Numeracy afternoon for KS1

Introduction/Aim of the session

- Give you an introduction and explain some of the methods of calculating being taught in school.
- Give you a better understanding so that you can support the learning at home.

EYFS

Problem Solving, Measures and Calculations

- Maths is taught through stories, songs, games, imaginative and practical activities.
- Children are taught to use mathematical language to describe and compare shapes,
- position, size and quantity. Through a variety of activities, children will be taught to
- count, write and use numbers to at least 10. In day to day activities the children will
- become familiar with numbers larger than 10.

- play simple counting games
- such as:
- – snakes and ladders
- – counting buttons
- – choose two dominoes and count the total number of spots

- play simple ordering games such as:
- – choose ten buttons and order them by size from smallest to largest
- – from a pack of cards take out the Jacks, the Queens and the Kings and shuffle up the numbered cards. Choose any ten of them and put them in order

- play simple pattern-making games such as:

– with a collection of tiddlywinks

make patterns such as 2 red, 1 blue, 2 red 1 blue…

- play simple sorting games such as sorting a collection of buttons, shells or leaves by colour or by size
- lay the table for a meal – selecting the correct number of items and matching them.

KS1

- Less is recorded in KS1.
- Calculations are written in a variety of ways.
- May not look like the kind of ‘sums’ you remember.
- Written calculations are not the ultimate aim.
- The aim is for calculations to be done in the head. If numbers too large, use ways to help them with their thinking.

- When attempting a calculation, a child must always try to solve it mentally first, using personal jottings if needed.
- More standard methods used alongside using a calculator usually happens in KS2.

- Using the correct words/vocabulary is important when talking about the numbers in calculations.
- The numbers are always said using the ‘value’ of the number, eg:

- 45 + 13

- is **forty** is **ten**

  not 4 not 1

- Talk to your children about how they work things out.
- Ask the children to explain their thinking.

Counting

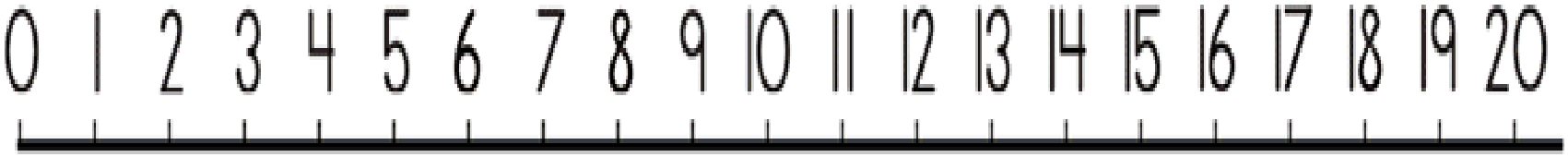
- Counting is important so that children learn the order of numbers and where the numbers are in relation to other numbers.
- Counting forwards and backwards sets a foundation for early addition, subtraction, multiplication and division.
- Using a number line or 100 square when counting, helps the children to see and recognise the number they are saying and where it appears in relation to other numbers.

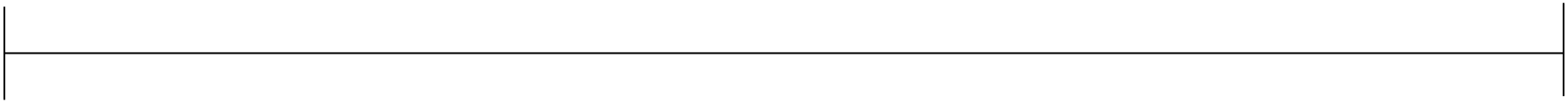
- It is important for children to know how close 10 is to 7 and how far away 10 is from 27.
- Count on in ones from 0 first then start at different points
- Practice counting forwards in 2's, 5's and 10's.
- Then in Year 1 – try counting in 3's
- Then in Year 2 – try counting in 4's

1 – 100 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

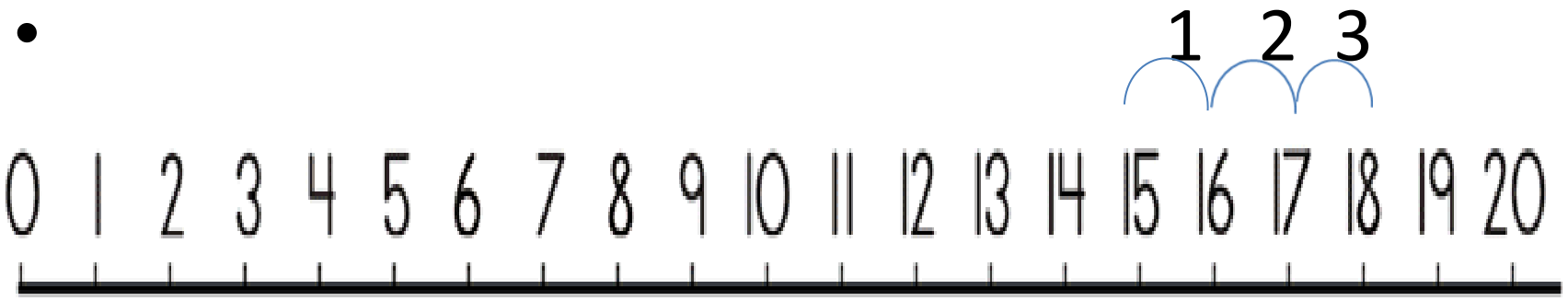
Number lines



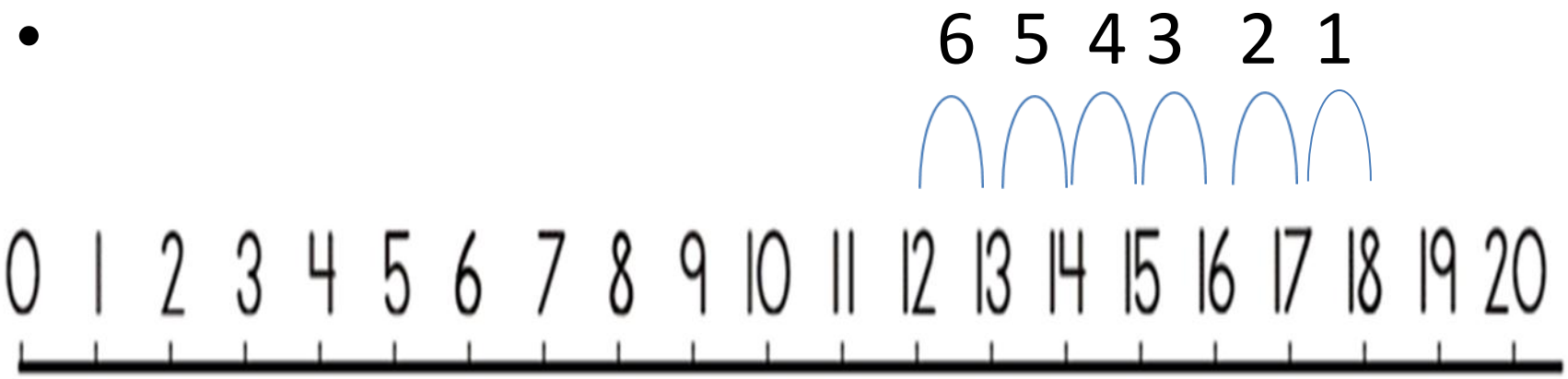


Addition and subtraction

- Early addition and subtraction begins with finding 1 more or 1 less. Then two more and two less.
- Children can use number lines or 100 squares to do this.
- Get them to do this.
- Children can use this method of counting on and counting back to add and subtract other numbers.

- In Year 1 and Year 2, children learn to read number sentences and use the number line to count on and back to solve them.
- 15 + 3 =
- Start with the largest number and count on the number line 3 steps.
- 

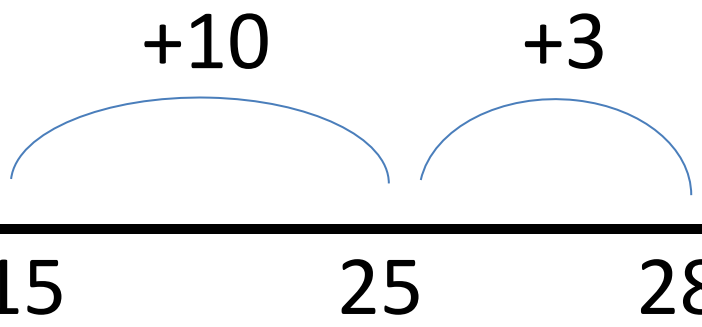
- The answer is 18 15+3=18

- 18 – 6 =
- Find 18 and mark it on the number line. Then find 18 and start counting back 6.
- 

- The answer is 12 18 – 6= 12
- Children will use number lines that will have numbers marked on. During Year 1 & 2, children will begin to use empty number lines.

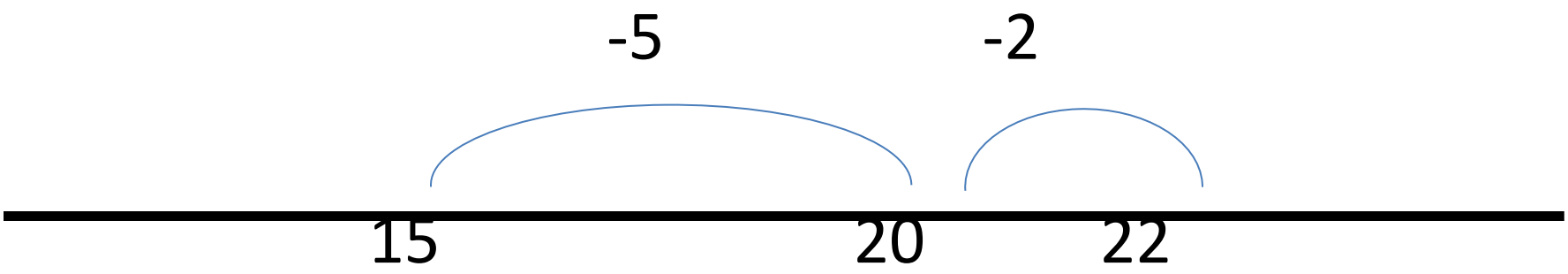
- Using empty number lines to work out

15 + 13 =



Begin with the largest number then partition(split) the other number into 10's and units. Therefore 13 will be 10 + 3.

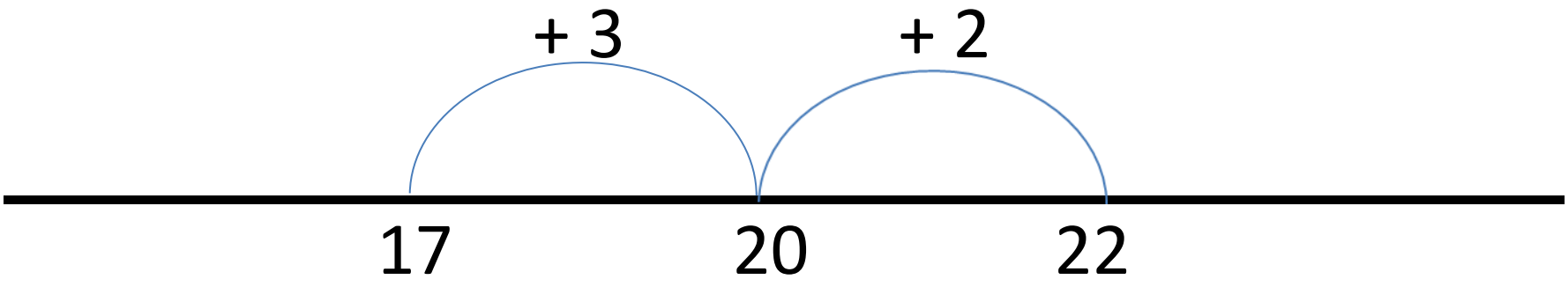
- The empty number line can be used for subtraction also: 22 – 7 =



Begin by marking 22 on the line. It's easier for the children to work around multiples of 10 and 100 when calculating. Encourage your child to count back to the nearest multiple of 10. In this example it is 20. How many have you counted back? 2

How many more do we need to count back? 5

- The number line can also be used to subtract by counting up from the smaller number to the larger. 22 – 17 =



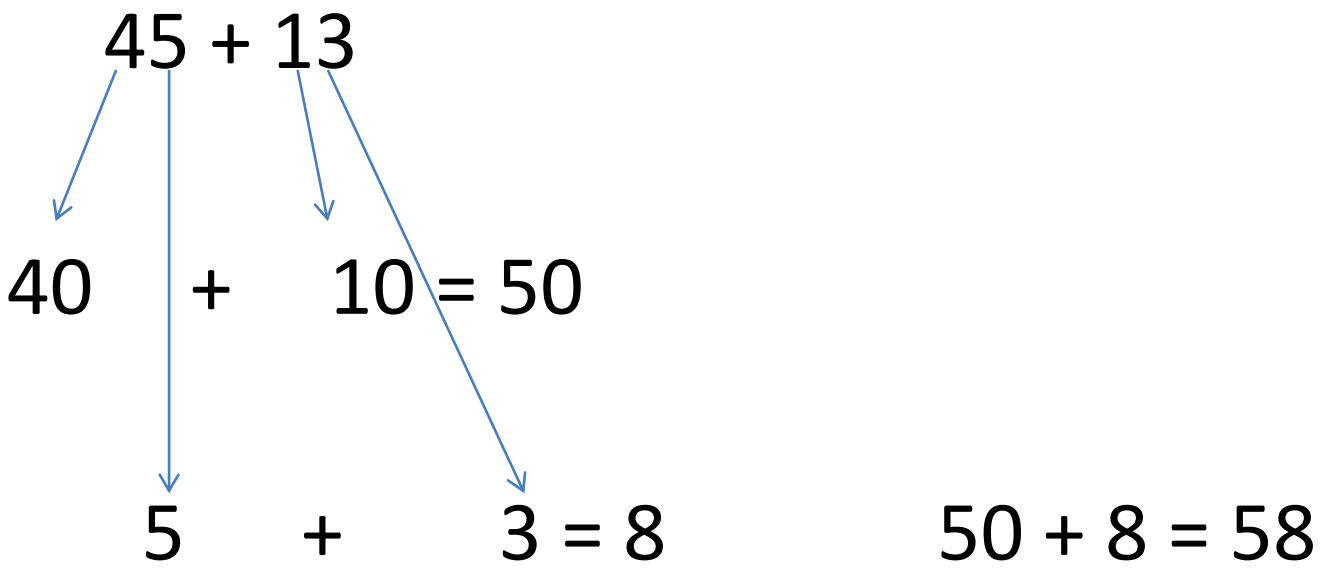
The answer is 5 22 – 17 = 5

- Children can gain a better understanding of what's happening to the numbers if they at first use a 100 square.
- Using a 100 square ask your child to add or subtract 10 to and from a number. What's happening to the number each time? The units stay the same and the tens will increase or decrease by 10.

- Another method for adding is to partition/split the numbers into tens and units then add them together

45 + 13 =

Partition/split the numbers into tens and units



Multiplication & Division

- Early multiplication and division skills begin with counting forward and backwards in different steps.
- Practice counting in twos and tens then in fives.
- Children need to understand that multiplication is repeated addition!
- In Year 2, children are expected to learn multiplication facts in the two, three, five and ten times tables

- Multiplication tables should be chanted like this….

One five is five

Two fives are ten

Three fives are fifteen

Four fives are twenty…….. Etc

Have a fact of the day or fact of the week? Ask them the same fact at intervals all that day eg What is 5 lots of 3?

Division

- Don’t forget to practice the corresponding division facts too!
- What is 10 shared into 2?
- What’s two lots of 5?

- Play dominoes where the answer on one domino matches the question on another domino.
- Roll 2 dice and multiply the two numbers. One of the dice must only have 2, 5 and 10 on it. (cover the original numbers with sticky labels and write new numbers on.)

- Early division starts with sharing or grouping objects into various size lots, mostly practical activities yet being practiced and re-called using the strategies above.

- Addition, subtraction multiplication and division facts are always written horizontally!