

29.1.21

## Investigation

Learning Objective:

We are learning to solve an investigation systematically.

I will be successful if:

- I can be systematic in my working out.
- I can use sentence stems to help explain my thoughts.

## Sentence stems

I already know that... so...

I started by...

I checked by...

I decided to... because...

I noticed that...

I wondered why...

The pattern I noticed was...

I used the inverse of...

I used the fact that...

I was systematic because I...

# Flashback 4

Year 5 | Week 4 | Day 5



- 1) Which is greater,  $\frac{1}{2}$  or  $\frac{7}{12}$ ?
- 2) Change  $5\frac{1}{2}$  to an improper fraction.
- 3) Dexter gets £18 pocket money a week.  
How much pocket money does he get in a year?
- 4) Work out the missing number.  
 $23 = \square - 47$



Challenge - round these numbers to the nearest 1000

5) 165,271

6) 83,386

7) 3501

8) 41,850

# Flashback 4

Year 5 | Week 4 | Day 5

1) Which is greater,  $\frac{1}{2}$  or  $\frac{7}{12}$ ?

$\frac{7}{12}$



2) Change  $5\frac{1}{2}$  to an improper fraction.

$\frac{11}{2}$

3) Dexter gets £18 pocket money a week.  
How much pocket money does he get in a year?

936

4) Work out the missing number.

$$23 = \square - 47$$

70



Challenge - round these numbers to the nearest 1000

5) 165,000

6) 83,000

7) 4000

8) 42,000

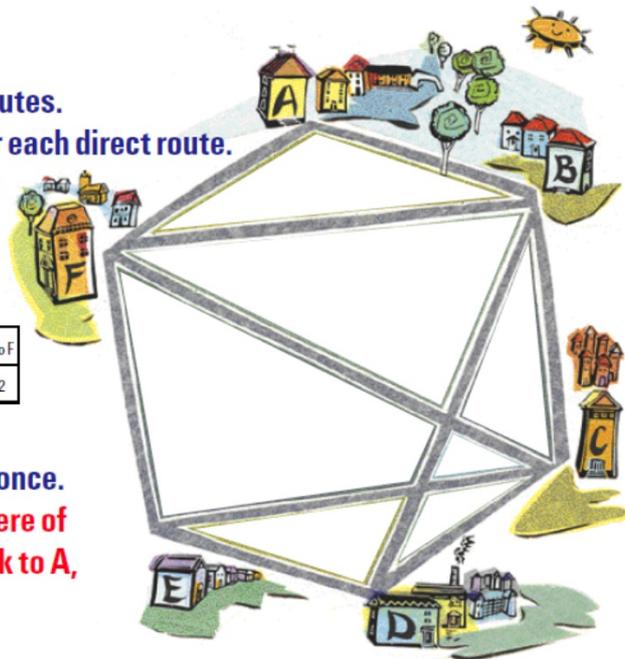
## Maths investigation

### Bus routes

6 towns are connected by bus routes.  
This table shows the bus fare for each direct route.  
The fare for A to B is the same at  
B to A, and so on.

A to B	B to C	C to D	D to E	E to F	F to A	B to D	B to F	C to E	C to F
£4	£3	£4	£4	£3	£4	£5	£3	£2	£2

The bus goes from A back to A.  
It visits each of the other towns once.  
**How many different ways are there of  
completing a journey from A back to A,  
visiting each town once?  
Which is the cheapest?**



Try and be systematic and don't forget to show your working out.

### Discussion

Which route did you find would be the most expensive?

Did you find any routes that cost exactly the same amount of money?

What could you investigate now using this problem?