

Mental calculations that children should be able to recall quickly:



- Addition and subtraction facts for all numbers to at least 10
- All pairs of numbers with a value of 20, e.g. $17+3$, $12+8$
- All pairs of multiples of ten that have a value of 100, e.g. $20+80$, $70+30$
- Multiplication facts for the 2, 5 and 10 times tables and associated division facts

Useful websites



www.bbc.co.uk/schools/bitesizeprimary
http://www.bbc.co.uk/schools/websites/4_11/site/numeracy.shtml
<http://nrich.maths.org>
<http://resources.oswego.org/games>
www.subtangent.com/maths/games.php
www.woodlands-junior.kent.sch.uk
www.coxhoe.durham.sch.uk
www.teachingtables.co.uk
<http://www.multiplication.com>
<http://www.coolmath4kids.com/>
<http://www.primarygames.com/math.htm>
<http://www.wmnet.org.uk/resources/gordon/Hit%20the%20button%20v9.swf> OR google—hit the button

Carr Hill Community Primary School



Supporting Mathematics in Year 2



This booklet has been written to support parents and children in maths. It explains the different methods we use to solve +, -, x and ÷ calculations. It also includes some useful websites and activities to do at home.



Working Together for our Children
Carr Hill Community Primary School

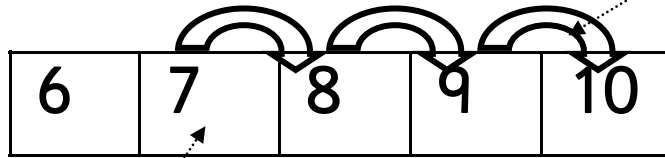
Addition in Year 2



- Children may begin adding by counting on with the use of a number track, counting in single jumps

$$7 + 3 = 10$$

count on 3 jumps



start on largest number

- Next we use empty number lines to solve $60 + 22 = 82$ by counting on in appropriate jumps. Here we start on 60, then add $10 + 10 + 2$ (22) to make the total 82.

+10 +10 +2



Add on 22 in jumps of $10 + 10 + 2$

- We also use tens and units apparatus, so that $31 + 13 = 44$



3 tens = 30 1 unit 1 ten = 10 3 units

- As well as this we partition numbers into tens and ones:

$$14 + 25 =$$

$$10 + 20 = 30 \quad \leftarrow \text{first add the tens}$$

$$4 + 5 = 9 \quad \leftarrow \text{then add the ones}$$

$$30 + 9 = 39 \quad \leftarrow \text{find the total}$$

Partitioning of 25

$$25 = 20 + 5$$

Fun activities to do at home

Money



- Real money can be used to help children see the numbers they are working with.
- Using 1p, 2p and 5p how many ways can you make 10p/20p?
- Ask questions like: "If you have 20p/50p and spend 3p, 6p or 10p... how much change will you get?"
- Use 10p coins to count in tens. Start from 5p and add on tens.

Measures and shape



- Estimate and measure heights/weights of family members.
- Weigh ingredients for baking.
- Look at different containers and bottles to compare capacities.
- Estimate and measure lengths and widths of rooms.
- Point out different times of the day, ask children to tell you the time at o'clock, half past and quarter to and past.
- Recognise shapes around the house.

Fun activities to do at home

Games



- Play games like snakes and ladders, ludo, skittles, bingo that involve counting and opportunities for addition and subtraction.
- Play dominoes where children have to recognise, count and match number/pattern of dots.
- Look at car number plates and add the digits $2 + 4 = 6$. What's the highest value number plate they can find?

Number



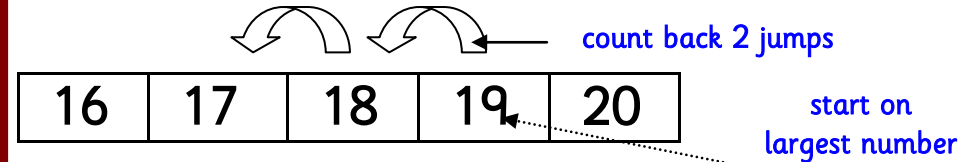
Practise:

- Counting in 2's, 5's, 10's, 3's and 4's
- Number bonds to 10 and 20, i.e. $11+9$
- Doubles and halves of numbers to 30 (Double 15 and Half of 30)
- Addition and subtraction facts to 20 worded in questions such as, 'There were 19 sweets, I ate 15 how many are there left?'
- Writing and reading numbers to 100, then 1000
- $\times 2$, $\times 10$ and $\times 5$ times tables

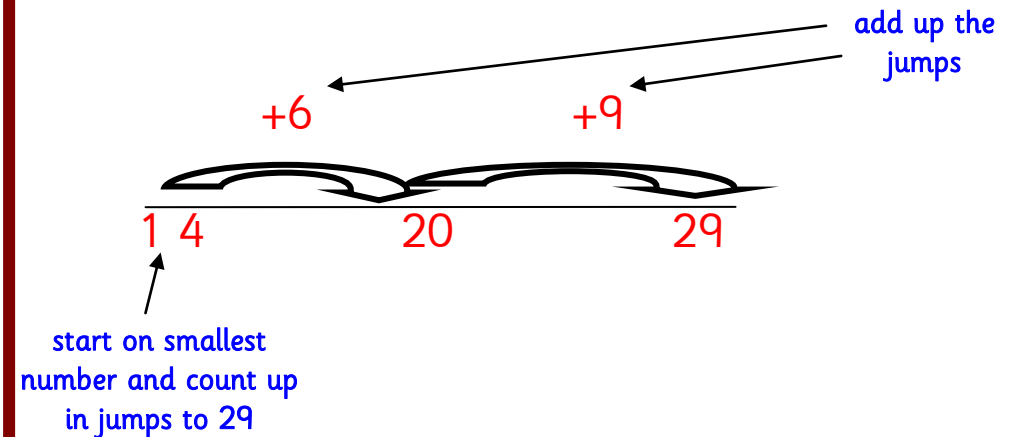
Subtraction in Year 2



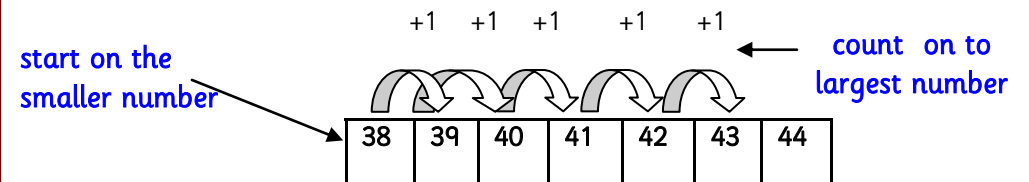
- Children may begin counting back with the use of a number track $19-2=17$



- We also use empty number lines to solve $29 - 14 = 15$ by counting on in appropriate jumps. Here we start on the smallest number, 14, then add 6, to make the next 10 and then add 9 to reach 29. We have added on $6 + 9 = 15$



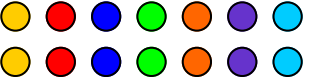
- As well as this we find a small difference by counting up $43 - 38 = 5$



Multiplication in Year 2



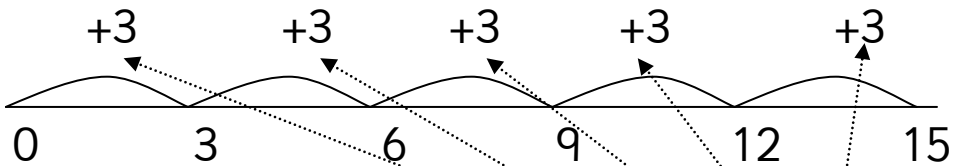
- We begin using practical activities to solve multiplication problems by drawing sets of objects:

7×2  _____ **7 sets of 2**

We count the number in the set to find the total of 14.

- Then we move on to using repeated addition:

$5 \times 3 = (5 \text{ groups of } 3) \text{ or } 3 + 3 + 3 + 3 + 3$



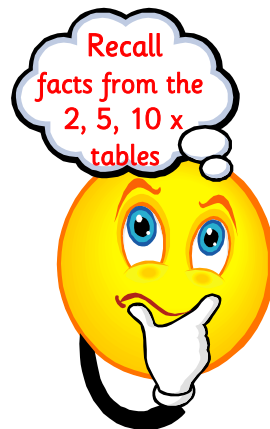
start on zero
and count on

5 jumps of 3

5 jumps of 3

So, $5 \times 3 = 15$

- Children will also be expected to recall facts from the 2, 5, 10 x tables.



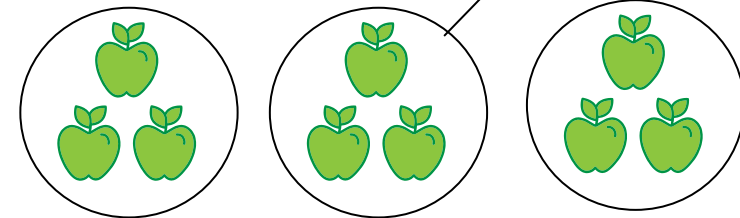
Division in Year 2



- We begin using practical activities to solve division problems:

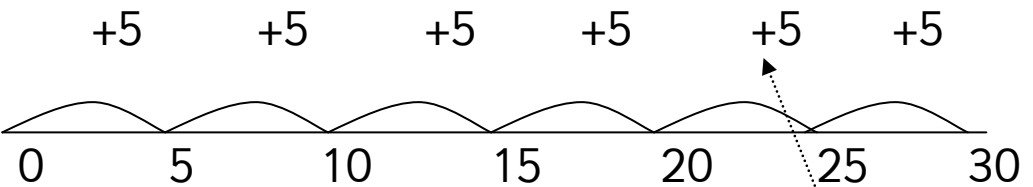
9 apples shared by 3 people:

count out 9
apples adding one
to each set as you
go



- We will then introduce children to the \div sign.

They will use empty number lines to solve division problems using repeated addition: $30 \div 5 = 6$



count on in 5's until
you reach the target
number

6 jumps of 5, so
the answer is 6