## - Maths

# A Guide to Learning at Home for Parents and Carers 



Andrell Education 4 dd

## Introduction

Big Maths was designed for teachers and schools, but we always planned to launch support and resources for parents. The changes to our lives triggered by Coronavirus mean that we are now working flat out to convert our teacher resources to share with parents.

The most important part of the maths curriculum to be spending time on at home is Basic Number Skills. To make it easier to see and understand these Basic Number Skills, in Big Maths we structure them into 4 sections called CLIC. It is worth spending just a little time to familiarise yourself with these 4 sections of CLIC:

## CLIC stands for ‘Counting', 'Learn Its’, 'It’s Nothing New’ and ‘Calculation’:

## Counting

Learn Its

It's Nothing New

Children will count forwards and backwards in steps depending on their ability e.g. in $1 \mathrm{~s}, 2 \mathrm{~s}, 3 \mathrm{~s}, 6$ s or even 25 s! 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' 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! When asked 'What is $6+4$ ?', they should give the answer as quickly (as quickly as telling you their name). As soon as they know $3 \times 5=15$ they also know $5 \times 3=15$ (this is known as a 'Switcher').

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. Children begin to learn the concept by counting random things (e.g. bananas, cats etc). Once children understand this concept, we change the 'thing' to other units (e.g. 'tens', so that 5 tens +3 tens $=8$ tens). It then becomes much easier to use standard measures (such as $\mathrm{ml}, \mathrm{m}, \mathrm{cm}, \mathrm{kg}$ ) whilst understanding the underlying number concepts.

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 to identify where to go back to if a child needs extra support.

## How CLIC works

CLIC sessions build up a child's knowledge so that they will always have the background skills in place in order to secure a new skill. You can see from the example below how children build up to 2 digit +2 digit addition sums such as $32+44$ :


## Beat That!

The Big Maths Beat That challenges are completed by children every week. These are done in a fun, engaging and non-competitive way with the children encouraged to focus on beating their best ever score. These challenges will inform you of the next steps in learning so that you can ensure your child is still progressing. Each question always links to the same skill in a challenge, each week the numbers will change. In this guide, we have included a copy of the challenge, with associated resources linking to each skill (for each question). We hope it helps!

You can help your child to improve their scores, by asking them to give you instant responses to 'Learn Its' throughout the day! Little but often, is the key to success as this helps the information become secure in the long term memory.


## Learn Its

There are only a few number facts we expect children to learn, and so although it is correct to refer to them as facts, it is actually more helpful to call the ones we wish children to learn 'Learn Its'. This provides an instructional message as well as an accurate label for the subset of facts that need memorising.

A 'Learn It', therefore, is a number fact that is learnt so well that it can be recalled instantly. It includes all of the 1 digit add 1 digit answers as well as the 1 digit multiplied by 1 digit answers. 'Learn Its' save us from counting again and again. They are number facts that we need repeatedly, that is why it is highly efficient to learn them as facts. There are just 72 'Learn Its', 36 addition facts and 36 multiplication facts.

The 36 Addition 'Learn Its'

| $\mathbf{+}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ | $\mathbf{9}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2}$ | 4 |  |  |  |  |  |  |  |
| $\mathbf{3}$ | 5 | 6 |  |  |  |  |  |  |
| $\mathbf{4}$ | 6 | 7 | 8 |  |  |  |  |  |
| $\mathbf{5}$ | 7 | 8 | 9 | 10 |  |  |  |  |
| $\mathbf{6}$ | 8 | 9 | 10 | 11 | 12 |  |  |  |
| $\mathbf{7}$ | 9 | 10 | 11 | 12 | 13 | 14 |  |  |
| $\mathbf{8}$ | 10 | 11 | 12 | 13 | 14 | 15 | 16 |  |
| $\mathbf{9}$ | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

The 36 Multiplication 'Learn Its'

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

## Learn Its By Year Group

Children will focus on the following 'Learn Its' in each age group:

Primary 1

$$
1+1|2+2| 3+3|4+4| 5+5|2+1=3|
$$

$2+3=5 \mid$ counting in multiples of 10

$$
\begin{aligned}
& 6+6|7+7| 8+8|9+9| 2+8=10|3+7=10| \\
& \text { Primary } 2 \\
& 4+6=10|4+2=6| 5+2=7|6+2=8| 7+2=9 \mid \\
& 9+2=11|4+3=7| 5+3=8|6+3=9| \\
& \text { counting in multiples of } 5 \text { and } 2
\end{aligned}
$$

$$
\begin{array}{ll} 
& 3+8|3+9| 4+7|4+8| 4+9|4+5| 5+6 \mid \\
\text { Primary } 3 & 6+7|7+8| 8+9|5+9| 6+9|7+9| 5+7 \mid \\
& 5+8|6+8| \times 2, \times 5 \text { and } \times 10 \text { times table facts }
\end{array}
$$

Primary 4 Focus on $\times 3, \times 4$ and $\times 8$ times table facts.

Primary 5 All times table facts, especially $\times 12$ and $\times 11$

Primary 6/7 All 72 of the Learn Its number facts shown above.

## KEY PRIORITIES!

- Spend 5 minutes on each part of CLIC every day.
- Help your child practise their Learn Its - a few minutes every day is all you need.
- Congratulate your child if their CLIC or 'Learn Its' score goes up!
- Make maths a positive experience and not something to worry about or be afraid of!

We hope this guide helps you, but for further advice, we always ask that you contact your child's class teacher or school.

Find out more about Big Maths at
www.BigMaths.com

## If you have any further questions, please don't hesitate to get in touch with us.

