

How to Support Your Child in Maths



Maths Support at Home

At Fetcham Village Infant School we try to set our Maths tasks in a practical problem-solving situation wherever possible.

In this booklet we hope to provide you with some ideas and strategies to use if you would like to improve your child's Maths skills. Some ideas will be more appropriate to Year R children, some to Year 1 and some to Year 2 depending on your child's stage of development.

There are many opportunities for practising Maths skills in everyday situations such as shopping, cooking, playing games, etc. We encourage the children to 'work things out in their head' and even more importantly **to explain how they reached the answer**. There are often many ways to achieve the correct answer and we accept that different people find different ways that suit them. We do discuss that sometimes there are certain ways that are more **efficient** than others.

In order to encourage children to think positively about Maths, we do not mark work wrong. Instead, we indicate with a highlighter that a child needs to 're-think' his/her answer and the child is then praised for going over the work a second time.



Early Mathematical Experiences

There are many activities you can do at home to develop basic skills in Maths, for example:

- How many spoons will we need if 4 people are having pudding?
- Set the table for 3 people. How many knives, forks and spoons? How many pieces of cutlery altogether?
- Making very simple repeating patterns with bead strings/cubes, for example:
 - Red Blue Red Blue or
 - Red Red Green Red Red Green □ Asking simple problems:
 - 6 ducks are on the pond; 2 fly away; how many are left?
 - There are 10 legs in the field. The farmer has sheep and ducks. How many of each animal could be in the field?
- Look for basic shapes as you are out for a walk, for example squares and hexagons (paving slabs), rectangles (doors), patterns on awnings or shapes in the play park.

- Show your child coins and talk about their values in a comparative way for example, £1 coin is worth lots more money than 1p.
- Measure how far it is from the end of your path to your front door in strides. Talk about why your child might have more strides than you.

There are other activities further on in this booklet which are appropriate to Year R. Please pick out some which you think might work with your child.

Other hints and tips for all year groups in no particular order

- Always write addition and subtraction sums horizontally, not vertically. They will learn vertical methods at junior school.
- Put the larger number first when adding mentally in your head e.g.
 - When adding $4+7$ rearrange as $7+4$ then count on four from 7
 - $5+36$ changes to $36+5$ then count on five in ones from 36
 - $30+60$ becomes $60+30$ then count on in tens from 60
- Count in tens e.g. 10, 20, 30, etc
Count on in tens from any number e.g. 7, 17, 27 or 127, 137, 147
- Count back in ones or tens from any number e.g. 54, 53, 52 etc. or 198, 197, 196, or 68, 58, 48

- Practise going over the tens boundary as this is harder
e.g. 58, 59, 60, 61 or 52, 51, 50, 49
- Count on over the 100 e.g. 98, 99, 100, 101, 102 or 76, 86, 96, 106, 116 (many children jump from 100 to 200 e.g. 98, 99, 100, 200, 300)
- Number bonds:
Practise adding all the pairs of numbers that make 10.
If you say a number, your child should be able to **instantly** tell you the number that must be added to make 10
e.g. You say 6 and child replies immediately with 4.
Don't forget $0+10$ and $10+0$.
- Work out all pairs of numbers that make each number up to 10 e.g. 6 is $0+6$ $1+5$ $2+4$ $3+3$ $4+2$ $5+1$ $6+0$
Do similarly for 3, 4, 5, 7, 8, 9
Children should be able to do this quickly. Remind them that they will be sure not to omit pairs if they tackle the task logically by starting with $0+....$

- Add three numbers mentally by looking for pairs that make 10 and do these first e.g.

$3+4+7$ (do $3+7$ first then add 4)

$5+2+5$ (do $5+5$ first then add 2)



- Use number bonds to 10 to work out bonds to 20, 30, etc. Children should be able to say that 5 and 5 or 2 and 8 or 6 and 4 etc. make 10 (very quickly because they know them rather than they have worked it out). So they

should be able to know how many to add on to 14 to get to 20 because it is a natural extension. What is the jump from 32 to 40?

- Learn the doubles of all numbers up to $10+10$. Make sure your child is able to explain that when doubling, he/she must add another number the same as the first. Practise doubling quickly in a random order.
- Use the understanding about doubles when working out sums such as $6+7=13$. We could work this out by (doubling $6+1$) or (double $7-1$). We call this 'near doubles'.
- Find the difference between two numbers by counting on. The difference between Sue's age (12) and Tom's age (8) is [8], 9, 10, 11, 12 therefore 4. The difference between 79 and 82 is 3 (found by counting on from 79).
- Add 9 to a number by adding 10 then subtracting 1.
 $14+9$ is the same as $(14+10) -1$
 $46+19$ is the same as $(46+20) -1$
 $43+39$ is the same as $(43+40) -1$
- Add 11 to a number by adding 10 then one more, add 21 by adding 20 then one more
- Subtract 11 by subtracting 10 then one more (subtract 21, 31, etc in the same way)

➤ At a higher level, subtract 9 by subtracting 10 then adding another one. This is a much higher level skill and isn't always easy for the children.

➤ Practise recognising and continuing number patterns e.g.

$7+0=7$

$10-0=10$

$3+5=8$

$4+3=7$

$6+1=7$

$10-1=9$

$13+5=18$

$40+30=70$

$5+2=7$

$10-2=8$

$23+5=28$

$400+300=700$

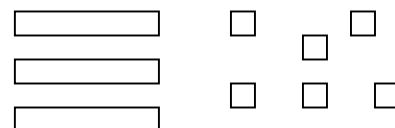
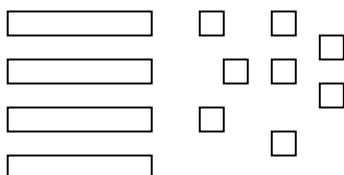
➤ Practise recognising and counting number patterns e.g. 2, 4, 6, 8, ? 25, 35, 45, 55, ?

➤ Partition hundreds, tens and units numbers e.g. 264 is made up of 200 and 60 and 4

➤ Add 2-digit numbers mentally e.g.

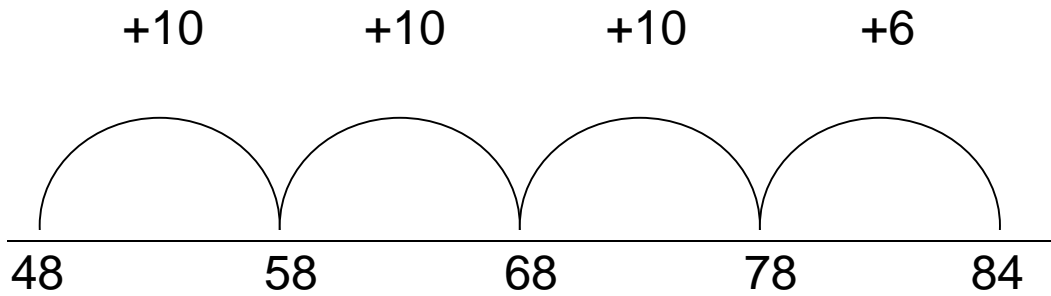
- 26+10 or 20 or 30 (adding whole tens)
- 35+14 etc. (adding teens numbers not crossing, then crossing the tens boundary)
- Larger 2-digit numbers that don't cross the boundary e.g. 26 and 31 by partitioning the numbers in your head e.g. 20+30 and 6+1 then recombining
- Moving on to numbers that cross the boundary e.g. 46+39

➤ Use informal jottings to help work out answers. Draw tens sticks and unit cubes

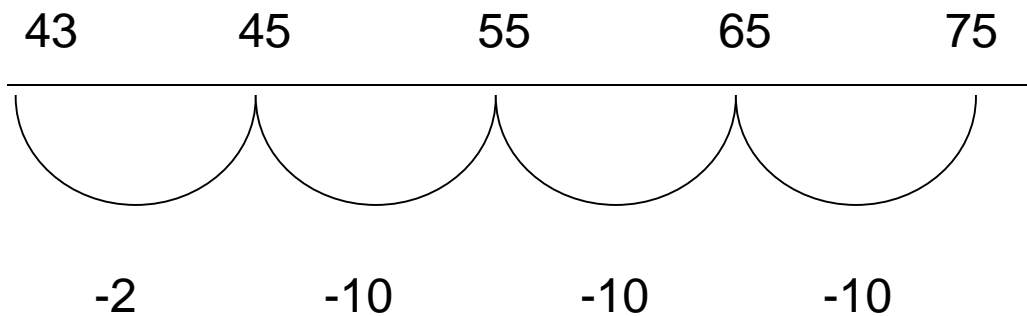


$$48 + 36$$

Draw unstructured number lines to help explain your thinking



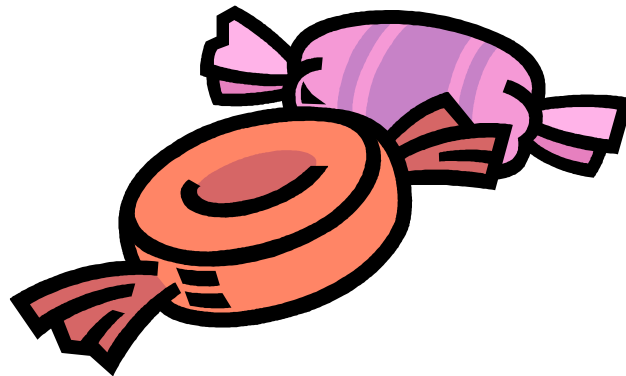
- Children find subtraction more difficult. Build up to subtracting 2-digit numbers e.g. $75-32$



For subtraction, the jumps should start at the right hand side and jump under the line.

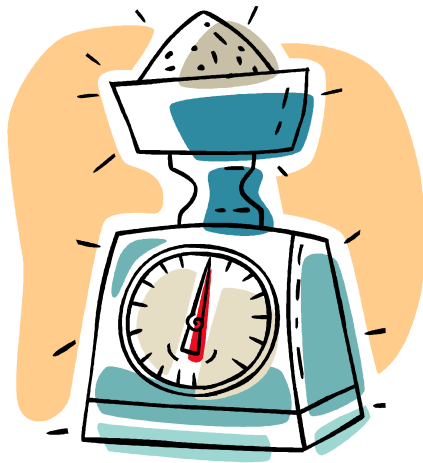
- “I am thinking of a number” games. What is my number?
- When I double my number, I get 12.

- If I add 10 to my number, I get 16.
 - If I subtract 4 from my number, I get 7.
 - If I halve my number and then add 3, I get 11.
- If I know that $3+2=5$, then what is $5-2$? (Learning the relationship between addition and subtraction).
- Learn by heart the $2x$ and $10x$ tables. Know the facts in random order. Move on to $5x$, $3x$, $4x$.
- Share amounts e.g. sweets equally between different numbers of people. What happens if there are some left over?



- Use money and recognise all coins. Order them for value. Know the equivalent values e.g. $5p = 5 \times 1p$ coins, $£1 = 5 \times 20p$ coins. Play swapping games.
- Total coin amounts.
- Play shopping games where you have to give change (children find this hard).

- Learn to read the scales on rulers, measuring jugs, weighing scales through practical experiences of measuring or cooking. Learn grams, kilograms, litres, millilitres, metres, centimetres.



- Learn to tell the time using both analogue and digital clocks (children find telling the time quite difficult).
What time will it be in 1 hour/ 2 hours? What time was it $\frac{1}{2}$ hour ago?
If I get to the bus stop at 4 o'clock and the bus comes at $\frac{1}{2}$ past 4, how long do I have to wait?
- Recite the alphabet, days of the week, months of the year, seasons, ordinal numbers (first, second, third).
- Number of days in each month. Measurements of time e.g. seconds, centuries.
- Learn clockwise, anti clockwise, north, south, east, west.



**Thank you for your
continued support**