

Decoy Community Primary School Maths Policy

Written: November 2015 Reviewed: January 2016 Review Cycle: 2 Years

'All children will learn; all children will succeed' (an aim of the National Curriculum)

At Decoy School we believe in developing a 'Growth Mind-set' for our children in terms of all their learning. We want our children to believe that maths is something they can all learn to the highest level and in doing so we promote mixed ability groupings and encourage children to increasingly self- differentiate and challenge themselves daily in their learning.

Our children are taught that:

- Everyone can learn maths to a high level and the attitude of 'not able' is replaced with 'not able yet'
- Mistakes are opportunities to promote learning.
- Struggle is a good thing because if we don't struggle we don't learn
- Deep thinking is more important than pace in maths
- Being curious, asking questions, reasoning and finding patterns is very important to learning in maths.

What do our pupils think about maths?

"We need to learn maths because it is used in almost every job. I want to go into the RAF and I will have to use maths to work out measurements like fuel consumption"

"You need to use maths all the time in everyday life e.g when you go shopping, using money, converting recipes from ounces to grams, measuring, looking at timetables. Infact you use maths without really knowing you're doing it"

"I like learning maths because I enjoy finding out patterns and doing investigations"

"Maths is great- it makes me think! It is challenging and gets me out of my comfort zone"

"I like finding different ways of doing something . It is a really good feeling when you suddenly just get it!"

The aim of teaching mathematics at Decoy is:

- to promote enjoyment and enthusiasm for learning maths, through practical activity, exploration and discussion.
- to develop thinking skills
- to promote fluency with numbers and the number system.
- to develop the ability to solve problems through decision making and reasoning in a range of contexts.
- to explore features of shape and space and develop measuring skills in a range of contexts.
 - and in doing these -
- equip our children for the mathematics they will need in everyday life

The following approaches are used to teach mathematics at Decoy:

We deliver mathematics at Decoy to cover the expectations of the Maths Curriculum 2014 through:

- A dedicated daily mathematics lesson of 1 hour for both KS1 and KS2. In foundation children are taught concepts as a whole class, have the opportunity to embed and apply these skills with an adult in a guided group or independently through well planned continuous provision
- Working in mixed ability groups in KS2 and part of the week in KS1
- Providing opportunities for discussion and 'talk' between children of different abilities.
- Direct teaching and interactive oral work with the whole class and groups
- Providing appropriate challenge to promote 'thinking skills' and deepen understanding by the use of differentiated activities based on a common theme.
- Giving opportunities for children to challenge themselves through self differentiation.
- Providing children with incisive written feedback which children respond to, to move their learning forward (as exemplified in the feedback policy)
- Integral use of ICT in the teaching and learning of mathematics

We use a range of resources to assist and enhance our teaching and learning which include:

- Abacus Active Learn Mathematics teaching scheme.
- NRICH
- A wide variety of maths games programmes on all computers
- Classroom resources age appropriate, including: numicom, bead strings, number lines, number squares, small apparatus, calculators
- Sharing and using relevant research and innovative approaches to improve the teaching and learning of mathematics (e.g. Jo Boaler).

On leaving Decoy, pupils:

- Will have a positive attitude towards learning mathematics.
- Understand the relevance and importance of maths in everyday life
- Will be confident and proficient with number.
- Will be confident with mathematical language.
- Will be confident approaching problems and be able to reason mathematically
- Be independent learners
- Be equipped with the mathematical skills needed for everyday life

Progression, Assessment and Monitoring in Mathematics:

Assessment is continuous process and includes:

- Information gained daily from observing and working with children in lessons, through 'Guided Maths' and marking children's work, which are used to inform short term planning
- Focus marking feedback to extend and consolidate children's' understanding using 'Fix it,' 'Push it,' and 'Revisit' stickers

- Summative Abacus half termly Arithmetic and Problem Solving and Reasoning tests which are then analysed and areas identified where further work is needed for individual or groups of children.
- End of Key Stage assessments in KS1 and KS2 SAT's

All assessments are used to inform future planning and progression

Role of the co-ordinator is to:

- To ensure knowledge of developments in the subject area is up to date
- To share up to date knowledge and resources with staff
- Provide support and guidance for all teachers and learning support staff
- To monitor the teaching and learning of mathematics
- To monitor children's progress in maths across the school and direct resources where necessary
- To provide and organise resources for mathematics across the school.
- To deliver INSET where necessary .

Related Policies

- ICT Policy
- Teaching and Learning Policy
- Marking and Feedback