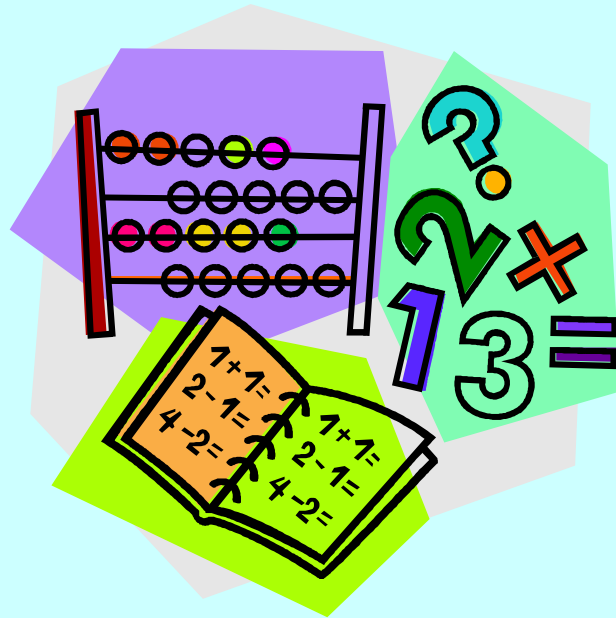
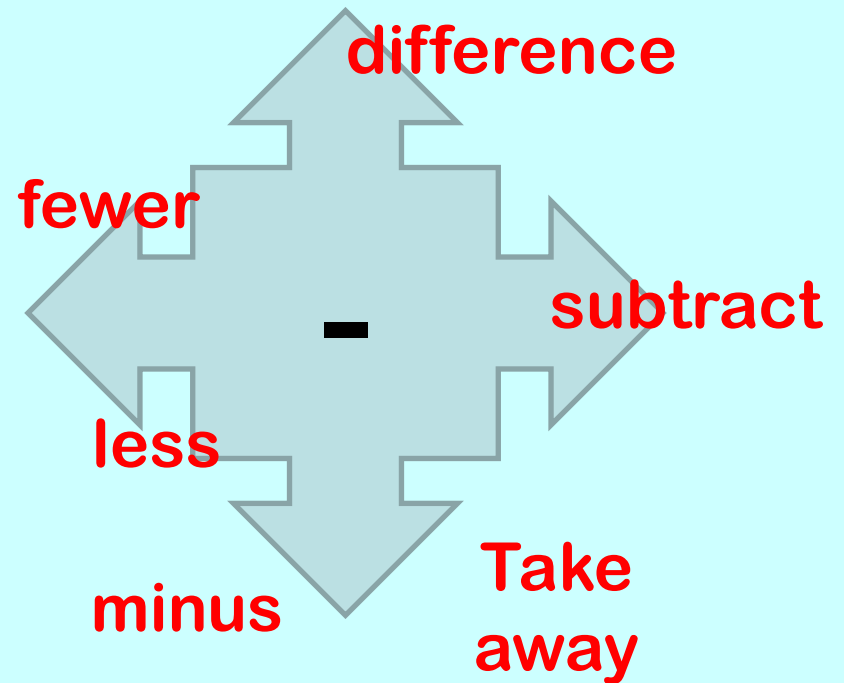
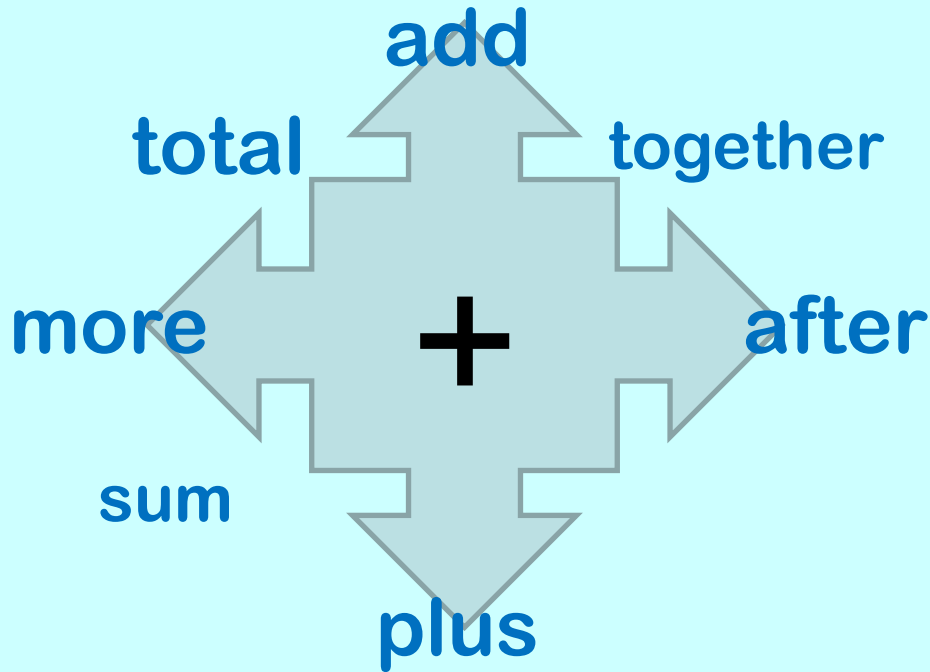


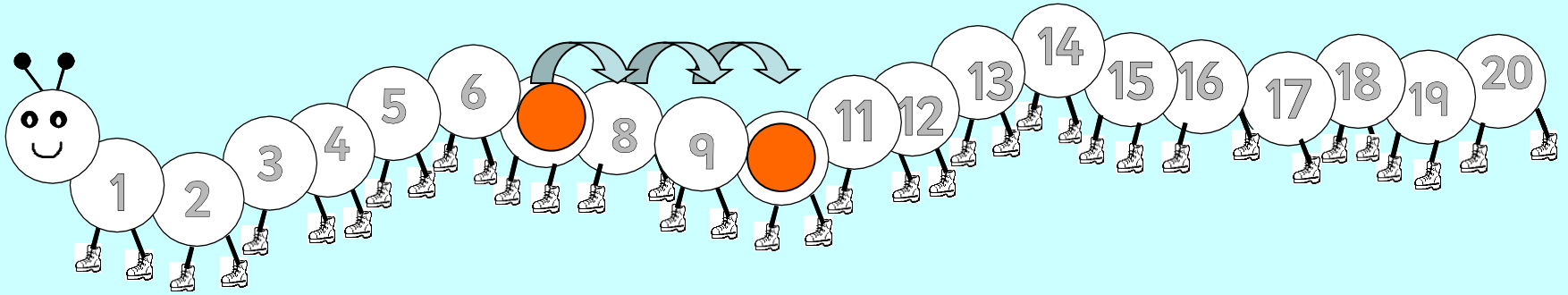
Year 1

Numeracy Workshop



Vocabulary





$$7 \text{ add } 3 = 10$$

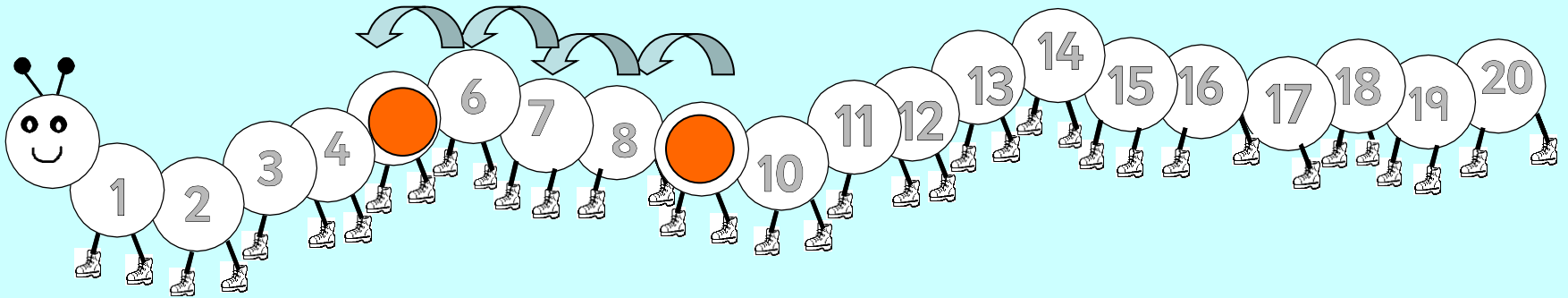
$$9 \text{ add } 4 =$$

$$6 \text{ add } 2 =$$

$$11 \text{ add } 5 =$$

$$5 \text{ add } 12 =$$

Takeaway



Ask children
before they
start which way
they need to go
to work out the
calculation.

$$9 \text{ take away } 4 = 5$$

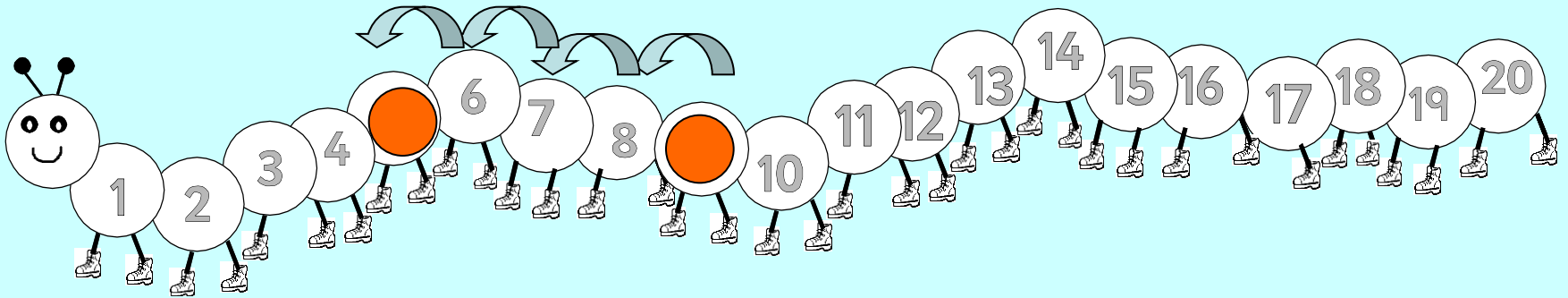
$$10 \text{ take away } 6 =$$

$$14 \text{ take away } 3 =$$

$$11 \text{ take away } 9 =$$

$$17 \text{ take away } 12 =$$

Missing numbers



We also use the number line to find the number in missing number calculations by counting on .

$$8 + \square = 12$$

$$11 + \square = 18$$

$$19 + \square = 21$$

$$\square + 7 = 15$$

$$\square + 14 = 19$$

We always encourage the children to use which ever method they prefer. Everyday we practice Counting in 2's, 5's and 10's forwards and backwards, along with pairs of numbers to 10 and doubling facts.

The children are then able to recall these facts mentally when adding and subtracting .

Pairs to 10

$$0 + 10 = 10$$

$$1 + 9 = 10$$

$$2 + 8 = 10$$

$$3 + 7 = 10$$

$$4 + 6 = 10$$

$$5 + 5 = 10$$

$$6 + 4 = 10$$

$$7 + 3 = 10$$

$$8 + 2 = 10$$

$$9 + 1 = 10$$

$$10 + 0 = 10$$

Doubles

$$0 + 0 = 0$$

$$1 + 1 = 2$$

$$2 + 2 = 4$$

$$3 + 3 = 6$$

$$4 + 4 = 8$$

$$5 + 5 = 10$$

$$6 + 6 = 12$$

$$7 + 7 = 14$$

$$8 + 8 = 16$$

$$9 + 9 = 18$$

$$10 + 10 = 20$$

Once the children are confident to 10 we extend the facts to 20 (remember to mix the order of calculations to embed the number facts.)

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

The 100 Square

Can be used for addition, subtraction, division and multiplication problems.

We encourage children to notice the patterns on the number square to help them identify numbers quickly.

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

We have started using the 100 square in our everyday adding and subtracting.

25 add 4 =

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

Try these:

$$74 + 7 = 81$$

$$55 - 6 = 49$$

The children are also being taught to jump up and down the 100 square in order to add or subtract 10 or a multiple of 10.

$$30 + 40 =$$

$$51 + 40 =$$

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

Try these:

$$11 + 80 = 91$$

$$59 - 40 = 19$$

Some children will be starting to work out addition and subtraction problems by partitioning them into tens and units.

$$32 + 16 =$$

Becomes

$$32 + 10 + 6 =$$

$$45 - 22 =$$

Becomes

$$45 - 20 - 2 = 23$$

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

Try these:

$$22 + 14 = (22+10+4=) \quad 36$$

$$65 - 27 = (65-20-7=) \quad 38$$

$$87 + 13 = (87+10+3=) \quad 100$$

We also show the children how to draw number lines to solve the calculation mentally. - **show example**

The children always have a range of equipment to choose from to solve their calculations (number line counters, fingers, hundred square , pens and pencils - we encourage them to draw the calculation to check their working if they need to – **show example**)

However in order to prepare them for Year 2 – when they are ready we ask the children to see if they can start to solve the calculation mentally without using equipment:

- When they become very familiar with the number line and hundred square they begin to do it in their head and do the jumps mentally
- When they are confident with their pairs to 10 they can use these facts mentally
 $12 + 6 + 4 =$
 $12 + 10 = 22$
- When they are confident with their doubles to 10 they can use these facts mentally
 $11 + 3 + 3 =$
 $11 + 6 = 19$

Multiplication in Year 1

We talk about groups or sets of numbers and relate it to their counting e.g. We are going to count in **sets of 10**.

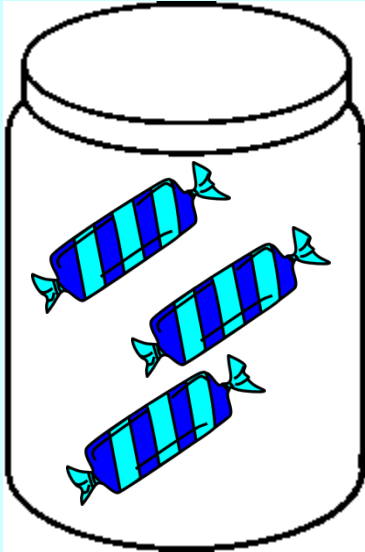
We do a lot of counting in **2s, 5s and 10s** and will be moving onto **3s** by the end of the year.

When counting we relate the number to **how many sets?**

e.g. If I clap in 10s to 50 how many claps have I done?

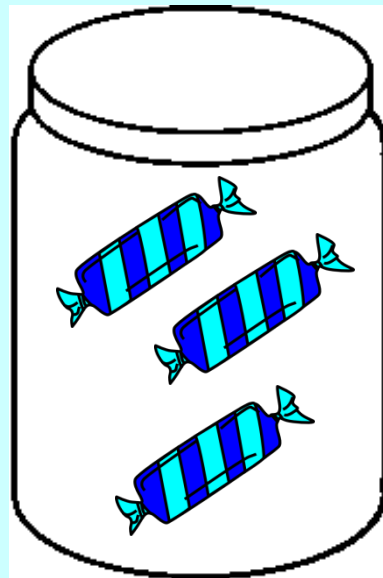
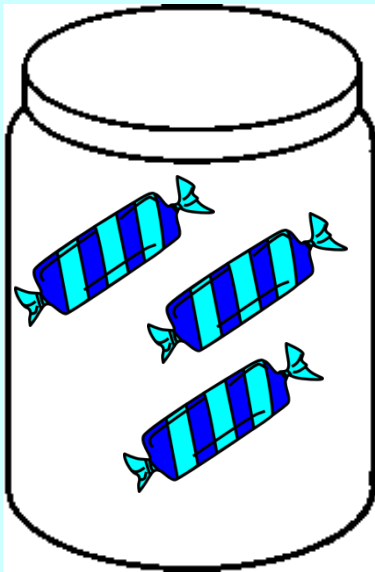
so 5 sets of 10 is 50.

Counting in sets



1 set of 3 is 3

$$1 \times 3 = 3$$



2 sets of 3 is 6

$$2 \times 3 = 6$$