



Overview

Subject Vision INTENT

Mathematics is an important creative discipline that helps us to understand the world. We want all pupils at Yorkley School to experience the beauty, power and enjoyment of mathematics and develop a sense of curiosity about the subject.

At Yorkley School, we foster positive 'can do' attitudes, believe all children can achieve in mathematics, and teach for secure and deep understanding of mathematical concepts. We use mistakes and misconceptions as an essential part of learning and provide challenge through rich and sophisticated problems before acceleration through new content. These skills are embedded within Maths lessons and developed consistently over time. We link our Maths learning with our drivers belonging, building me, creativity, active adventure and communication. We are committed to ensuring that children are able to recognise the importance of Maths in the wider world and that they are also able to use their mathematical skills and knowledge confidently in their lives in a range of different contexts.

Curriculum Intent: Skills

We aim for all pupils to:

- Become fluent in the fundamentals of mathematics (see Year by Year Curriculum Maps) so that they develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- Solve problems by applying their mathematics to a variety of problems with increasing sophistication, including in unfamiliar contexts and to model real-life scenarios.
- Reason mathematically by following a line of enquiry and develop and present a justification, argument or proof using mathematical language.
- Have an appreciation of number and number operations, which enables mental calculations and written procedures to be performed efficiently, fluently and accurately.
- Take risks in their learning and use different ways to solve problems when something doesn't work the first time.

Subject Vision IMPLEMENTATION

Mathematics Lessons

To ensure consistency throughout KS1 and KS2 and building upon skills, Yorkley School uses the 'Can Do Maths' programme. Each lesson focuses on a manageable step of new learning based on the NC statements.

Typical Lesson design:

- 1) Introduction
- 2) Live modelling of the new learning with explicit use of potential misunderstandings
- 3) All children practise together **Support & Challenge**

Independently/Adult Supported

- 4) Up to 5 examples - 5 'What it is' or '3+2 'What it is/What it's also' **Challenge 1: Procedural**
- 5) 1 or 2 Misunderstandings (True/false, Spot the mistake) **Challenge 2: Conceptual Understanding**
- 6) Extension: Apply understanding to solve new problems **Challenge 3: Mathematical Thinking**
- 7) Lesson Recap: Key Concept Statement and Key Vocabulary

Maths Subject Overview

Maths on track sessions consist of practise of previous learning or extra support where needed with current learning to ensure that no child is left behind and to ensure that learning is embedded.

To improve skills in other areas of maths when needed *Arithmekits, ArithmeDo, CanDoSATs, CanDo21, CanDo Fractions, CanDo tables, CanDo Geometry and CanDO Bonds* are used.

SEN children are taught at a level appropriate to them to ensure they make the maximum progress possible.

EYFS

In Early Years, Mathematics involves providing children with opportunities to develop and improve their skills in counting, understanding and using numbers, calculating simple addition and subtraction problems; and to describe shapes, spaces, and measure.

Pupils are taught to

Number

- count reliably with numbers from 1 to 20
- place them in order and say which number is one more or one less than a given number
- add and subtract two single-digit numbers and count on or back to find the answer using quantities and objects
- solve problems, including doubling, halving and sharing

Shape, space and measure

- use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems
- recognise, create and describe patterns
- explore characteristics of everyday objects and shapes
- use mathematical language to describe them.

Subject Vision IMPACT

The school has a supportive ethos and our approaches support the children in developing their collaborative and independent skills, as well as empathy and the need to recognise the achievement of others. Children can underperform in Mathematics because they think they can't do it or are not naturally good at it. The Can Do programme addresses these preconceptions by ensuring that all children experience challenge and success in Mathematics by developing a growth mindset. Regular and ongoing assessment informs teaching, as well as intervention, to support and enable the success of each child.

Throughout each lesson formative assessment takes place and feedback is given to the children through marking and next step tasks to ensure they are meeting the specific learning objective. Teacher's then use this assessment to support and challenge children where needed and ensure they are providing a mathematics curriculum that will allow each child to progress. Each second term children from Year 2 and above complete a summative assessment to help them to develop their testing approach and demonstrate their understanding of the topics covered using NFER tests. Children also complete a remember it at the end of a topic to see where further support is required.

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 is based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly are challenged through being offered rich and sophisticated problems. Those who are not sufficiently fluent with earlier material consolidate their understanding, including through additional practice, before moving on. Where appropriate, extra materials are given to children who need more support to ensure that the concepts are embedded.

Maths Subject Overview

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