

## **Mathematics Curriculum Statement**

### Our intent is that all pupils are **FRIPS** **F**luent **R**easoning **I**ndependent **P**roblem **S**olvers

At North Wootton Academy, we aim to provide our pupils with a high-quality mathematics education that equips them with key skills and understanding of mathematical concepts and develops their ability to communicate their mathematical reasoning and become critical thinkers.

We aim to:

- develop mathematical competency and skills and understanding across key concepts
- Develop pupils' sense of number both in terms of formation and place value
- develop fluent mathematicians who are confident and able to apply their mathematical knowledge to a variety of problems
- develop pupils' ability to reason about mathematical concepts and make connections within the mathematics programme of study, the whole school curriculum, and between disciplines and the wider world
- develop independent problem solvers who take risks in their learning and challenge themselves
- foster an enjoyment of mathematics and create critical thinkers

#### **Implementation**

##### ***Curriculum***

The mathematics curriculum is structured into units for each year group. Units build upon prior learning and are designed to focus on one specific area so that pupils have time to deepen their understanding and to make connections between mathematical concepts.

##### ***Classroom practices and approaches***

In classrooms, there are many systems in place to support us in achieving our aims.

- Key Stage 1 and EYFS classes explore a 'Number of the Day', occurring at least 3 times a week, within which pupils are taught to make connections, practise number formation and apply their understanding of mathematical concepts through just one number.
- In Key Stage 2, all children complete Fluent in Five, which are 5-minute daily sessions looking at fluency within calculations and developing reasoning through discussion of appropriate methods.
- Across the school a CPA (concrete, pictorial and abstract) approach is applied to support depth of understanding across calculations and mathematical concepts (examples noted in calculation policy)
- Dedicated time on a weekly basis within KS1 and KS2 classes to the teaching of multiplication and division facts.
- Mathematics lessons are carefully planned and structured to guide and develop learning in small steps, building on prior learning. Opportunities are given for children to develop fluency within different areas of the curriculum and to secure this independently, before justifying, convincing and finally applying their learning to familiar and unfamiliar scenarios.

#### **Impact**

##### ***Daily***

On a daily basis, marking and feedback is the most effective way of measuring impact. Live marking is used as much as possible with the children so that teachers are able to gain immediate feedback on the progress being made within a lesson and identify gaps in learning. These are then plugged through either immediate intervention in the lesson or during a short catch up session later in the week. Live marking also allows teachers to deepen pupils understanding through identifying when children are ready to move their learning on.

### ***Additional tracking***

Within EYFS, key milestones have been identified across the year and these are used to assess the children against and to again identify any gaps that need addressing.

Fluency is tracked on a half termly basis to allow staff to identify quickly any ongoing areas of weakness that may need to be addressed in a more formal intervention setting for a short period of time and allows for vulnerable groups to be tracked carefully. In addition, from Year 1 upwards, more formal termly assessments are used (PiXL tests and SATs papers) and full QLAs are taken. Multiplication tracking through the EMAT happens termly and on a half termly basis through Tackling Tables scheme.

All this information is used to make termly judgements about the working level of each pupil; these are then quality assured through a data validation process, whilst books and teaching are reviewed by the subject leader and discussed with each teacher to moderate assessment. All SEND, EAL and pupil premium champions track these cohorts specifically on a half-termly basis and conduct pupil progress reviews twice yearly. With regard to SEND, this may involve the reviewing of their progress on NAP steps as required for pupils 2 years below the expected level.