Big Maths at Peterston super Ely Church in Wales Primary School



A guide for parents

Big Maths is a teaching programme used at Peterston super Ely C/W Primary to help children to become numerate. Problem solving and word problems cannot be solved until children can manipulate and understand how numbers work.

Children become numerate through following a natural sequence of progression: e.g. for a child to know double 70 they need to know double 7 first. We call these steps of progression "Progress Drives".

Children need to have basic skills in order to use basic skills: Therefore it is important to separate out the acquisition of core basic skills for Mathematics from the 'using and applying' of those skills. We call the basic skills 'Core Numeracy' and the use of these skills 'Outer Numeracy'.

Children acquire the basic skills of Mathematics through the chronology of
CLIC: When we look at Core Numeracy in more detail we see that it has a 4 stage process to it;

* [Counting](https://www.bigcurriculum.com/framework/subject-area/1) (children learn to count and to ‘count on’).
* [Learn Its](https://www.bigcurriculum.com/framework/subject-area/2) (children then short-cut this counting by recalling their ‘counting on’ as facts).
* [It’s Nothing New](https://www.bigcurriculum.com/framework/subject-area/3) (children then ‘swap the thing’ to realise that the counting fact, or ‘Learn It’, can be applied to any object, amount or unit of measure).
* [Calculation](https://www.bigcurriculum.com/framework/subject-area/4) (the previous 3 phases are combined to provide a calculation structure).

Big Maths lessons are fast, fun and furious. Children work on whiteboards and ‘flash’ answers to their teachers and the pace of the lesson is quite exhausting. We need to pass on the pressure to work at pace and have maths facts instantly available, rather than counting on fingers.

The children are introduced to child-friendly terms such as ‘Switchers’ and ‘Learn Its’, rather than ‘commutative law’ and ‘number bonds’ to help them manipulate numbers and make them more confident and more successful.

CLIC Sessions

This stands for ‘**Counting’, ‘Learn Its’, ‘It’s Nothing New’** and ‘**Calculation’**.

Maths lessons contain each of these elements.

**Counting**

Children will count forwards, backwards, in steps of 3 6 or 25, read and write numbers and in multiples. When practising counting at home with your children, make sure you go backwards and forwards. Don’t always start at 0 – make sure they can count on from 75 to 106 for example.

**‘Learn Its’**

Learn Its are addition facts and times tables facts. There are 72 Learns Its in total. 36 addition Learn Its and 36 multiplication Learn Its. These are facts that children need to learn off by heart, so when they are asked ‘What is 6+4 ?’ they are able to give the answer as quickly as they would be able to tell you their name. As soon as they know 3x5=15 they also know 5x3=15 (This is known as a ‘Switcher’)

Your child’s teacher will select the Learn Its for your child to work on and rather than race ahead. Please work at home to make sure they really **do** know their Learn Its and their Switchers with INSTANT RECALL (no fingers!)

‘Learn Its’ By Year Group

* Reception – Doubles of 1, 2, 3, 4, 5, and 2+1 = 3 and 2+3 = 5
* Year 1 – Doubles of 6, 7, 8, 9, and numbers which make 10 (2+8, 7+3)
* Year 2 - Remainder of 1 digit + 1 digit facts (eg 9+7=16)
* Year 3 – focus on x3, x4, x9 tables facts
* Year 4 – the six remaining facts (6x6, 6x7, 6x8, 7x7, 7x8, 8x8,) and 36 Addition Learn Its
* Year 5 and 6 - all 72 Learn Its.

**Addition** Learn Its



**Multiplication** Learn Its



**Big Maths Beat That**

Big Maths Beat That is a weekly timed test of your child’s Learn Its. The aim is to improve their score by one each time. You can help your child to improve their scores, by asking them to give you instant responses to their Learn Its while at home, the journey to school and throughout the day at weekend. Little and very often is the key to success, so the information enters the long term memory.



**It’s Nothing New**

This is the most important aspect of CLIC – the way children become successful and properly numerate. Ideas such as 5 things and 3 things are always 8 things. If we then change the ‘thing’ to tens for example. 5 tens + 3 tens = 8 tens. Children will count in bananas, aliens, cats etc. to lead into this. It becomes much easier to use amounts and measures such as ml, cm and kg.



Pim the Alien is used to reinforce this concept.

He has 3 arms + 4 arms = 7arms, and he has 3 hands + 4 hands = 7 hands. And on each hand he has 10 fingers, so that 3 groups of 10 fingers + 4 groups of 10 fingers = 7 groups of 10 fingers, which means that 3 tens + 4 tens = 7 tens, and 30 + 40 = 70.

Following this principle with young children leads to a deeper understanding and of how numbers work (and they think it is fun too!)

The idea is that the learning is nothing new – children find begin told that this means they feel able to answer the questions with real understanding. If a child knows double 4, they can use that to find double 40 with confidence.

Strange phrases such as ‘Jigsaw Numbers’, ‘Smile Multiplication’ and ‘Where’s Mully?’ are all part of this section of Big Maths.

Jigsaw numbers are a way of adding pairs of numbers to equal 100, decimals equal to 1.0



Smile Multiplication – is used for multiplying multiples of 10 eg. 40 x 6



‘Where’s Mully?’ is a game that is played to help children master division, which is traditionally the most challenging of the four operations. He hides behind numbers in a number square and the children have to find him. The word division is never used!



eg. He’s hiding behind the biggest multiple of 3 without going over 40 – he’s on 39

**Calculation**

This aspect of CLIC is when the teacher will work on developing the class’ progress and understanding of addition, subtraction, multiplication and division. Big Maths clearly maps out which steps children should do in a clear order and helps teachers to identify where to go back to if a child is struggling.

**Big Maths is a very useful tool to help children become numerate…but we still need your support at home.**

How can you help?

Help your child practice their Learn Its at home – a few minutes a day is all you need

Insist that numbers are written the correct way round

Congratulate your child if their Big Maths score goes up.

Make maths a positive experience (don’t tell your child you were rubbish at maths when you were at school – they will think they should be!)

If you have any questions or concerns please see your child’s class teacher in the first instance or Miss Tingay our Maths Subject Leader.