

# How do we teach maths at Barley Barkway Federation?

At Barley Barkway Federation we aim to teach our pupils to master mathematics. We follow a Maths Mastery approach to teaching and learning and we encourage our children to make connections to build a deep understanding of mathematical concepts. As a basis for our teaching we follow Master the Curriculum in Nursery, NCETM Mastering Number in Reception and White Rose Maths in Years 1-4. We follow small steps of learning to teach children. We also use Mastering Number for our fluency teaching in Years 1-4. Teachers will adapt the scheme of learning to suit the needs of our pupils.

### What is maths mastery?

Maths Mastery originated in East Asia, in Shanghai and Singapore where maths is taught to mastery, focussing on giving all students a deeper understanding of mathematics with the ability to reason and make connections with maths in the world we live in (real world).

## What does maths mastery look like?

Mastery at Barley Barkway Federation is taught through the use of concrete, pictorial and abstract (CPA) representations which build around talk, mathematical conversation and questioning. Children use sentence stems and are encouraged to respond in full sentences as well as consider what "maths they know " along with "what it can't be". Teachers may use a "ping pong" approach to encourage children to repeat mathematical facts and encourage the use of mathematical language. Children are encouraged to explore their mathematical knowledge to solve problems. Children are challenged to prove their answers. Teaching builds upon previous learning and builds connections between other mathematical concepts.

## Why do we use Maths Mastery?

We want our children to remember more, solve problems, make connections and reason about their learning. We will expose all children to maths problems developing language and deepen their understanding.

What other maths learning will children use?

In Key Stage 2 children will use Times Tables Rockstars in Year 4 to support their times tables learning. We also use 1 Minute Maths (White Rose Maths) and Numbots. Children may be set work on Purple Mash by their teachers. We also use the NCETM Times Tables booklets to support rehearsal of times tables and division facts in Key Stage 2.

In their "own learning" children have opportunities to play games such as tangrams, shut the box and card games.

## What can you do at home?

Play games with your children that involve maths. This might include games such as Monopoly or Connect 4. Use games that involve dice to support subitising.

Watch the BBC series "Numberblocks" which is a brilliant and fun maths resources.