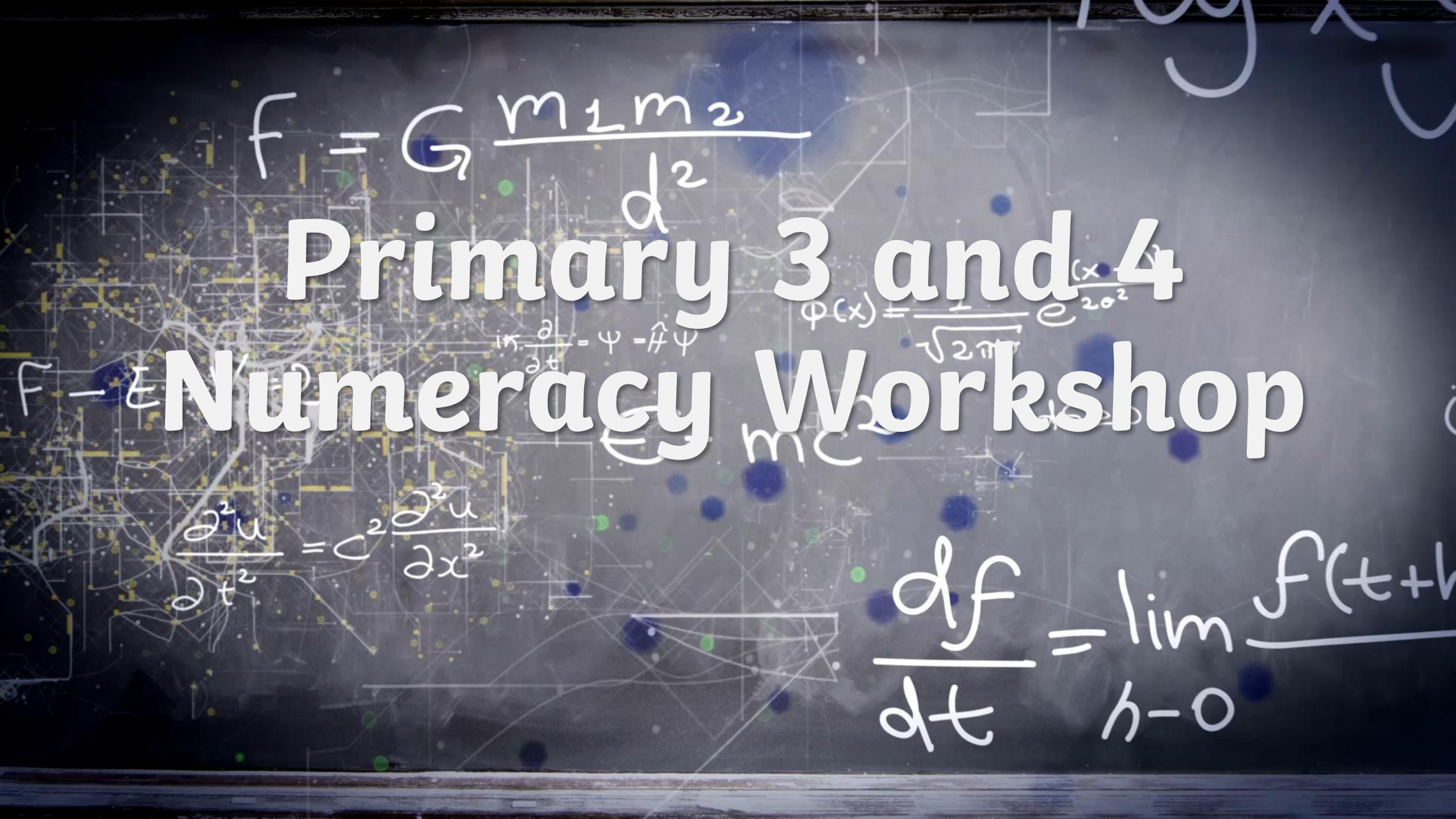

Primary 3 and 4
Numeracy Workshop

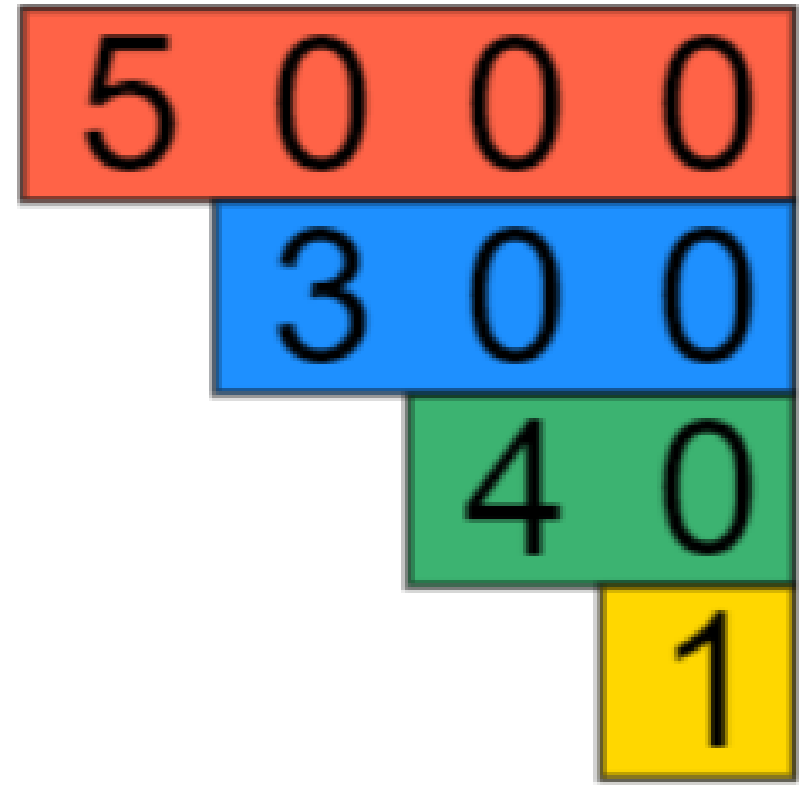
Aims

- To briefly look at the current teaching of numeracy and mathematics in school
- To explain some of the resources that are used in school
- To demonstrate ways you can help at home

Place Value

5341

5000
300
40
1



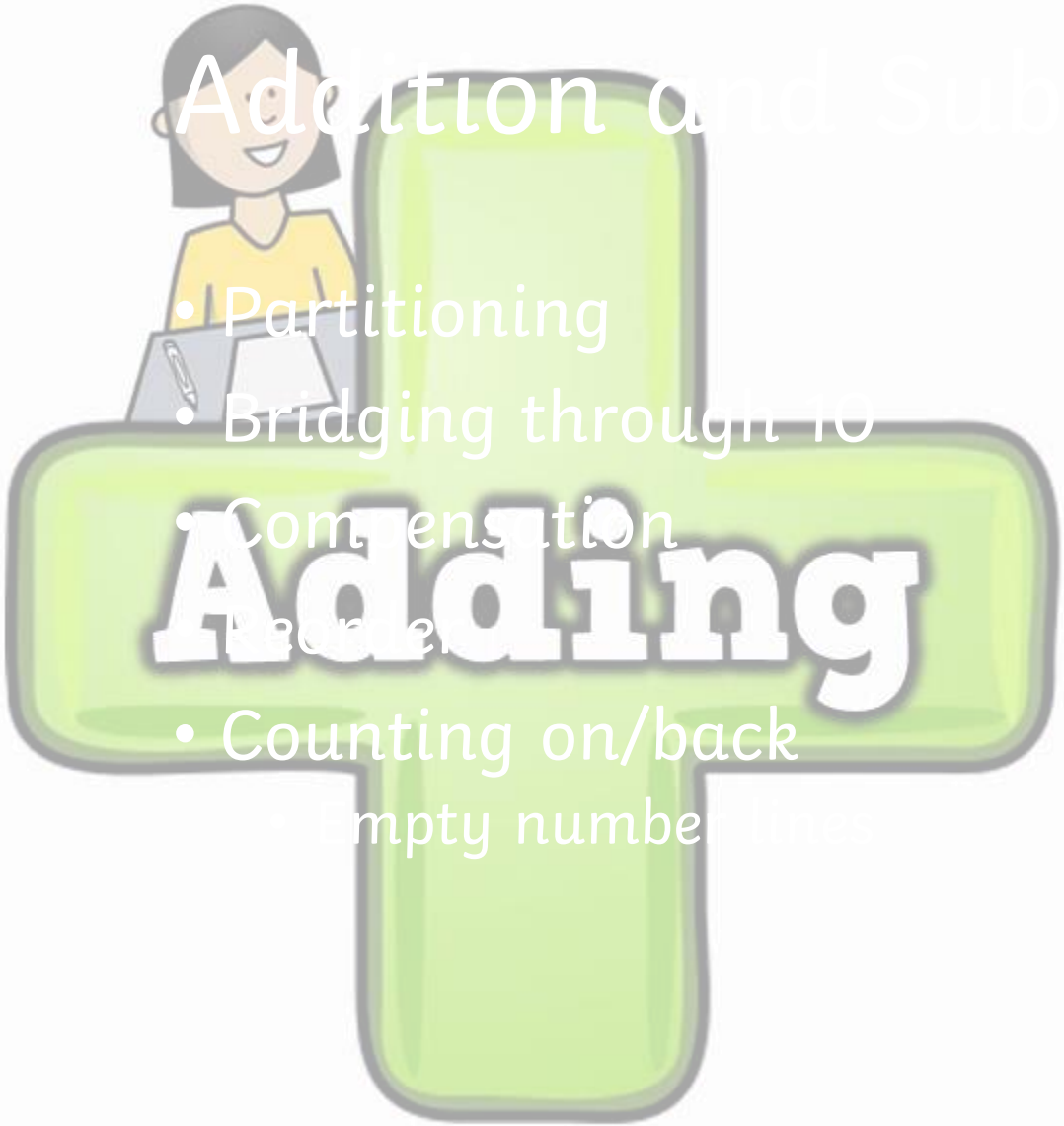
5341

5 thousands
3 hundreds
4 tens
1 one

5341

53 hundreds
2 tens
21 ones

Addition and Subtraction Strategies



- Partitioning
- Bridging through 10
- Compensation
- Doubles
- Counting on/back
- Empty number lines

and

Wonder Doubles

5+6

Double 5 and add one more
or double 6 and subtract one

5 + 5 + 1 = 11

6 + 6 – 1 = 11

- 14 + 15 = double 14 and add 1 or double 15 and subtract 1
- 30 + 29 = double 30 and subtract 1
- 18 + 16 = double 18 and subtract 2 or double 16 and add 2.

Wonder Woman knows her doubles and this helps her to add and subtract quickly

POW! Doubles/Near Doubles Strategy

Flash Through Ten

7 + 3 + 3 = 13

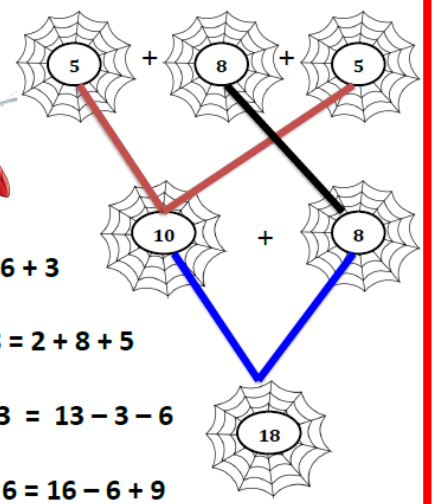
⚡6 + 7 = 6 + 4 + 3

⚡23 – 8 = 23 – 3 – 5

Flash knows when a number is close to ten or is a multiple of ten. This makes it easy for him to add and subtract.

BAM! Bridging Through Ten

Spider-Man Shuffle



3 + 6 = 6 + 3

2 + 5 + 8 = 2 + 8 + 5

13 - 6 – 3 = 13 – 3 – 6

16 + 9 – 6 = 16 – 6 + 9

7 + 2 + 3 + 5 + 8 = 10 + 10 + 5 = 25

Spider-Man shuffles the numbers around to make it easier to add and subtract.

POW! Reordering Strategy

Hulk Breaks Apart

20 + 38
= 20 + 30 + 8
= 50 + 8
= 58

68 – 30 = 60 – 30 + 8

35 + 14 = 30 + 5 + 10 + 4
= 30 + 10 + 5 + 4
= 49

The Hulk can break numbers into tens and ones. This helps him to add and subtract.

Partitioning Strategy

Superman Quick Change

33 + 18 → +2 → 20
33 + 20 = 53
53 - 2 = 51

34 + 9 = round the 9 up to 10 by adding 1
34 + 10 = 44
Subtract the 1 that was added to make 43.

70 - 18 = round 18 up to 20 by adding 2
70 – 20 = 50
Add on the 2 to make 52

Superman likes a quick change. He can round a number to make a multiple of ten then add or subtract to get the answer.

Compensation Strategy

Captain Count On or Back

4 + 8

16 - 3

4 + 7 count on in ones from 4 or count on in ones from 7
18 – 3 count back in ones from 18
18 – 6 count back in twos from 18
40 + 3 count on in ones from 40

Captain America can count on to add and count back to subtract.

Counting On or Back Strategy

Partitioning

812 + 26 =

812 + 26 = 838

800 + 10 +20 = 830

830 + 6 + 2 = 838

Bridging through 10

- The children are working out the answer to 7 + 146
- They know that 7 + 146 = 146 + 7

I partitioned 7 into 4 and 3.
146 + 4 = 150.
150 + 3 = 153

The answer is 153

Bridging through 100

- The children are calculating 754 – 80
- They know that 80 can break into 50 and 30

I partitioned 80 into 50 and 30
754 – 50 = 704
704 – 30 = 674

The answer is 674

Compensation/Transformation

- 137 + 125 =

I changed the calculation 137 + 125 to 140 + 122.
I added 3 to 137 and took 3 away from 125.

262

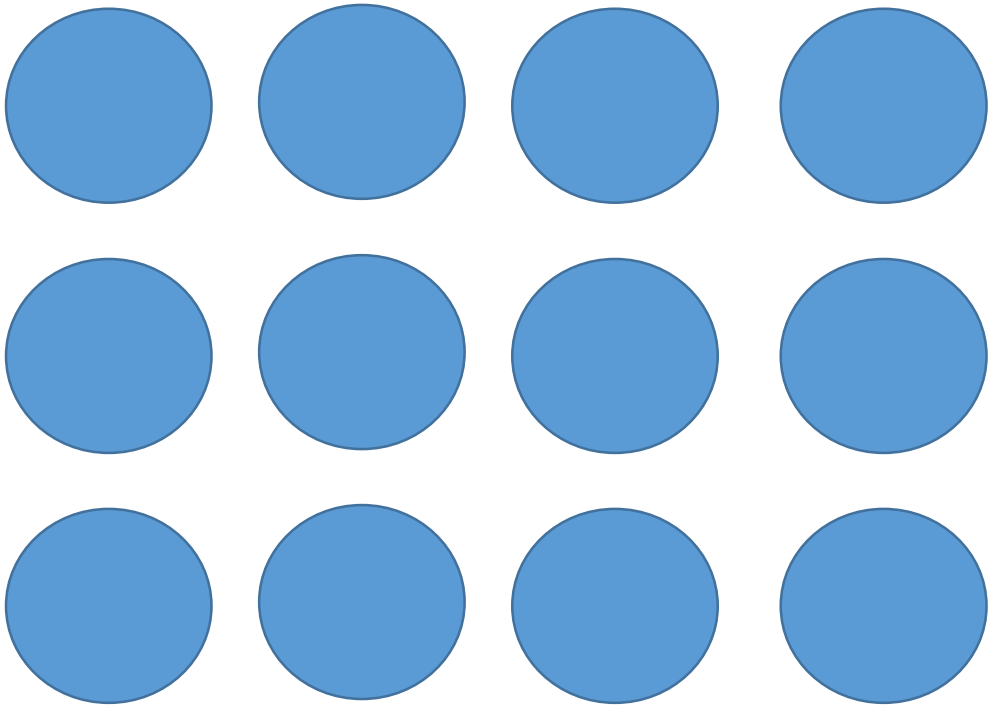
Compensation/Transformation

- 553 – 119 =

Instead of 553 – 119, I did 554 - 120. 554 take away 100 is 454, take away 20 is 434. I checked that my strategy worked by working out 553 – 119 on an empty number line.

Remember, when it comes to subtraction transformation – then what happens on one side, happens on the other.

Arrays



3 x 4 = 12

4 x 3 = 12

12 ÷ 4 = 3

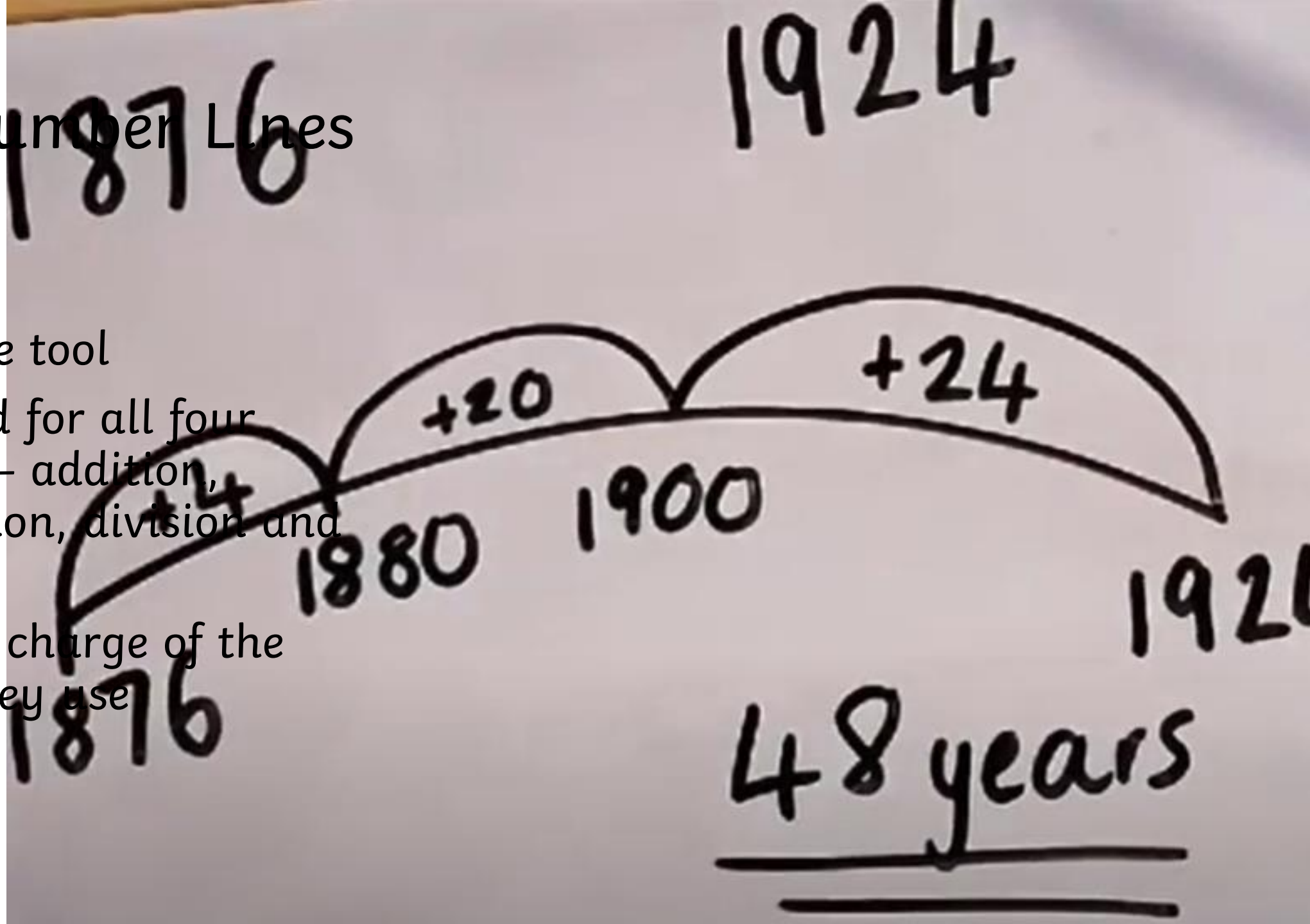
12 ÷ 3 = 4

Real life arrays

How many chocolates are in the box?
What would be the case if there were two layers?
What is the area of the box?

Empty Number Lines

- Very diverse tool
- Can be used for all four operations – addition, multiplication, division and subtraction
- Learners in charge of the numbers they use




THANK
YOU