| Name of Dog	Male/Female	Height	Breed	Colour	Tail Length
Athena	F	25cm	corgi	black	5cm
Apollo	M	62cm	labrador	golden	18cm
Bouncer	M	61cm	collie	mixed	40cm
Betty	F	17cm	terrier	white	10cm
Calib	M	20.5cm	dachshund	black	12cm
Choccy	F	29.5cm	corgi	brown	4cm
Dingo	M	26.5cm	pug	white	16cm
Doggy Mc Dogface	F	57cm	labrador	brown	30cm
Edith	F	51cm	collie	mixed	38cm
Eros	M	25cm	pug	mixed	14cm
Fred	M	16.5cm	terrier	white	12cm
Fluffy	F	22cm	terrier	black	14cm
Goliath	M	18.5cm	dachshund	brown	11cm
Gigi	F	26.5cm	pug	brown	17cm
Homer	M	55cm	collie	white	35cm
Hunteress	F	56.5cm	labrador	golden	32cm
Iceman	M	26.5cm	corgi	brown	4cm
Inky	F	21.5cm	dachshund	black	15cm
Juno	M	28cm	corgi	brown	5cm
Jellybean	F	21cm	dachshund	black	15cm
Keith	M	58.5cm	labrador	brown	26cm
Katdog	F	27.5cm	pug	mixed	17cm
Lothar	M	54.5cm	collie	brown	39cm
Luna	F	17.5cm	terrier	white	9cm
Munchy	F	58cm	labrador	black	29cm
Mars	M	27cm	corgi	brown	4cm
Nelly	F	20cm	pug	black	17cm
Nero	M	58.5cm	collie	white	40cm
Othello	M	25cm	pug	mixed	20cm
Oprah	F	55.5cm	labrador	black	31cm
Pixie	F	22cm	dachshund	mixed	15cm
Pat (the Dog)	M	18cm	terrier	brown	11cm
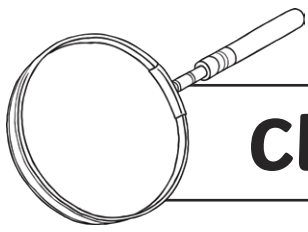
Clue 1

You have followed the tracks left by the dog and noticed where it stopped to answer a call of nature. This gave you a clue to the dog's identity. Solve these calculation strings (from left to right) to find the answer to the clue. The answer to each calculation string gives a number that corresponds to a letter in the alphabet (a = 1, b = 2, c = 3 etc.) which, put together, spells out the answer. The first one has been solved for you.

#					
1.	15	× 2	÷ 10	= **3**	C
2.	77	÷ 11	× 3	=	
3.	30	× 40	÷ 100	=	
4.	2^3	÷ 2	× 4	=	
5.	3^2	× 4	÷ 2	=	
6.	3^2	+ 3^2	- 3^2	=	
7.	1	- 0.8	× 100	=	
8.	6.5	- 3.2	+ 5.7	=	
9.	100	- 41	- 40	=	
10.	30	× 2	÷ 10	=	
11.	12.5	× 4	÷ 10	=	
12.	-7	+ 13.5	× 2	=	
13.	0.7	+ 0.6	- 0.3	=	
14.	0.7	+ 0.5	× 10	=	
15.	9	- 10	+ 6	=	
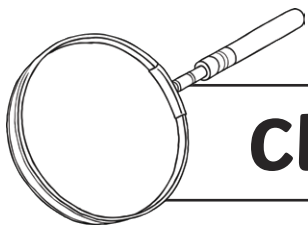
Clue 2

When you followed the tracks left by the dog, you found it had sneaked under a fence, meaning that only dogs under a certain height could get under the fence.

Solve the column subtractions below and the most popular answer will give you the height in **millimetres** that the dog must be under.

a)
```
  1 8 7 2
- 1 3 5 1
_____
```

b)
```
  1 9 8 4
- 1 7 0 6
_____
```

c)
```
  3 0 4 1
- 2 7 0 8
_____
```

d)
```
  1 0 0 0
-   7 2 2
_____
```

e)
```
    9 0 0
-   3 7 9
_____
```

f)
```
    8 0 7
-   3 6 8
_____
```

g)
```
  1 5 0 6
- 1 2 1 1
_____
```

h)
```
  1 0 0 1
-   5 6 2
_____
```

i)
```
  2 0 3 9
- 1 7 6 1
_____
```

The culprit is under ⬚ **mm**

! Remember the height given here is in **mm**.
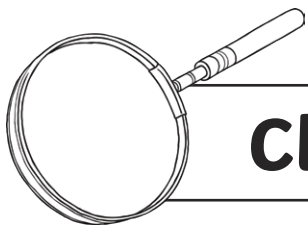
Starting with the first card shown below, make a chain of cards so that the question on the right matches up with the answer on the left of the next card.

Choose from the cards below and fill in the blank chain to reveal a hidden message.

32 (N) $\frac{1}{6}$ of 120	27 (B) $\frac{5}{8}$ of 56	48 (W) $\frac{7}{9}$ of 18	25 (M) $\frac{1}{10}$ of 35
0 (T) $\frac{1}{2}$ of 33	20 (C) $\frac{7}{12}$ of 84	15 (R) $\frac{5}{9}$ of 90	8 (D) $\frac{4}{9}$ of 27
35 (L) $\frac{3}{7}$ of 77	75 (I) $\frac{1}{4}$ of 200	49 (K) $\frac{1}{2}$ of 1	16.5 (H) $\frac{2}{3}$ of 99
50 (S) $\frac{9}{10}$ of 30	66 (E) $\frac{2}{5}$ of 20	33 (A) $\frac{5}{6}$ of 24	12 (O) $\frac{7}{10}$ of 15
10.5 (G) $\frac{3}{4}$ of 100			

Chain:

0 (T) $\frac{1}{2}$ of 33 — ( ) — ( )

( ) — ( ) — ( )

( ) — ( ) — ( )

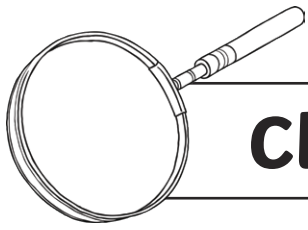( ) — ( ) — ( )

( )
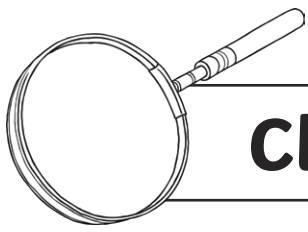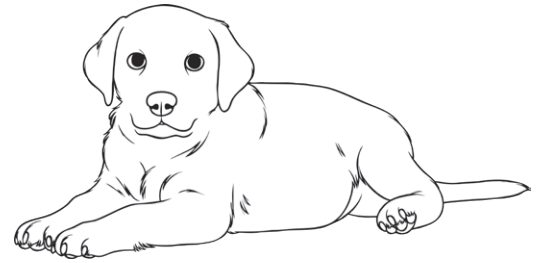
During your tracking of the sausage stealer, you have found a point where the dog sat down leaving a rough imprint of its tail so you can work out an approximate length. To find this clue, fill in the reflection of the shapes below to reveal a message. There's also the odd rotation just to mix things up a bit!

Rotate by 90°

Rotate by 180°

Rotate by 270°

Rotate by 90°

Clue 5

You have managed to find a good paw print in some mud on the field and it has given you the final piece of clue that you need.
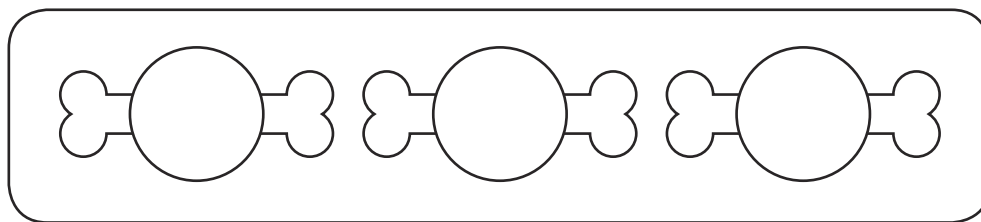
Solve these Roman numeral calculations, the answers will give you a letter of the alphabet using the code a = 1, b = 2, c = 3 etc. which will spell out the final clue.
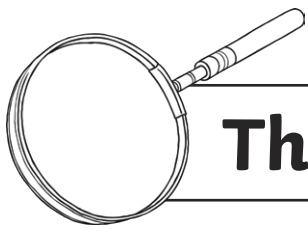
(a) M L V I - M X L =

(b) M C M X C V ÷ X C V =

(c) M M M - M M C M X C I I I =

The Mystery of the Burgled Bangers Culprit is

The Confession

When the dog's owner was finally given the very large bill for the stolen meat they had the following to say…
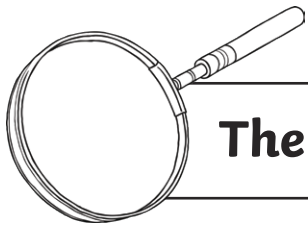
120	270	90	120	160	480	150	90	640

80	300	160	270	640	360	270	560	600	640	300

540	150	300	210	150	300	350	640	540	360	560	350	630

Work it out using the multiplication grid below.

x	2	5	7	3	10	8	6	4	1	9
60	I	A	L	V	B	K	D	C	J	'
90	V	M	!	T	$	Y	'	D	H	B
30	J	S	U	H	A	C	V	I	:	T
10	Q	&	.	:	P	W	J	X	Z	H
70	F	G	@	U	/	O	L	)	.	!
20	X	P	F	J	R	N	I	W	Q	V
80	N	?	O	C	#	E	K	£	W	Y
50	P	(	G	S	*	?	A	R	&	M
100	R	*	/	A	%	#	B	?	P	$
40	W	R	)	I	?	£	C	N	X	D

Clue 1

C(3) **U**(21) **L**(12) **P**(16) **R**(18) **I**(9) **T**(20)

I(9) **S**(19)　**F**(6) **E**(5) **M**(13) **A**(1) **L**(12) **E**(5)

Clue 2

a) **521**　　b) **278**　　c) **333**

d) **278**　　e) **521**　　f) **439**

g) **295**　　h) **439**　　i) **278**

The culprit is under **278mm**.

Clue 3

Spells: **THE DOG IS BLACK**

Clue 4

Spells: **TAIL LENGTH BETWEEN 13 AND 18CM**

Clue 5

P(16) **U**(21) **G**(7)

The Culprit

The culprit is Nelly.

The Confession

"I think she wanted to be a 'sausage' dog!"