

Haydon Wick Primary School Maths 2022

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Annual



The Nature of Mathematics

'Mathematics provides a powerful means of communicating thoughts and ideas. It is used to present information and concepts through figures, letters, tables, charts, diagrams and drawings'.

By the end of KS2 we aim for the children to be fluent in the fundamentals of mathematics with a conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

They should have the skills to solve problems by applying their mathematics to a variety of situations with increasing sophistication, including in unfamiliar contexts and to model real life situations. Children will be able to reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.

Introduction

The purpose of this document is to ensure that the National Curriculum for Mathematics 2014 is implemented in a consistent manner throughout the school. We do this by following the CanDo mastery approach.

Mathematics has the power to predict, and with it, the requirement to make and check hypotheses. This makes it a useful tool for other subject areas, for everyday life and for the world of work. For many people mathematics has a fascination of its own and can lead to an understanding of how things work.

Aims / Intent – What is it we want the children to learn?

Through mathematics children learn to be deep thinkers and apply learned skills to solve problems across the whole curriculum. Through engaging mathematics lessons, we teach our learners to consistently challenge themselves and persevere, whilst ensuring they develop a sense of curiosity and fundamental knowledge about their world.

We aim for pupils 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

• be able to solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar context and to model to real-life scenarios.



• have an appreciation of number and the number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately to be successful in mathematics.

Teaching Context – How do we implement this?

Our unit planning is based on National Curriculum Statements and we use Can Do Maths to give us our manageable steps for daily teaching. Challenge is visible throughout the whole session, where children are asked to reason and prove their understanding at a deeper secure level.

At Haydon Wick School we follow the CanDo maths approach. This gives us our long term, medium term and daily plans. Maths is split into units over the year and these are revisited and developed over the year during our MOT sessions which allows us to have deliberate practise of maths. We follow the mastery learning model forms the basis our approach to teaching maths. This means spending greater time going into depth about a subject as opposed to racing through the concepts and knowledge pupils are expected to know by the end of each year group. Our intention is take learning at a measured pace. This will better ensure no child is left behind as well as providing deeper and richer experiences for children who are grasping ideas quickly. We focus on the majority of children achieving what is expected of their age group and not going beyond this.

At our school, the majority of children will be taught the content from their year group only. They will spend time becoming true masters of content, applying and being creative with new knowledge in multiple ways. We believe that with good teaching, appropriate resources, effort and a 'can do' attitude that all our children can achieve and enjoy maths. We want children to know that sometimes we just can't do something...YET!

Resources

The teachers and the maths co-ordinator will monitor the equipment and teachers resources, updating, renewing and replacing these items when needed.

All classes are encouraged to use manipulatives during the lesson if it helps develop the mathematical learning.

A range of I.C.T. resources is available to support mathematics teaching (TT rockstars / Numbots / White Rose)

Assessment

All assessment will link closely with the school's assessment policy.

In maths, assessments will be carried out termly by the children completing Remember it tests which focus on that terms learning. In Term 1, 3 and 5 the teachers will use the QLA analysis to identify class gaps which will then inform future MOT sessions. In term 2,4 and 6 I will look at the QLA analysis and identify any common gaps within the school and look for any children who are not on track to



make expected progress. At the end of the year the children complete 'Ready to Progress' tests and the QLAs are the passed onto the next teacher which identify gaps from the year.

A verbal report will be given during Parents' Evenings, and pupils will receive a record of their progress in a mid-year report and a yearly report to parents.

General Issues

The following need to be considered when teaching maths:

* consistent use of mathematical language and the use of generalised sentences and STEM sentences which are all given in the Can DO resources.

* use of I.C.T. in maths when appropriate.

* the use of display to encourage thought and discussion – most classes have a working wall and these are used in the way that the teacher and the children in the class see fit.

- * giving both boys and girls positive messages about their achievements in maths
- * making maths manipulatives easily accessible in every lesson.
- * the teaching of the skills of problem solving and the skills to answer different types of problems.

Equal Opportunity

Equal opportunity will be extended to all pupils. All children have an entitlement to access the work which is age appropriate to them and all children are taught with their peers. Work is differentiated by outcome rather than different tasks being set.

Health and Safety

We recognise the importance of close supervision of the children during activities undertaken outside the classroom. We invite parents and



Teaching Assistants to help the class teacher ensure the safety of the children on such occasions.

Special Needs

Those children who are recognised as having special educational needs will follow a similar scheme of work to that of their peers. Differentiation can occur with the level of support given and the outcome expected.

Haydon Wick is committed to supporting **all** children whatever their needs. As part of our commitment to an inclusive ethos, we are working towards achieving **Swindon Dyslexia Friendly Schools Award** and are continually striving to maintain and improve Dyslexia Friendly practice. As a school, we believe that a Dyslexia Friendly environment will benefit the learning of all pupils.

Review of the Policy

At the end of each academic year, or whenever appropriate, this policy will be discussed and if necessary revised in response to any changes made locally or nationally.

