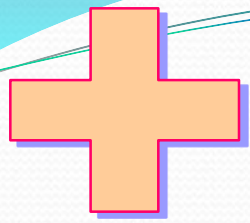


Numeracy Workshop for parents...

The aim of today is to share the calculation methods we use at Tansley so you are confident in supporting your child at home.

Structure of a Numeracy lesson.

- Every child throughout the school has a dedicated maths lesson each day. In reception children the numeracy work is integrated into everyday activities, in KS1 it is a 45 minute lesson building up to a 1 hour lesson in KS2.
- Each lesson consists of a mental and oral warm up, a main teaching and learning part and a plenary.



Addition

what is the sum of...?

what is... altogether?

what is... plus ...?

what is... in total?

SUBTRACTION



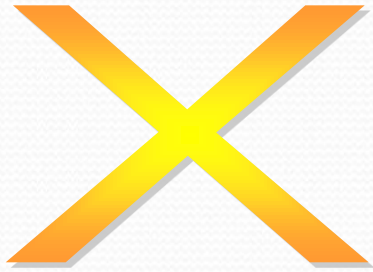
what is... take away ...?

what is the difference between...?

what is... subtract ...?

what is... minus ...?

MULTIPLICATION



what is 3 groups of 2?

what is 3 lots of 2?

what is 2 multiplied by 3?

$$2 \times 3 =$$

(2 three times)



Division

Can you put ten cubes into groups of 2?
How many groups did you make?

can you cut the cake in half?

There are six sweets, how many children can have 2 each?

$$45 - 37 = 8$$

Start at 37, add 3, add 5.

$$262 - 95 = 167$$

Subtract 100

Then add 5

$$307 + 95 = 402$$

Add 95 to 300

Then add 7 more

$$2460 + 3540 = 6000$$

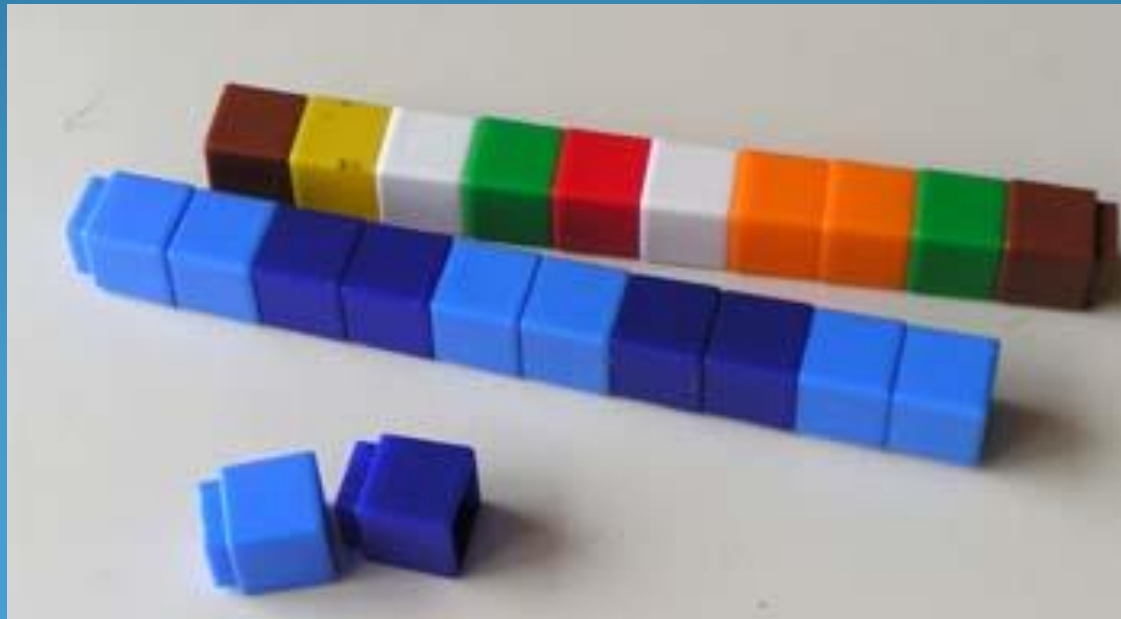
The hundreds and tens add up to
make 1000

so it is

$$3000 + 2000 + 1000$$

KS1 Math

What we learn and our
methods of teaching



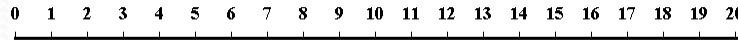
What do we teach in ks1 Maths?

- Number bonds from 10 and 20 (ie $7+3=10$, $18+2= 20$)
- **Basic multiplication (2,5,10)**
- Basic division (2)
- Fractions ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$)
- **Addition and subtraction to 100**
- **Place value (units, tens and hundreds)**
- Time (o'clock, half past, quarter to, quarter past)
- Measurement (weight, length, capacity)
- Money (everyday money- calculating change)
- Problem solving
- Handling data (graphing, tables, sorting data)
- Shape and space

Today we will focus on the red highlighted examples

Resources

- Number line



- Counters

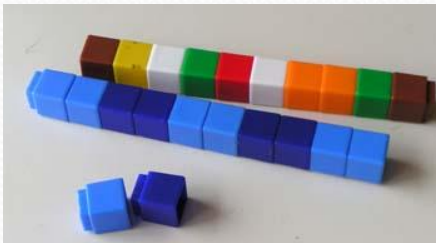


- [Online games](#)

Number 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 |

- Unifix sticks



Place value cards



Place Value

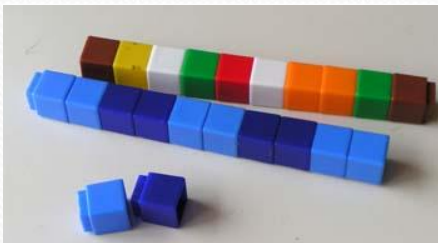
- We use place value cards in combination with unifix cubes and 100 squares to recognize values of numbers.

i.e. make the number 245

Step 1: separate the number into its value

2 hundreds, 4 tens and 5 units

Step 2: make that number with either cubes or a value card.



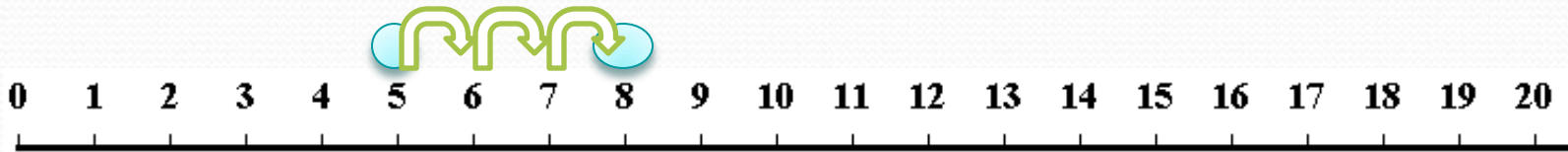
T.U.B Method

- $25 + 33 = 58$
- Step 1: partition numbers (tens $20 + 30$) (units $5+3$)
- Step 2: add up the Tens (**T**) ($20 + 30 = 50$)
- Step 3: add up the Units (**U**) ($5+ 3 = 8$)
- Step 4: add both (**B**) ($50 + 8 = 58$)

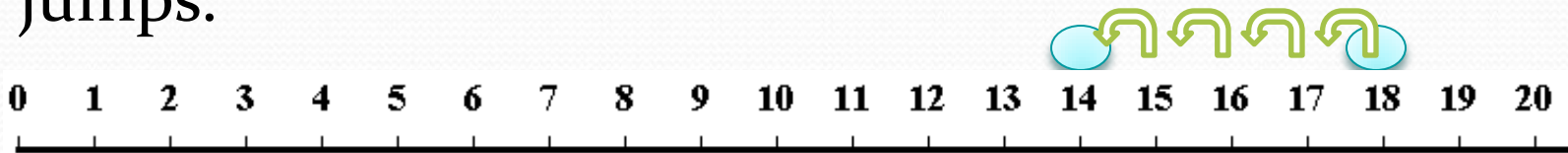
- $55 + 26$ (T $50 + 20 = 70$) (U $5+6 = 11$)
- $70 + 11 =$ (T $70 +10 = 80$) (U $0+1=1$)
- $80+1=81$
- Or UTB when carrying 1

Using a Number Line

- Adding $5 + 3 = 8$
- Step 1 start on the biggest number and count on in jumps.

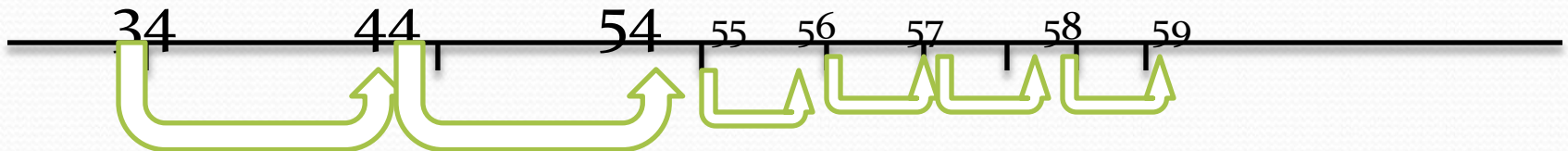


- Subtracting $18 - 4 =$
- Step 1: start on the biggest number and count back in jumps.



Using a blank number line

- $34 + 25 = 59$



Step 1: partition 2nd number (25- 2 tens (20) and 5 units)

Step 2: jump the 10's (2 tens)

Step 3: jump the units (5)

Addition and Subtraction a with number square

- Adding 12

- $54 + 12 = 66$

- Step 1 :Partition the number (one 10, two units) 10 & 2
- Step 2: add on the 10 (down 1)
- Step 3 add on the units (right 2)

- Adding 10 go down 1

- Subtracting 10 up 1

- Adding 1 go right 1

- Subtracting 1 go left 1

| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|-----|
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| 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 |

Addition and Subtraction a with number square

Adding 9 :

$$25 + 9 = 34$$

Step 1: find 25 on number square

Step 2: simplify the equation (add 10 -1).

To add 10 simple go down one on the number
Grid then then take 1 to make 9 (go left 1 space)

Down 1 left 1

Subtracting 9:

$$25 - 9 = 16$$

Step 1: find 25 on the number grid

Step 2: simplify the equation (take 10 +1)

Step 3: to take ten go up 1 then take 1 by going
Right 1.

Up 1 right 1

| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
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| 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 |

Using a number grid for patterns and multiplication

- Colour in the even numbers to recognize odd and even
- Learn the [2, 5 and 10 x table](#)
- [number square](#)
- [Variations for the number square](#)
- Hiding numbers on a [number square](#)

| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|-----|
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| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

Multiplication in ks1

- First recognize that multiplication is repeated addition

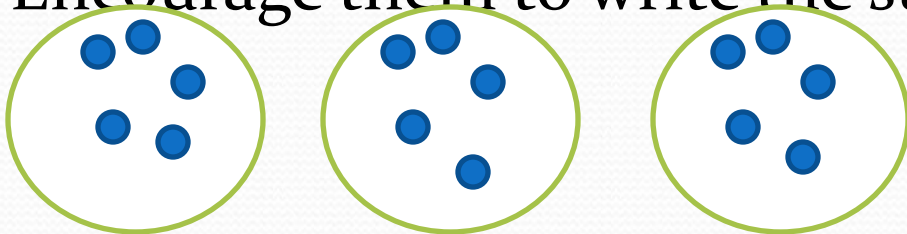
• No of lots how many per group total

• $3 \quad \times \quad 5 \quad = \quad 15$

- Is the same as 2 lots of 5 or $5 + 5 + 5 = 15$

- Use pictorial cues to represent a x sum.

- Encourage them to write the sum:



• $5 + 5 + 5 = 15$

Practical maths

Making maths practical by using real materials. Try some of these at home with your child.

- Using coins



using food

- Using measuring cups



-



cooking



How can you help?

Talk about
how you
do maths

Give praise and
encouragement



Be positive

Ask your
child to
explain

Make sure maths is fun!

Online games

Children love games to engage their learning. Try some of these site links.

