What is Big Maths Beat That!?

There are three parts to Big Maths Beat That:

1. The CLIC Challenges: Cover all the basic skills that a child needs to be properly numerate.
2. The Learn Its Challenges: Cover all the number facts children need.
3. The SAFE Challenges: Cover the rest of the Maths curriculum.

The Big Maths Beat That! Challenges provide a set of comprehensive questions that assess a child's ability in maths, which therefore accurately identifies the spread of ability across a class and informs planning and teaching. Better still, because the questions in each challenge are accurately pitched (once a child's ability has been determined through a baseline activity), children enjoy and look forward to completing the challenges each week, allowing teachers to measure progress.

Remember the children!

Explain to each child that they will be doing the same Challenges next week and their only target is to beat their best ever score. Ensure they understand that this is a personal challenge and that beating their last score represents personal success. It is always useful to explain that if they fail to beat their previous best score this doesn't represent failure. Instead, focus on the correct answers as these confirm secured steps on the learning journey (incorrect answers inform learning objectives for teacher planning). This is a very important early communication to the child.

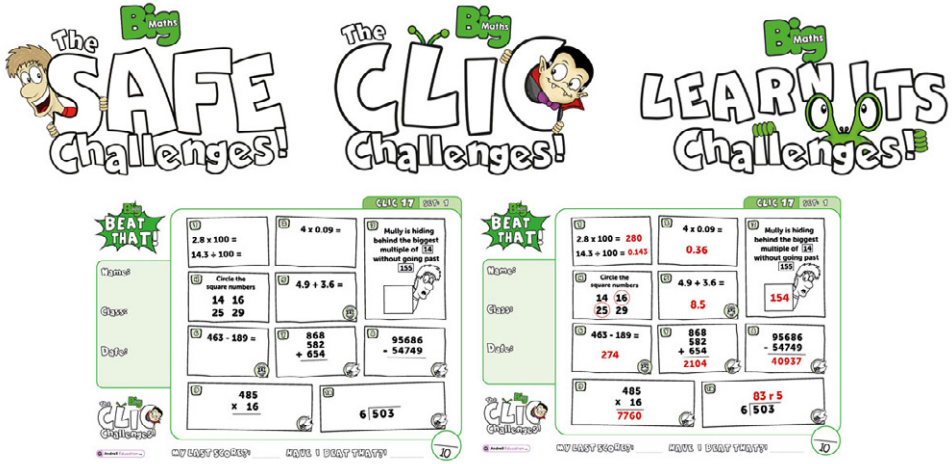
Take the time to explain the system and personal objectives in more depth for any children with a lack of confidence in maths or a learning difficulty (particularly related to recall). Give these children extra big celebrations for every step of progression so that the Big Maths Beat That! Challenges are being used to address their confidence issues, as opposed to other attainment based testing that may exacerbate them.

The whole point of Big Maths Beat That! is that it offers all children the opportunity to feel good about their maths.

Should I Race Ahead?

A general rule of thumb is that a child only moves on to the next CLIC or SAFE Maths Challenge if they get 10 out of 10 three weeks running. With the Learn Its Challenges, we recommend that children should progress to the next challenge after they have achieved full marks once within the recommended time limit.

The following pages give an overview of each of the three different types of Big Maths Beat That! Challenges.



The CLIC Challenges

The CLIC Challenges cover all of the basic skills that a child needs to become fully numerate.

There are 20 different CLIC Challenge assessments (each of which has 10 questions) which children progress through incrementally.

Each of the 20 CLIC Challenges is linked to a term, except CLIC 20 which is known as the 'Platinum Challenge' and reflects content from the secondary mathematics curriculum.

The questions in the CLIC Challenges target specific steps of learning. The 10 questions for each CLIC challenge are an assessment of the minimum expectation of where a child should be on their basic numeracy skills journey.

Some questions may need an adult present to assess the child (more so in the earlier years), an icon (T) is provided to indicate where.

Although the CLIC Challenges are aligned to curriculum expectations, the limitations and breadth of some curriculum statements mean some questions do not align directly by year group. Where there is not a direct translation, in the CLIC Challenges the skill is assessed (and taught if following the Big Maths pedagogy) earlier than required in the curriculum... never later.

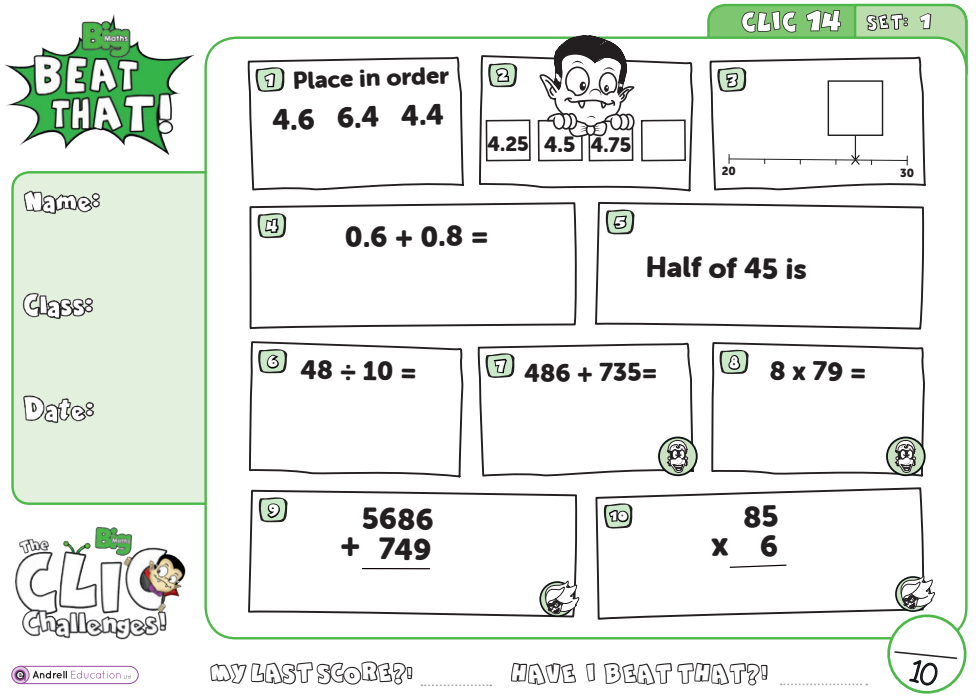
How The CLIC Challenge System Works

Start by giving each child a CLIC Challenge assessment that you believe they will find relatively easy (at least 5 of the 10 questions should be correct). In establishing a baseline for each child, you may choose to begin with a Challenge well below their ability and let them work through Challenges in sequence until they begin to get less than 10 correct.

Explain to the child that they will be doing the same CLIC Challenge next week and that you have just found out their score and that you challenge them to Beat That!

The CLIC Challenge baseline assessment identifies if the child is 'on track', 'ahead of track' or 'off track' (and to what degree). This is done by comparing the child's current year group and term against The CLIC Challenge Schedule in the FAQs document of your free resource pack.

Teachers should look at the questions the child **can't do** on that CLIC Challenge and use them to inform teaching and planning. In the Big Maths framework, each incorrect answer guides the teacher to the detailed step of learning which that child needs to learn.



The Learn Its Challenges

'Learn Its' are addition and multiplication facts, each of which children should simply be encouraged to "Learn it!". There are 15 different Learn Its Challenge assessments that children progress through incrementally.

Each of the 15 Learn Its Challenges is linked to a term and perfectly aligned with the expectations of the curriculum. Notice how each term, the previous two steps of the Learn Its Progress Drive are also being reassessed along with the new step.

All children without a genuine learning difficulty for recall should keep track with this schedule, some children will be ahead of this journey.

Step	Addition Learn Its	Multiplication Learn Its	Big Maths Term	Number of Questions in Challenge	Paper Timings		Online Timings	
					Seconds per question	Total time allowed (seconds)	Seconds per question	Total time allowed (seconds)
Ultimate	All '+' facts from 2+2 to 9+9	All 'x' facts from 2x2 to 9x9	Year 5 & 6	72	2	144	3	216
15		X12 Table	Year 4: Term 3	30	2	60	3	90
14		X11 Table	Year 4: Term 2	28	2	56	3	84
13		The Six Fact Challenge!	Year 4: Term 1	26	2	52	3	78
12		X8 Table	Year 3: Term 3	30	2	60	3	90
11		X4 Table	Year 3: Term 2	36	4	144	5	180
10		X3 Table	Year 3: Term 1	41	4	164	5	205
9	5 + 9 6 + 9 7 + 9 5 + 7 5 + 8 6 + 8	X2 Table	Year 2: Term 3	46	4	184	5	230
8	5 + 4 5 + 6 6 + 7 8 + 7 8 + 9	X5 Table	Year 2: Term 2	34	5	170	6	204
7	3 + 8 3 + 9 4 + 7 4 + 8 4 + 9	X10 Table	Year 2: Term 1	27	5	135	6	162
6	6 + 6 7 + 7 8 + 8 9 + 9	Multiples of 2 – In counting	Year 1: Term 3	17	5	85	6	102
5	4 + 2 5 + 2 6 + 2 7 + 2 9 + 2 4 + 3 5 + 3 6 + 3		Year 1: Term 2	15	5	75	6	90
4	1 + 9 = 10 2 + 8 = 10 3 + 7 = 10 4 + 6 =10 5 + 5 = 10	Multiples of 5 – In counting	Year 1: Term 1	10	5	50	6	60
3	2 + 1, 2 + 3	Multiples of 10 – In counting	Reception: Term 3	7	6	42	7	49
2	3 + 3, 4 + 4, 5 + 5		Reception: Term 2	5	6	30	7	35
1	1 + 1, 2 + 2		Reception: Term 1	2	6	12	7	14

How the Learn Its Challenge System Works

From the child's point of view, they must start each challenge by answering the questions from the left step on the sheet, before answering the middle step and finally the right step (new Learn Its for that challenge).

Answering questions from the two previous steps should be a formality and the child should be able to very quickly write out the answers. If they are hesitant, the teacher must consider if the previous challenge would be more appropriate.

In establishing a baseline for each child, you may choose to begin with a Challenge well below their ability and let them work through Challenges in sequence until they begin to get some wrong. This is a celebratory starting point for growing confidence.

Explain to the child that they will be doing the same Learn Its Challenge next week and that you have just found out their score and that you challenge them to Beat That!

The Learn Its Challenge baseline assessment identifies if the child is 'on track', 'ahead of track' or 'off track' and to what degree.

Teachers should look at the questions the child can't do on that Learn Its Challenge and use them to inform teaching and planning. In the Big Maths framework, each incorrect answer guides the teacher to the detailed step of learning which that child needs to learn.

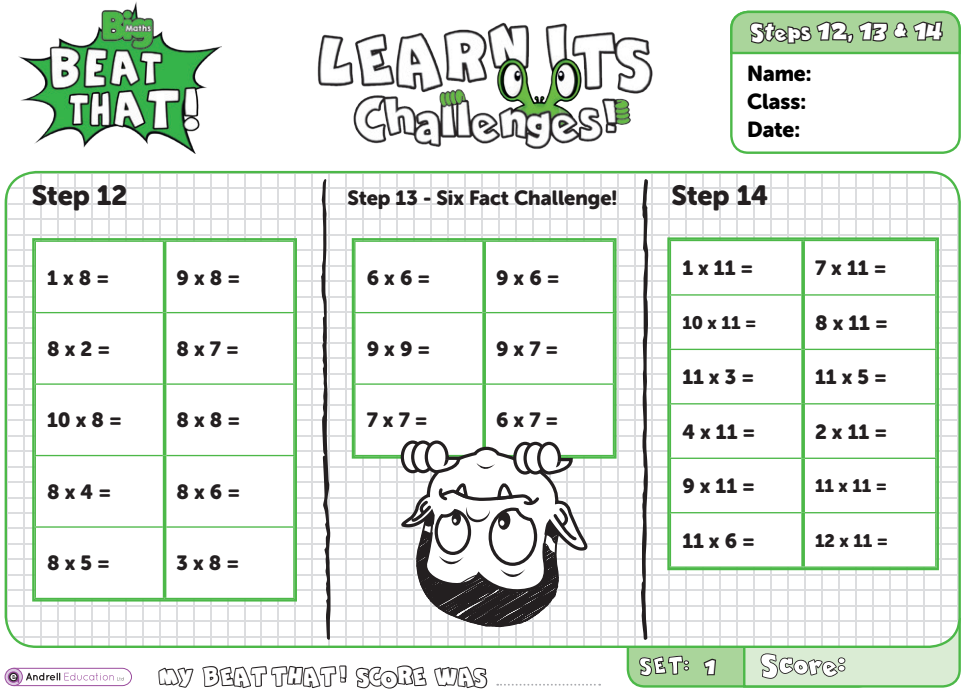
The child does not receive an identical Learn Its Challenge each week as they may start to simply remember the answers. This is why there are ten versions of each Learn Its Challenge. This way the child has the same standard of challenge each week but the order of the questions will change.

There is also an extension assessment for those children that complete Learn Its Challenge 15. This extension challenge is called, Learn Its Ultimate!

This Ultimate assessment has all 36 one digit add one digit Learn Its and all 36 one digit times one digit Learn Its. All 72 Learn Its are jumbled up each week. Once a child can write down all 72 answers in less than 90 seconds (some schools may choose to use 60 seconds) then they receive a Big Maths Beat That! Ultimate! certificate.

Unlike the other two parts of Big Maths Beat That!, the Learn Its Challenge is a timed assessment. The timer comes in the form of a jingle, found in your free resource pack. Although the fun and pacey jingle music remains the same, the timing of the period of silence in the middle of the jingle varies.

A child is ready for the next step once they can record all the answers in the recommended time allowed (although it can also be useful to challenge a child to complete the challenge more quickly before they move on to the next step. Schools may well choose to vary the timings on paper to suit their own needs).



The SAFE Maths Challenges

The SAFE challenges cover the rest of the maths curriculum, including shape and fractions.

There are 20 different SAFE Maths Challenges of 10 questions, which children progress through incrementally.

Each challenge is linked to a term and provides an assessment against the minimum expectation of where a child should be on their 'Outer Numeracy' journey.

SAFE Challenges 1 to 5 do not have a sheet to present the child with. Instead teacher notes are used as assessment criteria to tick off skills and understanding as they are accomplished. SAFE Challenges 1 to 5 therefore have a space for the child's name and for recording the date as each step is ticked off.

Although the SAFE Challenges are aligned to the curriculum expectations, the limitations and breadth of some curriculum statements mean some questions do not align directly by year group. Where there is not a direct translation, in the SAFE Challenges the skill is assessed (and taught if following the Big Maths pedagogy) earlier than required in the curriculum... never later.

How The SAFE Maths Challenge System Works

In establishing a baseline for each child, you may choose to begin with a Challenge well below their ability and let them work through Challenges in sequence until they begin to get some wrong. This is a celebratory starting point for growing confidence.

The initial SAFE Maths Challenge assessment can also tell us immediately if the child is on track, ahead of track or off track (and to what degree). This is done by comparing the child's current year group and term against The SAFE Maths Challenge Schedule in the FAQs document of your free resource pack.

Teachers should look at the questions the child **can't do** on that SAFE Challenge and use them to inform teaching and planning. In the Big Maths framework, each incorrect answer guides the teacher to the detailed step of learning which that child needs to learn.