

Year 2 Maths: What we learn and our methods of teaching.



What do we teach in Year 2 Maths?

- Number bonds from 10 and 20 (ie $7+3=10$, $18+2=20$)
- **Basic multiplication (2,5,10)**
- Basic division (2, 5, 10)
- Fractions ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{3}{4}$)
- **Addition and subtraction to 100**
- **Place value (hundreds, tens and units)**
- 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

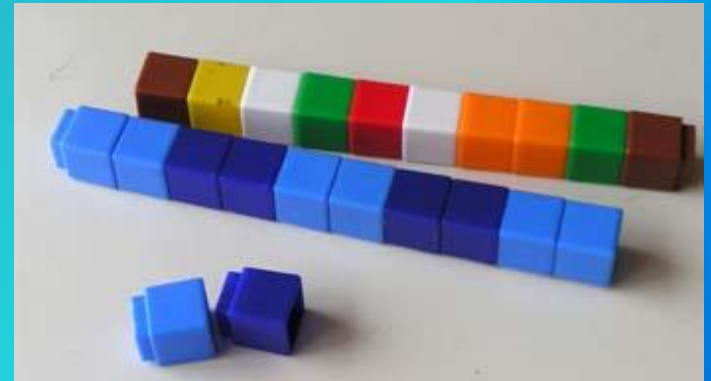
Today we will focus on the red highlighted examples

Place Value

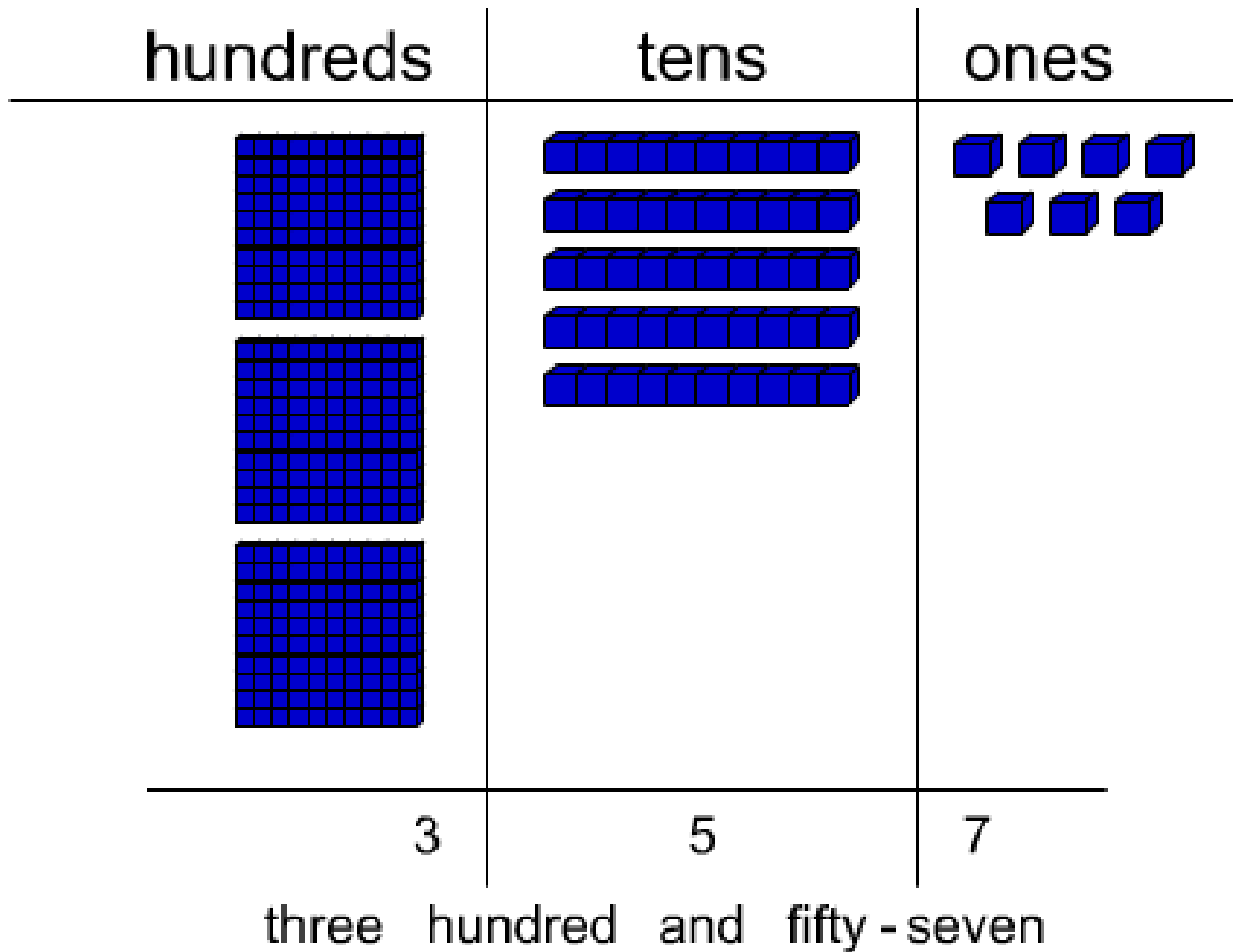
We use place value cards in combination with ten rods and/or unit cubes. We use 100 squares to recognise values of numbers.

i.e. make the number 357

Step 1: separate the to its value
3 hundreds, 5 tens and 7 units



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



We partition practically to understand the value of numbers before using this to help us with written addition.

Partitioning Method

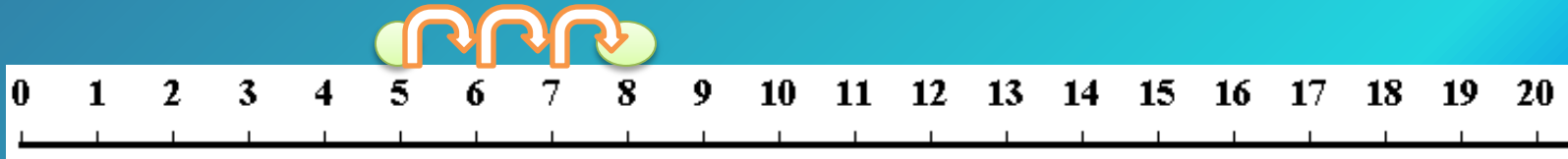
- $25 + 33 = 58$
- Step 1: partition numbers (tens $20 + 30$) (units $5+3$)
- Step 2: add up the Tens ($20 + 30 = 50$)
- Step 3: add up the Units ($5 + 3 = 8$)
- Step 4: add both ($50 + 8 = 58$)

- $55 + 26$ Can you add these numbers by partitioning?!

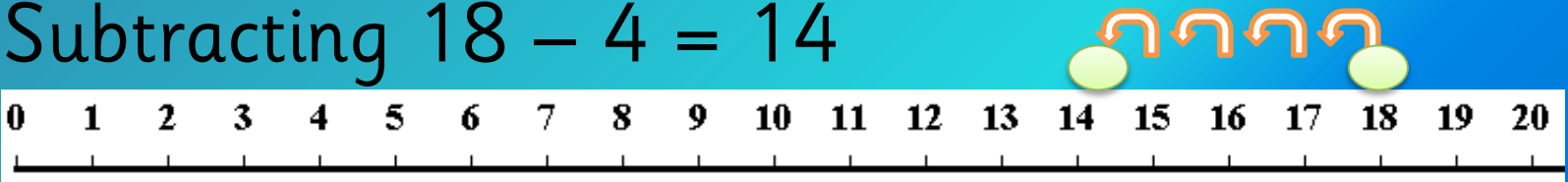
Using a Number Line

- Adding $5 + 3 = 8$

Step 1: start on the biggest number and count on in jumps.



- Subtracting $18 - 4 = 14$



Step 1: start on the biggest number and count back in jumps.

Using a blank number line

- $34 + 25 = 59$

34 44 54 55 56 57 58 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 you are adding
(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** ↓
- **Adding 2 go right 2** →

- Subtracting 12
- $54 - 12 =$

Step 1 :Partition the number you are subtracting
(one 10, two units) 10 & 2

Step 2: subtract the 10 (up 1)

Step 3: subtract the units (left 2)

- **Subtracting 10 go up 1** ↑
- **Subtracting 2 go right 2** ←

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

Addition and Subtraction with a 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)

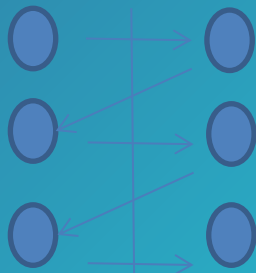
Step 3: to take ten go up 1 then take 1 by going Right 1.

Up 1 right 1

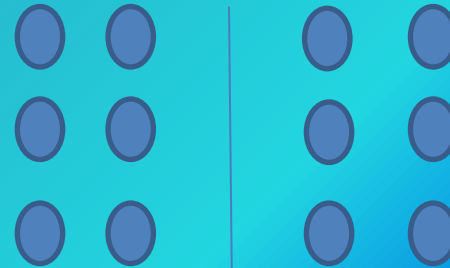
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41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Halving and doubling

- Dot methods are used to halve and double numbers
- i.e Half of 6
- i.e. Double 6



Side to side until you
get to 6 and count
one side



Put 6 on each side
and add total

Multiplication in Year 2

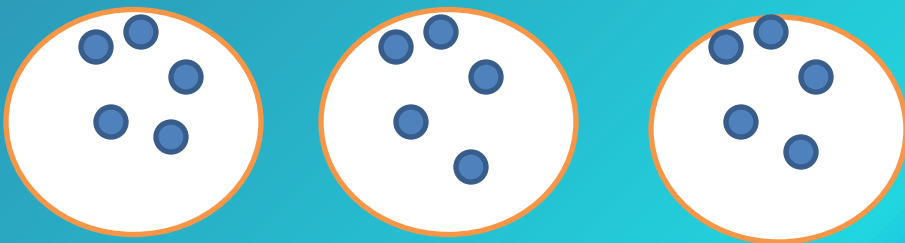
- First recognise that multiplication is repeated addition

- No of lots how many per group total

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

Is the same as 3 lots of 5 or $5 + 5 + 5 = 15$

- Use pictorial cues to represent a x sum.
- Encourage them to write the sum:



$$5 \quad + \quad 5 \quad + \quad 5 \quad = \quad 15$$

Practical maths

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

- Using coins



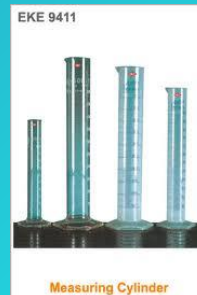
- Using food



- Using measuring cups



- Cooking



Online games

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



Starship



We also use IpadS to support learning. We welcome any suggestions if you have found useful apps yourself.

