## Day 4 Maths - Starter

I) What is $36 \div 10$ ?
2) What is the value of the digit 2 in the
 number 17.243?

3) Work out $1 \frac{2}{5}+\frac{3}{4}$

4) Max has $£ 1,500$. He spends $£ 279$ on a new TV. How much does he have left? $\square$

## Day 4 Maths - Starter Answers

1) What is $36 \div 10$ ? $\quad 3.6$
2) What is the value of the digit 2 in the
 number 17.243? 2 tenths
3) Work out $1 \frac{2}{5}+\frac{3}{4} \quad 2 \frac{3}{20}$
4) Max has $£ 1,500$. He spends $£ 279$ on a new TV. How much does he have left? $£ 1,22 \mid$

## Warm yourself up with this problem solving teaser...

## A Square of Numbers

Age 7 to 11
Challenge Level $\star$
Can you put the numbers 1 to 8 into the circles so that the four calculations are correct?

$$
\begin{array}{r}
? \div ?=? \\
-\frac{?}{?} \quad=?(?) ? ?
\end{array}
$$

I put down seven of them on the table in a row.


The numbers on the first two cards add to 15 . The numbers on the second and third cards add to 20. The numbers on the third and fourth cards add to 23. The numbers on the fourth and fifth cards add to 16. The numbers on the fifth and sixth cards add to 18. The numbers on the sixth and seventh cards add to 21 .

What are my cards?
Can you find another way of doing it?

This task is all about 'thinking like a mathematician'
Try to avoid just randomly guessing, or writing down the first pair of numbers that comes to mind.

Each pair of numbers you chose will affect the next clue and so on...

Are there only 2 numbers that have a sum of 20? Or are there more? Does one of those numbers then allow you to make the next number?

## Fifteen cards

I have fifteen cards numbered 1-15.
I put down seven of them on the table in a row.


The numbers on the first two cards add to 15 .
The numbers on the second and third cards add to 20.
The numbers on the third and fourth cards add to 23.
The numbers on the fourth and fifth cards add to 16.
The numbers on the fifth and sixth cards add to 18.
The numbers on the sixth and seventh cards add to 21 .

## Try to find 2 solutions before checking the answers... extend your learning!

What are my cards?
Can you find another way of doing it?

Try to find a solution to the problem. You might want to print off (or just make) some number cards with 1-15 on to help you move them around.


Try to find a solution to the problem. Once you have, provide a series of reasoning statements to explain your maths: how did you know you answer must be the way it is, why couldn't it be anything else, was there only one pair of numbers you could use, why not use the other?

I have fifteen cards numbered 1-15.
I put down seven of them on the table in a row.


The numbers on the first two cards add to 15. The numbers on the second and third cards add to 20. The numbers on the third and fourth cards add to 23. The numbers on the fourth and fifth cards add to 16. The numbers on the fifth and sixth cards add to 18. The numbers on the sixth and seventh cards add to 21 .

What are my cards?
Can you find another way of doing it?

## 2 possible solutions:

## $8,7,13,10,6,12,9$

## And

$6,9,11,12,4,14,7$

Some fun to end.....
Hint: the answer is more than $20 \odot$

## How many squares do you see?



## There are 40 squares in total

The answer is far too long to put on a slide, so if you want to find out where each of the squares are - then follow the link below where it will colour each of them for you: 'How many squares are in this picture' WhatsApp puzzle with answer and solution inside
(republicworld.com)

