Mathematics @ Paull Primary

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- Chris Quigley milestones are used to meet the national curriculum.
  - Split into three milestones
    - Y1/2 Milestone 1
    - Y3/4 Milestone 2
    - Y5/6 Milestone 3
- EYFS curriculum for nursery (Foundation Stage 1) & reception (Foundation Stage 2)
- Big maths all year groups.

CHRIS QUIGLEY

Key Stage 1	Key Stage 2
• Count and calculate in a range of practical contexts.• Use and apply mathematics in everyday activities and across the curriculum. • Repeat key concepts in many different practical ways to secure retention. • Explore numbers and place value up to at least 100. • Add and subtract using mental and formal written methods in practical contexts. • Multiply and divide using mental and formal written methods in practical contexts. • Explore the properties of shapes. • Use language to describe position, direction and movement. • Use and apply in practical contexts a range of measures, including time. • Handle data in practical contexts.	• Count and calculate in increasingly complex contexts, including those that cannot be experienced first hand. • Rigorously apply mathematical knowledge across the curriculum, in particular in science, technology and computing. • Deepen conceptual understanding of mathematics by frequent repetition and extension of key concepts in a range of engaging and purposeful contexts. • Explore numbers and place value so as to read and understand the value of all numbers. • Add and subtract using efficient mental and formal written methods. • Multiply and divide using efficient mental and formal written methods. • Use the properties of shapes and angles in increasingly complex and practical contexts, including in construction and engineering contexts. • Describe position, direction and movement in increasingly precise ways. • Use and apply measures to increasingly complex contexts. • Gather, organise and interrogate data. • Understand the practical value of using algebra.

		Milestone 1	**Milestone 2**	**Milestone 3**
To know and use numbers	Counting	• Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. • Count, read and write numbers to 100 in numerals. • Given a number, identify one more and one less. • Count in steps of 2, 3, 5 and 10 from 0 or 1 and in tens from any number, forward and backward.	• Count in multiples of 2 to 9, 25, 50, 100 and 1000. • Find 1000 more or less than a given number. • Count backwards through zero to include negative numbers.	• Read numbers up to 10 000 000. • Use negative numbers in context and calculate intervals across zero.
	Representing	• Identify, represent and estimate numbers using different representations, including the number line. • Read and write numbers initially from 1 to 20 and then to at least 100 in numerals and in words.	• Identify, represent and estimate numbers using different representations. • Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.	• Write numbers up to 10 000 000 • Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.
	Comparing	• Use the language of: equal to, more than, less than (fewer), most and	• Order and compare numbers beyond 1000.	• Order and compare numbers up to 10 000 000.

Big Maths

- Big maths focuses on the main mathematical principles.
- Clear progression from year to year.
- Build on prior learning and ensure children are secure in their knowledge.
- Common methods taught and language used throughout the school.
- Focuses on the number and four rules of mathematics.
- Develops the skills through regular practice.
- Shows the children's progress through weekly testing.
- It is used as a small part of every maths lesson or taught sep.
- The principle is to enable to basic mathematical skills to be used in all areas of maths such as:
  - Measures
  - Problem solving
  - Data handling
  - Shape

Big Maths
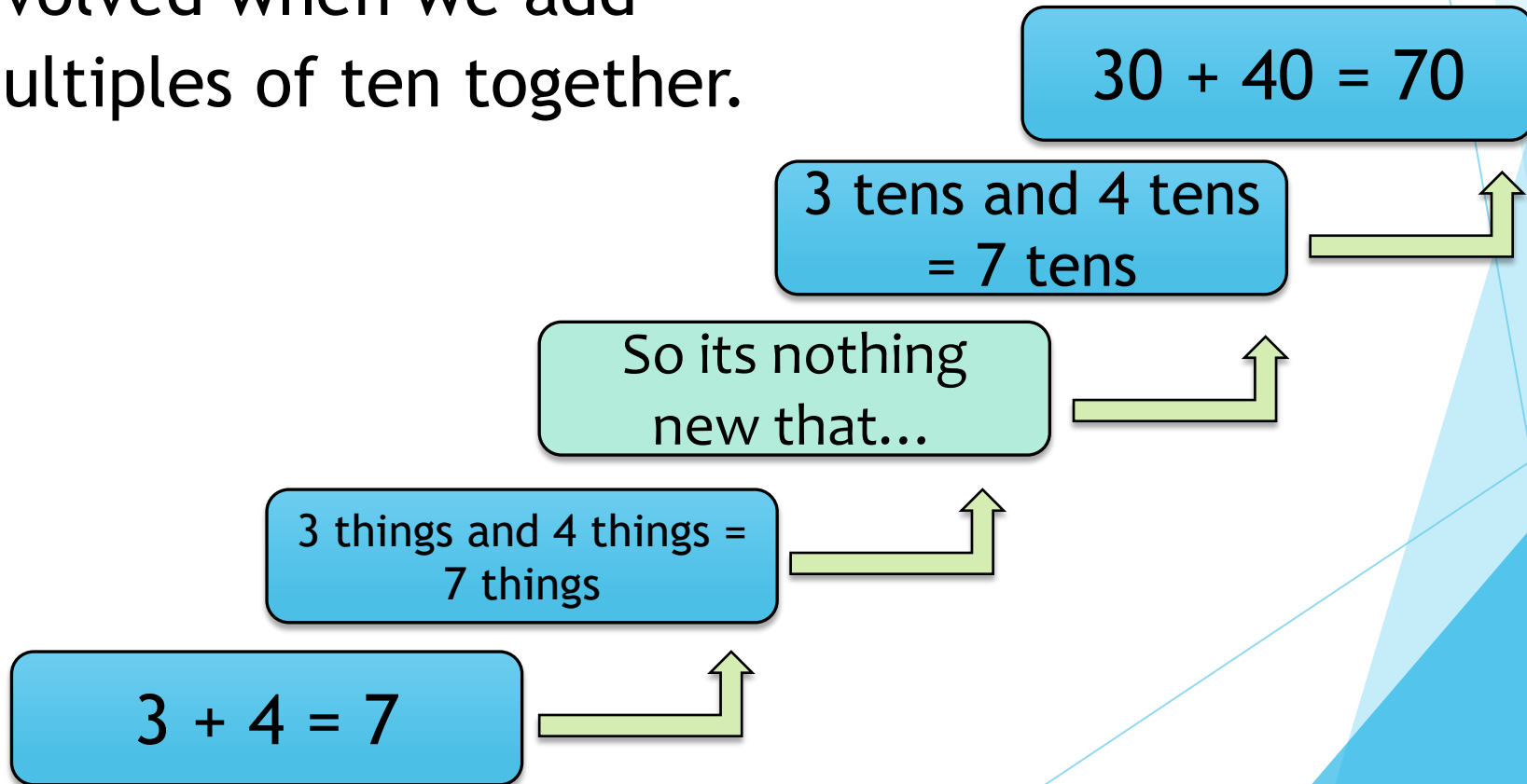
▶ **The Learn Its Challenge or Minute Maths:** Covers all the addition and multiplication facts needed.

▶ **The CLIC Challenge:** Covers all the basic skills that a child needs to be properly numerate.

▶ **Chris Quigley:** Covers the rest of the Maths curriculum.

Counting:
- Saying numbers
- Reading numbers
- Core number
- Counting skills
- Actual counting
- Counting on
- Counting multiples
- Count different ways
- Counting along

Adding

There is no new maths involved when we add multiples of ten together.

3 + 4 = 7

3 things and 4 things = 7 things

So its nothing new that…

3 tens and 4 tens = 7 tens

30 + 40 = 70

Learnits

Step	Addition learnits	Multiplication learnits
15		X12 table
14		X11 table
13		The six fact challenge
12		X8 table
11		X4 table
10		X3 table
9	5+9 6+9 7+9 5+7 5+8 6+8	X2 table
8	4+5 5+6 6+7 7+8 8+9	X5 table
7	3+8 3+9 4+7 4+8 4+9	X10 table
6	6+6 7+7 8+8 9+9	Multiples of 2
5	4+2 5+2 6+2 7+2 9+2 4+3 5+3 6+3	
4	2+8 3+7 4+6	Multiples of 5
3	1+2 2+3	Multiples of 10
2	3+3 4+4 5+5	
1	1+1 2+2	

Its nothing new
- Addition
- Doubling/halving
- Jigsaw numbers
- X10/÷
- Smile multiplication
- Coin multiplication
- Fact families.

Coin Multiplication

Children start by completing a 1 & 10 Coin Card

Then a 1, 2, 5, & 10 Coin Card

They then progress onto the full Coin Card

X 26	
1	26
2	52
5	130
10	260
20	520
50	1300
100	2600

Smile Multiplication

30 X 80 = 2400

24

- Do the tables bit
- Count the zeros in the question
- Put the zeros on your answer!

Calculation

Step 1 - I know when to add some more

Step 2 - I know to find the total

Step 3 - I add the right amount

Step 4 - I add the right amount and can count how many altogether

Step 5 - I can add numbers of objects to 10

Step 6 - I can read a number sentence

Step 7 - I can arrange a number sequence

Step 8 - I can solve a number sentence

Step 9 - I can solve addition on a number line

Step 10 - I can add 1 to a number up to 20

Step 11 - I can add 2 or 3 to a number up to 20

Step 12 - I can add a 1d number to a number to 20

Step 13 - I can add 1 to a 2d number

Step 14 - I can add 10 to a 2d tens number

Step 15 - I can add 10 to any 2d number

Step 16 - I can add a 1d number to a 2d tens number

Step 17 - I can solve 2d+1d

Step 18 - I can add a 2d tens number to another one

Step 19 - I can solve any 1d+1d in my head

Step 20 - I can solve any 2d+1d

Step 21 - I can add any 2d tens number to another one

Step 22 - I can add a 2d tens number to a 2d number

Step 23 - I can add any 2d tens number to a 2d number

Step 24 - I can add a 2d number to a 2d number

Step 25 - I can solve any 2d+2d

Step 26 - I can solve 3d+2d

Step 27 - I can solve any 3d+2d

Step 28 - I can solve 3d+3d

Step 29 - I can solve any 3d+3d

Step 30 - I can solve 3d+3d as money

Up to step 39- I can solve additions with several numbers.

Big Maths BEAT THAT!

Name:

Class:

Date:

1 (T) 300 800 900

2 Write a number 'more than' 12 but 'less than' 20

3 Count backwards

49, 48, 47, ___, ___

4 Count backwards

83, 82, 81, ___, ___

5 Double 30 is

6 4 + ___ = 10

7 (T) 4 + 3 =

8 5 + 2 =

0 1 2 3 4 5 6 7 8 9 10

9 (T) 8 – 5 =

10 6 – 4 =

0 1 2 3 4 5 6 7 8 9 10

___/10

The Big Maths CLIC Challenges!

1
46
/   \

2 Place in order
13 11 17 14

3
14,   , 18, 20

4
160, 170,   , 190, 200

5 Circle the odd numbers
14   15   21   24

6 Write the fact family for:
8 + 6 = 14
....
....

7 16 + 3 =

8 16 + 7 =

9 16 - 3 =

10 16 - 7 =

MY LAST SCORE?! ....   HAVE I BEAT THAT?! ....

10

BIG Maths BEAT THAT!

Name:

Class:

Date:

The Big CLIC Challenges!
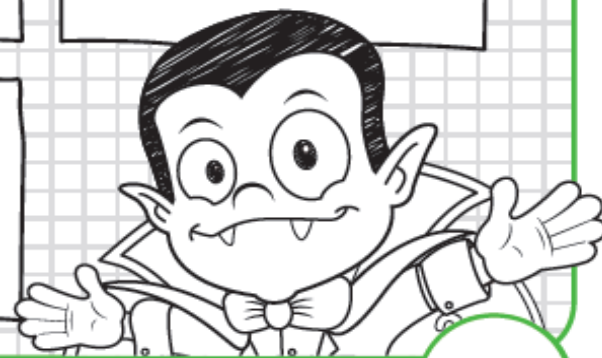
1 300, 400, _____ , _____ , 700

2 30 + 40 =

3 Double 34 is

4 Double 70 is

5 Half of 70 is

6 Write the fact family for:

30 + 40 = 70

....

....

....

7 60 + 10 =

8 73 + 10 =

9 80 − 10 =

10 43 − 10 =

MY LAST SCORE?! ....

HAVE I BEAT THAT?! ....

10

BEAT THAT!

Name:

Class:

Date:

PLATINUM

1. $8 \div \frac{2}{5} =$

2. Five sixths add seven ninths

3. Explain why 36% is less than 3/8

4. Convert 5/8 into a percentage

5. Increase £32 by 15%

6. Write down a fraction between 1/3 and 1/2

7. Decrease 72m by 35%

8. A recipe for 6 people includes 750ml of orange juice. How many millilitres would be needed for 10 people.

9. There is a 30% sale. A boy paid £140 for a camera in the sale. What was the original price of the camera?

10. Divide 180 in the ratio 3:4:5

MY LAST SCORE?!   HAVE I BEAT THAT?!   10

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Tracking Entry

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SUBJECT

Writing
Reading
Maths ✓
Science

YEAR GROUP

Year 1
Year 2 ✓
Year 3
Year 4
Year 5
Year 6

TERM

Term 4 End of Autumn Term ✓
Term 5 End of Spring Term
Term 6 End of Summer Term

TIME MACHINE

Year 1

PUPILS (13)

Toggle all ☐

	Milestone 1 (EYFS Exit Exceeding)						Milestone 2	Milestone 3
	Basic 1	Basic 2	Adv 1	Adv 2	Deep 1	Deep 2		
NUMBERS				●				
ADD & SUBTRACT				●				
MULTIPLY & DIVIDE				●				
FRACTIONS			●					
SHAPES		●						
POSITION, DIRECTION & MOVEMENT			●					
MEASURES			●					
STATISTICS			●					
ALGEBRA			●					
	1	2	3	4	5	6		

▶ Set Improvement Targets

SATS!

EYFS – Teacher Assessment

KS1 – Teacher Assessment – backed up with SATS tests and moderation.

KS2 – SATS & Teacher Assessment

Tests – Arithmetic & Problem Solving

How can I support my child?

Help your child to practice their 'Learn Its' or 'Minute Maths' at home/h. Each week your child will be introduced to new facts.

Ask your child to tell you about their Maths skills.

Praise! Celebrate the successes.