 90 questions- 2s, 5s, 10s, 3s, 4s, 6s, 7s, 8s and 9s
- 120 questions- 2s, 5s, 10s, 3s, 4s, 6s, 7s, 8s, 9s, 11s

and 12s

Our expectation is that all children will know the 2, 5 and 10 times table by the end of year 2 and all times tables by the end of year 4.

In year 5 and 6, if a child completes within the time limit **and** gets all the answers correct, they then take 30 seconds of the time limit for the next test. Teachers keep track of results.

Assessment

In Mathematics assessment is continuous. From the beginning of every lesson, teachers and teaching assistants will be assessing what their pupils are, or are not understanding and use this to scaffold each segment of the lesson.

Interventions will be both planned for and 'live', meaning that misconceptions are dealt with immediately and high attaining pupils are challenged appropriately. Pre and post teaching ensures that all children can achieve and are prepared for the following lesson.

Early Years Foundation Stage

- Daily observations of pupils learning are made using written notes, photographs and annotated pieces of work from lessons and child initiated learning sessions. These are used to inform next steps and determine progress.
- A baseline assessment is made in the first three weeks of joining Year R using the Statutory assessment materials.

KS1 and KS2

- In the daily mathematics lesson, formative assessments are made. Practitioners observe, question and evaluate lesson outcomes to further determine progress made and the next steps in learning.
- Summative assessments are made at the end of each term to monitor children's knowledge and understanding of concepts taught. These are White Rose Maths tests completed at the end of terms 2, 4 and 6.
- Statutory assessments are made at the end of each key stage as well as the Times Table Check at the end of Year 4.

Monitoring procedures

The Head teacher, Senior Leadership team and Maths subject leader play a central role in the monitoring and evaluation of the quality of teaching and learning of mathematics in the school.

The monitoring strategy:

1. Children's work and medium term planning scrutinies are conducted.
2. Observations take place in all classes throughout the year.
3. Pupil conferencing and learning walks.

The subject leader is responsible for monitoring attainment and progress, the outcomes of which are collated and fed back to staff at an appropriate time.