



Mathematics Learning Journey at The Redeemer

Mathematics makes sense of the numbers, measures, shapes and statistics that we use every day in our lives.

Subject Leaders: Mrs Joanne Prescott and Mrs Clare Power

Subject Team: Governors Revd. Chris Anderton and Mr. G. Swanton

Intent:

At The Redeemer, we think that mastery of anything takes time, consequently we talk about the 'journey to mastery'. It is our intention to teach all children, to develop the knowledge, understanding and skills necessary to use mathematics in their everyday lives, today, and in the future. In the words of one pupil, 'We need maths for real life situations such as: shopping, mortgages and debt.' We aim to develop our students' learning of mathematics, by providing opportunities for a conceptual understanding of this subject, where the journey is broken down into small skill steps and units of understanding. By carefully building up the planning experiences in different contexts, our pupils move from maths fluency, to being able to apply their knowledge and skills to solve new, real-life problems, whilst also supporting other areas of the curriculum. Through talk, children will be encouraged to articulate their mathematical reasoning. As teachers, we want all pupils in our care to develop a positive attitude towards mathematics, so that they believe they can do maths!

Implementation:

In Early Years, our children learn from the NCETM – Mastering Number Scheme. Stories and songs are shared to introduce maths in concrete learning. Goldilocks invites the Three Bears to tea – each bear will need 1 dish, 1 spoon...



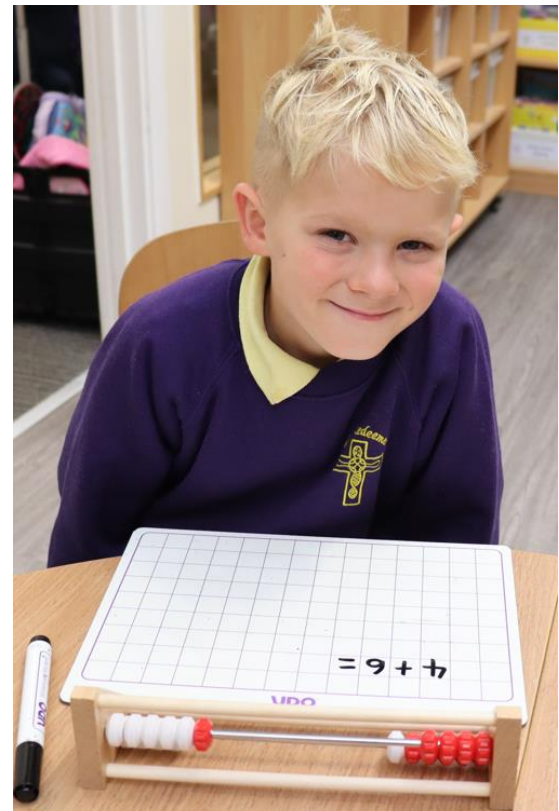
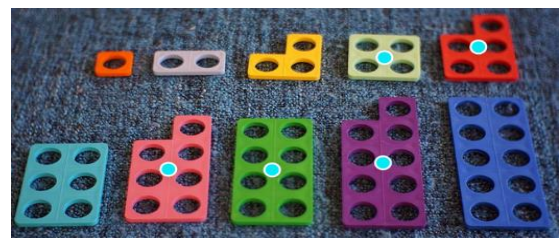


From Year 1 to Year 6, we teach using the White Rose Maths scheme supplemented by other mastery materials. Our maths lessons last 1 hour, comprising of approximately: 30 minutes whole class teaching, 20 minutes of independent practise time and a 10 minute plenary, with additional intervention time for those who need it.

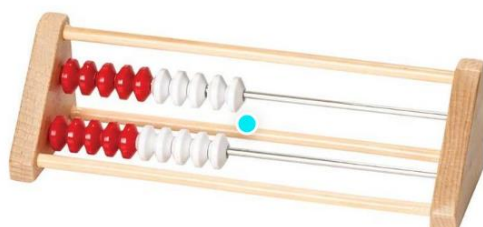
The Concrete Pictorial Abstract (CPA) approach of learning is taught where concrete resources, pictorial representations and abstract numbers are used, both across year groups and individual lessons. Our tasks are not differentiated. Challenge will be available to all through the opportunity for deep learning, reasoning and open ended challenging problems. SEND (Special Educational Needs Disabilities) children are given personalised outcomes. Mental Maths will be taught in a separate lessons.

In Key Stage One, the agreed concrete resources step to agreed pictorial representations and the recording of abstract numbers as shown below. Number bonds, odds and evens, doubles and halves are also learnt.

Numicon

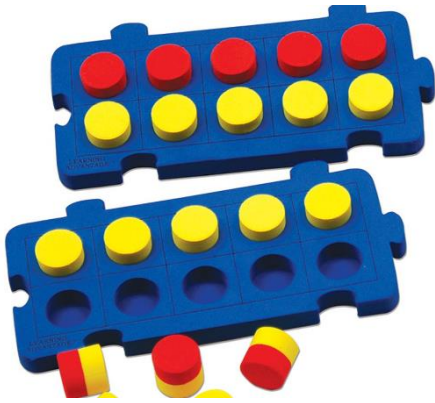


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





Tens Frame



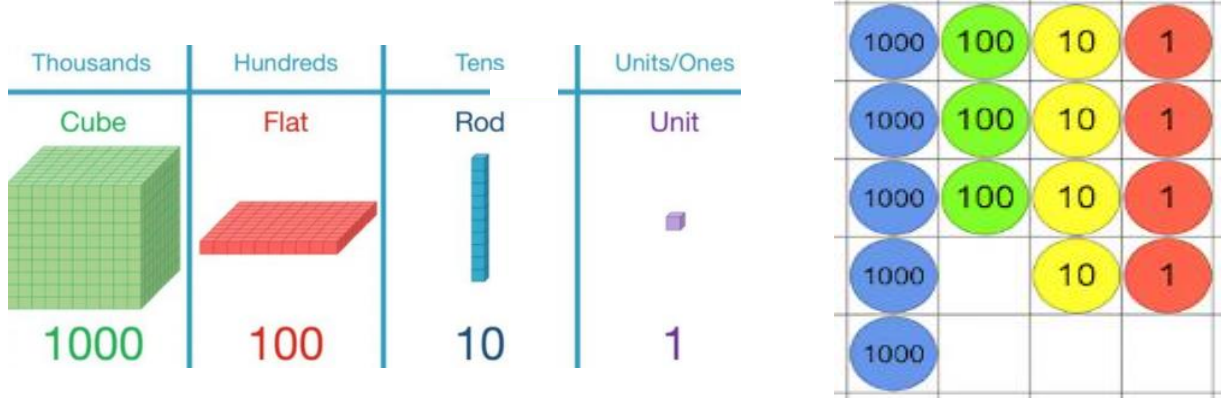
Base 10

Tens	Units
	
3	5



In Key Stage 2 as the value of numbers becomes larger, and smaller with fractions and decimals, the journey leads from...

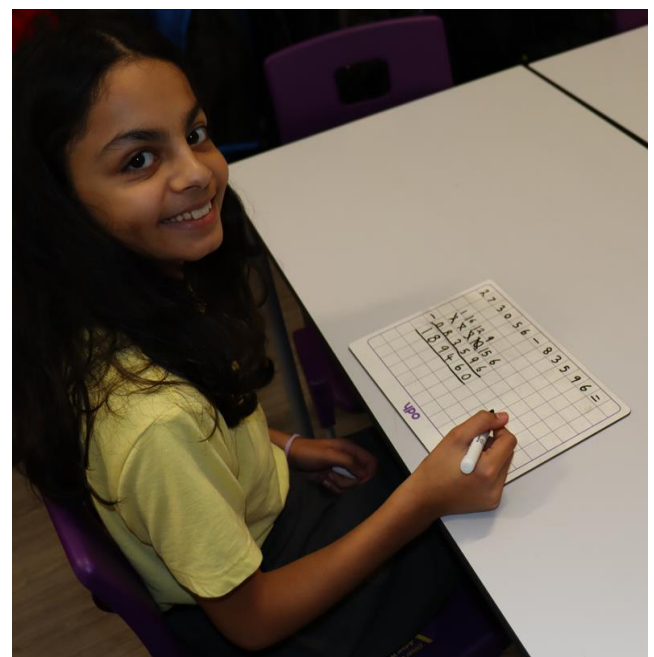
Base 10 to Place Value Counters



Times tables are practised by chanting, singing and on the computer using TT Rock Stars.

Impact:

Once a secure understanding of a given mathematical concept has been mastered, the scaffolding of the concrete resources and pictorial representations is withdrawn - to enable our children to become accurate and efficient mathematicians.



The journey to become accurate and efficient mathematicians results in the learning of formal abstract methods for addition, subtraction, multiplication and division to solve the problems that will be met in everyday life.

At The Redeemer we believe - Practising Makes Permanent!



We assess children's mathematics during each lesson - how they have developed their knowledge and understanding of: Place Value, Addition, Subtraction, Multiplication, Division, Fractions, Ratio and Proportion, Algebra, Measurement, Geometry and Position and Statistics. Below, is a guide to the different methods and times of assessment.

Maths Assessment at The Redeemer

In class Number Bonds Check	In class Times tables Check	In class Homework Calculations
WRMH End of Block Assessments	WRMH Termly Arithmetic Assessments	Key Stage 1 SATs
Termly Puma Assessments Y1-Y6	Y4 Multiplication Tables Check (MTC)	Key Stage 2 SATs

What?	When?	How?
Teacher Assessment	Always	Teachers are constantly assessing the learning of maths in each lesson. Teaching assistants inform teachers of the learning of children in their morning maths groups. Number bonds check Times tables check Calculations homework WRMH End of Block Assessments WRMH Arithmetic Assessments
Puma Assessments (Practice SATS for Y2/Y6)	3x year	In class
KS1 Statutory Assessment Maths	Summer Term	Children sit the Statutory KS1 Maths Assessment
Year 4 MTC	June	Administered by school between Monday 5th June to Friday 16th June 2023.
Statutory KS2 Maths	Summer	Administered by school: Thursday 11 May 2023 Paper 1 (Arithmetic) Thursday 11 May 2023 Paper 2 (Reasoning) Friday 12 May 2023 Paper 3 (Reasoning)

