



## **NORTH FERRIBY C E PRIMARY SCHOOL**

# **MATHS POLICY**

<b>Date of New Policy:</b>	<b>Spring 2018</b>
<b>Review Date:</b>	<b>Spring 2020</b>
<b>Policy Type:</b>	<b>School</b>
<b>Co-ordinators:</b>	<b>Mr. Rae</b>
<b>Link Governor:</b>	<b>Matt Smith</b>
<b>Committee:</b>	<b>Curriculum</b>

**Mission Statement:**

**A Christian School with children at its heart.**

**Christian Values Statement:**

At North Ferriby CE Primary School, we keep Christian values at the heart of our school community where we live, love and learn together.

**Ethos Statement for North Ferriby CE VC Primary:**

Recognising its historic foundation, the school will preserve its religious character in accordance with the principles of the Church of England and in partnership with the Church at parish and diocesan level.

The school aims to serve its community by providing an education of the highest quality within the context of Christian belief and practice.

It encourages an understanding of the meaning and significance of faith and promotes Christian values through the experience it offers to all its pupils.

YORK DIOCESAN BOARD OF EDUCATION

## **1. Introduction:**

This policy outlines the teaching, organisation and management of mathematics taught and learnt at North Ferriby Primary School. The policy is based on the 2014 expectations and aims of the 'New Curriculum' for mathematics and the Early Years 'Development Matters' EYFS document. This ensures continuity and progression in the learning and teaching of mathematics. The policy has been drawn up by the mathematics coordinator, shared and discussed with all staff and has the full agreement of the Governing Body.

Mathematics is a creative and highly interconnected discipline that has been developed over centuries, providing the solution to some of history's most intriguing problems. It is essential to everyday life, critical to science, technology and engineering, and necessary for financial literacy and all forms of employment. A high-quality education in maths therefore provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject.

This policy should be read in conjunction with the North Ferriby CE Primary Calculations Policy.

## **2. Aims:**

At North Ferriby CE Primary School we aim to ensure that most pupils achieve Age Related Expectations in maths.

The new National Curriculum for mathematics aims to ensure that all pupils:

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.

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects. The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not

sufficiently fluent with earlier material should consolidate their understanding, including through additional practise, before moving on.

In addition to this we should aim to make reasoning and problem solving accessible to all children at all stages of mathematical development through careful differentiation.

### **3. Planning and Assessment:**

Class teachers are responsible for planning lessons that meet the needs of individual children on a daily basis. Learning objectives will be taken from the National Curriculum and then broken down into specific success criteria. Success criteria will state whether children have completed a piece of work independently or with support unless otherwise stated on the individual's work. Children's individual achievements towards the success criteria will be the starting point for the next lesson or response time (except for in the case of moving onto a new mathematical domain). Teachers will only plan to cover 2 or 3 domains in a half term, thus ensuring children are given the opportunity to deepen their learning and apply their learning to other curriculum areas, before moving onto a new domain. The interconnectivity of maths is explored at all times e.g. measures at the heart of teaching the 4 operations, teaching time throughout the day rather than exclusively in the maths lesson etc.

When children are learning an area of maths for the first time they must be provided with suitable equipment. One differentiation strategy will be according to how quickly the children stop using equipment. Another frequently used differentiation strategy will be providing different levels of questions: [A] being the easiest, progressing upwards according to teachers' discretion. Other differentiation strategies may, at times, include children working on different mathematical concepts. Intervention will take place immediately if a child has not achieved the expected outcomes, either with the class teacher or teaching assistant later on that day. This will hopefully prevent gaps in learning and help to keep within age related expectation. As much as possible, children are to work within the objectives of their year group. Where a child is more able, they are to be 'stretched' appropriately using reasoning and problem solving based activities to deepen their learning rather than being accelerated to objectives beyond their years.

Assessment is continual, with both teachers and children responding to the success criteria with the traffic light system. If a concept has not been understood it either needs addressing later on that day or in the next maths lesson. The traffic light system is also used by children, during lessons, in order for teachers and teaching assistants to best direct support.

Children's progress is tracked using Class Track and O'track.

### **4. Links with other Curriculum areas:**

Links must be made regularly with other curriculum areas, especially;

Statistics – taught through data rich subjects such as Science and Geography  
Angles, position and direction – taught through the Computing curriculum  
Shape – taught through art

## **5. The Role of the Coordinator:**

To ensure that teachers are able to navigate the curriculum and help them to plan lessons  
To lead by example in the way that they teach in their own classroom  
To prepare, organise or lead 'Continuing Professional Development' (CPD)  
To monitor planning and books on a regular basis and provide feedback  
To attend CPD and termly coordinator meetings  
To discuss regularly the progress of maths in the school with the Head Teacher and the Maths governor  
To periodically audit and order resources  
To keep abreast of national developments and current trends  
To liaise with the Maths Governor  
To maintain the Subject Portfolio

## **6. Health and Safety:**

When maths takes place outside of the classroom, staff are to ensure that risk assessments are made and followed and that appropriate supervision is provided.

## **7. Equal Opportunities:**

The school's Equal Opportunities Policy applies to the teaching of mathematics as to all other subjects.

## **8. Special Educational Needs and Disability (SEND):**

Children are to be taught in line with SEND policy.  
Intervention should take place immediately if a child has not achieved the expected outcomes, either with the class teacher or teaching assistant later on that day. This will hopefully prevent gaps in learning and help to keep within age related expectation.  
If children need further support then they will follow an intervention programme drawn up by the teacher to meet their individual needs. On occasions generic intervention programmes may be used such as Marvellous Maths, Overcoming barriers, Springboard and Wave.

## **9. Christian Values:**

During their maths learning children will learn to develop working friendships, to build trust between team members and become aware of how mathematics helps to define and build the world we live in.

## 10. Skills for Life:

Maths must be taught in the context of real life at all times to prevent it from becoming an abstract subject.

*“Mathematics is not about numbers, equations, computations, or algorithms, it is about understanding”* William Paul Thurston