

SHIREMOOR PRIMARY SCHOOL

APPROACH TO BIG MATHS



At Shiremoor Primary School, we took the decision to introduce elements of the Big Maths scheme of work to support with the delivery of an outstanding Maths Curriculum. This document provides some more information about the programme including the elements that we have adopted for our school and how these help to support a child's progress with their mathematical knowledge.

The CLIC Sessions

At Shiremoor Primary School, the National Curriculum should be fully implemented across school with each child receiving a daily mathematics lesson. Although the structure of the lessons may be rearranged, they should be planned to include opportunities for children to become fluent in the fundamentals of mathematics through varied and frequent practice, the reinforcement of key skills and times table recall. Lessons should reflect the opportunity for each child to be challenged. To aid with this, Shiremoor Primary School uses the Big Maths CLIC framework approach to teaching fundamental number and calculation skills when suitable.

The CLIC session comprises between three and four parts and forms the Mental and Oral Starter at the beginning of each Maths lesson.

Counting

Learn Its which focusses on learning key number facts.

It's Nothing New which focusses on applying known facts to new situations.

Calculation

A CLIC session usually takes around 20 minutes, with around 5 minutes being spent on each part. The remaining part of the lesson is used to either provide greater focus on Place Value and calculation approaches or to focus on the wider aims of the Maths curriculum including shape, amounts, fractions, and data. If the main section of the lesson focusses on a calculation structure, the CLIC session may instead be 15 minutes and only focus on Counting, Learn Its and It's Nothing New as calculation learning is covered in the main section of the lesson.

Assessment of CLIC

Each element of CLIC has clearly designed 'end points' for the end of each term starting in Reception Autumn Term. These are key concepts or steps that we want children to have grasped by the end of each term. This helps to ensure the progression of the child's maths knowledge and helps to inform teacher judgments as to those who are at, exceeding or below the expected standard. An example of these end points for Year 2 can be seen below.

Big Maths: Year 2 Term 1 End Points

CLIC Challenge 7			
	Step Location in the CLIC framework		Title of Step
	Progress Drive	Step No.	
Q1	Counting: Count Along in 4 Ways	3	100s / 200s / 500s / 2500s
Q2	INN: Addition and Subtraction	1	Pupils can add tens
Q3	INN: Doubling with Pim (Without Crossing 10)	3	Pupils can double 2d numbers
Q4	INN: Doubling with Pim (With Crossing 10)	2	Pupils can double 2d multiples of 10
Q5	INN: Halving with Pim	2	Pupils know half of 30, 50, 70, 90
Q6	INN: Fact Families	2	Pupils can turn 1d + 1d facts into multiples of 10
Q7	Calculation: Addition	14	Pupils can add 10 to a 2d tens number
Q8	Calculation: Addition	15	Pupils can add 10 to any 2d number
Q9	Calculation: Subtraction	13	Pupils can take 10 from a multiple of 10
Q10	Calculation: Subtraction	14	Pupils can take 10 from a 2d number

The children are assessed against the 10 key CLIC steps weekly on the Big Maths Beat That Challenges and the Big Maths Learn Its Challenges. The Beat That Challenges focus on assessing the children's knowledge of the Counting, It's Nothing New and calculation Elements, whilst the Learn Its are assessed in the Learn Its challenges. Learn Its incorporate addition facts, being able to count in set multiples to prepare children to learn their times tables and the times table facts themselves (See a Learn Its Poster below). For the Learn Its, children must be able to not only calculate the answer, but know it and be able to enter their answers in a set amount of time ensuring they have truly 'Learnt it'.

The diagram on page 2 shows which step relates to which question on the Beat That Challenge. For children above the CLIC 5 level (Year 1 Spring) these assessments take place on iPads each child having their own unique log in. The children's CLIC level is recorded automatically and can be analysed on the Big Maths website. For children below CLIC 5, the children are assessed verbally with the teacher using their Teacher Assessments to decide if the child has a successful understanding of the CLIC target. This information is then imputed by teachers into the Big Maths website.

This allows teachers to see exactly which steps are understood by each individual child but also, and arguably even more importantly, it shows the gaps children have in their knowledge of each CLIC. This then allows the teacher to adapt their planning to address any misconceptions the children have in regards to each CLIC level. In addition, outside intervention ran by teaching assistants also focus on these 'learning gaps'.

Learn Its Step 4

The poster features a dark blue background with a space theme, including planets and stars. At the top, a maroon banner contains the title "Learn Its Step 4" in white. Below the banner, a dark blue rounded rectangle contains five addition facts: $9 + 1 = 10$, $4 + 6 = 10$, $3 + 7 = 10$, $2 + 8 = 10$, and $5 + 5 = 10$. Below this, a series of colored circles are connected by lines, representing a number line from 5 to 50 in increments of 5. The circles are: 5 (pink), 10 (red), 15 (orange), 20 (blue), 25 (green), 30 (pink), 35 (blue), 40 (red), 45 (green), and 50 (purple). A green alien character is visible in the bottom right corner.

9 + 1 = 10 4 + 6 = 10
3 + 7 = 10 2 + 8 = 10
5 + 5 = 10

5 10 15 20
35 30 25
40 45 50

The Learn Its Step 4 poster, shows that the children should be fluent in their knowledge of Number Bonds to 10 and be able to count in 5s by the end of the Year 1 Autumn Term.

The children need to be able to do this fluently and under a set time to be promoted to the next Learn Its step.

COVID 19

Shiremoor Primary School introduced Big Maths at the Start of the 2020-2021 Academic Year to support with the school's 'Recovery Curriculum' after the Nation Wide Lockdown in 2019-2020. Big Maths has provided the school with lots of useful insight into the areas of the maths curriculum that the children had not grasped the previous years. This has allowed the teachers to understand exactly which areas of the previous years curriculum were not understood completely and by which individual children. This has then informed teacher's planning at the start of the new academic year to ensure these learning gaps are plugged quickly and allow the children to access the new years curriculum with no misconceptions that will ultimately hinder their mathematical understanding.

The procedures for continuing to deliver the Maths Education the children require have been outlined in the maths Policy as well as on the Home Learning section on the website. In addition to this, Big Maths comes with a Home-work pack that will be made available to children when they are required to learn from home. This looks at the 10 'End Points' for the CLIC that the children are currently working on and then gives them set activities that help the children with their understanding of each question.