# Year 2 Maths 

Dear Parents,
Below are some of the strategies that have been taught in school to support your child solve problems based around the 4 concepts- addition, subtraction, multiplication and division. We hope this might help you!

## Partitioning a number into tens and ones:



You can do this with any 2 digit number. Start by seeing how many tens there are (4, draw 4 sticks of ten), then count the ones (6), draw 6 cubes of one). Then carry across the stick of ten to make a new number on the other side of the + sign. Partitioning helps understand how a number is made up. It also helps with addition and subtraction.

## Addition <br> $$
12+14=
$$

## Solving with partitioning

1. Read the problem twice and circle the sign
2. Partition the numbers into tens and ones

3. Count up the tens $=2$ tens $=20$
4. Count up the ones $=2+4=6$
5. Count up the tens and ones $20+6=26$

## or

## Solving with the empty number line


(If your child cannot do a straight jump of 4, you could count in jumps of 1, 4 times)

## Subtraction

$23-17=$

## Solving with partitioning

1. Read the problem and circle the sign
2. Partition the first number only numbers into tens and ones

3. To take 17 away is now tricky! So you will need to scribble out 1 of your sticks of ten and exchange it for ten little ones.

4. Now you can partition the 17 , you will need to cross out 1 ten (blue line) and 7 ones.
5. Now count up what is left! 6 ones are left, so the answer is 6.

## Solving with the empty number line


(If your child cannot do a straight jump of 7, they could break down the number as I have done above).
E.g. Question: $3 \times 2=$

3 sets of 2 is represented by: (drawing an array and writing the multiples next to it)
$x \times 2$
$x \times 4$
$x \times 6$
$2+2+2=6$ (repeated addition)
$3 \times 2=6$ (multiplication sentence)
You can do these problems for any numbers in the 2, 3, 5 or 10 timetables.

The children have also been taught to write out their multiples, instead of drawing an array:
$3 \times 2=6$ (count in 2's, 3 times)
$2,4,6$
They also may just know the answer by working it out in their heads!
$12 \div 2=$ (share the 12 equally between 2 plates)
Here the children have drawn 12 objects (lines) and they need to be shared between 2 people. Cross through the line and add a/ to 1 plate, repeat until all 12 have been shared equally. Count up the total in each plate to find the answer.
/ / / / / / / / / / /



You can do these problems for any numbers in the 2, 3,5 or 10 timetables.

The children have also been taught to write out their multiples, instead of drawing lines and circles. For this problem, they would count in $2 s$ and stop at 12.
$2,4,6,8,10,12$
You would then ask 'How many times did we count in 2 's? $=6$

## Additional support:

Find $\frac{1}{2} \frac{1}{4} \frac{3}{4}$ of shapes and objects (fold a circle or a square, cut up a pizza, share a box of raisins or smarties- the children know that $\frac{1}{2}$ is 1 of 2 equal parts, they take 1 section of the 2 parts).

Tell the time to o'clock, quarter to, quarter past and half past and then to the nearest 5 minutes if they can. - Use a clock with hands to help. The long hand is the minute hand, the short hand points to the hour.

Recognise and use coins to make a total: 10p and $5 p=15 p$ 'Is there another way?' 'What is the most efficient/best way?'

Half turns, quarter turns, whole turns, three quarter turns (anti-clockwise and clockwise)- Can do this physically in your house or garden.

Recall pairs of numbers for any 2 digit number up to $20(14+6=20,12+4=16)$
Know doubles and halves of numbers up to 20
Counting to 100 from 0 and backwards
Counting in $2 s, 3 s, 5 s$ and $10 s$ from 0

