



## **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, solve problems and assess risk 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 have developed a math's curriculum that provides children the opportunity to have a deep understand of all aspects of mathematics concrete through to abstract approaches, with the aim of ensuring that children fully understand what they are learning.

### **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 Foundation Stage (FS) and the National Curriculum (NC).
- To ensure pupils become fluent in the fundamentals of mathematics, developing conceptual knowledge and an ability to recall and apply knowledge rapidly and accurately
- To foster positive attitudes, fascination and excitement of discovery through the teaching and learning of mathematical concepts.
- To ensure that pupils can reason mathematically and solve problems
- For our children to develop a 'can do' attitude and perceive themselves as mathematicians.

- To broaden children's knowledge and understanding of how mathematics is used in the wider world.
- For our children to use and understand mathematical language and recognise its importance as a language for communication and thinking.

### **Organisation of teaching and learning**

#### **Structure of a lesson**

1. Starter
2. Teacher input,
3. Paired Language Development
4. Develop Learning
5. Independent Task
6. Plenary

#### **Foundation Stage**

In the Foundation Stage (FS), teaching is planned through adult supported teaching and learning. Daily opportunities to informally develop mathematical understanding through child-initiated 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 one of which will be based on arithmetic. Alongside this times tables test will be undertaken from Year 1 upwards weekly.

#### **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.
- Concrete resources will be kept in each year group.
- 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 can be used at home.
- Busy Ant Maths (Collins) resources are used to support teaching and learning and to help teachers for planning and activities.

## Times Tables (120/100/90 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. Our times tables scheme includes inverse operations, a range of representations and problem solving, which are all vital skills in mathematics. The children are tested weekly and our challenge is linked to beating their previous time or score.

Each child tested weekly. Starts in Year 1 through to year 4. They will be tested on 10 times tables varying order in each of the numbers they are learning.

- Year 1- 30 questions- 2s, 5s, 10s.
  - Year 2- 60 questions- 2s, 5s, 10s, 3s, 4s and 6s.
  - Year 3- 90 questions- 2s, 5s, 10s, 3s, 4s, 6s, 7s, 8s and 9s
- Year 4 - 120 questions- 2s, 5s, 10s, 3s, 4s, 6s, 7s, 8s, 9s, 11s
- and 12s

Class teacher to print out each test per week, these are timed and 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 to keep track (possibility for a display) sheet attached for this.

In each year group there will be 3 to 4 different tests, they are all a mixture of the times tables this year group is being tested on, so it doesn't matter which order they are taken in- it would probably be best to alternate the tests each week.

All the resources will be saved on the Sever under the Maths > 120Club > Year1.

## 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.

### Foundation Stage

- Daily observations of pupils learning is 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 EYFSP profile descriptors.
- Summative assessment data is collected in December, March and June.

### KS1 and KS2

- In the daily mathematics lesson, formative assessments are made on a day-to-day basis. 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 Rising Stars tests done at the end of terms 1, 3 and 5. Teachers will receive data back from these tests in order to inform planning.
- Year 4 Times Tables Check.
- Statutory assessments are made at the end of each key stage.

## Monitoring procedures

The Head teacher 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. Lesson 'drop ins' and observations take place in all classes throughout the year.
3. Pupil conferencing takes place termly.

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.

