BIG MATHS

A GUIDE FOR BIG PEOPLE

(SO THEY CAN HELP LITTLE PEOPLE)

Big Maths is a teaching programme used at Radnor Primary School to help children to become numerate (understand and use numbers).

Children cannot work systematically through number problem and word based problems until they can manipulate numbers and to do this they have to understand how various elements of our number system works – this is where we use Big Maths.

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 learn how to use numbers successfully and so make them more confident and more successful.

There is a strong emphasis on developing **instant** recall of number facts, including number bonds and times tables.

CLIC SESSIONS

This stands for

Counting
Learn Its
It's Nothing New
Calculation

Big Maths lessons contain each of these elements.

Counting

Children will learn how to count forwards and backwards in all kinds of steps depending on their level (not their age) e.g. in 1s, 2s, 3s, 6s or even 25s!

When practising counting at home with your child, make sure they count forwards *and* backwards.

Don't always start at 0 – make sure they can count on from 75 to 106 for example – make their brains work!

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 you ask your child '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 3 x 5 = 15 they also know 5 x 3 = 15

This is known as a Switcher

Addition Learn Its:	Multiplication Learn Its:
	

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 • 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 • multiples of 5 and 2	**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 • X 2, x 5, x 10 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 work at home to make sure they really do know their Learn Its and their Switchers with INSTANT RECALL no fingers!

Big Maths Beat That

Big Maths Beat That is a weekly timed test of your child's Learn Its.

The aim is for the children to improve their score 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, on 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 – and stays there!

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 equal to 8 *things*

– is a fundamental concept. Once children understand this concept, we can change the 'thing' to other units, such as tens so -

so that **5 *tens* + 3 *tens* = 8 *tens***

Children begin to learn the concept by counting random units e.g. bananas, aliens, cats etc. whilst understanding the underlying number concepts. It then becomes much easier to use standard measures such as ml, m, cm, kg,

Pim the Alien is used to reinforce this concept.

Pim has 3 arms + 4 arms = 7 arms - so
Pim has 3 hands + 4 hands = 7 hands

And on each hand he has 10 fingers

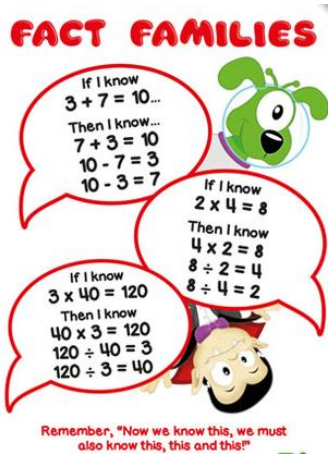
so 3 groups of 10 fingers + 4 groups of 10 fingers = 7 groups of 10 fingers

which means that 3 tens + 4 tens = 7 tens
30 + 40 = 70.

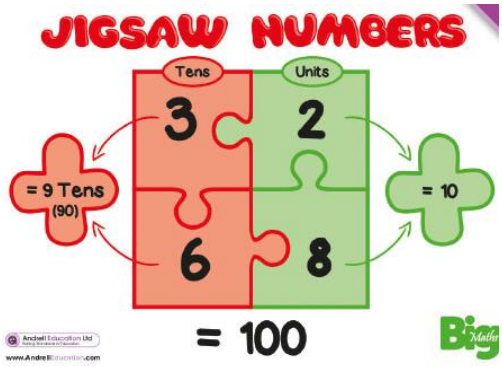
Following this principle with young children leads to a deeper understanding of how numbers work and they have even been known to have some fun learning!

The idea is that the 'learning is nothing new' and children feel able to answer the all sorts of questions by drawing on previous learning with real understanding e.g. If a child knows double 4, they can use that understanding to find double 40, double 400 etc. with confidence.

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

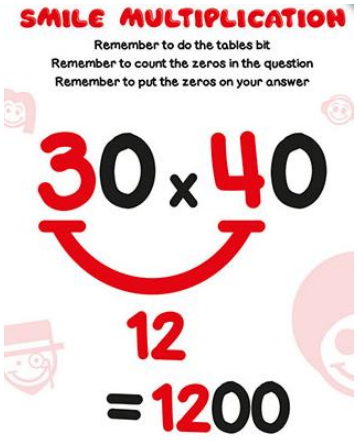


Jigsaw



Numbers are a way of adding pairs of numbers to equal 100, or decimals equal 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.
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 the teacher focuses on developing the children's understanding of addition, subtraction, multiplication and division.

Big Maths maps out which steps children should take 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 still need your support at home.

- Help your child practise their Learn Its at home – a few minutes a day is all you need.
- Insist that numbers are written the correct way way around.
- Congratulate your child if (when) their Big Maths score goes up.
- Make maths a positive experience - don't tell your child you were no good at maths when you were at school – they will think they should be the same and give up – poor understanding of maths is not hereditary!!

If you have any questions please see your child's class teacher in the first instance or Mrs Swindell, our maths curriculum leader.