



Headteacher	Summer 2022
Review	Summer 2024

Woore Primary and Nursery School

Maths Policy

The fundamental purpose of our Mathematics curriculum is to ensure that all children become fluent in the fundamentals of mathematics, are able to reason mathematically and can solve problems by applying their Mathematics. This will be developed through our creative and engaging Maths curriculum which supports children's progression as they move from one stage to the next.

The aims for our children are:

- to develop the ability to make rich connections across the different areas of Mathematics and apply these to other subject areas
- to encourage children to confidently use their mathematical terminology
- to develop their confidence in mathematics
- to encourage their curiosity and love for mathematics
- to understand the value and importance mathematics has in everyday life
- to provide children with the opportunities to become fluent, develop problem solving skills and to be able to reason about mathematics

The aims of the National Curriculum 2014 are for our children to:

- *become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately*
- *reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language*
- *can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions*

Planning

Each class teacher is responsible for the mathematics teaching and learning in their class in consultation with and with guidance from the mathematics subject leader. The maths is planned using a wide range of rich resources including White Rose Maths, MyMaths, Classroom Secrets and NumberBlocks (C1)

Teachers of the **Reception** pupils base their teaching on objectives in the EYFS Framework for Reception; this ensures that they are working towards the 'Early Learning Goals for Mathematical Development'.

At **Key Stage 1 and 2** teachers use the National Curriculum 2014 for teaching mathematics to ensure that all parts of the programme of study are taught.

Where possible, teachers will plan to use the CPA (concrete, pictorial, abstract) approach in their lessons using a wide range of quality resources in school. Calculation methods are taught in accordance with the Calculation Policy (see separate document), which again encourages a CPA approach. Teachers will use computing resources where appropriate to enhance their Maths teaching.

Careful planning and preparation ensure that throughout school children engage in:

- practical activities and games using a variety of resources
- problem solving to challenge thinking
- independent and collaborative working and discussions
- purposeful practise where time is given for children to apply their learning
- open questions to probe and challenge children's thinking and reasoning
- a range of methods
- the use of practical equipment through the CPA (concrete, pictorial, abstract) approach

Teachers will ensure:

- they seek to ensure that every child has the opportunity to use and apply their mathematical knowledge in context on a regular basis
- they respond to individual needs by carefully targeting questioning and through live marking
- they devise appropriate, challenging work, which although differentiated, will seek to include every child in the class
- they use their questioning skills to develop reasoning within their classrooms
- their lessons involve elements of: instruction, demonstration, explaining/illustrating, questioning & discussing, reflecting & evaluating and summarising

Early Years

The Early Years Curriculum gives all children the opportunity to talk and communicate in a widening range of situations and to practise and extend their range of vocabulary and numeracy skills. They have the opportunity to explore, enjoy, learn about, and use mathematics in a range of situations. Mathematics is planned on a weekly basis and assessed using the criteria from the Early Learning Goals. Mathematics is taught as a discrete subject and within the whole Early Years Curriculum to give children opportunities to use their Numeracy skills in real life situations. There is also a maths continuous provision area with differentiated activities which can be adapted daily/weekly.

Marking and Assessment

The marking of children's work is essential to ensure they make further progress. The majority of children's maths work is 'live marked' during the lesson, to enable children to act immediately upon feedback. Some pieces of work in mathematics can be self or peer marked, particularly in Class 3.

Mathematics will be regularly assessed according to the school's Assessment Policy. Information obtained will be used to inform future planning and track children's mathematical progress, alongside informing teachers of any interventions that are needed. Children's knowledge and understanding is assessed constantly in class, through the use of observations, questioning and live marking and picking up on misconceptions. Assessments and observations are on-going for children in reception; however

final judgements are made at the end of the year in June through the Early Years Foundation Stage Profile (EYFSP). Pupils in Y2 and Y6 sit their national assessment tests (SATs) in May. Pupils in Year 4 will sit their multiplication check (MTC) each year during June. For those children in Years 1,3,4 and 5, a mix of Teacher Assessment and formal NFER tests are used for summative assessment.

Resources and Displays

All teachers should organise a working wall within the classroom dedicated to mathematics. Maths vocabulary must form part of the working wall as well as providing the children with aids to help their current learning. Working walls should be updated regularly, to run alongside which mathematical area is being taught. Working walls may also have manipulatives available for the children. The working wall should demonstrate the activities, steps, examples of calculations needed to achieve the maths being taught. Each classroom has a stock of core resources that are age appropriate. Additional mathematical equipment and resources are stored centrally in the Mathematics Cupboards.

Inclusion

Positive attitudes towards mathematics are encouraged, so that all children, regardless of race, gender, ability or SEND, develop an enjoyment and confidence in mathematics. Teachers ensure this by providing children with access to the range of appropriate maths activities and tasks. Children are encouraged and supported to develop their mathematical capability and thinking using a range of materials to suit learners at different stages in their development. Teachers differentiate activities within mathematics to ensure that the specific needs of individual children are best met.

Monitoring

The monitoring of the standards of children's work and of the quality of teaching in Maths is the responsibility of the Maths subject coordinator. Their work also involves supporting colleagues in the teaching of this subject, being informed about current developments in the subject, and providing a strategic lead and direction for the subject in the school. Lesson observations are also, occasionally, undertaken and the subject coordinator regularly reviews evidence of the children's work. This policy will be reviewed by staff on a 2 year cycle.