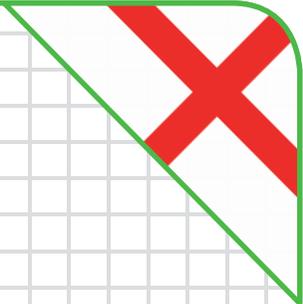
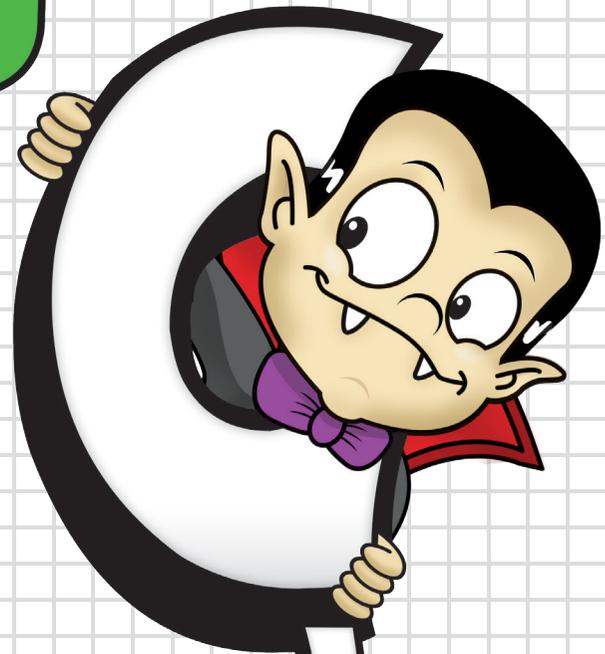


Part of **BEAT THAT!**



The **Big Maths** **CLIC** Challenges!



 **Andrell Education Ltd**
Raising Standards in Education

What is Big Maths Beat That?

Big Maths is growing fast because it works! If you're looking for a simple but highly effective way to significantly strengthen your whole school numeracy journey then choose Big Maths! Big Maths provides a clear framework (CLIC) for getting all children numerate, along with a weekly assessment, i.e. a 'progress check' (Big Maths Beat That) that is linked into that framework. 'Big Maths Beat That' is only a small part of the Big Maths teaching approach.

'Big Maths Beat That' Challenges consist of the CLIC Challenges and Learn Its Challenges, which collectively provide a set of comprehensive questions that assess a child's ability in core maths. 'Big Maths Beat That' has been specifically designed as the assessment element of Big Maths and allows a teacher to measure the progress of each child on a weekly basis.

The CLIC Challenges are aligned to each term of a child's journey through Primary School, assessing their knowledge of core maths skills and their position on that journey. This allows teachers and school leaders to keep a constant 'progress check' as the weeks go by... all linked into National Curriculum age expectations!

The Learn Its Challenges assess those essential facts that, once secure, will allow a child to continue their journey, tackling increasingly complex questions more logically and successfully. Teachers must ensure that the child can recall their Learn Its instantly before attempting the next challenge.

'Big Maths Beat That' Challenges inform teachers of each child's ability, which therefore accurately identifies the spread of ability across a class and informs planning and next steps. Big Maths offers a comprehensive, progressive and effective primary strategy for teaching maths, guaranteed!

There are three parts to Big Maths Beat That:

1. **The Learn Its Challenge:** Covers all the addition and multiplication facts needed.
2. **The CLIC Challenge:** Covers all the basic skills that a child needs to be properly numerate.
3. **The Outer Numeracy Challenge:** Covers the rest of the Maths curriculum (this part will be available in 2015).

How to use Big Maths Beat That

All 3 parts of Big Maths Beat That have common practices, principles and purposes (the specifics of how to use each part is described later).

- **Use it for Summative Assessment:** Big Maths Beat That provides a progressive bank of assessments. For example, there are 15 steps of progression that every child is traveling along on their 'Learn Its' journey. Big Maths Beat That has an assessment for each step and so we can use it to find out the current step of the child. Which step have they mastered? Knowing precisely where a child is up to with their Maths ability is vital information for the child's maths teacher. This is always the starting point for teaching maths.
- **Use it for Formative Assessment:** Because Big Maths Beat That provides a simple progressive structure we can not only see what the child can currently do and understand, but the system will also inform us what to teach the child next.
- **Use it to Drive Progress:** The weekly assessment of Big Maths Beat That should not be used in isolation. It is the quality of input during the week that will make the child's score improve. For example, for a child to make rapid secure progress through The CLIC Challenge

then we recommend they have a daily CLIC session using the teaching methodology of Big Maths and with the teacher guiding the child through every step of the CLIC framework Progress Drives found in 'The CLIC Book' (available from www.andrelleducation.com)

- **Use it with children to Celebrate, Motivate and for FUN!:** Because Big Maths Beat That allows every child to improve their score easily, all children can feel great about their Maths. The free downloadable jingles (www.andrelleducation.com) add an extra fun dimension!
- **Use it to Track Progress:** Crucially, Big Maths Beat That is aligned to the expected standards journey that comes through the government's national curriculum description. For example, The CLIC Challenge follows the 'CLIC on Your Planning' journey that describes which curriculum content the child should have mastered by the end of each term in school. This means that Big Maths Beat That provides data as to which children are on track, ahead of track (and by how much) and 'off-track' and to what degree. It also provides accurate data for groups of children including entire cohorts. More information is found in the sections that follow.
- **Use it Flexibly:** Big Maths Beat That provides a simple but highly effective system to support all children becoming numerate. However, there are times when teachers choose to alter the system because it suits the needs of particular children and that flexibility is fully endorsed. For example, a child with a genuine relevant cognitive difficulty may need a bespoke Big Maths Beat That assessment that provides even smaller steps for success.

- **Use it to Hardwire Basic Skills:** One of the biggest barriers to high standards in a primary school is the learning loss of basic skills. Finding time each week to revisit the recently learnt basic skills is not easy for busy teachers...but is still vital! Setting up the Big Maths Beat That system in school is quick, easy and only needs to be done once. From that point onwards the children will actually find it fun and motivating to repeat and revisit questions they can already do as they seek to achieve their best ever score!



The CLIC Challenges

- There are 20 different CLIC Challenge assessments. Children progress through them incrementally from CLIC 1 to CLIC 20.
- Each of the 20 CLIC Challenges has 10 key questions.
- Each of the 20 CLIC Challenges is linked to a term of the journey from 'CLIC on Your Planning' (downloadable for free from www.AndrellEducation.com), except CLIC 20 which is known as the 'Platinum Challenge' and reflects content from the secondary Mathematics curriculum (previously Level 6).
- In other words the 10 questions for each CLIC challenge sum up the minimum expectation of where a child should be on their basic numeracy skills journey. In summary table form the content of each CLIC Challenge looks like this, and we call it The CLIC Challenge Schedule (see next page).
- The 10 questions don't cover all of the CLIC framework, so the teacher still obviously needs to use the CLIC on Your Planning document to check all children have secured the minimum required step on each Progress Drive in the CLIC framework.
- Some questions may need an adult present to assess the child (more so in the earlier terms), an icon (T) is provided to indicate where. Each of the CLIC Challenges has its own teacher page to provide assessment guidance for such questions. Obviously, the sooner children are able to answer such questions independently of the teacher the better. Many of these earlier assessments take place using the week's teaching and learning activities (e.g. by watching the children's lips as they join in a counting session in a CLIC lesson), rather than sitting with each child individually on a Friday.



- The teacher page also shows the teacher where each question fits in the CLIC framework.
- Very occasionally some questions are revisited from the previous CLIC Challenge. This is because there is such little new learning in that term of CLIC on Your Planning, thus making it even easier to ensure children keep to the minimum CLIC journey.
- Some questions require that the child must use a Column Method and these are indicated by the use of the Speedy Col image.
- Some questions require that the child must use an expanded high-understanding calculation method from CLIC, and these are indicated by the use of the Super Fab (or 'FAB Man') image. This could be that the child writes out the full expanded thinking (that also qualifies for a correct answer), but it maybe that they are actually holding some numbers in their head or indeed solving it 'brain only'. Any of the above is fine so long as the teacher is confident from classroom experience that the child is developing a high understanding CLIC method rather than a Column Method.
- Although the CLIC on Your Planning journey is aligned to the national curriculum requirements, some questions do not translate directly from national curriculum year groups since the national curriculum naturally has the limitations of detail that is not lost in the CLIC system. Where there is not a direct translation, it is always in favour of securing a skill earlier than required... never later.



The CLIC Challenge Schedule

CLIC Challenge	Term from 'CLIC on Your Planning'
CLIC 1	Term 1
CLIC 2	Term 2
CLIC 3	Term 3
CLIC 4	Term 1
CLIC 5	Term 2
CLIC 6	Term 3
CLIC 7	Term 1
CLIC 8	Term 2
CLIC 9	Term 3
CLIC 10	Term 1
CLIC 11	Term 2
CLIC 12	Term 3
CLIC 13	Term 1
CLIC 14	Term 2
CLIC 15	Term 3
CLIC 16	Term 1
CLIC 17	Term 2
CLIC 18	Term 3
CLIC 19	Y6 - Term 1
CLIC 20	The Platinum Challenge

How The CLIC Challenge system works

- Start by giving each child a CLIC Challenge assessment that you know they will find relatively easy (at least 5 of the 10 questions will be 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 initial CLIC 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 CLIC Challenge Schedule. For example if they are in Year 3, term 2 but have scored 7 on CLIC 14 then they are a year ahead of expected attainment for CLIC.
- The teacher begins to look at the questions the child **can't do** on that CLIC Challenge and begins to use that to inform planning. However, here is a crucial note on formative assessment.

Formative Assessment not Assertive Teaching

- When the CLIC Challenge system informs us that a child has not yet secured the skills and understanding to get a particular question right, that does not mean we will just teach around that question until they can. This would be an over-assertive approach by the teacher and can be damaging for the child's maths confidence and future progress since learning gaps underneath are not being addressed. What should happen is that the teacher would go to the Progress Drive (from the CLIC framework) where that step is found, go down the Progress Drive and find the step the child has actually already secured for that thread of numeracy and then work back up it again following a natural sequence of progression until the desired step is secure and the child can now get the relevant question from the CLIC Challenge right. All of the Progress Drives from CLIC, along with the detailed teacher notes for every step can be found in 'The CLIC Book' (available from www.AndrellEducation.com).

- Of course the child does not receive an identical CLIC Challenge every week as they will possibly start to just remember the answers. This is why there are multiple (10) versions of each CLIC Challenge and now the child has the same standard of challenge each week but the actual numbers in the questions will change.
- Some schools move forward together from the week 1 bank of CLIC Challenges to the week 2, and then week 3 etc. giving the child the correct CLIC Challenge from 1 to 20 that they are currently on.
- A child only moves on to the next CLIC Challenge if they get 10 out of 10 three weeks running. This means they can keep progressing through the system until they can get 10 out of 10 on CLIC 20 (also known as 'The Platinum Challenge').
- Having said that, some teachers may choose to keep the bulk of the class on the same CLIC challenge each term in order to control the journey of the cohort. With this approach, only a group of more able children move ahead of the 'CLIC on Your Planning' journey, and they do so together. This solution to 'managing the spread' can prove more effective overall than allowing children to move through the system individually. These are decisions for individual schools or teachers.

Quality First Teaching

When driving standards for Maths in a primary school the initial focus is always the basic skills part of the journey. This is CLIC! For children to progress rapidly and securely with the CLIC Challenge they need quality input on a daily basis. There is a specific pedagogy required to input the basic skills for Maths and this is all built into the Big Maths training and 'The CLIC Book' (details available from www.AndrellEducation.com).

Keeping to this pedagogy and keeping to the CLIC on Your Planning journey reflected in the CLIC Challenge means that all children (without a genuine cognitive difficulty) will complete the CLIC journey, as a minimum, by the end of term 1 in Year 6.

Tracking Progress without NC Levels

In non-statistical terms we have already seen that we can describe a child as being on track, ahead of track or 'off track' by comparing their current CLIC Challenge position to The CLIC Challenge Schedule, which is itself a description of progress linked into the national curriculum 2014.

CLIC Point Scores

However, such descriptors are not quite accurate enough for rigorous monitoring of progress and so we advise giving each child a CLIC Points Score to describe their CLIC Challenge attainment (the child will not normally know about this score). When a child secures their very first correct response on CLIC 1 we call that 0.1.

As they secure their second correct response we call that 0.2. In other words each individual correct response is worth one tenth. Since there are 10 questions on the CLIC 1 assessment a child will have a score of 1.0 when they have mastered all 10 questions. As they get their first question correct on CLIC 2 their score goes up to 1.1 and so on, until they finish CLIC 2 with 10 out of 10... this is a CLIC point score of 2.0.

The same process continues until the child has a CLIC point score of 19.0. This is when the CLIC journey has finished, and the child could then be introduced to the post-CLIC 'Platinum Challenge'. This will eventually give the child a score of 20. Our concern here though is up to CLIC 19 and we expect that to be finished for all children (without a genuine cognitive difficulty), as a minimum, by the end of term 1 in Year 6. The CLIC Schedule with reference to the CLIC Points Score looks like the table on the next page.

Giving each child a CLIC Points Score in this simple way, and knowing that on the CLIC Challenge Schedule we expect progress of 1 CLIC Point a term, takes the precision of the tracking to a new level:

- For every child, at any given moment, we can compare their current basic skills Maths attainment against national expectations without using National Curriculum levels.

- We can also see the degree of drift. For example a child at the end of Year 2 should have a CLIC Points Score of 9.0, however if they had a score of 10.0 then we can see they are precisely 1 term ahead of expectations. A score of 10.5 would mean they were one and a half terms ahead (i.e. half a year).
- The graph template on page 9, can be used by class teachers to track progress for individual children over the course of a year. The graph template on page 10, can be used to track individual attainment and progress across seven years against national expectations. We advise that school leaders 'check-in' with each individual child's line graph at the end of each term.
- Doing this for every child we can show the proportions of children whose attainment exceeds national expectations. We could also show average figures for groups of children.
- Regardless of attainment, we can also show proportions of children making expected progress (1 CLIC Point per term) and proportions of children making better than expected progress (e.g. a school could show that in KS2 90% of children made at least 4 CLIC Points progress in the previous year, compared to the expected progress of 3 points).
- Averaging the score for a class of children, or cohort of children, allows a profile of attainment (and gains in attainment) to be seen clearly (see pages 9 and 10).
- However, averaging scores can mask individuals that are making insufficient progress or have insufficient attainment. Which is why tracking the proportions of children on track, and ahead of track, can be much more revealing (see pages 11, 12, 13 and 14).
- Schools will need to follow current national government guidelines as to what constitutes 'exceeding' for attainment and progress. As a rule of thumb, half a year ahead for attainment, constitutes as exceeding expectations. For progress, children making gains of an extra third of the year over a two year period, constitutes as exceeding progress. In other words, any progress equivalent to 7.0 CLIC points, when 6.0 CLIC points were expected.

The CLIC Challenge Schedule

CLIC Challenge	Term from 'CLIC on Your Planning'	CLIC Point Score
CLIC 1	Rec	1.0
CLIC 2		2.0
CLIC 3		3.0
CLIC 4	Y1	4.0
CLIC 5		5.0
CLIC 6		6.0
CLIC 7	Y2	7.0
CLIC 8		8.0
CLIC 9		9.0
CLIC 10	Y3	10.0
CLIC 11		11.0
CLIC 12		12.0
CLIC 13	Y4	13.0
CLIC 14		14.0
CLIC 15		15.0
CLIC 16	Y5	16.0
CLIC 17		17.0
CLIC 18		18.0
CLIC 19	Y6 - Term 1	19.0
CLIC 20	The Platinum Challenge	20.0



Progress Tracker - Over 1 Year

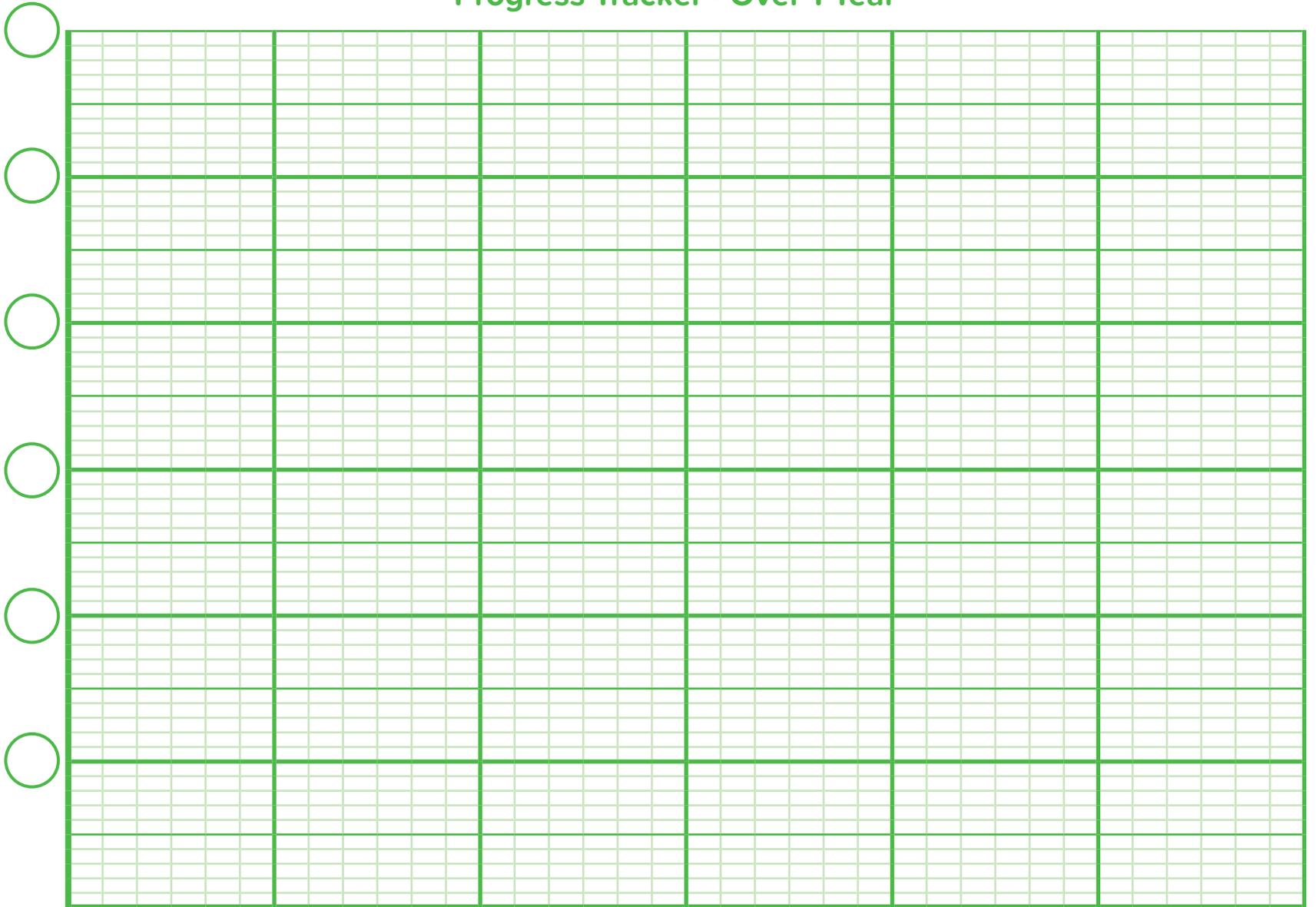
CLIC Challenges - Points Score Tracker

Name:

Class:

Year:

CLIC Challenge Points Score



6

12

18

24

30

36

Weeks



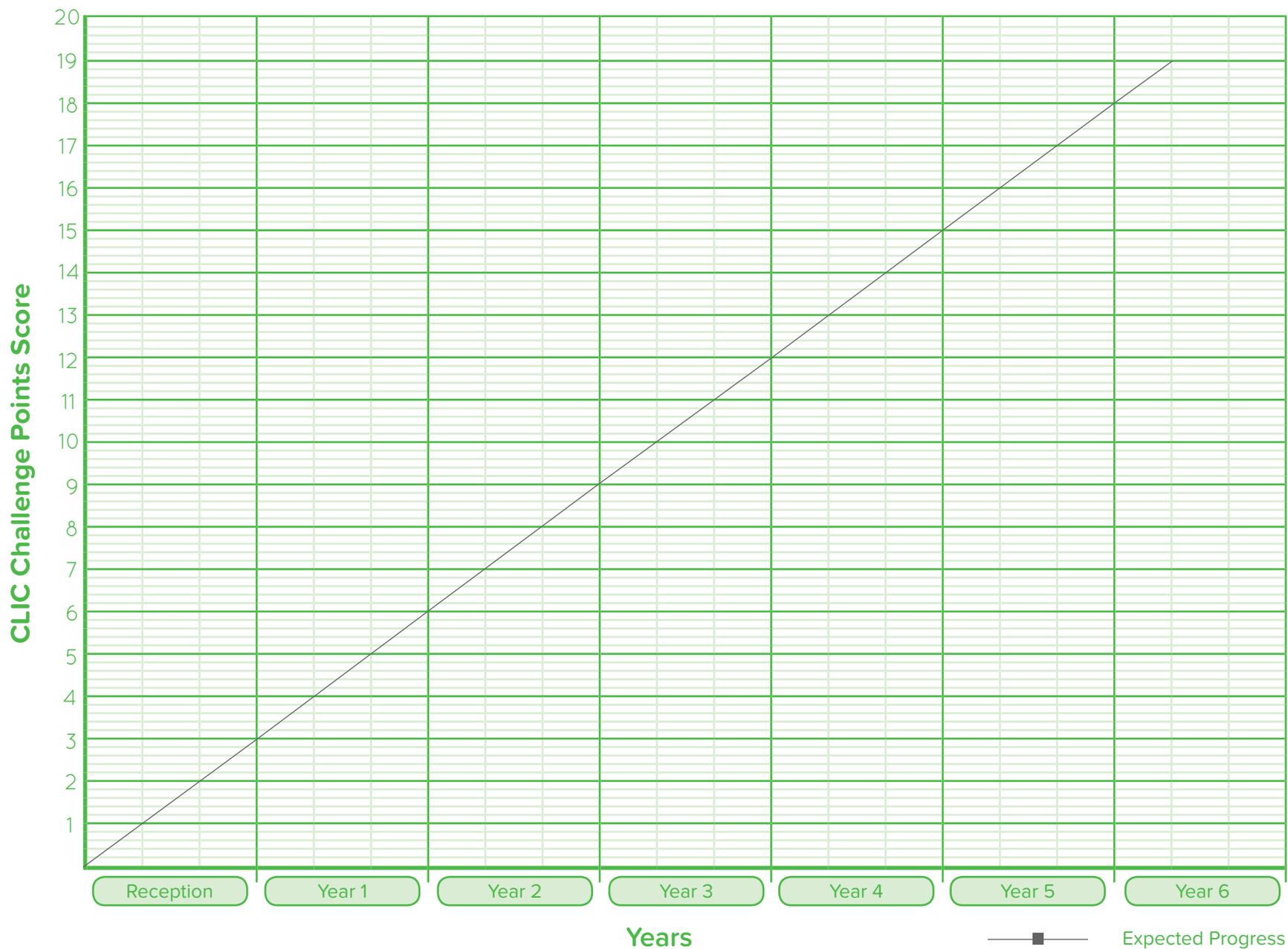
Progress Tracker - Over 7 Years

CLIC Challenges - Points Score Tracker

Name:

Class:

Year:



Big Maths

What Impact have we had?

	Rec	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Ave Child
Baseline								
After 1 Term								
Progress (expected is 1.0)								

Big Maths

What Impact have we had?

After 2 Terms

	Rec	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Ave Child
Baseline								
After 2 Term								
Progress (expected is 2.0)								

Big Maths

What Impact have we had?

After 1 Year

	Rec	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Ave Child
Baseline								
After 1 Year								
Progress (expected is 3.0)								

Big Maths

What Impact have we had?

Proportion of pupils
with attainment in line, or above,
NC expectations

	Rec %	Year 1 %	Year 2 %	Year 3 %	Year 4 %	Year 5 %	Year 6 %	Whole School
End of Term 1								
End of Term 2								
End of Term 3								

Big Maths

What Impact have we had?

Proportion of pupils
with attainment exceeding
NC expectations

	Rec %	Year 1 %	Year 2 %	Year 3 %	Year 4 %	Year 5 %	Year 6 %	Whole School
End of Term 1								
End of Term 2								
End of Term 3								

Big Maths

What Impact have we had?

Proportion of pupils
with progress in line, or above,
NC expectations

	Rec %	Year 1 %	Year 2 %	Year 3 %	Year 4 %	Year 5 %	Year 6 %	Whole School
End of Term 1								
End of Term 2								
End of Term 3								

Big Maths

What Impact have we had?

Proportion of pupils
with progress exceeding
NC expectations

	Rec %	Year 1 %	Year 2 %	Year 3 %	Year 4 %	Year 5 %	Year 6 %	Whole School
End of Term 1								
End of Term 2								
End of Term 3								

Big Maths Beat That!: Teacher Notes

CLIC Challenge 1				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	LBM: Counting, Saying Numbers 1	4	1, 2, 3, 4, 5, 6, 7	The teacher checks the child can say the numbers from 1 to 7.
Q2	Counting: Saying Numbers	1	I can count to 10	The teacher checks the child can say the numbers from 1 to 10.
Q3	LBM: Counting, Reading Numbers 1	3	1, 2, 3	The teacher checks the child can read the numbers from 1 to 3.
Q4	LBM: Counting, Reading Numbers 1	4	4, 5	The teacher checks the child can read the numbers from 1 to 5.
Q5	Counting: Actual Objects	1	I can count 3 objects	The teacher checks the child can count up to 3 actual objects.
Q6	LBM: Learn Its 2	4	I have 10 fingers	The teacher checks the child knows instantly that they have 10 fingers.
Q7	LBM: Learn Its 3	2	Double 4 is 8	The teacher checks the child knows instantly that double 1 is 2, and that double 2 is 4.
Q8	LBM: Learn Its 4	2	Half 4 is 2	The teacher checks the child knows instantly that half of 2 is 1, and that half of 4 is 2.
Q9	Learn Its:	1	$1 + 1, 2 + 2$	The teacher asks "1 add 1" and checks the child can say "2" as an immediate response.
Q10	Learn Its:	2	$3 + 3, 4 + 4, 5 + 5$	The teacher asks "2 add 2" and checks the child can say "4" as an immediate response.

Big Maths Beat That!: Teacher Notes

CLIC Challenge 2				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	LBM: Counting, Saying Numbers 2	2	11, 12, 13	The teacher checks the child can say the numbers from 1 to 13.
Q2	Counting: Reading Numbers	1	I can read 1d numbers	The teacher checks the child can read the numbers from 1 to 10.
Q3	Counting: Actual Counting	3	I can count 5 objects	The teacher checks the child can count up to 5 actual objects.
Q4	Counting: Actual Counting	5	I can count 10 objects	The teacher checks the child can count up to 10 actual objects .
Q5	Counting: Core Numbers	1	I can understand numbers to 10	The teacher checks the child can place 3 different one digit numbers in order.
Q6	LBM: Counting, Counting Multiples 1	3	10, 20, 30, 40, 50	The teacher checks the child can say the first 5 multiples of 10.
Q7	LBM: Learn Its 2	5	5 fingers + 5 fingers makes 10 fingers	The teacher checks the child knows instantly that they have 5 fingers on each hand, and 10 altogether.
Q8	INN: Doubling (without crossing 10s)	1	I can double 1d numbers	The teacher checks the child knows instantly double 1. 2. 3 and 4.
Q9	LBM: Calc: +	3	I know '1 more than'	The teacher checks the child can tell them '1 more than....' for any 1 digit number.
Q10	LBM: Calc: -	3	I know "1 less than"	The teacher checks the child can tell them '1 less than....' for any 1 digit number.

Big Maths Beat That!: Teacher Notes

CLIC Challenge 3				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	Counting: Saying Numbers	2	I can count to 20	The teacher checks the child can say the numbers from 1 to 20.
Q2	LBM: Counting, Reading Numbers 2	3	14, 15	The teacher checks the child can read the numbers from 1 to 15.
Q3	Counting: Reading Numbers	2	I can read the numbers 11 - 20	The teacher checks the child can read the numbers from 1 to 20.
Q4	Counting: Actual Counting	6	I can count 20 objects	The teacher checks the child can count up to 20 actual objects.
Q5	LBM: Counting, Actual Counting 2	5	10 objects from a pile	The teacher checks the child can take up to 10 objects out of a larger starting pile.
Q6	LBM: Counting, Saying Numbers 7	2	10... 0	The teacher checks the child can say the numbers backwards from 10 to zero.
Q7	Counting: Counting On	5	I can Count On & Count back 5	The teacher checks the child can count on and back (up to 5 more/less) from a given 1 digit number, using a number line.
Q8	Counting: Counting Multiples	1	I can count in 10s	The teacher checks the child can say the first 10 multiples of 10.
Q9	Calc: +	5	I can add numbers of objects to 10	The teacher checks the child can add 2 amounts of objects (numbers don't need to pass 10).
Q10	Calc: -	5	I can take away numbers of objects to 10	The teacher checks the child can take away a given number of objects from a starting pile not greater than 10.

Big Maths Beat That!: Teacher Notes

CLIC Challenge 4

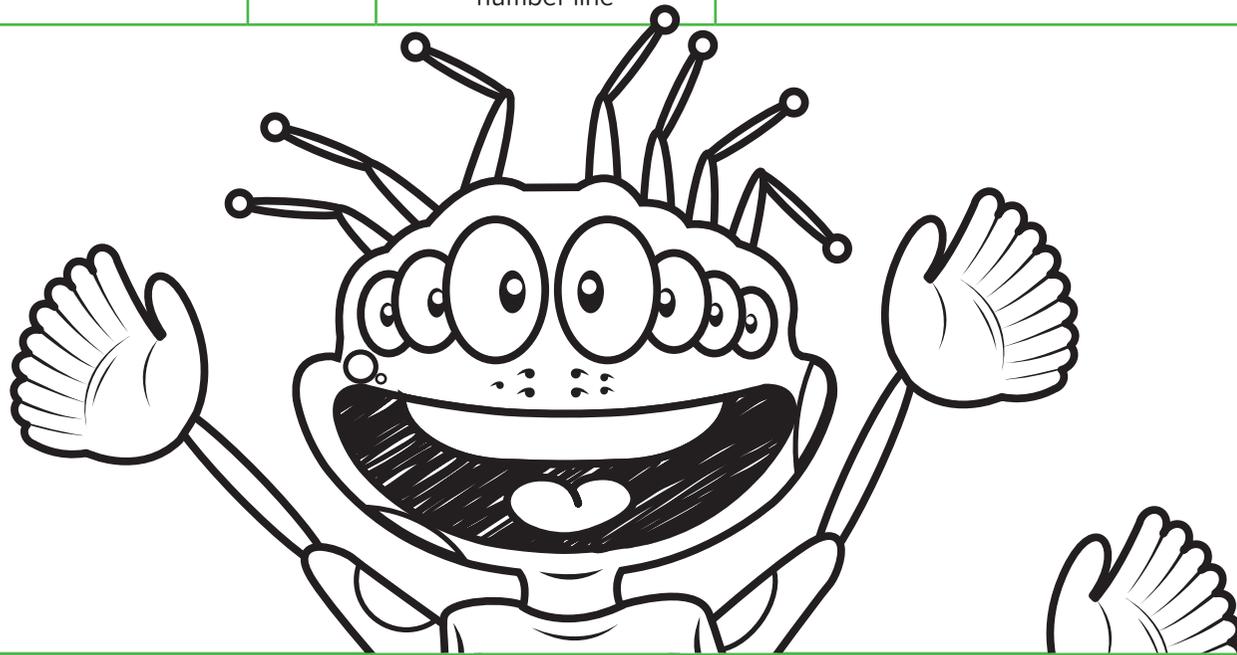
CLIC Challenge 4				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	Counting: Saying Numbers	3	I can count from 60 to 69.	The teacher checks the child can say the next 9 numbers when given a 2 digit multiple of 10 to count on from.
Q2	Counting: Saying Numbers	4	I can count to 100	The teacher checks the child can say the numbers to 100 by giving the child any 2 digit number and letting them count on through the next multiple of 10.
Q3	Counting: Reading Numbers	3	I can read 2d multiples of 10	The teacher checks the child can read any 2 digit multiple of 10.
Q4	Counting: Reading Numbers	4	I can read 2d numbers	The teacher checks the child can read any 2 digit number.
Q5	LBM: Counting, Counting Multiples 2	3	5, 10, 15, 20, 25	The teacher checks the child can say the first 5 multiples of 5.
Q6	Counting: Counting Multiples	2	I can count in 5s	The teacher checks the child can say the first 10 multiples of 5.
Q7	LBM: Counting, Counting Multiples 3	3	2, 4, 6, 8, 10	The teacher checks the child can say the first 5 multiples of 2.
Q8	LBM: INN 6, Who Won?	5	I can use these words in a range of contexts	The teacher checks the child can say who was first, last, second, third, fourth and fifth – in a range of contexts.
Q9	INN: Jigsaw Numbers	1	I can find the missing piece to 10	The teacher checks the child knows all of their number bonds to 10 and can complete them in the context of a missing number box question.
Q10	LBM: Counting, Saying Numbers 7	3	20... 0	The teacher checks the child can say the numbers backwards from 20 to zero.

Big Maths Beat That!: Teacher Notes

CLIC Challenge 5				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	Counting: Reading Numbers	5	I can read 3d multiples of 10	The teacher checks the child can read any 3 digit multiple of 100.
Q2	Counting: Core Numbers	2	I can understand numbers to 20	This question assesses 'More than' and 'less than' – numbers never go beyond 20.
Q3	LBM: Counting, Saying Numbers 7	4	100... 0	The teacher checks the child can say the numbers backwards from any 2 digit number (without needing to pass through a multiple of 10). Ideally the child is able to read this question and write the answer on the sheet, however, if they are only able to complete this verbally then they are still given the mark.
Q4	LBM: Counting, Saying Numbers 7	4	100... 0	The teacher checks the child can say the numbers backwards from any 2 digit number (the child must show consistent competence passing through a multiple of 10). Ideally the child is able to read this question and write the answer on the sheet, however, if they are only able to complete this verbally then they are still given the mark.
Q5	INN: Doubling (without crossing 10s)	2	I can double 2d multiples of 10	Numbers to double include: 10, 20, 30, 40.
Q6	INN: Jigsaw Numbers	1	I can find the missing piece to 10	(Consolidation Question) This question is a consolidation of Q9 from CLIC 4 (except the teacher is no longer present).

Big Maths Beat That!: Teacher Notes

CLIC Challenge 5				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q7	Calc: +	6	I can read a number sentence	The teacher is present for this question as the child will read out the number sentence without needing to answer it.
Q8	Calc: +	9	I can solve addition on a number line	Numbers will not go above 10.
Q9	Calc: -	6	I can read a subtraction number sentence	The teacher is present for this question as the child will read out the number sentence without needing to answer it.
Q10	Calc: -	9	I can solve subtraction on a number line	Numbers will not go above 10.



Big Maths Beat That!: Teacher Notes

CLIC Challenge 6

CLIC Challenge 6				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	Counting: Squiggleworth	1	I can partition a 2d number	Numbers include any 2 digit numbers.
Q2	Counting: Core Numbers	2	I can understand numbers to 20	Numbers include any numbers to 20.
Q3	Counting: Counting Multiples	3	I can count in 2s	Missing numbers are multiples of 2 up to 20.
Q4	Counting: Count Fourways	10s		This question checks the child can count in multiples of 10, or multiples of 25.
Q5	Counting: Count Fourways	2s		This question checks the child can use their ability to count in multiples of 2 to identify odd and even numbers.
Q6	INN: Fact Families	1	I know the Fact Families for 1d + 1d facts	Some of these questions start with a subtraction sentence.
Q7	Calc: +	11	I can add 2 or 3 to a number up to 20	
Q8	Calc: +	12	I can add a 1d number to a number to 20	
Q9	Calc: -	11	I can take 2 or 3 from a number up to 20	
Q10	Calc: -	12	I can take a 1d number from a number to 20	

Big Maths Beat That!: Teacher Notes

CLIC Challenge 7				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	Counting: Count Fourways	100s		This question checks the child can count in multiples of 100.
Q2	INN: Pim's Addition	1	I can add tens	Teachers should also verbally ask children, 'How do you know?' to check they have used their 1 digit add 1 digit Learn Its but swapped 'the thing' to a ten.
Q3	INN: Doubling (without crossing 10s)	3	I can double 2d numbers	Numbers to double include any 2 digit number with digits less than 5.
Q4	INN: Doubling (with crossing 10s)	2	I can double 2d multiples of 10	Numbers to double include any 2 digit multiple of 10 where crossing of 10 is necessary (ie 50, 60, 70, 80, 90).
Q5	INN: Halving	2	I know half of 30, 50, 70, 90	Numbers to halve include 30, 50, 70 and 90 .
Q6	INN: Fact Families	2	I can turn 1d + 1d facts into multiples of 10	Some of these questions start with a subtraction sentence.
Q7	Calc: +	14	I can add 10 to a 2d tens number	
Q8	Calc: +	15	I can add 10 to any 2d number	
Q9	Calc: -	13	I can take 10 from a multiple of 10	
Q10	Calc: -	14	I can take 10 from a 2d number	

Big Maths Beat That!: Teacher Notes

CLIC Challenge 8				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	Counting: Count Fourways	50s		This question checks the child can count in multiples of 50, or multiples of 500, or multiples of 5000, or in halves.
Q2	INN: Pim's Addition	2	I can add hundreds	Teachers should also verbally ask children, 'How do you know?' to check they have used their 1 digit add 1 digit Learn Its but swapped 'the thing' to a hundred.
Q3	INN: Jigsaw Numbers	2	I can find the missing piece to the next multiple of 10	This question assesses that the child can use their number bonds to 10 to instantly find the gap to the next multiple of 10. Children complete them in the context of a missing number box question, as an addition or a subtraction.
Q4	INN: Where's Mully	1	I can find Mully using my tables	This question only necessitates knowledge of the first 10 multiples of 10, or the first 10 multiples of 5.
Q5	Calc: +	17	I can solve $2d + 1d$	
Q6	Calc: +	18	I can add a 2d tens number to another one	
Q7	Calc: -	16	I can take a 1d number from a multiple of 10	
Q8	Calc: -	17	I can solve $2d - 1d$	
Q9	Calc: -	18	I can solve any $2d - 1d$	
Q10	Calc: -	19	I can solve any $3d - 1d$	

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CLIC Challenge 9				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	Counting: Core Numbers	3	I can understand 2d numbers	Numbers include any 2 digit numbers.
Q2	INN: Pim's Addition	3	I can add thousands	Teachers should also verbally ask children, 'How do you know?' to check they have used their 1 digit add 1 digit Learn Its but swapped 'the thing' to a thousand.
Q3	INN: Doubling (with crossing 10s) Halving	3 / 3	I can double 2d numbers / I know half of 300, 500, 700, 900	Includes doubling any 2 digit number Numbers to halve include 300, 500, 700 and 900.
Q4	INN: Jigsaw Numbers	3	I can find the missing piece to 100	This question assesses that the child can instantly find the gap from any 2 digit number to 100. Children complete them in the context of a missing number box question, as an addition or a subtraction.
Q5	INN: Multiplying by 10 Dividing by 10	1 1	I can multiply whole numbers by 10 / I can divide multiples of 10 by 10	
Q6	Calc: +	24	I can add a 2d number to a 2d number	
Q7	Calc: -	27	I can solve any 2d - 2d	
Q8	Calc: ÷	17	I can use a tables fact to find a division fact (with remainders)	
Q9	Column Methods: +	1	I can solve a 2d + 2d	
Q10	Column Methods: -	1	I can solve a 2d - 2d	

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CLIC Challenge 10				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	Counting: Squiggleworth	2 (i)	I can partition a 3d number	Numbers include any 3 digit numbers.
Q2	INN: Pim's Addition	3	I can add thousands	(Consolidation Question) Teachers should also verbally ask children, 'How do you know?' to check they have used their 1 digit add 1 digit Learn Its but swapped 'the thing' to a thousand.
Q3	INN: Doubling (with crossing 10s) Halving	3 / 3	I can double 2d numbers / I know half of 300, 500, 700, 900	(Consolidation Question) Includes doubling any 2 digit number. Numbers to halve include 300, 500, 700 and 900.
Q4	INN: Jigsaw Numbers	3	I can find the missing piece to 100	(Consolidation Question) This question assesses that the child can instantly find the gap from any 2 digit number to 100. Children complete them in the context of a missing number box question, as an addition or a subtraction.
Q5	INN: Multiplying by 10 Dividing by 10	1 1	I can multiply whole numbers by 10 / I can divide multiples of 10 by 10	(Consolidation Question)
Q6	Calc: +	25	I can solve any 2d + 2d	
Q7	Calc: -	28	I can take any 2d number from 100	
Q8	Calc: ÷	17	I can use a tables fact to find a division fact (with remainders)	(Consolidation Question)
Q9	Column Methods: +	2	I can solve any 2d + 2d	
Q10	Column Methods: -	2	I can solve any 2d - 2d	

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CLIC Challenge 11				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	Counting: Counting Multiples	5	I can count in 4s	Missing numbers are multiples of 4 up to 40.
Q2	INN: Doubling (without crossing 10s)	4	I can double 3d multiples of 100	Numbers to double include: 100, 200, 300, 400.
Q3	INN: Doubling (with crossing 10s)	4	I can double 3d numbers	Numbers to double include any 3 digit multiple of 100 where crossing of 10 is necessary (ie 500, 600, 700, 800, 900).
Q4	INN: Smile Multiplication	1	I can multiply multiples of 10	Questions require X5, 2, 3, 4 Learn Its recall. Teachers should also verbally ask children, 'How do you know?' to check they have used their 1 digit times 1 digit Learn Its but swapped 'the thing' to a ten.
Q5	INN: Coin Multiplication	3	I can complete a full Coin Card	Coin Multiples for any 2 digit number are to be found.
Q6	INN: Where's Mully	2	I can find Mully using 10 lots and a Tables Fact	This question only necessitates knowledge of the first 10 multiples of 10, 5, 2, 3 or 4. The multiple beyond the 10 lots is only ever another 2 lots, 3 lots or 4 lots.
Q7	Calc: +	26	I can solve $3d + 2d$	
Q8	Calc: +	27	I can solve any $3d + 2d$	
Q9	Column Methods: +	3	I can solve a $3d + 2d$	
Q10	Column Methods: +	4	I can solve any $3d + 2d$	

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CLIC Challenge 12				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	Counting: Squiggleworth	3	I can partition a 1dp number	Numbers include any 1dp numbers.
Q2	Counting: Core Numbers	4	I can understand 3d numbers	Numbers include any 3 digit numbers.
Q3	INN: Doubling (with crossing 10s)	5	I can double 3d numbers	Includes doubling any 3 digit number.
Q4	INN: Smile Multiplication	3	I can write Smile Multiplication Fact Families	Some of these questions start with a division sentence.
Q5	Calc: +	28	I can solve $3d + 3d$	
Q6	Calc: x	11	I can solve $1d \times 2d$	
Q7	Calc: \div	19	I can combine 2 or more Tables Facts to solve division (with remainders)	
Q8	Column Methods: +	6	I can solve any $3d + 3d$	
Q9	Column Methods: x	1	I can solve a $2d \times 1d$	
Q10	Column Methods: \div	1	I can solve a $2d \div 1d$ (using x2, 3, 4, 5) No remainders inside the question	

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CLIC Challenge 13				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	Counting: Squiggleworth	4	I can partition a 3dp number	Numbers include any 2dp numbers.
Q2	Counting: Core Numbers	5	I can understand 4d numbers	Numbers include any 4 digit numbers.
Q3	Counting: Counting Multiples	7, 8, 9	I can count in 6s, 7s, 8s	Missing numbers are multiples of 6 up to 60, or multiples of 7 up to 70, or multiples of 9 up to 90.
Q4	Counting: Count Fourways	250s		This question checks the child can count in multiples of 250, or multiples of 2500.
Q5	Counting: Counting Along	3	I can still count along for all of 'Count Fourways'	This question checks the child can count along an unmarked number line for multiples of 2, 10 and 50.
Q6	INN: Jigsaw Numbers	4	I can find the missing piece to 1000	This question assesses that the child can instantly find the gap from any 3 digit number to 1000. Children complete them in the context of a missing number box question, as an addition or a subtraction.
Q7	INN: Multiplying by 10	2	I can multiply whole numbers by 100	
Q8	Calc: x	12, 13	I can solve any 1d x 1d / I can do any Smile Multiplication	
Q9	Column Methods: -	6	I can solve any 4d - 2d or 3d	
Q10	Column Methods: ÷	2	I can solve a 2d ÷ 1d (using x2, 3, 4, 5) No remainders in answer	

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CLIC Challenge 14				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	Counting: Core Numbers	6	I can understand 1dp numbers	Numbers include any 1digit 1dp numbers.
Q2	Counting: Count Fourways	0.25s		This question checks the child can count in 0.2s, 0.5s, 0.25s.
Q3	Counting: Counting Along	4	I can even count along when there are no lines	This question checks the child can identify numbers half way between divisions on an unmarked number line, finding half way between multiples of 2, 10 and 50.
Q4	INN: Pim's Addition	4	I can add tenths	Teachers should also verbally ask children, 'How do you know?' to check they have used their 1 digit add 1 digit Learn Its but swapped 'the thing' to a tenth.
Q5	INN: Halving	4	I know half of 3, 5, 7, 9 as decimals	Numbers to halve include 3, 5, 7 and 9 (answers must be expressed as 1.5, 2.5, 3.5, 4.5).
Q6	INN: Dividing by 10	2	I can divide whole numbers by 10 or 100 giving decimal answers	In this question children divide whole numbers by 10, or 100.
Q7	Calc: +	29	I can solve any $3d + 3d$	
Q8	Calc: x	14	I can solve any $1d \times 2d$	
Q9	Column Methods: +	7	I can solve any $4d + 2d$ or $3d$	
Q10	Column Methods: x	2	I can solve any $2d \times 1d$	

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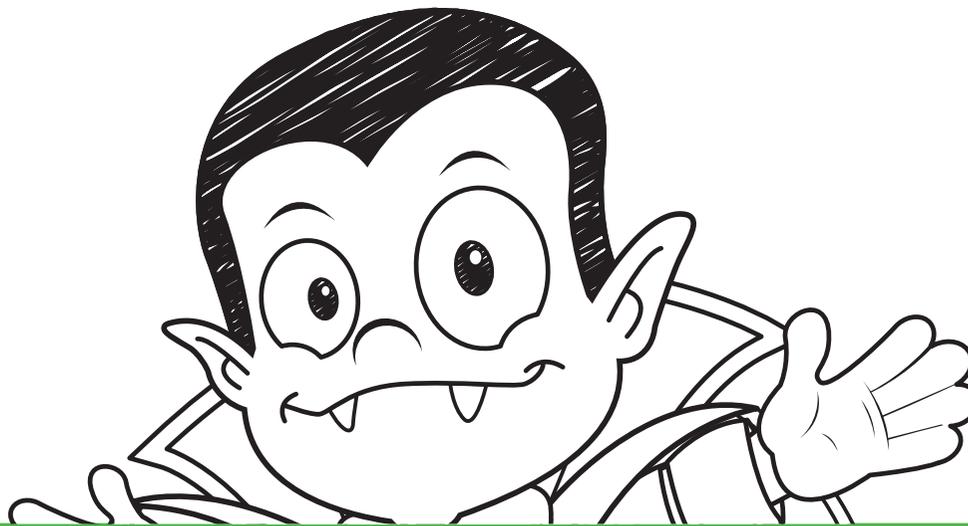
CLIC Challenge 15				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	Counting: Core Numbers	7	I can understand 2dp numbers	Numbers include any 1digit 2dp numbers.
Q2	INN: Halving	6	I can halve any 3d number	Numbers to halve include any 3 digit number.
Q3	INN: Where's Mully	3	I can find Mully using Smile Multiplication	This question necessitates knowledge of Smile Multiplication tables (see Smile Multiplication Step 3).
Q4	INN: Pom's Words	2	I can find factors	Teachers should check that the number itself and the number 1 are always declared as known factors.
Q5	Calc: -	30	I can solve any 3d - 2d	
Q6	Calc: ÷	21	I can use a Tables Fact to find a division fact	
Q7	Calc: ÷	23	I can combine 2 or more Tables Facts to solve division	
Q8	Column Methods: -	7	I can solve any 4d - 4d	
Q9	Column Methods: x	3	I can solve any 3d x 1d	
Q10	Column Methods: ÷	5	I can solve a 4d ÷ 1d (using any table) No remainders in answer	

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CLIC Challenge 16				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	INN: Pim's Addition	5	I can add hundredths	Teachers should also verbally ask children, 'How do you know?' to check they have used their 1 digit add 1 digit Learn Its but swapped 'the thing' to a hundredth.
Q2	INN: Jigsaw Numbers	5	I can find the missing decimal piece	This question assesses that the child can instantly find the gap from any 1 dp or 2 dp number to 1, 10 or to 100. Children complete them in the context of a missing number box question, as an addition or a subtraction.
Q3	INN: Multiplying by 10 Dividing by 10	3 3	I can multiply decimals by 10 / I can divide decimals by 10	
Q4	INN: Smile Multiplication	4	I can do Smile Multiplication for tenths	Questions require all 1digit times 1 digit Learn Its recall. Teachers should also verbally ask children, 'How do you know?' to check they have used their 1 digit times 1 digit Learn Its but swapped 'the thing' to a tenth.
Q5	INN: Where's Mully	4	I can find Mully using Smile Multiplication and Tables Facts	This question necessitates knowledge of Smile Multiplication tables (see Smile Multiplication Step 3). The multiple beyond the Smile Multiplication multiple is only ever another 2 lots, 3 lots or 4 lots.
Q6	Calc: +	32	I can solve 1dp + 1dp	

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CLIC Challenge 16				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q7	Calc: +	33	I can solve any 1dp + 1dp	
Q8	Calc: -	31	I can solve 4d - 2d	
Q9	Calc: ÷	25	I can use a Smile Multiplication fact to find a division fact	
Q10	Column Methods: x	4	I can solve a 3d ÷ 1d (using any table) No remainders in answer	



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CLIC Challenge 17				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	INN: Multiplying by 10 Dividing by 10	4 4	I can multiply decimals by 100 / I can divide decimals by 100	
Q2	INN: Smile Multiplication	5	I can do Smile Multiplication for hundredths	Questions require all 1digit times 1 digit Learn Its recall. Teachers should also verbally ask children, 'How do you know?' to check they have used their 1 digit times 1 digit Learn Its but swapped 'the thing' to a hundredth.
Q3	INN: Where's Mully	5	I can find Mully using Coin Multiplication	This question necessitates knowledge of Coin Multiplication (Steps 3, 4 and 5). The multiple beyond the Coin Multiplication multiple is only ever another 2 lots, 3 lots or 4 lots.
Q4	INN: Pom's Words	3	I can understand square numbers	Only square numbers up to 144 are used here.
Q5	Calc: +	35	I can solve any 1d.1dp + 1d.1dp	
Q6	Calc: -	32	I can solve 3d - 3d	
Q7	Column Methods: +	9	I can use Column Addition for several numbers	
Q8	Column Methods: -	8	I can solve any 5d - 5d	
Q9	Column Methods: x	5	I can solve any 3d x 2d	
Q10	Column Methods: ÷	6	I can solve any 4d x 1d	

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CLIC Challenge 18

CLIC Challenge 18				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	Counting: Squiggleworth	5	I can partition a 3dp number	Numbers include any 3dp numbers.
Q2	Counting: Core Numbers	9	I can understand 5, 6, 7, 8d numbers	Numbers include any 5,6,7 or 8 digit numbers, rounding to nearest 10, 100, 1000, 10 000, 100 000, 1 000 000.
Q3	Counting: Count Fourways	-25s		This question checks the child can count in -25s.
Q4	Counting: Counting Along	6	I can find the gap between 2 negative numbers	Numbers do not exceed 10, since we are assessing the understanding and basic skill of calculating gaps with negative numbers.
Q5	INN: Multiplying by 10 Dividing by 10	5 5	I can multiply / divide whole numbers and decimals by 1000	These questions involve whole numbers and decimals being multiplied, or divided, by 1000.
Q6	INN: Pom's Words	4	I can understand prime numbers	Children are expected here to instantly identify prime numbers up to 19.
Q7	Calc: +	37	I can solve any additions with 2dp	
Q8	Calc: -	35	I can subtract numbers with tenths	
Q9	Calc: ÷	30	I can combine 2 or more coin facts to solve division	
Q10	Column Methods: +	10	I can solve any 5d + 5d	

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CLIC Challenge 19				
	Step Location in the CLIC framework		Title of Step	Teacher Notes (if applicable)
	Progress Drive	Step No.		
Q1	Counting: Core Numbers	10	I can understand numbers with different decimal places	This includes numbers with 1dp, 2dp or 3dp.
Q2	Counting: Counting Along	7	I can find the gap between a negative number and a positive number	Numbers do not exceed 10, since we are assessing the understanding and basic skill of calculating gaps with negative numbers.
Q3	Calc: +	41	I can solve any 2dp + 1dp	
Q4	Calc: -	37	I can subtract numbers with different decimal places	
Q5	Calc: x	18	I can solve 1d x 1d.2dp	
Q6	Calc: ÷	33	I can combine 2 or more table facts to solve decimal division	
Q7	Column Methods: +	14	I can add numbers with mixed amounts of decimal places	
Q8	Column Methods: -	12	I can subtract numbers with mixed amount of dp	
Q9	Column Methods: x	11	I can solve any 1d.2dp x 2d	Some questions require answers with 2dp to be found.
Q10	Column Methods: ÷	10	I can solve division with decimal places in the answer	

CONGRATULATIONS!

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