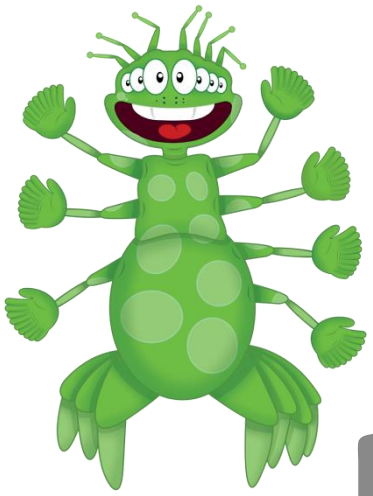
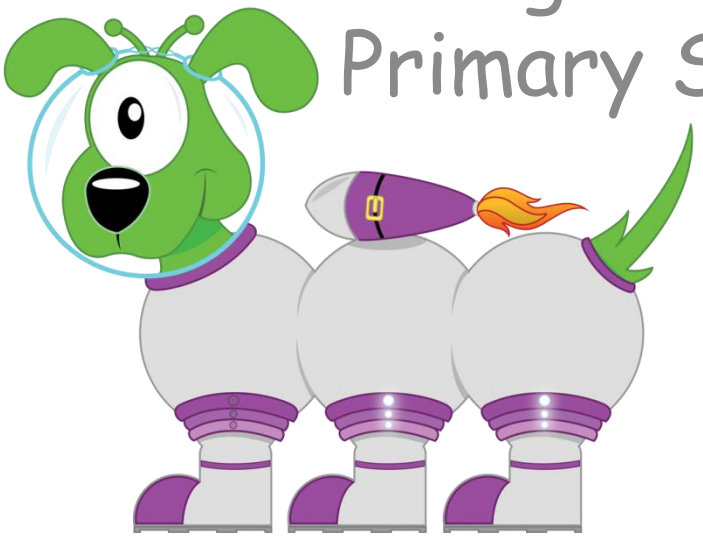


Big Maths

At

David Livingstone Memorial Primary School



Why change the way we teach maths and numeracy?

- Children were often less confident in basic numeracy than we felt they should be.
- We want to build a common approach across all stages that will build on the very good teaching that already exists in this area.
- We want to improve mental maths skills and general attainment in numeracy across the school.

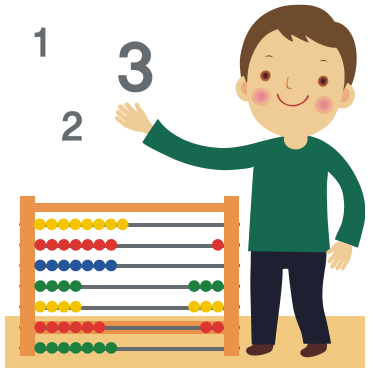
Why Big Maths?

- Big Maths focuses on core numeracy skills that are essential for building confidence.
- Big Maths has clear progression from year to year, with common methods taught and language used.
- Big Maths builds on prior learning and ensure children are secure in their knowledge.
- There is evidence that Big Maths improves mental maths skills and general numeracy across the school.

What is CLIC?

We are working towards implementing a Big Maths CLIC session! Four parts to every lesson are:

1. Counting
2. Learn Its (number bonds and facts)
3. It's Nothing New (use what we know as we progress in number work)
4. Calculation (apply our skills!)



Where did we start?

- Initial training delivered by Big Maths specialist.
- Whole staff agreed an approach – starting with Counting and Learn its at the level appropriate for their class. (term 2)
- Introducing ‘It’s Nothing New’ (term 3)
- Full CLIC session by Term 4 (20 mins max)

P1 T2: CLIC Planning Weekly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
C	**Reading Numbers (1)** **CLIC Book page 33** *I can read 1d numbers.*	**CORE Numbers (1)** **CLIC Book page 52** *I can understand numbers to 10.*	**Actual Counting (2)** **CLIC Book page 62** *I can count 4 objects.*	**Counting On (1)** **CLIC Book page 65** *I can count on and back 1.*	**Actual Counting (3)** **CLIC Book page 62** *I can count 5 objects.*	**Actual Counting (4)** **CLIC Book page 62** *I can count 6 objects.*
L	**Step 1 & 2** **CLIC Book p99-100** *1 + 1 = 2* *2 +2 = 4* *3 + 3 = 6* *4 + 4 = 8* *5 + 5 = 10*	**Step 1 & 2** **CLIC Book p99-100** *1 + 1 = 2* *2 +2 = 4* *3 + 3 = 6* *4 + 4 = 8* *5 + 5 = 10*	**Step 1 & 2** **CLIC Book p99-100** *1 + 1 = 2* *2 +2 = 4* *3 + 3 = 6* *4 + 4 = 8* *5 + 5 = 10*	**Step 1 & 2** **CLIC Book p99-100** *1 + 1 = 2* *2 +2 = 4* *3 + 3 = 6* *4 + 4 = 8* *5 + 5 = 10*	**Step 1 & 2** **CLIC Book p99-100** *1 + 1 = 2* *2 +2 = 4* *3 + 3 = 6* *4 + 4 = 8* *5 + 5 = 10*	**Step 1 & 2** **CLIC Book p99-100** *1 + 1 = 2* *2 +2 = 4* *3 + 3 = 6* *4 + 4 = 8* *5 + 5 = 10*
I	**Doubling (1)** **CLIC Book p146** *I can double 1d numbers.*	**Doubling (1)** **CLIC Book p146** *I can double 1d numbers.*	**Doubling (1)** **CLIC Book p146** *I can double 1d numbers.*	**Doubling (1)** **CLIC Book p146** *I can double 1d numbers.*	**Doubling (1)** **CLIC Book p146** *I can double 1d numbers*	
C	**Addition (1)** **CLIC Book p222** *I know when to add some more.*	**Subtraction (1)** **CLIC Book p277** *I know when to take some away.*	**Division (1)** **CLIC Book p36** *I can give out objects fairly.*	**Addition (2)** **CLIC Book p222** *I know to how find the total.*	**Subtraction (2)** **CLIC Book p278** *I know to take some away and count how many are left.*	

*Friday: Big Maths Beat That Tests/ CLIC Tests

P4 T1: CLIC Planning Weekly Overview

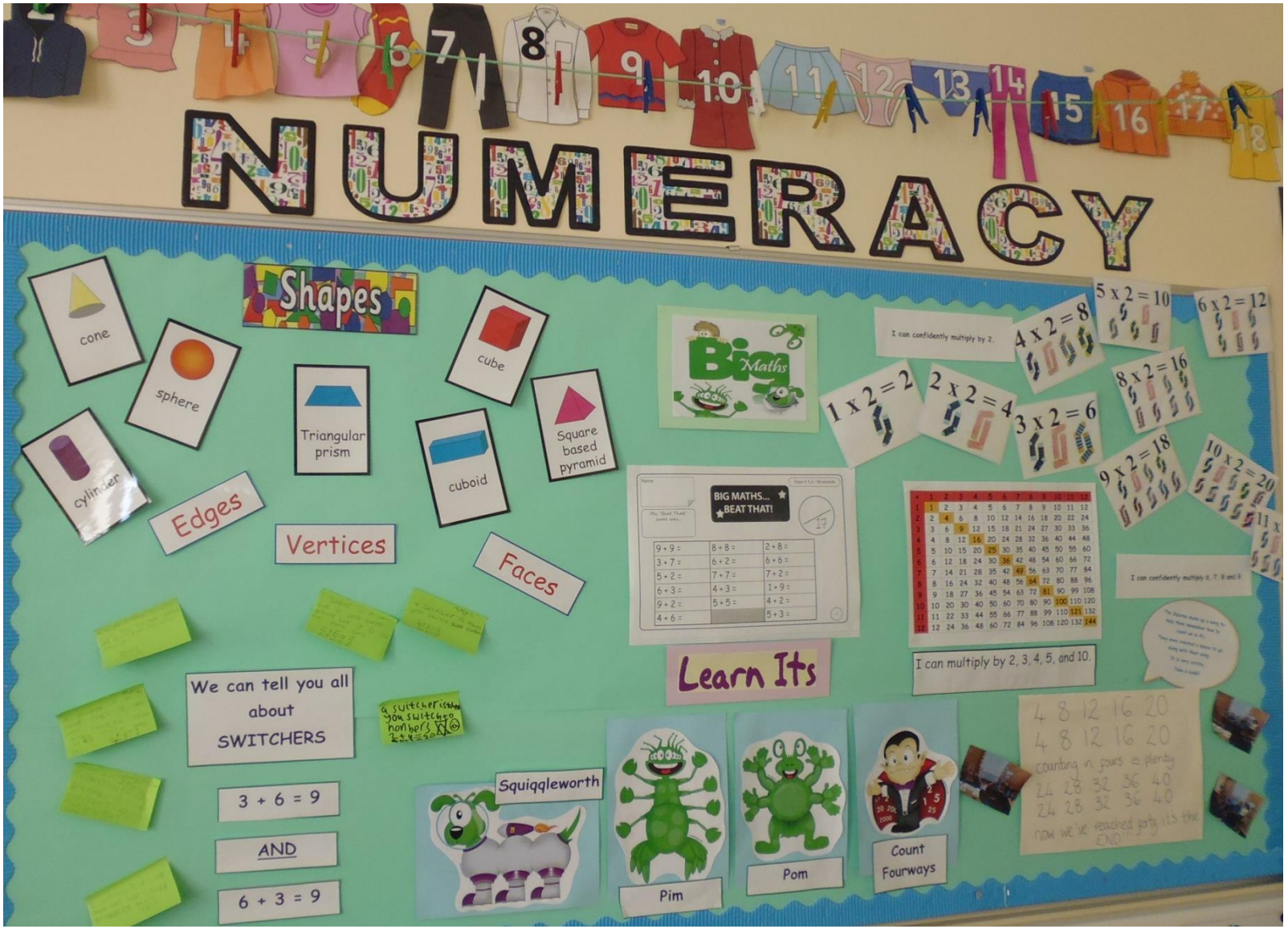
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
C	**Reading Numbers (6) (revision)** **CLIC Book P37** *I can read 3d numbers.*	**Squiggleworth (2)** **CLIC Book P146** *I can partition a 3d number.*	**Squiggleworth (2)** **CLIC Book P108** *I can partition a 3d number.*	**CORE Numbers (3)** **CLIC Book P52** *I can understand 2d numbers.*	**Counting Multiples (4)** **CLIC Book P68** *I can count in 3s.*	**Counting Along (1)** **CLIC Book P89** *I can count along a number line.*
L	**Step 10** **CLIC Book P108** *3x Tables Facts*	**Step 10** **CLIC Book P108** *3x Tables Facts*	**Step 10** **CLIC Book P108** *3x Tables Facts*	**Step 10** **CLIC Book P108** *3x Tables Facts*	**Step 10** **CLIC Book P108** *3x Tables Facts*	**Step 10** **CLIC Book P108** *3x Tables Facts*
I	**Pim the Alien (1)** **CLIC Book P135** *I can swap objects.*	**Adding with Pim (3)** **CLIC Book P140** *I can add thousands.*	**Adding with Pim (3)** **CLIC Book P108** *I can add thousands.*	**Doubling (3)** **CLIC Book P147** *I can double 2d numbers.*	**Halving (3)** **CLIC Book P155** *I can half 3d numbers.*	**Jigsaw Numbers (3)** **CLIC Book P160** *I can find the missing piece to 100.*
C	**Addition (25)** **CLIC Book P249** *I can solve any 2d + 2d calculation.*	**Subtraction (28)** **CLIC Book P306** *I can take any 2d number from 100.*	**Subtraction (28)** **CLIC Book P108** *I can take any 2d number from 100.*	**Multiplication (9)** **CLIC Book P335** *I can solve 1d x 1d calculations.*	**Division (17)** **CLIC Book P375** *I can use tables facts to find division facts.*	**Division (17)** **CLIC Book P375** *I can use tables facts to find division facts.*

P7 T1: CLIC Planning Weekly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
C	**Reading Numbers (11)** **(revision)** **CLIC Book P41** *I can read numbers with decimal places.*	**Squiggleworth (3)** **(revision)** **CLIC Book P47** *I can partition 3dp numbers.*	**CORE Numbers (7)** **CLIC Book P54** *I can understand 2dp numbers.*	**Count Fourways (-1s)** **CLIC Book P79** *I can count backwards through zero into negative numbers.*	**Count Fourways (-1s)** **CLIC Book P79** *I can count backwards through zero into negative numbers.*	**Reading Numbers (8)** **CLIC Book P38** *I can read 5 digit numbers accurately.*
L	**Revision**	**Revision**	**Step 15 Revision** **CLIC Book P113** *12 x table facts.*	**Step 15 Revision** **CLIC Book P113** *12 x table facts.*	**Revision** *All table facts.*	**Revision** *All table facts.*
I	**Adding with PIM (5)** **(revision)** **CLIC Book P141** *I can add hundredths.*	**Halving with PIM (6)** **(revision)** **CLIC Book P156** *I can half any 3d number.*	**Where's Mully?(2)** **CLIC Book P190** *I can Mully using 10 lots and a Tables Fact.*	**Coin Multiplication (4)** **CLIC Book P181** *I know when to add 2 multiples together.*	**Coin Multiplication (4)** **CLIC Book P181** *I know when to add 2 multiples together.*	**X 10 (3)** **CLIC Book P165** *I can multiply decimals by 10.*
C	**Addition (39)** **CLIC Book P267** *I can solve additions with several numbers.*	**Multiplication (17)** **CLIC Book P351** *I can solve 1d x 1d.1dp number.*	**Division (24)** **CLIC Book P382** *I can use a Smile Multiplication fact to find a division fact.*	**Division (24)** **CLIC Book P382** *I can use a Smile Multiplication fact to find a division fact.*	**Division (25)** **CLIC Book P383** *I can use a Smile Multiplication fact to find a division fact with remainders.*	**Division (25)** **CLIC Book P383** *I can use a Smile Multiplication fact to find a division fact with remainders.*

*Friday: Big Maths Beat That Tests/ CLIC Tests


Maths
take away
add
2D
time
equals
3D
measure
numbers
pattern
3 shapes
Learn its
1+1=2
1+2=3
4+2=6
6+3=9
5+3=8
2+2=4
2+1=3
7+2=9
9+2=11
4+3=7
3+3=6
2+3=5
4+4=8
3+2=5
5+5=10
6+6=12
2+8=10
7+7=14
8+2=10
8+8=16
3+7=10
9+9=18
7+3=10
6+2=8
4+6=10
5+2=7
6+4=10
100 Square
1 2 3 4 5 6 7 8 9 10
11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30
31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50
51 52 53 54 55 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70
71 72 73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90
91 92 93 94 95 96 97 98 99 100
0
10
20
30
40
50
60
70
80
90
100
100
200
300
400
500
600
700
800
900
1000
circle
triangle
square
rectangle
Circles
Rectangles
Triangles
Numbers to 100
Subtraction
Money
left
right


NUMERACY
Shapes
cone
sphere
cylinder
cube
Triangular prism
cuboid
Square based pyramid
Edges
Vertices
Faces
Big Maths
I can confidently multiply by 2.
1 x 2 = 2
2 x 2 = 4
3 x 2 = 6
4 x 2 = 8
5 x 2 = 10
6 x 2 = 12
8 x 2 = 16
9 x 2 = 18
10 x 2 = 20
11 x
BIG MATHS... BEAT THAT!
I can confidently multiply 6, 7, 8 and 9
I can multiply by 2, 3, 4, 5, and 10.
Learn Its
We can tell you all about SWITCHERS
3 + 6 = 9
AND
6 + 3 = 9
Squiqqleworth
Pim
Pom
Count Fourways
4 8 12 16 20
4 8 12 16 20
counting in fours is plenty
24 28 32 36 40
24 28 32 36 40
now we've reached forty it's the END!!!


Learn its!
We are learning about the language of Maths.
Less than
Minus
writing numbers
7+2=9
2+4=6
1 + 1 = 2
2+7=9
4+2=6
2 + 2 = 4
2+9=11
2+5=7
3 + 3 = 6
5+2=7
6+2=8
4 + 4 = 8
4+3=7
2+6=8
5 + 5 = 10
2 + 1 = 3
1 + 2 = 3
3 + 2 = 5
2 + 3 = 5
8+2 = 10
2+8 = 10
7+3 = 10
3+7 = 10
6+4 = 10
4+6 = 10


Big Maths
CLIC
Counting—Learn its—It's nothing new—Calculations
COUNT FOURWAYS
SMILE MULTIPLICATION
30 x 40
12
=1200
Take the 'Learn it' challenge.. 45 cards in 90 seconds!
PARTITION TO HELP ADD + SUBTRACT −
equals
balance
same as
subtract
leave
less
difference between
take away
minus
share
divide
multiply
times
groups of
lots of
add
plus
make
altogether
addition
total
sum
more
5 4
50 4
5 6 8
500 60 8

Counting

Learn Its

Its Nothing New

Calculations

Counting

Learn Its

Its Nothing New

Calculations

Reading Numbers

I can read 3d numbers.

Step 6

Reading Numbers

Step 6

I read 3d numbers.

Remember to:

- say the hundreds digit
- then say "and"
- then say the 2d number

Reading Numbers

357

Reading Numbers

357

Three hundred and fifty seven

Step 6

Reading Numbers

521

Reading Numbers

521

Five hundred and twenty one

Step 6

Reading Numbers

878

Reading Numbers

878

Eight hundred and seventy eight

Reading Numbers

235

Reading Numbers

235

Two hundred <u>and</u> thirty five

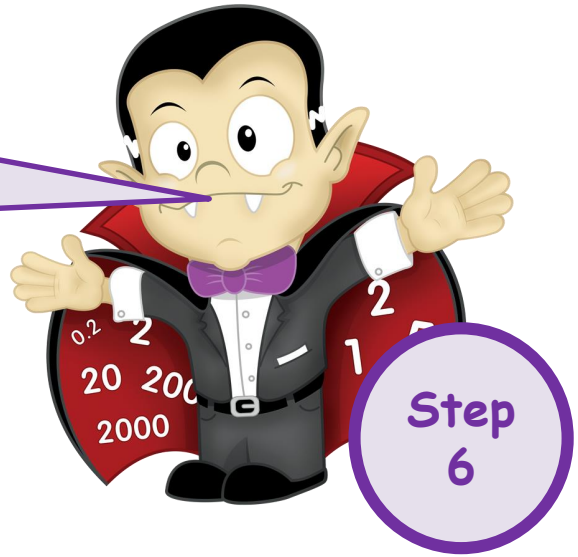
Reading Numbers

416

Reading Numbers

416

Four hundred and sixteen



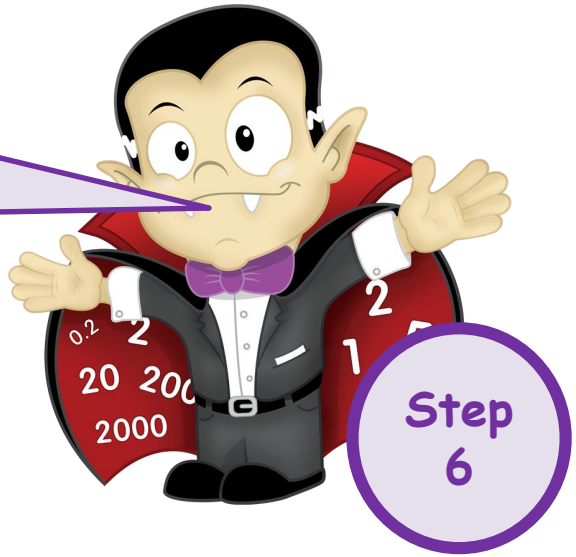
Reading Numbers

684

Reading Numbers

684

Six hundred and eighty four



Reading Numbers

962

Reading Numbers

962

Nine hundred and sixty two

Reading Numbers

744

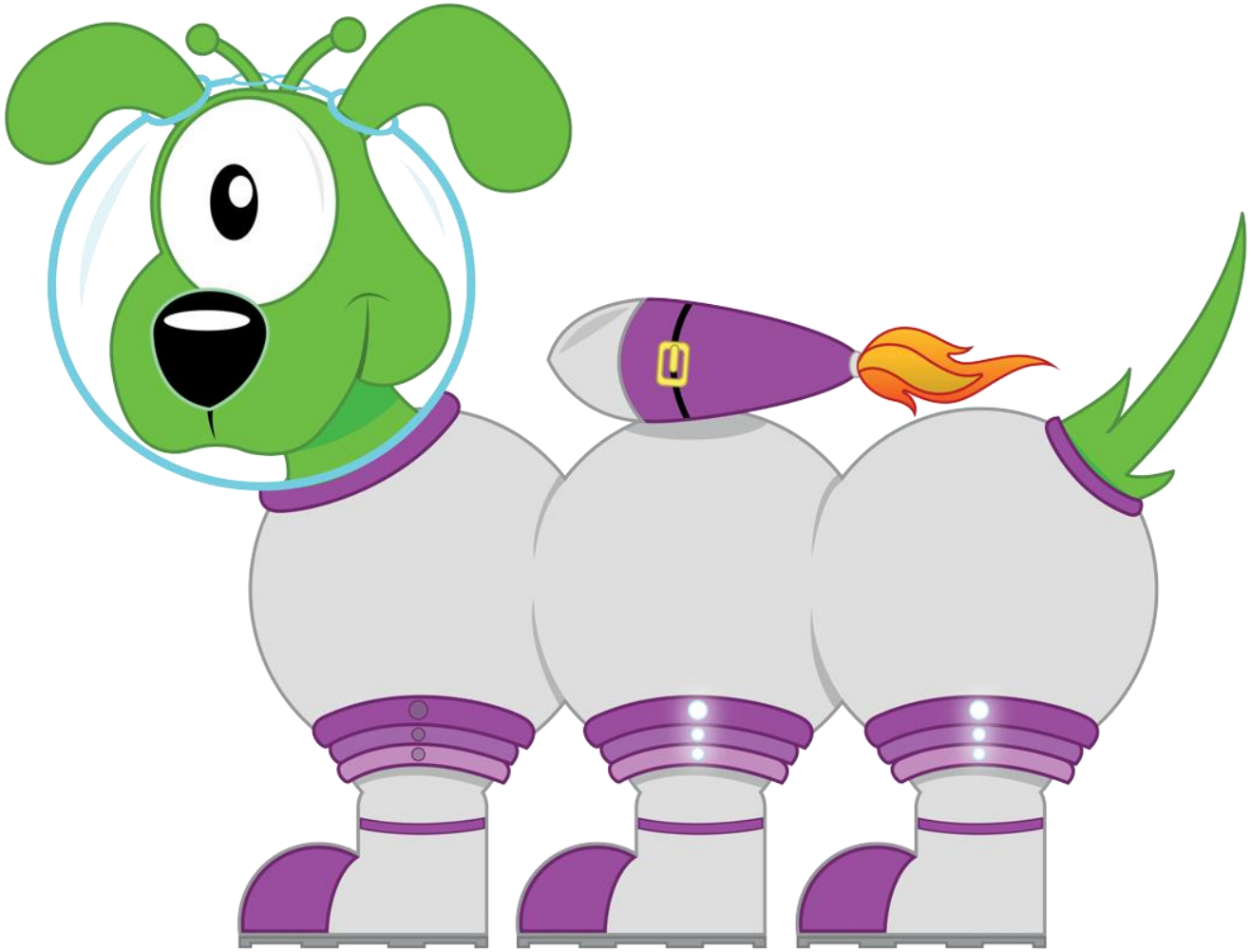
Reading Numbers

744

Seven hundred and forty four

Step 6

Well done!



Counting

Learn Its

Its Nothing New

Calculations

Lots of the Learn Its have their own jingles!

Listen to this one for

5 + 5 = 10 ☺

Learn Its

Step 10

I know my 3x tables.

Step 10

3x Table Facts

1 x 3 = 3

2 x 3 = 6

3 x 3 = 9

4 x 3 = 12

5 x 3 = 15

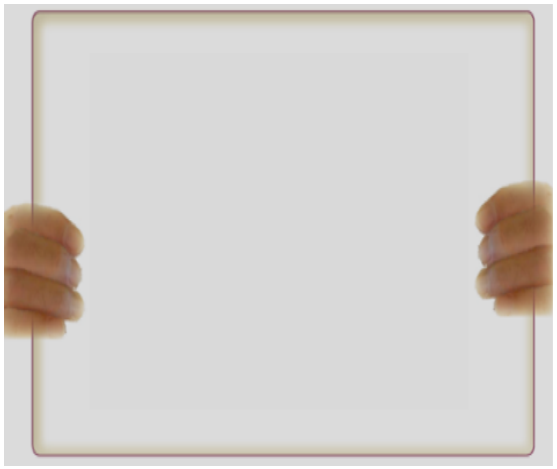
6 x 3 = 18

7 x 3 = 21

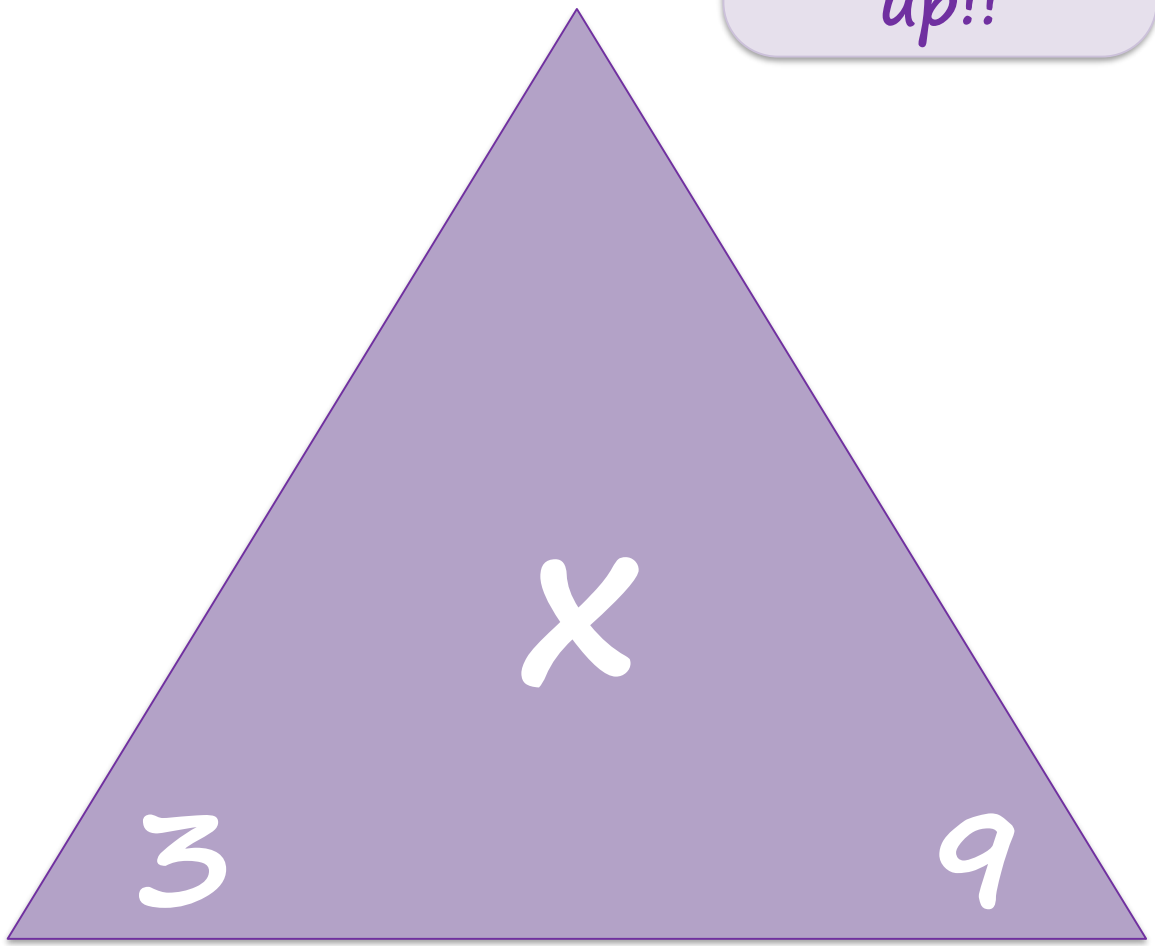
8 x 3 = 24

9 x 3 = 27

10 x 3 = 30



Get your whiteboards ready!!



Let's wire the numbers up!!

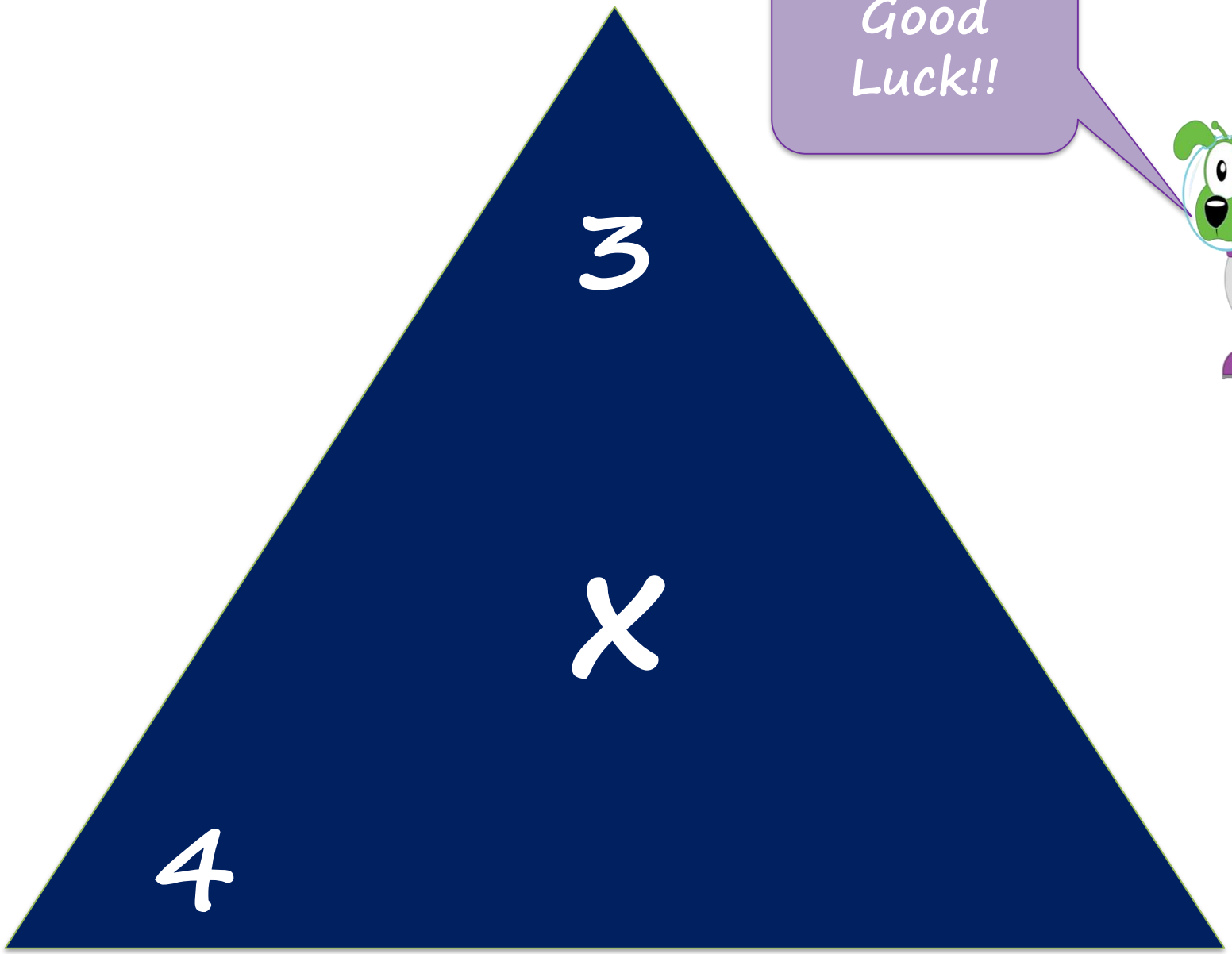
Well...

27

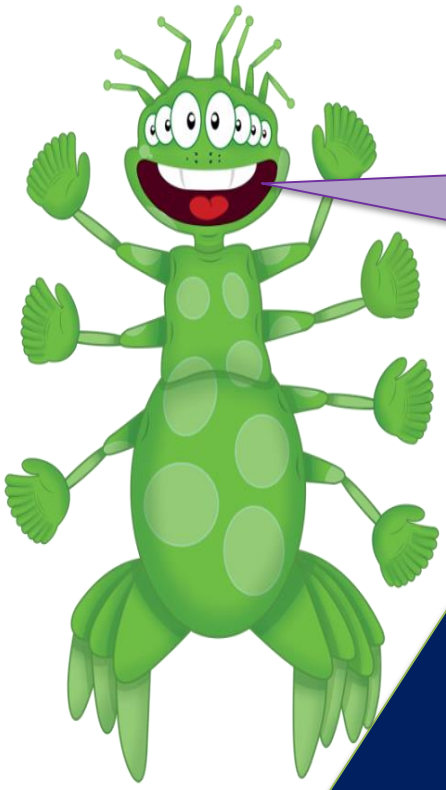
X

3

9



Good Luck!!



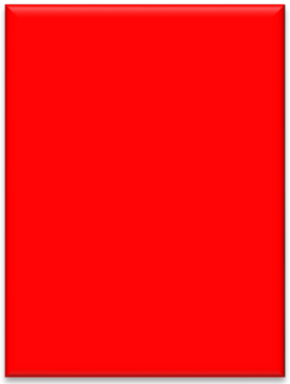
How did you go?

3

X

4

12

 x 3 = 12

$$\boxed{4} \times 3 = 12$$

$3 \times 8 =$ 

$$3 \times 8 = 24$$

 x 3 = 6

$$2 \times 3 = 6$$

Well done!

Counting

Learn Its

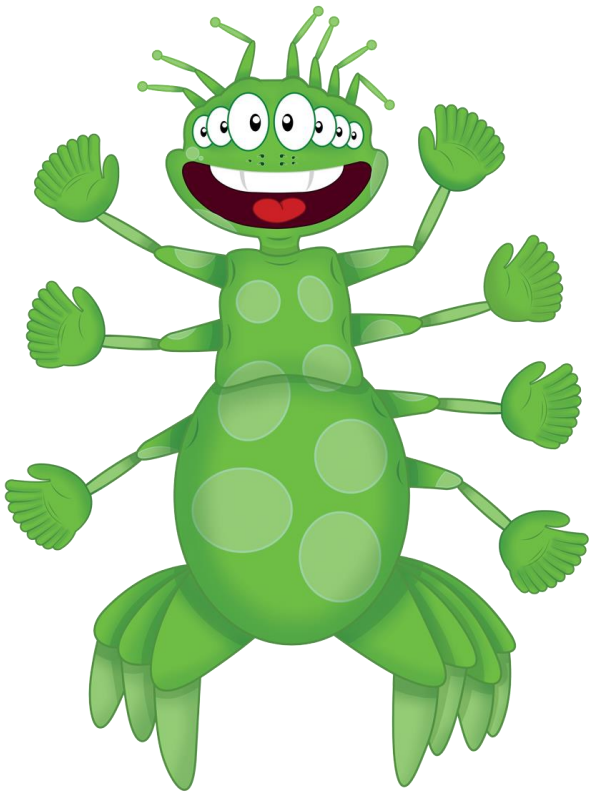
Its Nothing New

Calculations

Its Nothing New

Step 1

I can swap objects.



Its Nothing New

What is the total of 17 cats and 4 cats?

Its Nothing New

What is the total of 17 cats and 4 cats?

21

Its Nothing New

What is the total of 28 dogs and 4 dogs?

Its Nothing New

What is the total of 28 dogs and 4 dogs?

32

Its Nothing New

What is the total of 19 pens and 3 crayons?

Its Nothing New

What is the total of 19 pens and 3 crayons?

22

Its Nothing New

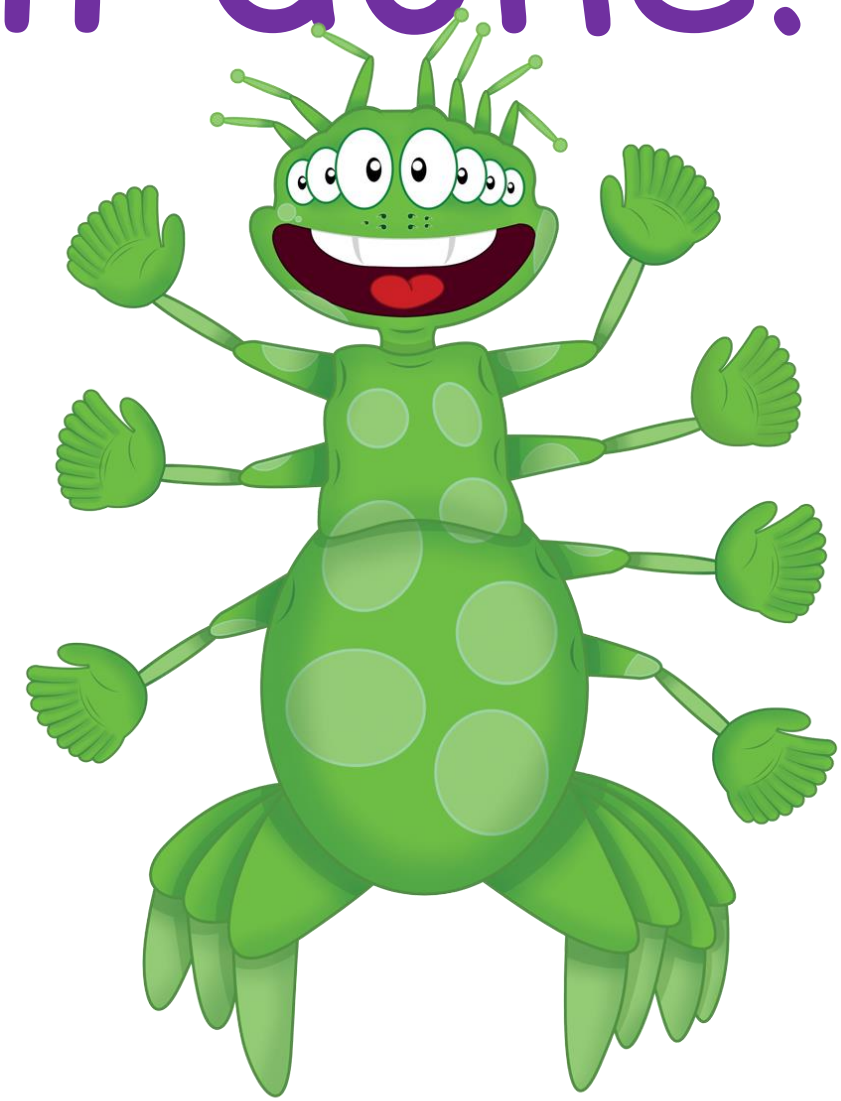
What is the total of 48 t-shirts and 3 t-shirts?

Its Nothing New

What is the total of 48 t-shirts and 3 t-shirts?

51

Well done!



Counting

Learn Its

Its Nothing New

Calculations

Calculations

Step 25

I can solve any 2d number + 2d number.

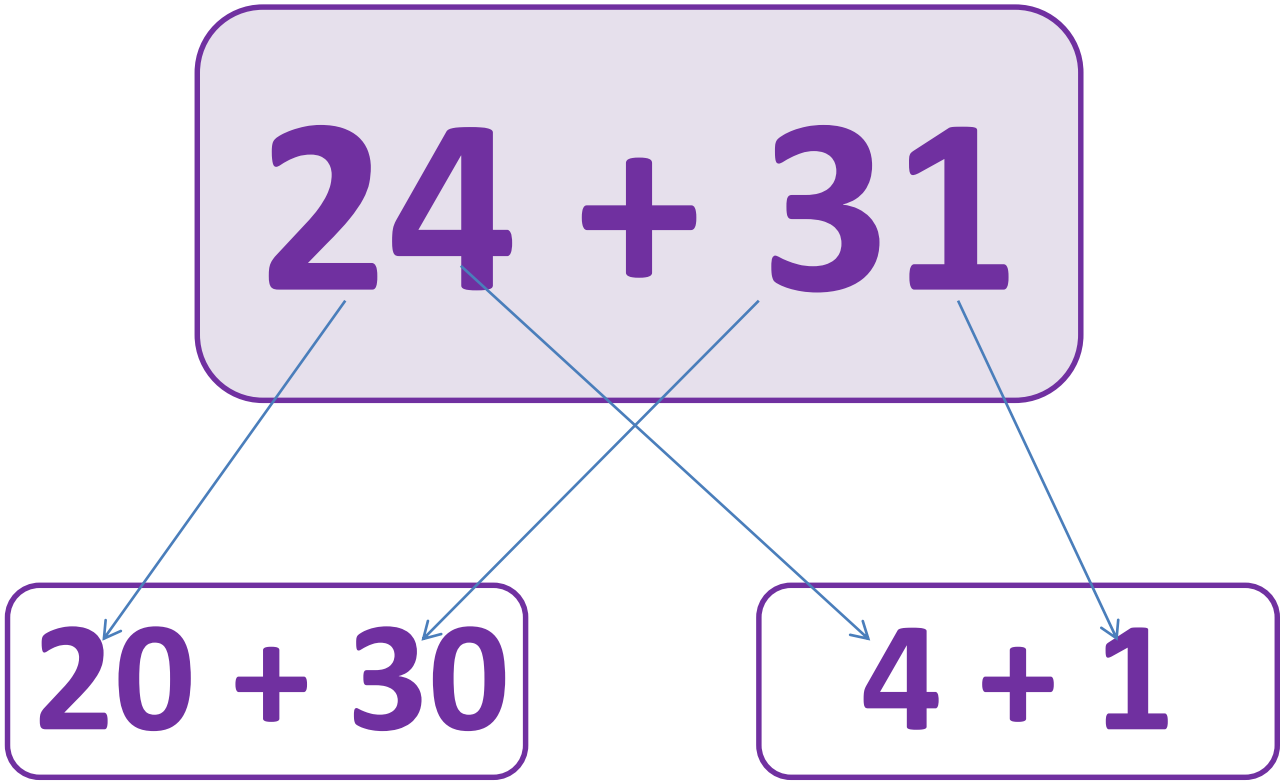
Remember to:

- partition the number
- write out the 2 new questions
- add the units
- add the tens
- add the units answer to the tens answer

F A B

$$24 + 31$$

F



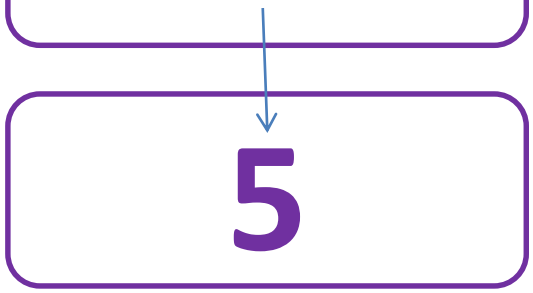
1. Partition the numbers and write out the 2 new questions

F

24 + 31

20 + 30

4 + 1



2. Add the units

F

24 + 31

20 + 30

50

4 + 1

5

3. Add the tens

F

24 + 31

20 + 30

4 + 1

50 + 5

55

F

4. Add the units answer to the tens answer

24 + 31

50 + 5

55

A

$$24 + 31$$

55

B

Well done, you have now completed your CLIC session!

Now it's your turn...

Big Maths Beat That!

Name:

My 'Beat That' score was...

Steps 1, 2, 3 - 20 seconds

BIG MATHS... BEAT THAT!

4 + 4 =	3 + 3 =
5 + 5 =	1 + 1 =
2 + 2 =	2 + 3 =
2 + 1 =	

Name:

My 'Beat That' score was...

Steps 4, 5, 6 - 30 seconds

BIG MATHS... BEAT THAT!

17

9 + 9 =	8 + 8 =	2 + 8 =
3 + 7 =	6 + 2 =	6 + 6 =
5 + 2 =	7 + 7 =	7 + 2 =
6 + 3 =	4 + 3 =	1 + 9 =
9 + 2 =	5 + 5 =	4 + 2 =
4 + 6 =		5 + 3 =

Name:

My 'Beat That' score was...

Steps 1 - 13 - 100 seconds

BIG MATHS... BEAT THAT!

3+2=	6x2=	7+5=	8x2=	8+3=	5+4=	9+4=	4x2=
7+4=	6+6=	9x7=	9+2=	7x2=	5+5=	6x3=	6+4=
7x6=	4x3=	4+4=	8x5=	8+2=	8+4=	9+6=	4x4=
9x9=	4+3=	9+3=	3x3=	5x2=	6+2=	5x5=	8x6=
5+2=	5+3=	2+2=	8+5=	9x5=	9+5=	8+7=	6x5=
6+5=	7x7=	9x6=	6x6=	4+2=	7x5=	9+7=	9x3=
7x3=	7+6=	7+2=	3x2=	9+8=	6+3=	9x4=	5x3=
8x4=	8x3=	9x8=	8x7=	8x8=	7+7=	9x2=	6x4=
3+3=	7+3=	8+6=	8+8=	2x2=	9+9=	5x4=	7x4=

24 Questions in 60 seconds

How you can support Big Maths at home.

Maths games

http://www.davidlivingstone-pri.s-lanark.sch.uk/wordpress/?page_id=2558

https://www.topmarks.co.uk/maths-games/hit-the-button

https://www.topmarks.co.uk/Flash.aspx?f=BingoMultiplicationv9

*Quick fire questions
*Flashcards (Learn its)

What do the children think?

I love the little songs we sing for our numbers.

(Primary 1 child)

Big Maths helps me pop the answer out. I don't need to use my fingers anymore.

(Primary 2 child)

I was nervous about learning my multiplication tables but Big Maths made it easier and it meant I was more confident each day.

(Primary 3 child)

Big Maths has made my maths really fast. I like being the first one with my whiteboard in the air and trying to beat my 'Beat That' score.

(Primary 5 child)

I enjoy the Big Maths Beat that tests, I like to beat my score! The Learn Its have helped me get better at my tables.

(Primary 7 child)

Quick Questions?