L.O. To apply a written method to addition and subtraction questions.

Monday

(A)

1. 2747 + 579 =
2. 4885 + 2626 =
3. 3125 - 1650 =
4. 6372 - 5713 =

(B)

1. 16794
   +14618

2. 53479 + 35635 =

3. 38 928
   + 33 457

4. 56 434 - 27693 =
5. 65 341 - 29588 =
6. 31 620
   -24 926

(C)

1. 374 948 + 126 954 =
2. 535 767 + 293 872 =
3. 759 486 + 472 594 =
4. 715 423 - 597 464 =
5. 860 317 - 283 718 =
6. 937054 - 739486 =

Challenge

1. 162□□
   + 8877 9

   1□□□9 5

2. 7□95□
   - □1□39

   436□1

Can you work out the missing numbers?

Monday

Test 2

1. Nathan runs 724 metres and stops for a rest.
He then runs a further 619 metres.

How many metres does Nathan run in total?

m

1 mark

2. Sahil has £700
He buys a laptop,
a monitor and a printer.

£373.99

£149.79

£85

How much money does Sahil have left?

Show your method

£

2 marks

3. Write the missing numbers.

42 is ☐ times greater than 7

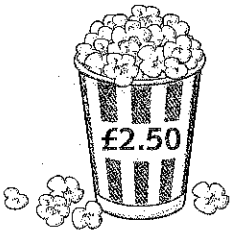
72 is ☐ times greater than 9

12 is ☐ times smaller than 48

2 marks

4. Chan has £6.52
His mum gives him £5
He pays £1.75 for his bus fare and £7.20 for a cinema ticket.

Show that Chan has enough money left to buy popcorn.



Show your method

2 marks

L.O. To use a written method to solve multiplication problems.

Tuesday

(A)

1. $39 \times 6 =$
2. $183 \times 17 =$
3. $135 \times 23 =$
4. $549 \times 18 =$

(B)

1. $1536 \times 34 =$
2. $4872 \times 29 =$
3. $239.4 \times 52 =$
4. $1853 \times 63 =$
5. $394.5 \times 48 =$
6. $16.93 \times 54 =$

(C)

1. $35\,215 \times 28 =$
2. $14\,793 \times 45 =$
3. $294.08 \times 36 =$
4. $53.826 \times 19 =$
5. $1293.7 \times 37 =$
6. $3.89 \times 356 =$

Challenge

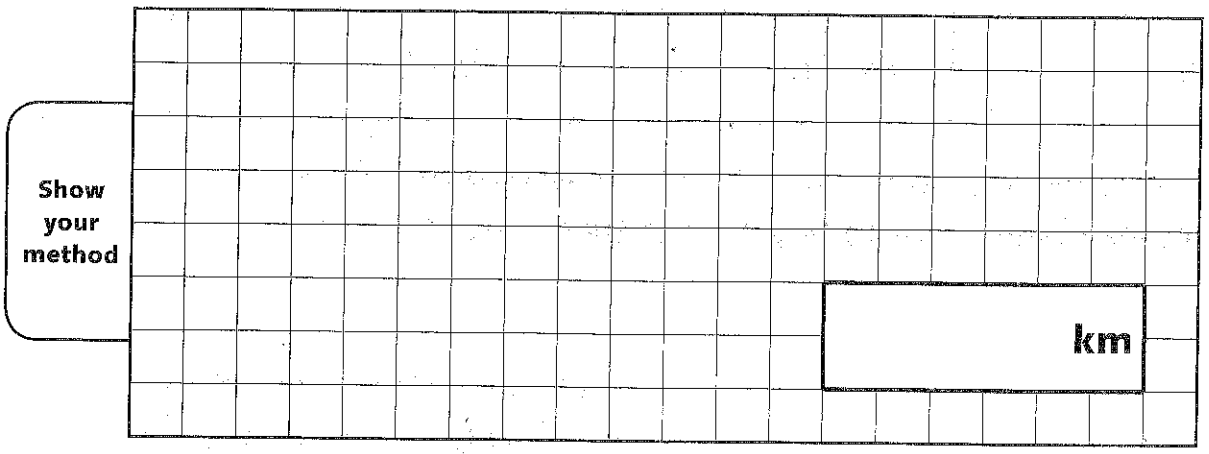
Each can of paint holds 2·35 litres. How much paint is needed to fill 346 cans?

Each pipe is 6·95m long. What is the total length of 258 pipes?

Tuesday

7. An airline pilot flies from London to Istanbul and back again.
The pilot does this 14 times a month.
The distance from London to Istanbul is 2,516 km.

How far does the pilot fly each month?



2 marks

8. Kara says, *'34 is a factor of 2,108'*

Explain why she is correct.

1 mark

Tues

L.O. To apply a written method to division questions.

Wednesday

(A)

1. 115 ÷ 8 =
2. 369 ÷ 5 =
3. 261 ÷ 9 =
4. 104 ÷ 6 =

(B)

1. 4585 ÷ 3 =
2. 2843 ÷ 6 =
3. 3356 ÷ 4 =
4. 254.8 ÷ 4 =
5. 11.72 ÷ 2 =
6. 49.8 ÷ 6 =

(C)

1. 17477 ÷ 7 =
2. 40 789 ÷ 5 =
3. 44 416 ÷ 9 =
4. 28624 ÷ 8 =
5. 187.7 ÷ 2 =
6. 9381.9 ÷ 11 =

Challenge

There are eight ink cartridges in each pack. How many packs can be filled from 7538 cartridges?

Six classroom tables cost £173.70 altogether. How much does one table cost?

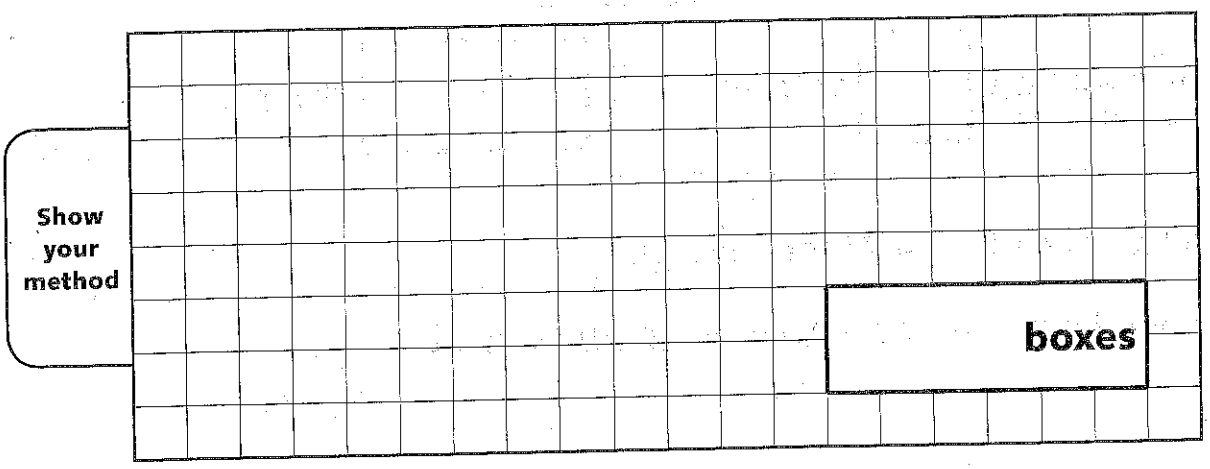
Wednesday

7. Write down **all** the common factors of 8 and 20

2 marks

8. There are 16 lollies in a box.
A shop sells 1,036 lollies in one week.

How many **whole boxes** of lollies is this?



2 marks

Weds

Thursday

Reasoning and Problem Solving
Four Operations Consolidation – Year 6

It's the Women's Football Cup Final at the end of this month and your fan club are planning a trip to support the local team.

There's a lot of organisation needed to ensure the trip is a success, and that the club get the best deal for their money.

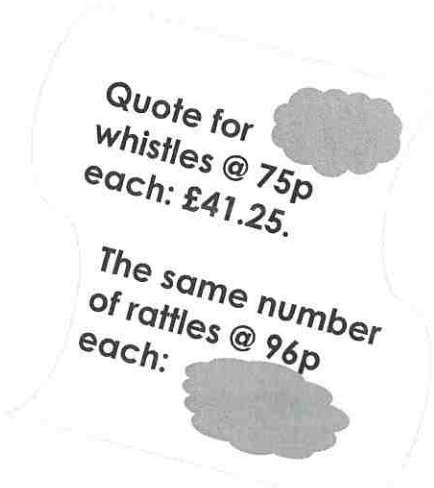
You have been assigned the role of budget management; all spending is signed off by you. Get going, everyone's relying on you and there's heaps to do before the big match!

First thing to organise is the strip. The club has created a memorial strip to celebrate reaching the cup final and the orders are flying in; you can't keep up with demand.

1a. Last week you ordered 73 shirts and were quoted £1,022, but now the order has increased by 21 more shirts! What will the new total price be?

1b. You want to make at least £18 profit on each shirt. How much is the minimum you need to sell the shirts for?

2. You've had a quote passed to you by the club secretary. She has ordered some whistles and rattles for the fans to make a racket at the game. Unfortunately, it got wet when she spilt some coffee on it. You need to sort out the missing figures.



2a. How many whistles were ordered?

2b. How much does the order of rattles come to?

2c. What is the total quote?

Thursday

Reasoning and Problem Solving
Four Operations Consolidation – Year 6

3a. The tickets for the game cost £35.50 for an adult and half that for a child.

You have 67 adults and 27 children in your fan club who would like to buy a ticket. What is the total cost for the group?

3b. A new deal has come online!
For every 10 adult tickets, you will get 3 children's tickets free!
How much will you save?

4. You have been given some merchandise; 35 rubbers and 42 stickers.
How many bags will you need to share them both equally into each bag?

5. The transport company have been in touch. You will need to arrange train and bus travel to get all 94 fans to the stadium.

Train carriages seat 33 people and cost £54 per carriage, or £2.50 per person.

5a. How much will your train journey cost?

5b. The coaches seat 25 people and cost £57 each.
How much will the coach cost?

5c. What are the total travel costs?

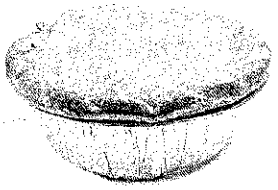
Thursday

Reasoning and Problem Solving
Four Operations Consolidation – Year 6

There's a hot meal and drink deal on at the stadium.

Usually pies cost £2.50 and drinks are £1.75.

Pie and a soft drink for £3.75



6. If half your group buy the deal, how much money will they save altogether?

You receive a quote from a hotel offering to put everyone up overnight after the game.

7a. Check the quote below, is it accurate? If not why not?

SleepWell Hotel
RE: Quote

94 rooms @ £23 each
£2,068

Breakfast per person @ £9
£856

Total Quote: £2,904

7b. What is the correct calculation?

Rooms | Breakfast | Total

8. YOUR TEAM WON! Congratulations! The FA have sent a gift to cover the cost of the trip; tickets, travel, food and drinks. Your award is £3,500!

8a. Does this cover your costs?

8b. How much profit or loss does it leave you?

8c. If you have a profit, how could you spend this money to benefit all the fans?

Two and Two

How many solutions can you find to this alphanumeric?

Each of the different letters stands for a different number.

```
  TWO
+ TWO
------
 FOUR
------
```

Now try creating and solving some of your own alphanumerics. You might like to start with:
ONE + ONE = TWO

Rollback Everyday Value Essentials Smart Price BOGOF Better than half price

Pocket the difference Taste the difference Spend a little, live a lot Every little helps Where quality is cheaper Loyalty card

Quality you'd expect at prices you wouldn't Living well for less Super 6 Price cuts More reasons to shop at .. Basics

Good food costs less at .. Saving you money every day Why pay more? Good with food

Murder Mystery 6– Death **in** the supermarket.

The last customers left 3 hours ago. In the manager's room one week's takings were waiting for the security van to come the next day to deliver the thousands of pounds to the bank.

However, when the cleaners arrived early the next morning, they found the money gone and the night guard dead. However it appeared that the night guard witnessed the theft of the money. Keen eyed staff spotted coded notes scribbled on cardboard boxes round the supermarket and the clocks in the homeware department had been altered.

The Inspector and his assistant Smithkins concluded that the night guard had hidden for about an hour after the theft before he was found and silenced. During this time he left clues.

The staff knew about the money and it appeared to be an inside job. There are 32 suspects. Each of the 5 clues eliminates half of the suspects. Can you help the Inspector and his assistant to find the murderer?

Check out the clues!

Number	Forename	Surname	Sex	Place of work	Hair Colour	Transport	Full/part time	Guilty?
1	Fred	Pickles	M	Till 1	Black	Car	Full	
2	Mary	Bingles	F	Till 9	Black	Car	Full	
3	Sophie	Brandon	F	Till 10	Fair	Car	Part	
4	Anne	Smithers	F	Till 11	Black	bicycle	full	
5	Jim	Jenkins	M	Till 2	Fair	Car	part	
6	Lizzie	Luger	F	Till 12	Auburn	bicycle	part	
7	Egbert	Williams	M	Till 3	Black	Walk	full	
8	Sam	Barker	M	Till 4	Red	Bus	Part	
9	Beth	Turner	F	Till 13	Black	Car	Part	
10	Abdirahman	Aziz	M	Till 5	Black	Car	Full	
11	Grace	Pinder	F	Till 14	Blonde	Car	Part	
12	Simon	Roberts	M	Till 6	Bald	Car	Part	
13	Saskia	Talker	F	Till 15	Black	bus	Full	
14	Orla	Baker	F	Till 16	Brown	bicycle	Part	
15	Harry	Pitcher	M	Till 7	Black	bicycle	Full	
16	Tom	Mather	M	Till 8	Fair	Walk	Part	
17	James	Penberton	M	Cheese	Black	Car	Full	
18	Ruth	Sutton	F	Supervisor	Black	Car	Full	
19	Becky	Dingles	F	Fruit & Veg	Blonde	Car	Part	
20	Mariam	Khan	F	Pharmacy	Black	Walk	Full	
21	India	Hart	F	Drinks	Brown	Walk	Part	
22	Ian	Denton	M	Fish	Fair	Car	Part	
23	John	Begglar	M	Bakery	Black	Walk	Full	
24	Gavin	Tasker	M	Cakes	Brown	bus	Part	
25	Jake	Brimbles	M	Manager	Black	Car	Full	
26	Courtney	Pike	F	Café	Black	Car	Full	
27	Faisal	Iqbal	M	Supervisor	Brown	Car	Part	
28	Marion	Cout	F	Dry cleaning	Blonde	Car	Part	
29	Tim	Smart	M	Trolleys	Black	Walk	Full	
30	Safia	Obed	F	Petrol	Black	Bus	Full	
31	Ella	Winkerton	F	Meat	Blonde	bus	Part	
32	Dennis	Spring	M	Music	Green	Bus	Part	

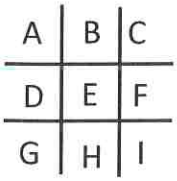
Clue 1 – Place Value

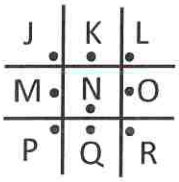
A series of numbers were found with a grid.
"It looks like each number has a 3 & a 5 in it," observed the Inspector.
"Yes, but they are not always in the same place," commented Smithkins, his assistant.

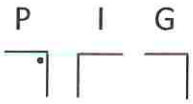
Number	Letter	Number	Letter
65223.4		5431	
965674.34		548793.48	
4518.73		953.26	
51764.83		500.73	
5431.6		43.57	
4851.34		549376.21	
954.3		7951.34	
9574.136		1524.93	
56274.34		1524.39	

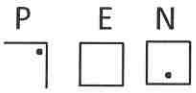
5↓ 3→	hundred	ten	unit	tenth	hundredth
Hundred thousand	A	J	S	C	N
Ten thousand	O	B	D	R	K
Thousand	P	I	T	H	Y
Hundred	-	V	U	.	E
Ten	Q	-	F	L	Z
Unit		,	-	W	G
tenth			M	-	X

Clue 2—Turning the case around









Rotation

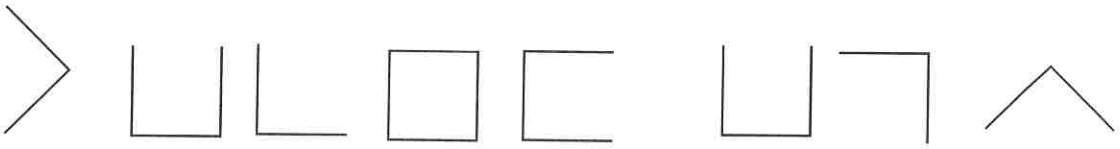
Shape	Direction	How much	New shape	Letter
	clockwise	180°		
	Anti-clockwise	90°		
	clockwise	90°		
	clockwise	90°		
	Anti-clockwise	90°		
	Anti-clockwise	360°		
	clockwise	180°		
	anticlockwise	180°		
	clockwise	135°		
	Anti-clockwise	90°		
	Anti-clockwise	90°		
	clockwise	180°		
	clockwise	135°		
	clockwise	270°		
	clockwise	180°		
	clockwise	90°		
	clockwise	45°		
	Anti-clockwise	90°		
	clockwise	180°		
	Anti-clockwise	270°		

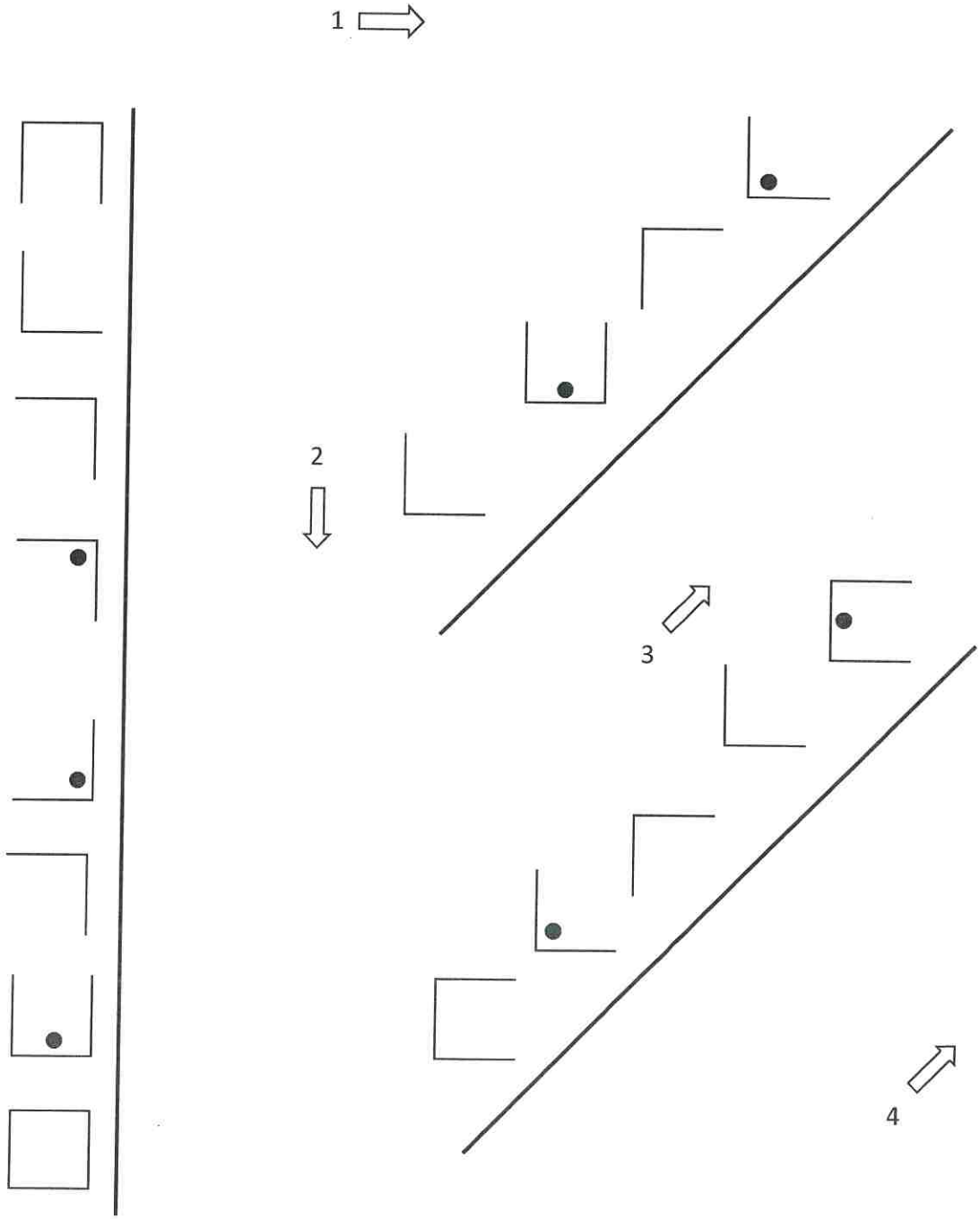
Clue 3—Something to reflect on!

"There's 4 mirror lines here," commented Smithkins.

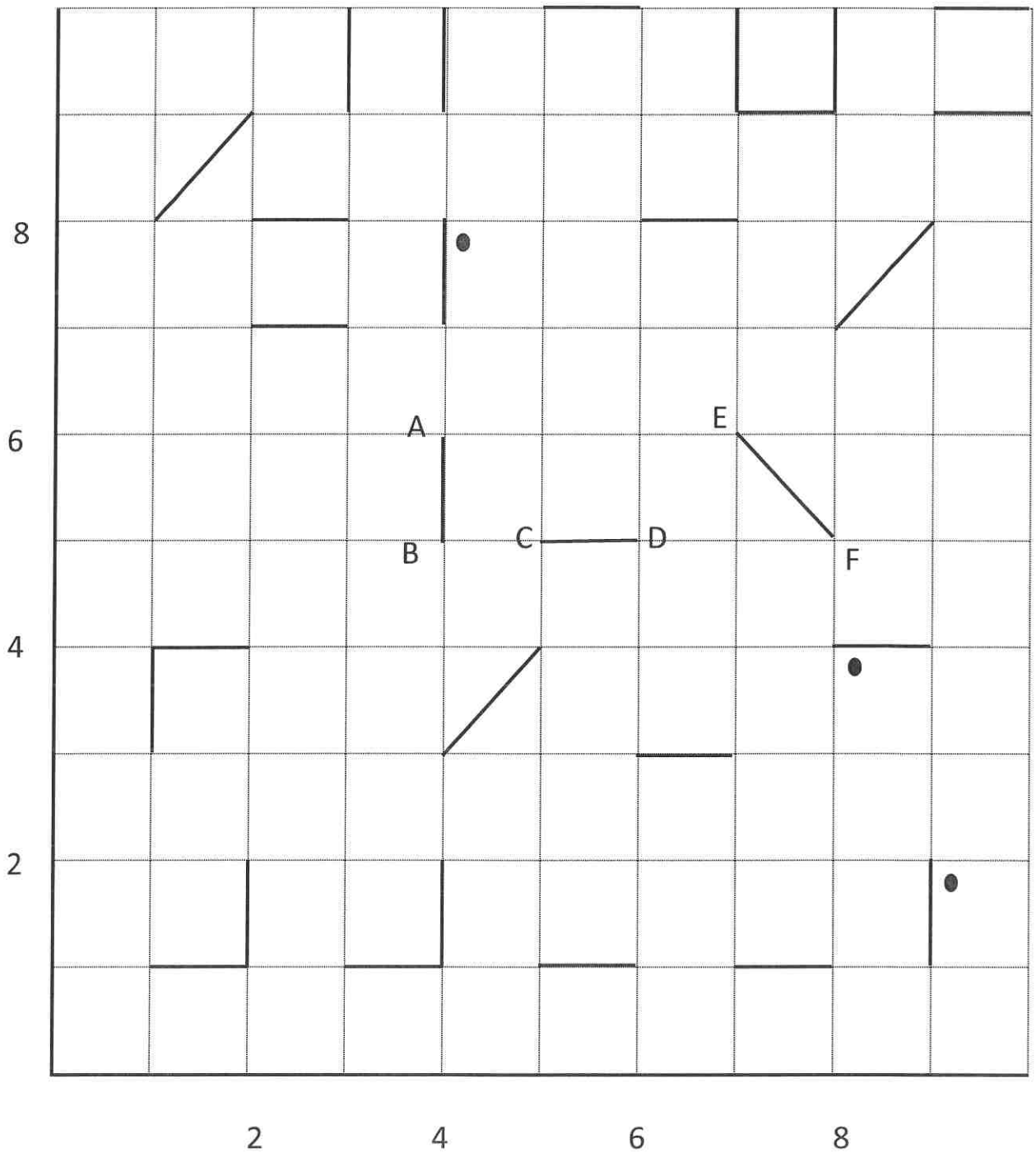
"Yes, but once we've got the new pigpen letters, it is important to keep the paper portrait to read them."

"It looks like the numbered arrows show the order of the words to make the sentence."





Clue 4 – Lost in translation.



"This looks like pig pen again but it doesn't make sense," said Smithkins.
"It looks like we have to do some translation first," observed the Inspector, reading the instructions.
"I did a little French at school – will that help?" enquired Smithkins.

"Not that sort of translation – this means moving something without rotating or resizing – sliding it really," commented the Inspector.

Translate

Line	x axis	y axis
AB	+1	+4
AB	+5	+4
AB	-1	+2
AB	+2	+2
AB	-2	-2
AB	+2	-2
AB	+4	-2
AB	-3	-4
AB	+1	-4
AB	+4	-4
CD	-2	+5
CD	+2	+5
CD	-1	+3
CD	-4	-2
CD	-4	-3
CD	-2	-3
CD	+4	-3
EF	-6	+4
EF	+2	+2
EF	-4	-2

Clue 5—Time is of the essence

Smithkins was wondering if it was lunch yet. He had forgotten his watch and felt embarrassed to ask the time. He wandered over to the Homeware department and looked at the clocks. To his surprise, none of them showed the right time. The batteries had been removed from every clock. They were lined up in a row. This is a diagram showing the clocks.

The Inspector was intrigued to hear of this and quickly concluded that it was a clue. After a long think, he decided that it was the minute hand which gave the clue. It was the old a = 1, b = 2 etc.

"But what about the fourth clock—9:55? There is no 55th letter in the alphabet," observed Smithkins.

"But how many minutes is it to the next hour?" asked the Inspector.