

# NORTH WINGFIELD PRIMARY & NURSERY ACADEMY...

# **Mathematics Policy**

APPROVING BODY	Headteacher
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Further Information and Guidance	

# Intent

At North Wingfield Primary and Nursery Academy, we aim to offer pupils a rich and enjoyable experience in mathematics by providing the knowledge, skills, concepts and processes that are appropriate to each individual and that relate to the world around them. This provision should enable them to:

Develop a positive and confident attitude towards mathematics and to achieve their full mathematical potential.

Develop logical thinking, enquiring minds and an ability to record in a systematic way.

Use maths to interpret, predict, explain and solve problems involving as much practical experience as possible.

Develop the correct mathematical vocabulary and other skills necessary to express their thinking and strategies in an appropriate manner.

Develop their ability to work independently and collaboratively, as appropriate.

Use technology within mathematics lessons and in the development of their mathematical concepts.

Use and apply their mathematical knowledge by making appropriate choices in real-life situations.

#### **Implementation**

Maths at North Wingfield Primary and Nursery Academy:

- In Reception and Key Stage 1 'White Rose Maths' is used as the core of our teaching. We aim for Year 2 to introduce Power Maths in the Summer Term.
- Key Stage 2, we use 'Power Maths' as our core lessons. We complement these lessons with consolidation materials such as White Rose Maths if we feel we need to.

We use White Rose Maths and Power Maths as they are matched explicitly to the National Curriculum and each other.

In Year 6 the classes are divided into learning groups. This approach focuses on individual student needs and fosters optimal preparation for secondary school.

Differentiation empowers growth: Smaller class sizes allow us to tailor instruction to diverse learning styles, academic levels, and individual goals. This personalised approach maximizes each student's potential and fosters a deeper understanding of key concepts.

Within the 'Power Maths' lessons the children are guided through the learning then have the opportunity to practice independently and finally challenged with problems in context.

Every Friday, from Year 2 to Year 6, we have a 'Memory Maths' session. 'Memory Maths' has four questions based on previous lessons to jog the mind and aid the working memory

Every class from Year 2 upwards take part in the times tables challenge. Children are challenged on all their times tables with a time limit.

- At North Wingfield, we also use 'Times Tables Rock Stars' as a multiplication homework tool.
- In the Foundation Stage, children engage in learning which is supported by Development Matters and the Early Learning Goals.

### Impact

As a result of our maths teaching at North Wingfield you will see:

- Engaged children who are all challenged.
- Confident children who can all talk about maths, their learning, and the links between mathematical topics.
- Lessons that use a variety of resources to support learning.
- Different representations of mathematical concepts.
- Learning that is tracked and monitored to ensure all children make good progress.

# **Special Educational Needs**

Children with additional needs are supported by using practical resources and a bespoke curriculum where needed. Where possible SEN children will still follow the mastery approach, usually through 'White Rose Maths' They are also further supported by additional support staff whenever possible. Where applicable, children's provision maps will incorporate suitable objectives from the National Curriculum or the EYFS curriculum and teachers keep these objectives in mind when planning work. In addition to quality first teaching, interventions also take place during the school day and focus on those children who may need more specific targeted input.

## Assessment, Recording and Reporting to parents

Assessment is an integral part of the maths curriculum and not an addition to it. Children's work in mathematics is assessed from three aspects:

- 1. Informal, formative assessments are made continually by questioning the children, observing and monitoring their work. These short-term assessments are closely related to the learning intentions for the lesson and help inform next steps.
- 2. Periodic assessments take place at the end of a unit– we use White Rose maths and Power Maths end of block/unit assessments to check progress and understanding of content covered. This information also informs interventions.
- Summative assessment is less frequent this is the use of tests or more formal assessments to find out what children have learnt. We use New PUMA (Progress in Understanding Mathematics Assessment) papers whilst confidently measuring termly performance against thousands of pupils nationally. These assessments are also used to inform interventions.

Statutory Assessment Tests (SATs) are used for children in Year 2 and 6, plus children in Year 4 are also required to take a multiplication tables check (MTC) in the Summer Term. The purpose of the check is to determine whether pupils can fluently recall their times tables up to 12, which is essential for future success in mathematics.

A whole school tracking system is used to closely monitor children's progress throughout the school. Teacher assessments are entered termly and are closely analysed to identify children working at greater depth or who are at risk, appropriate intervention is then put in place to close gaps.

We see the relationship with parents as very important in supporting their children's mathematical skills. There is a dedicated maths page on our school website with provides specific documents for parents outlining what is covered in each year group and ways they can support at home. Parents also receive an end of year report which provides information on their child's outcomes and progress.

### **Times Tables**

At North Wingfield Primary and Nursery Academy, we believe that through a variety of interactive, visual and engaging techniques, all children can achieve the full multiplication tables knowledge by the time they leave Primary School. The new National Curriculum (2014) states that by the end of year 4, pupils should be able to recall multiplication and division facts for multiplication tables up to 12x12. Children in Year 4 are also required to take a multiplication tables check (MTC) in the Summer Term. The purpose of the check is to determine whether pupils can fluently recall their times tables up to 12, which is essential for future success in mathematics. This means it is important for the children to learn their multiplication tables facts and to be able to recall them quickly and accurately.

We teach times tables using the following progression:

Year 1 – Be able to count in multiples of twos, fives and tens

Year 2 - Be able to recall 2, 5 and 10 multiplication and division facts Year 3 - Be able to recall 3, 4 and 8 multiplication and division facts

Year 4 - Be able to recall 6, 7 and 9 multiplication and division facts

Year 5/6 - application of multiplication and division facts to problem solving

To support children's learning of multiplication tables we have a Multiplication Table Challenge and children have access to Times Tables Rockstars. This is an online resource that Years 2-6 use to aid the teaching and fluency of Multiplication and division facts.