BIG MATHS

A GUIDE FOR PARENTS AND CARERS

Big Maths is a teaching programme to help children to become numerate. Problem solving and word problems cannot be solved until children can manipulate numbers and understand how the number system works. Big Maths lessons are fast-paced and fun. The children are introduced to child-friendly terms, such as 'Switchers' and 'Learn Its', to help them manipulate numbers and become more confident and successful at maths. There is a strong emphasis on developing instant recall of number facts, including number bonds and times tables.

CLIC SESSIONS
As part of our school's curriculum, every class has a daily CLIC session lasting about 20 minutes. CLIC stands for 'Counting', 'Learn Its', 'It's Nothing New' and 'Calculation'. Each CLIC session contains all these elements and is in addition to the usual maths lesson.

Counting
Children will count forwards and backwards in all kinds of steps depending on their level e.g. in 1s, 2s, 3s, 6s or even 25s! When practising counting at home, make sure your child goes forwards and backwards. 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').

Addition Learn Its:

x	2	3	4	5	6	7	8	9
2	4							
3	6	9						
4	8	12	16					
5	10	15	20	25				
6	12	18	24	30	36			
7	14	21	28	35	42	49		
8	16	24	32	40	48	56	64	
9	18	27	36	45	54	63	72	81

Multiplication Learn Its:

x	2	3	4	5	6	7	8	9
2	4							
3	6	9						
4	8	12	16					
5	10	15	20	25				
6	12	18	24	30	36			
7	14	21	28	35	42	49		
8	16	24	32	40	48	56	64	
9	18	27	36	45	54	63	72	81

'Learn Its' by Year Group
Your child's teacher will focus on the following learning facts in each age group:

- Reception – Doubles of 1, 2, 3, 4, 5, 2+1 = 3, 2+3 = 5 and multiples of 10 (counting)
- Year 1 – Doubles of 6, 7, 8, 9, 2+8=10, 3+7=10, 4+6=10, 4+2=6, 5+2=7, 6+2=8, 7+2=9, 9+2=11, 4+3=7, 5+3=8, 6+3=9 and multiples of 5 and 2 (counting)

- Year 2 -3+8, 3+9, 4+7, 4+8, 4+9, 4+5, 5+6, 6+7, 7+8, 8+9, 5+9, 6+9, 7+9, 5+7, 5+8, 6+8 and x2, x5, x10 tables
- Year 3 – focus on x3 x4 x8 tables facts
- Year 4 – all x table facts especially x12 and x11
- Year 5 and 6 -all 72 Learn Its.

Please make your child practises regularly at home to make sure they really do know their Learn Its and their Switchers with INSTANT RECALL (without counting on fingers!).

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 each time. You can help your child to improve their scores, by asking them to give you instant responses to Learn Its while at home, on the journey to school and throughout the day at weekend! Little but very often is the key to success as this helps the information become secure in the long term memory.
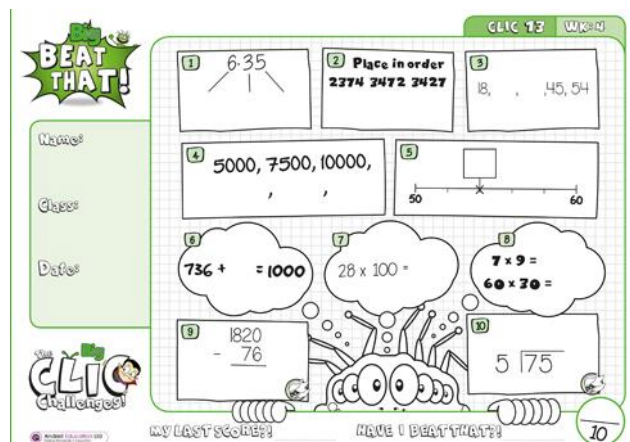
It's Nothing New

This is the most important aspect of CLIC. It is the way children become successful and properly numerate. The idea that 5 *things* and 3 *things* are always 8 *things* is a fundamental concept. Once children understand this concept, we can change the '*thing'* to other units (e.g. 'tens', so that 5 tens + 3 tens = 8 tens). Children begin to learn the concept by counting random units (e.g. bananas, aliens, cats etc). It then becomes much easier to use standard measures (such as ml, m, cm, kg) whilst understanding the underlying number concepts.


Pim the Alien is used to reinforce this concept. He has **3 arms + 4 arms = 7 arms** 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 really the learning 'is nothing new' and children feel able to answer the all sorts of questions with real understanding (e.g. 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, or decimals to equal to 1.0
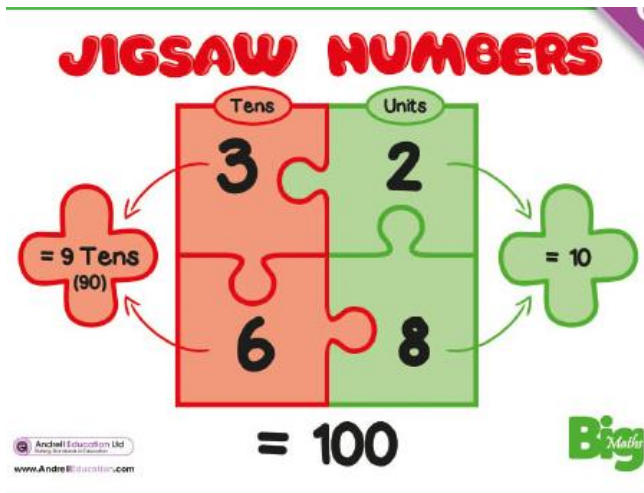
Smile Multiplication – is used for multiplying multiples of 10 e.g. 40 x 6
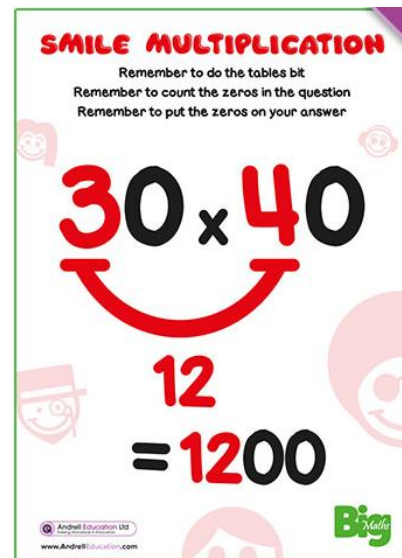
'Where's Mully?' is a game that is played to help children master division, which is traditionally the most challenging of the four operations. Mully Multiple hides behind numbers in a number square and the children have to find him. For e.g., He's hiding behind the biggest multiple of 3 without going over 40. Where's Mully? – he's on 39! The word 'division' is introduced later!

Calculation

This aspect of CLIC is when we focus on developing the children's understanding of addition, subtraction, multiplication and division. Big Maths maps out which steps children should do in a clear order and helps teachers to identify where to go back to if a child needs extra support.

How can you help?

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

- Help your child practise their Learn Its – a few minutes every 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 and not something to worry about or be afraid of!

If you have any questions or concerns, please see your child's class teacher in the first instance, or Mrs Geraghty, the school's Maths Leader.