#### Clue 1 – Place Value

A series of numbers were found with a grid.

<sup>&</sup>quot;Yes, but they are not always in the same place," commented Smithkins, his assistant.

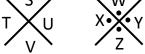
Number	Letter	Number	Letter
65223.4		5431	
965674.34		548793.48	
4518.73		953.26	
51764.83		500.73	
5431.6		43.57	
4851.34		549376.21	
954.3		7951.34	
9574.136		1524.93	
56274.34		1524.39	

5↓ 3→	hundred	ten	unit	tenth	hundredth
Hundred	Α	J	S	С	N
thousand					
Ten	0	В	D	R	K
thousand					
Thousand	Р	1	T	Н	Υ
Hundred	-	V	U	•	E
Ten	Q	ı	F	L	Z
Unit		,	-	W	G
tenth			М	-	X

<sup>&</sup>quot;It looks like each number has a 3 & a  $5^{-}$  in it," observed the Inspector.

# Clue 2—Turning the case around

Α	В	С	J M•	K	L		Р	I	G
D	Ε	F	M•	Ņ	•0		•		
G	Н	I	P	å	R			E	
\ .	S /		\W,	,			•		•



### 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°		

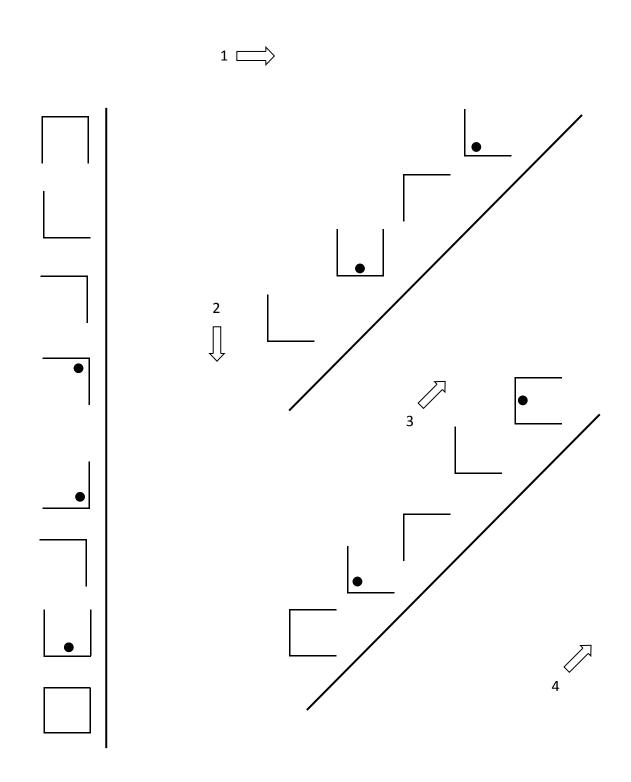
## Clue 3—Something to reflect on!

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

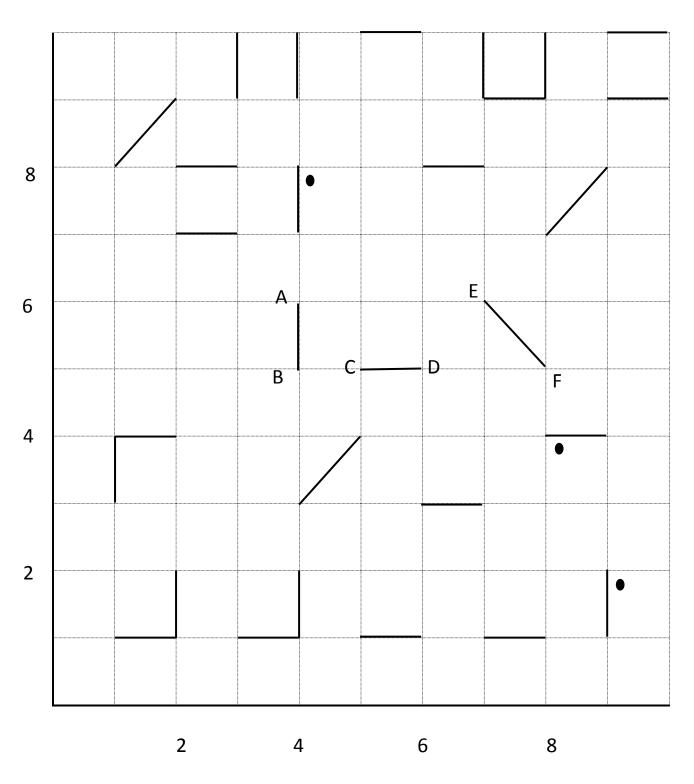
"Yes, but once we've got the new pigpen letters, it is important to keep the paper portrait to read them."

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





Clue 4 – Lost in translation.



<sup>&</sup>quot;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.

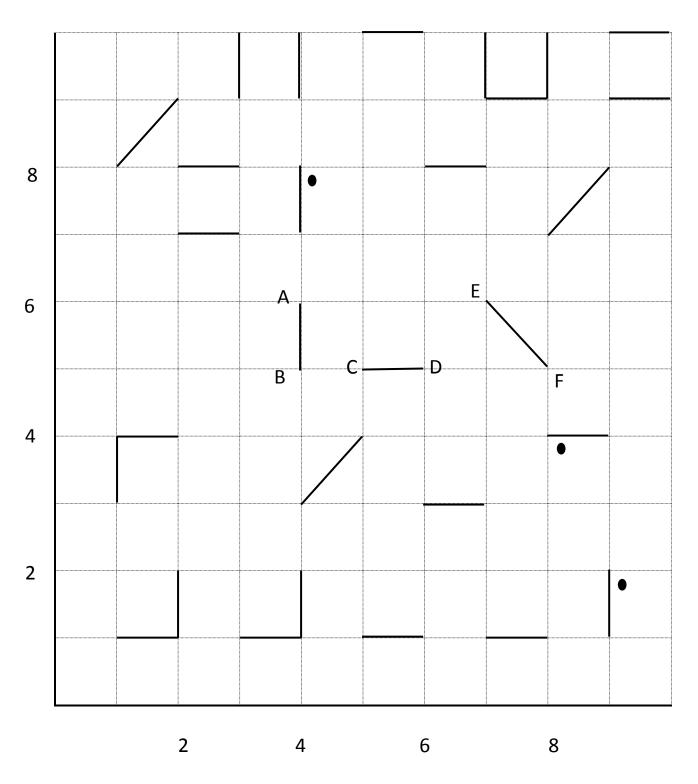
<sup>&</sup>quot;I did a little French at school – will that help?" enquired Smithkins.

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

### Translate

Line	left	right	ир	down
AB		1	4	
AB		5	4	
AB	1		2	
AB		2	2	
AB	3			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			

Clue 4 – Lost in translation.



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<sup>&</sup>quot;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 55<sup>th</sup> letter in the alphabet," observed Smithkins.

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

