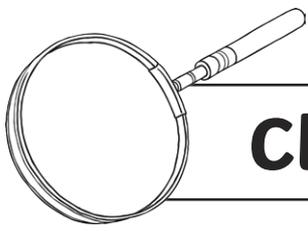




The Mystery of the Burgled Bangers

| 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 |

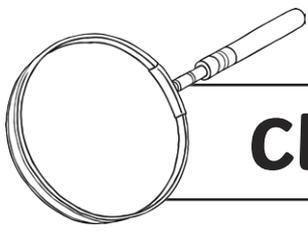


Clue 1



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 | $\times 2$ | $\div 10$ | $= 3$ | C |
| 2. | 77 | $\div 11$ | $\times 3$ | $=$ | |
| 3. | 30 | $\times 40$ | $\div 100$ | $=$ | |
| 4. | 2^3 | $\div 2$ | $\times 4$ | $=$ | |
| 5. | 3^2 | $\times 4$ | $\div 2$ | $=$ | |
| 6. | 3^2 | $+ 3^2$ | $- 3^2$ | $=$ | |
| 7. | 1 | $- 0.8$ | $\times 100$ | $=$ | |
| 8. | 6.5 | $- 3.2$ | $+ 5.7$ | $=$ | |
| 9. | 100 | $- 41$ | $- 40$ | $=$ | |
| 10. | 30 | $\times 2$ | $\div 10$ | $=$ | |
| 11. | 12.5 | $\times 4$ | $\div 10$ | $=$ | |
| 12. | -7 | $+ 13.5$ | $\times 2$ | $=$ | |
| 13. | 0.7 | $+ 0.6$ | $- 0.3$ | $=$ | |
| 14. | 0.7 | $+ 0.5$ | $\times 10$ | $=$ | |
| 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

$$\begin{array}{r} 1872 \\ - 1351 \\ \hline \\ \hline \end{array}$$

b

$$\begin{array}{r} 1984 \\ - 1706 \\ \hline \\ \hline \end{array}$$

c

$$\begin{array}{r} 3041 \\ - 2708 \\ \hline \\ \hline \end{array}$$

d

$$\begin{array}{r} 1000 \\ - 722 \\ \hline \\ \hline \end{array}$$

e

$$\begin{array}{r} 900 \\ - 379 \\ \hline \\ \hline \end{array}$$

f

$$\begin{array}{r} 807 \\ - 368 \\ \hline \\ \hline \end{array}$$

g

$$\begin{array}{r} 1506 \\ - 1211 \\ \hline \\ \hline \end{array}$$

h

$$\begin{array}{r} 1001 \\ - 562 \\ \hline \\ \hline \end{array}$$

i

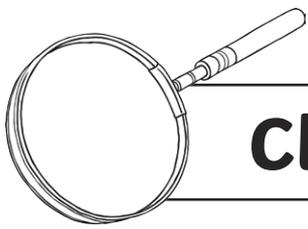
$$\begin{array}{r} 2039 \\ - 1761 \\ \hline \\ \hline \end{array}$$

The culprit is under

mm

!

Remember the height given here is in **mm**.



Clue 3



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

50 **S** $\frac{9}{10}$ of 30

16.5 **H** $\frac{2}{3}$ of 99

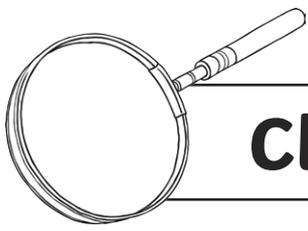
10.5 **G** $\frac{3}{4}$ of 100

66 **E** $\frac{2}{5}$ of 20

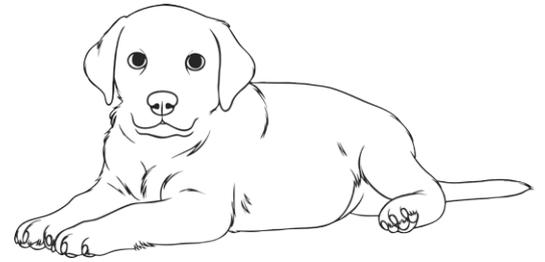
33 **A** $\frac{5}{6}$ of 24

12 **O** $\frac{7}{10}$ of 15

| | | |
|--------------------------------|--|--|
| 0 T $\frac{1}{2}$ of 33 | | |
| | | |
| | | |
| | | |
| | | |

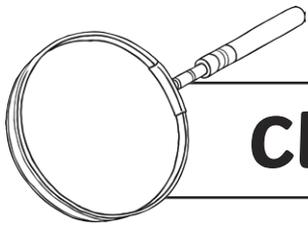


Clue 4



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!

| | | | | | | |
|--|--|--|--|--|--|--|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |



Clue 5



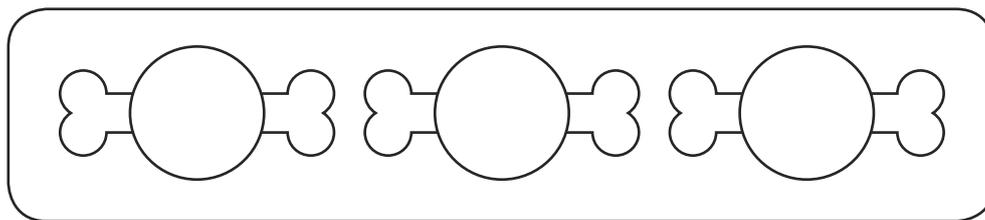
You have managed to find a good paw print in some mud on the field and it has given you the final piece of clue that you need.

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.

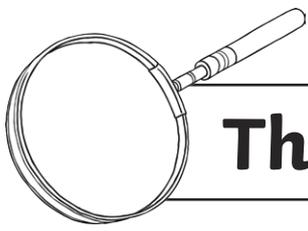
a M L V I - M X L =

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...



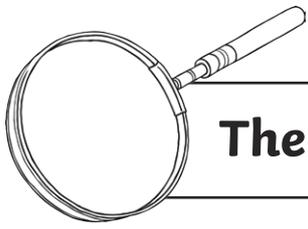
| | | | | | | | | |
|-----|-----|----|-----|-----|-----|-----|----|-----|
| 120 | 270 | 90 | 120 | 160 | 480 | 150 | 90 | 640 |
| | | | | | | | | |

| | | | | | | | | | | |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 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 |



The Mystery of the Burgled Bangers Answers

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

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

The Confession

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