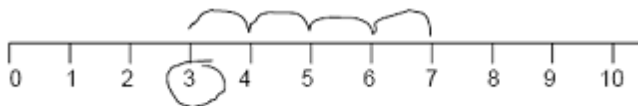


# A PARENTS' GUIDE TO MATHS IN THE CURRICULUM

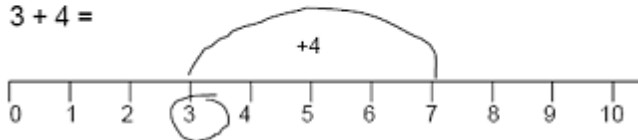
## Year 2

### Addition

Find the starting number and count on the right amount one jump for each, see where landed by using a number line.



$$3 + 4 =$$



Next work focuses on using a hundred square. Adding 1 to a number and looking at what happens.

$$28 + 1 =$$

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

Then adding 10 to a 2 digit tens number using 100 a square.

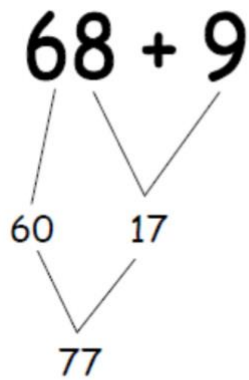
$$23 + 10$$

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

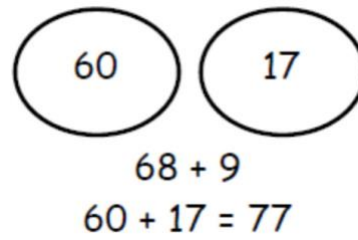
Then adding any number to a number that is on a hundred's square.

The next stage is partitioning numbers ...

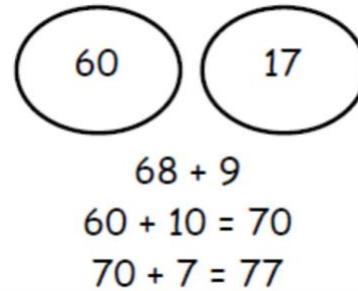
### Full Written Method



### Abridged Writing Stage

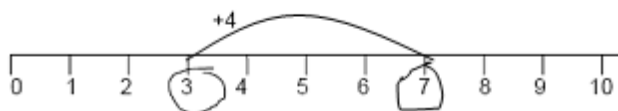
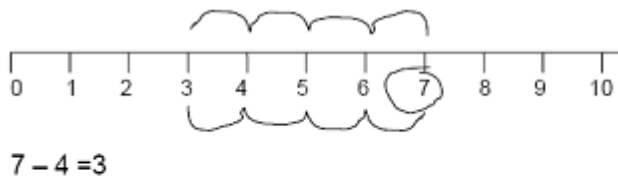


### Additional Stage if required

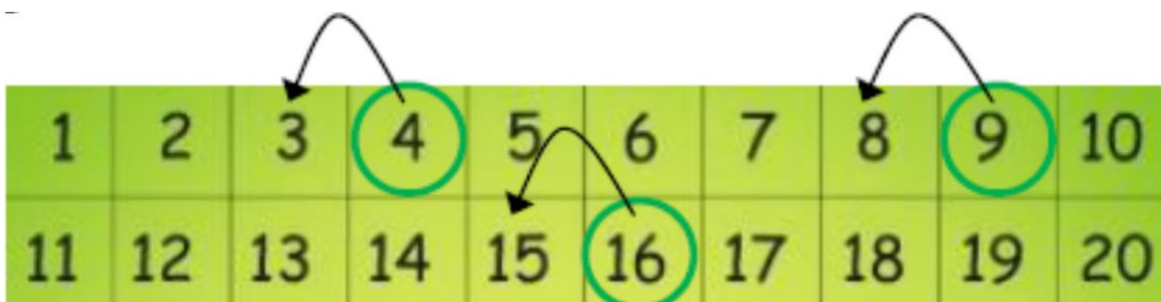


## Subtraction

The next step is to use the number sentence and be able to solve it. Find the starting number and then count back to the correct number using a number line.



The next step is to be able to use a 100 square.



$$4 - 1 = 3$$

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

$$40 - 10 = 30$$

Find a starting number and count back 10. For example, 80-10 or 81 -10  
Then from any starting number, count back the correct amount, for example 48-5.

To be able to subtract any 1digit number from any 3 digit number, use a blank number line.

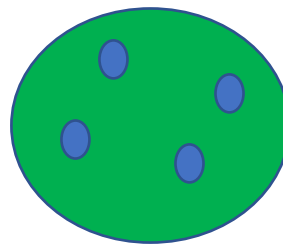
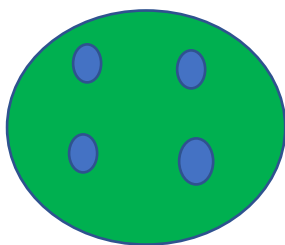
## Multiplication

Draw dots for each object as they set them out in lots of.

$$4 + 4 = 8$$

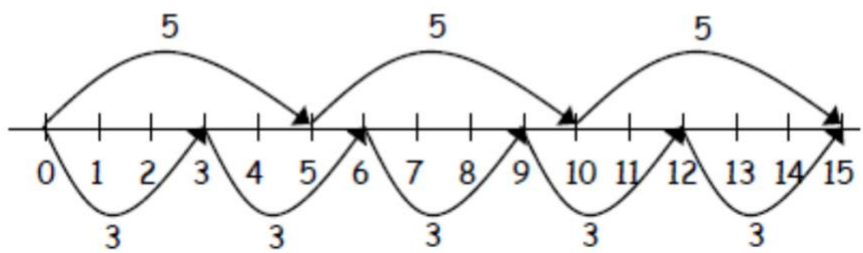
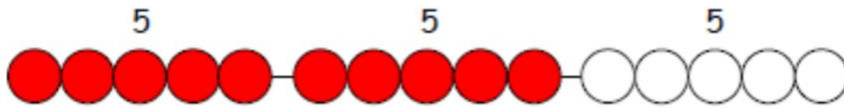
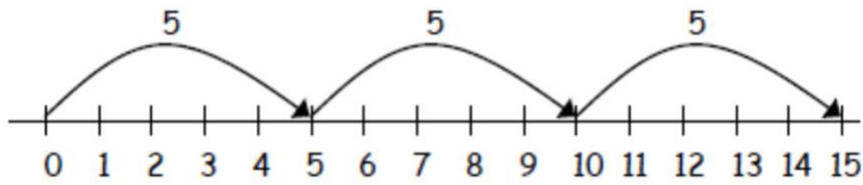
or

$$4 \times 2 = 8$$

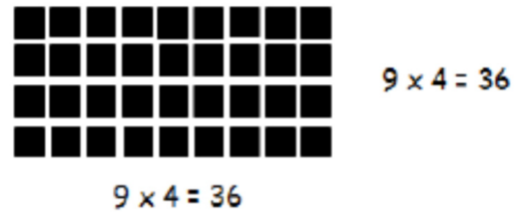
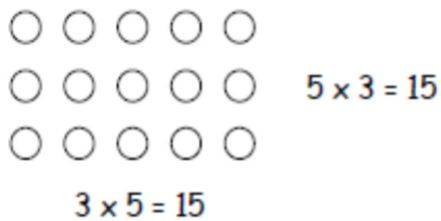


Seeing the repeated addition is the next stage.

5 lots of 3 =  $5 \times 3 = 5 + 5 + 5$



The next step is to use arrays.

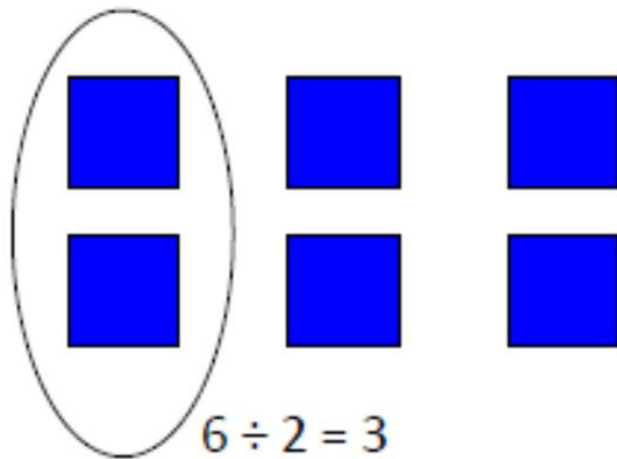


Division

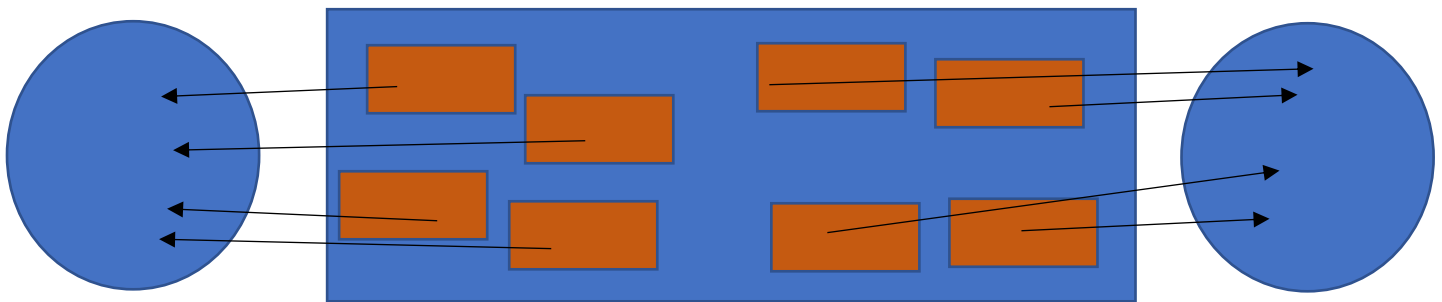
The next stage is to use the language associated with division and being able to read a division number sentence.

When sharing out objects, they are placed one at a time into different containers.

$6 \div 3 = 2$

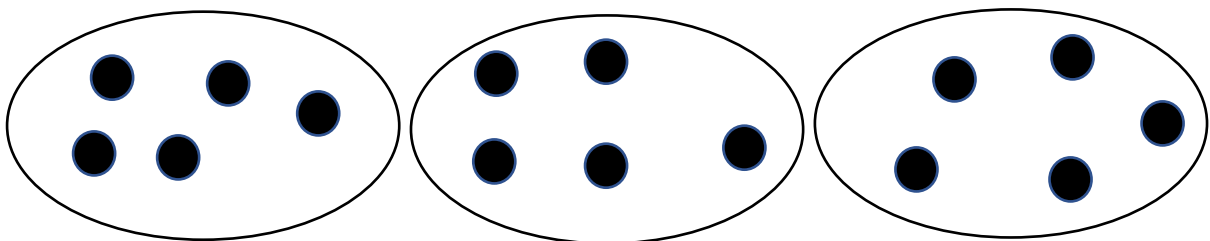


Taking turns to give each pile one at a time, finding out how many altogether by counting in each group.



This includes finding half of objects.

Children are encouraged to find how many altogether by counting in 2s, 5s or 10s.

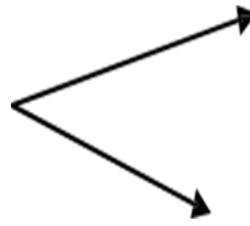


5, 10, 15 →

Then arrange a division number sentence.

15 blocks going into piles of 3 How many lots of 3 are there in 15?

$$15 \div 3$$

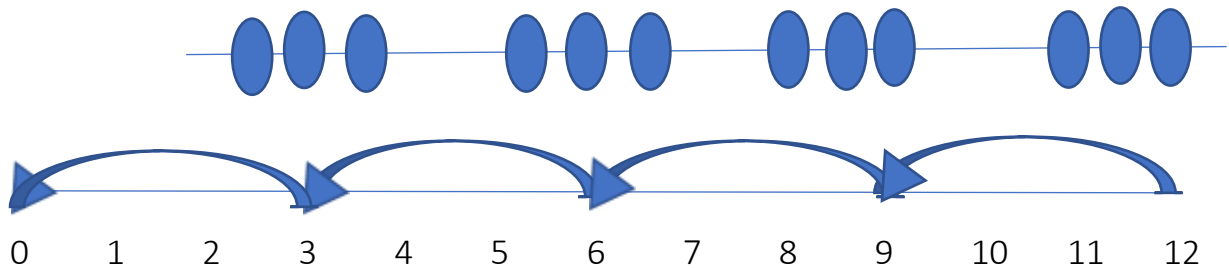


15 blocks going into piles of ...

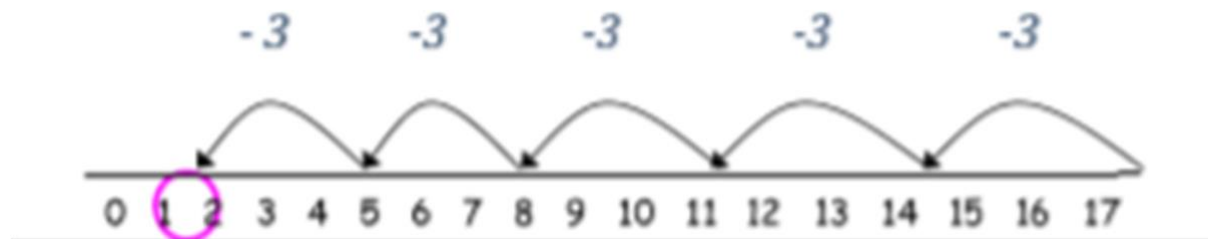
How many lots of 3 are there in 15?

Examples:

$$12 \div 3 = 4$$



$$17 \div 3 = 5 \text{ r } 2$$



**Year 2-Suggested games to play at home which promote mathematical development**

By the end of Year Two, children are expected to be confident with numbers to at least 100.

**I can read and write all numbers to at least 100 in numerals and words:**

Play number bingo or pairs – matching numbers to numbers or numbers to calculations;

Try writing numbers using different media (chalk, pencils, pens);

Read numerals in real life environments e.g. door numbers, road signs.

**I can recognise number patterns; such as recognising odd and even, counting in steps of 2,3,5 and 10:**

Look at number patterns on doors when walking up the street;

Try counting everyday objects, including larger numbers by grouping in 2s, 3s, 5s, 10s;

Play board games (to encourage the children to count as they move their playing piece). Also try card games;

Count as walking up the stairs (in 1s, 2s, 3s, 5s and 10s);

Count or tally the number of different vehicles when travelling in the car.

**I can recall and use multiplication and division facts for the 2, 5 and 10 times table:**

Sing number songs (multiplication CDs);

Focus on one table at a time until the children can recall the facts as quickly as they can recall their name (randomly as well as in order).

**I can add and subtract two 2-digit numbers:**

This is something we are aiming for at the end of year 2. Over the year we will build up to this starting first with 2-digit +/- 1 digit, then 2-digit +/- 2 – digit; Using the children's toys to add, subtract and sort into groups.

**I know the fractions** \_

**\_ ,  $\frac{1}{4}$ ,  $\frac{1}{2}$  and  $\frac{3}{4}$ , and can use them to find fractions of shapes, lengths and numbers:**

Share out food and toys so that each member of the group has an equal quantity; find half ( $\frac{1}{2}$ ), quarter ( $\frac{1}{4}$ ) and thirds ( $\frac{1}{3}$ ) sharing out a box of smarties, bunch of grapes, box of Lego);

Make shapes using dough, find half ( $\frac{1}{2}$ ), quarter ( $\frac{1}{4}$ ) and thirds ( $\frac{1}{3}$ );

Begin to look at fractions that equal the same amount ( $\frac{1}{2} = \frac{2}{4}$ )

**I can compare, order and problem solve using measures such as length, mass, capacity, time and money:**

Cook and bake – weigh out ingredients, measuring liquids;

Use the clock to illustrate tea time and how long it is until an event (to the nearest 5 minutes, quarter past and quarter to);

Time activities – estimating and measuring how long an activity could take e.g. getting dressed, car journey, length of a film;

Display a child's calendar, focusing on the days of the week, how many days / weeks or months until special events;

Play shops, pricing items and paying for them using real coins;

Encourage your child to select the correct coins to pay for small items;

Sort coins from their money box or your purse;

Measure how many footsteps it takes to walk to certain places (e.g. down the drive) and compare the child's with the adult's;

Measure different objects using a tape measure or ruler;

Use different containers in the bath to see which holds the most water, measuring scales.



**I can find shapes and talk about their properties:**

Go on shape hunts when walking or in the car (look for quadrilaterals, polygons, cuboids, prisms and cones);

Find 2d shapes on 3d shapes (circle on a cylinder, square on a cube)

With your child practice their rapid recall of the following:

- Number bonds to 10 (4+6, 8+2)
- Number bonds to 20 (11+9, 4+16)
- Counting in steps of 2s, 3s, 5s (forwards and backwards)
- Recognise odd and even numbers
- Recall 2s, 5s, 10s times tables
- Recall division facts for 2s, 5s, 10s times tables; e.g.  $5 \times 10 = 50$  so  $50 \div 10 = 5$
- Counting forwards and backwards in 10s from any number

**To see the whole of your child's Year 2 curriculum, use the following link:**

**The National Curriculum for Mathematics**

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/335158/PRIMARY\\_national\\_curriculum\\_-\\_Mathematics\\_220714.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/335158/PRIMARY_national_curriculum_-_Mathematics_220714.pdf)

**Websites that are useful:**

<http://resources.woodlands-junior.kent.sch.uk/maths/>

<http://www.kidsmathgamesonline.com/>

<http://www.bbc.co.uk/skillswise/maths>

<http://www.bbc.co.uk/education/subjects/z826n39>