## Day 1

## Maths- 5 a day

1. $453+39=$
2. What is the difference between 19 and 63?

3. $453-63=$
4. How many minutes are there in 2 hours?
5. Complete the number sequence
$1,6,11,16$, $\qquad$

## Day 1 ANSWERS

## Maths- 5 a day

1. $453+39=492$
2. What is the difference between 19 and 63 ? 44

3. $453-63=390$
4. How many minutes are there in 2 hours? 120 minutes
5. Complete the number sequence

$$
1,6,11,16,21,26
$$

## Day 2

## Maths- 5 a day

1. $245+254=$
2. $7+7+3=$
3. Complete the part part whole.

4. Put these numbers in descending order. $45,5,4,54,145,254$
5. What month comes after March?

## Day 2 ANSWERS

## Maths- 5 a day

1. $245+254=499$
2. $7+7+3=17$
3. Complete the part part whole.

0


9
4. Put these numbers in descending order. 254, 145, 54, 45, 5, 4
5. What month comes after March? April

## Day 3

## Maths- 5 a day

1. $746+155=$
2. What is 10 more than 592 ?

3. What number is represented by the dienes?

4. $24 \div 4=$
5. How many days are there In January and February in total?

## Day 3 ANSWERS

## Maths- 5 a day

1. $746+155=901$
2. What is 10 more than 592? 602

3. What number is represented by the dienes? 310

4. $24 \div 4=6$
5. How many days are there In January and February in total? 59

## Day 4

## Maths- 5 a day

1. $734+171=$
2. $822-134=$
3. Use $=<>$ to make the sentence true. The number of days in June $\qquad$ the number of days in July.
4. True or false? This shape is a quadrilateral.
5. Complete the number sequence..

15, 18, 21, __ _

## Day 4 ANSWERS

## Maths- 5 a day

1. $734+171=905$
2. $822-134=688$

3. Use =<> to make the sentence true. The number of days in June < the number of days in July.
4. True or false? This shape is a quadrilateral. True
5. Complete the number sequence..
$15,18,21,24,27$

## Day 5

1. $533+267=$

Maths- 5 a day
2. $216-54=$
3. Complete the part-part whole.

4. Complete the number sequence.

$$
24,28,32, \ldots,
$$

5. What is the difference between 125 and 111 ?

## Day 5 ANSWERS

1. $533+267=800$

Maths- 5 a day
2. $216-54=162$
3. Complete the part-part whole.

4. Complete the number sequence.

$$
24,28,32,36,40
$$

5. What is the difference between 125 and 111 ? 14

Summer 2 Week 1 Task 1

To work systematically to solve problems

This week we are going to be learning to work systematically to help solve problems. This means we will need to...

- organise our work clearly
- choose a sensible place to start
- change one thing at a time

For task one we are all going to work together. In task 2 you are going to solve a very similar problem so you can use what you have done in task 1 to help you. Task 3 has 3 problems which all will need you to use systematic working to help solve.

Note - Problem 3 in task 3 is an optional challenge.

## To work systematically to solve problems



## Half time scores

At fulltime in a Southampton FC vs Manchester City football match the score was 4-2 to Southampton.

What could the score have been at half time?

Find all the possibilities.

## To work systematically to solve problems



At fulltime in a Southampton FC vs Manchester City football match the score was 4-2 to Southampton.

What could the score have been at half time?

Find all the possibilities.

## Step 1: Re-read the problem

## Step 2: Plan how you are going to organise your work.

I am going to choose to us $S$ for Southampton and M for Manchester in my work to help show the different team's scores. I am also going to write my working out in neat columns.

## To work systematically to solve problems



At fulltime in a Southampton FC vs Manchester City football match the score was 4-2 to Southampton.

What could the score have been at half time?

[^0]
## Step 3: Choose where to start to solve the problem in a systematic way.

I am going to start at the lowest possible score which is $0-0$.

## S O-M O

## To work systematically to solve problems



At fulltime in a Southampton FC vs Manchester City football match the score was 4-2 to Southampton.

What could the score have been at half time?

[^1]
## Step 4: Continue solving the problem working in a systematic way.

I am going to choose to only change $S$ score and leave $M$ as 0 until I cannot find any more possibilities. How many can you find using this system?

$$
\begin{aligned}
& S O-M O \\
& S 1-M O
\end{aligned}
$$

## To work systematically to solve problems



At fulltime in a Southampton FC vs Manchester City football match the score was 4-2 to Southampton.

What could the score have been at half time?

Find all the possibilities.

## Step 4: Continue solving the problem working in a systematic way.

You should have found 5 possible scores keeping M the same. Here they are...

$$
\begin{aligned}
& S O-M O \\
& S 1-M O \\
& S 2-M O \\
& S 3-M O \\
& S 4-M O
\end{aligned}
$$

## To work systematically to solve problems



At fulltime in a Southampton FC vs Manchester City football match the score was 4-2 to Southampton.

What could the score have been at half time?

[^2]
## Step 5: Continue solving the problem working in a systematic way.

Now find all the possibilities if $M$ was 1 .

$$
\text { S O-M } 1
$$

## To work systematically to solve problems



At fulltime in a Southampton FC vs Manchester City football match the score was 4-2 to Southampton.

What could the score have been at half time?

Find all the possibilities.

## Step 5: Continue solving the problem working in a systematic way.

 There are 5 possibilities if M was 1 .$$
\begin{aligned}
& S 0-M 1 \\
& S 1-M 1 \\
& S 2-M 1 \\
& S 3-M 1 \\
& S 4-M 1
\end{aligned}
$$

## To work systematically to solve problems



At fulltime in a Southampton FC vs Manchester City football match the score was 4-2 to Southampton.

What could the score have been at half time?

[^3]
## Step 6: Continue solving the problem working in a systematic way.

 Now find all the possibilities if M was 2 .$$
\text { S O-M } 2
$$

## To work systematically to solve problems



At fulltime in a Southampton FC vs Manchester City football match the score was 4-2 to Southampton.

What could the score have been at half time?

Find all the possibilities.

## Step 6: Continue solving the problem working in a systematic way.

 Now find all the possibilities if $M$ was 2 .$$
\begin{aligned}
& S 0-M 2 \\
& S 1-M 2 \\
& S 2-M 2 \\
& S 3-M 2 \\
& S 4-M 2
\end{aligned}
$$

## To work systematically to solve problems



At fulltime in a Southampton FC vs Manchester City football match the score was 4-2 to Southampton.

What could the score have been at half time?

Find all the possibilities.

We can't have more then 4 goals for Southampton or 2 Goals for Manchester City so we can't change either teams scores any more.
S O-M O
S O-M 1
SO-M 2
S 1 - M 0
S 1 - M 1
S 1 - M 2
S 2 - M 0
S 2 - M 1
S 2 - M 2
S 3 - M 0
S 3 - M 1
S 3 - M 2
S 4 - M 0
S 4 - M 1
S 4 - M 2

We have found that there are 15 possible half time scores for this football match.

## Summer 2 Week 1 Task 2

To work systematically to solve problems

## To work systematically to solve problems

## Half time scores



At fulltime in a Manchester City vs Southampton FC football match the score was a 3-3 draw.

What could the score have been at half time?

Find all the possibilities.

## To work systematically to solve problems



Half time scores

At fulltime in a Manchester
City vs Southampton FC football match the score was a 3-3 draw.

What could the score have been at half time?

Find all the possibilities.

Solve this problem using the same systematic approach as we did in task 1.

## TOP TIPS

- Start with the lowest possible score
- Change one thing at a time
- Organise your work neatly


## To work systematically to solve problems



## ANSWER

There are 16 possible half time scores for a match ending in a 3-3 draw.

Half time scores

At fulltime in a Manchester City vs Southampton FC football match the score was a 3-3 draw.

What could the score have been at half time?

SO-MO
SO-M 1
SO-M 2
SO-M 3
S 1-M 0
S1-M 1
S 1 - M 2
S 1-M 3
S 2 - M 0
S 2-M 1
S 2 - M 2
S 2-M 3
S $3-\mathrm{M} 0$
S 3-M 1
S 3-M 2
S 3-M 3

## Summer 2 Week 1 Task 3

 To work systematically to solve problems
## To work systematically to solve problems

## Problem 1

Using the digits $2,4,6$ only once how many different three digit numbers can you make?


## TOP TIPS

- Start with the lowest possible number
- Change one thing at a time
- Organise your work neatly


## To work systematically to solve problems

## Problem 1 ANSWER

You can make 6 different three digit numbers using the digits
2, 4 and 6.
246
264
426
462
624
642


## TOP TIPS

- Start with the lowest possible number
- Change one thing at a time
- Organise your work neatly


## To work systematically to solve problems

## Problem 2

A school is choosing a new school uniform. Below is the possible choices of clothes. How many different possible combinations are there?


Red jumper



Green jumper


Grey trousers


Navy trousers

Not for this
one.

TOP TIPS

- Start with the lowest possible number
- Change one thing at a time
- Organise your work neatly


## To work systematically to solve problems

## Problem 2 ANSWER

There are 9 possible combinations for the school's new uniform.


Not for this
one.

TOP TIPS


- Start with the lowest possible number
- Change one thing at a time
- Organise your work neatly


## To work systematically to solve problems

## Problem 3 EXTRA CHALLENGE

You have four shapes...


How many different ways can you organise them in a row?
Not for this
one.
TOP TIPS

- Start with the lowest possible number
- Change one thing at a time
- Organise your work neatly


## To work systematically to solve problems

## Problem 3 EXTRA CHALLENGE ANSWER



There are 24 possible combinations of the four shapes. Well done if you found them all!


[^0]:    Find all the possibilities.

[^1]:    Find all the possibilities.

[^2]:    Find all the possibilities.

[^3]:    Find all the possibilities.

