## The Mystery of the 'Kid'-napping.

Farmer Palmer the Llama Charmer also keeps pigs and prize goats, which are famous for their quality dairy products.
He woke up last Friday to find that there had been a llama farmer drama; all of his new baby goats had been stolen.

It's a real 'kid'-napping!
It must have happened overnight as he had checked them on Thursday night and everything had been fine. He even remembered locking the gate. He has no CCTV on his fields so it's down to you, the detective and the Scene of Crime Officers (SOCOs) to find out who was the perpetrator.

Solve the following clues to eliminate all but one of the following suspects based on their gender, where they live, hair colour, shoe size and the vehicle they drive.

Good Luck ... Farmer Palmer, his pigs, goats and llamas are depending on you!

| Name | M/F | Village | Hair Colour | Shoe Size | Vehicle Used |
| :---: | :---: | :---: | :---: | :---: | :---: |
| April Azalea | F | Stowford | brown | 7 | Quad Bike |
| Arthur Abloom | M | Westford | black | 6 | Motorbike |
| Brenda Blossom | F | Eastford | ginger | 9 | $4 \times 4$ |
| Brian Breezy | M | Starford | bald | 7 | Quad Bike |
| Colin Crocus | M | Stowford | grey | 10 | $4 \times 4$ |
| Catherine Catkin | F | Westford | black | 4 | Tractor |
| Dave Duckling | M | Eastford | bald | 8 | $4 \times 4$ |
| Denise Daffodil | F | Starford | ginger | 9 | None |
| Eddie Equinox | M | Stowford | brown | 6 | Motorbike |
| Emelia Eggshell | F | Starford | grey | 7 | Quad Bike |
| Frances Forsythia | F | Stowford | blonde | 8 | $4 \times 4$ |
| Frank Flower | M | Eastford | brown | 11 | Car |
| Gordon Green | M | Starford | brown | 9 | Quad Bike |
| Geraldine Gardener | F | Eastford | blonde | 5 | Car |
| Harry Hatch | M | Westford | ginger | 7 | Motorbike |
| Hannah Honey | F | Westford | black | 6 | Quad Bike |
| Irene Iris | F | Starford | brown | 9 | $4 \times 4$ |
| Ignatius Inclement | M | Stowford | blonde | 7 | Tractor |
| Janet Jumpling | F | Starford | brown | 8 | Motorbike |
| Jerry Joyful | M | Eastford | bald | 8 | none |
| Kitty Kidling | F | Stowford | grey | 3 | Quad Bike |
| Kevin Kingfisher | M | Starford | ginger | 6 | $4 \times 4$ |
| Lois Lilac | F | Westford | blonde | 7 | Tractor |
| Liam Lively | M | Stowford | brown | 9 | Quad Bike |
| May March | F | Starford | blonde | 7 | Car |
| Mark May | M | Eastford | black | 11 | Quad Bike |
| Naomi Narcissus | F | Starford | blonde | 8 | Tractor |
| Nesta Nestling | M | Westford | ginger | 10 | Motorbike |
| Orton Orchid | M | Starford | brown | 10 | $4 \times 4$ |
| Oona Outdoors | F | Eastford | grey | 7 | Quad Bike |
| Polly Pollinate | F | Stowford | black | 8 | Quad Bike |
| Paddy Pansy | M | Westford | brown | 7 | Motorbike |

## Clue 1

The SOCOs have found traces of blood near the gate to the field. It looks like the catch on the gate has cut the criminal.

To reveal what information the SOCOs have found out about the criminal, work out the answers to these calculations. The answers give the number of a letter in the alphabet using the code: $A=1, B=2, C=3$, etc...

1. $20(3.1-2.8)=$
2. $2^{3}-(0.03 \times 100)=$
3. $\frac{11^{2}+3^{2}}{10}=$
4. $0.02+0.7+0.28=$
5. $8+(20 \div 5)=$
6. $\sqrt{ }(0.25 \times 100)=$

## Answer

## Clue 2

The SOCOs have found tyre tracks around the entrance to the field that do not match any of Farmer Palmer's vehicles.

They need to match the dimensions of the tyre tracks with the dimensions of various vehicles. Work out the calculations below and the answer that comes up three times will give the width in centimetres of the tyres of the vehicle that the culprit used.

| 1. $25 \%$ of $102=$ | $2.2 \%$ of $950=$ |
| :--- | :--- |
| 3. $50 \%$ of $50.8=$ | $4.10 \%$ of $255=$ |
| 5. $20 \%$ of $127=$ | $6.5 \%$ of $508=$ |


| Vehicle | Front Tyre Diameter | Front Tyre Width |
| :--- | :--- | :--- |
| Motorbike | 17 inches | 19 cm |
| Quad bike | 25 inches | 25.4 cm |
| Car | 16 inches | 20.5 cm |
| $4 \times 4$ | 18 inches | 25.5 cm |
| Tractor | 19 inches | 127 cm |

## Answer

## Clue 3

After the SOCOs identified the vehicle, they looked at the tyre tracks and have realised that they come from one of the four nearby villages: Eastford, Westford, Starford and Stowford.

Work out the labelled angles in the tyre tracks to find the name of the village below...


Work out which letters are on the following angles and you will have the name of the village in which the culprit lives.

| $120^{\circ}$ | $65^{\circ}$ | $95^{\circ}$ | $145^{\circ}$ | $80^{\circ}$ | $95^{\circ}$ | $60^{\circ}$ | $165^{\circ}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |

## Clue 4

While the SOCOs are looking at the type of tracks, you have found some more evidence in the shape of some hair caught on the gate. Work out the calculations below to find the letters and solve the clue to reveal what you have discovered about the hair. (Remember when working with decimals you can think of money to help you.)

| Decimal Calculation | Letters | Answers |
| :---: | :---: | :---: |
| $0.3 \times 6$ | $=\mathrm{a}$ |  |
| $0.25 \times 5$ | $=\mathrm{b}$ |  |
| $2.8 \div 4$ | $=C$ |  |
| $0.8 \div 2$ | $=e$ |  |
| $0.5 \times 5$ | $=\mathrm{g}$ |  |
| $0.7 \times 8$ | $=k$ |  |
| $8.1 \div 9$ | $=1$ |  |
| $1 \div 10$ | $=\mathrm{n}$ |  |
| $0.33 \times 3$ | $=0$ |  |
| $2.7 \times 4$ | $=r$ |  |
| $0.9 \div 3$ | $=\mathrm{t}$ |  |
| $3.6 \div 6$ | $=\mathrm{y}$ |  |

## Solve the Clue:

Find the corresponding letters to the numbers below.

| 0.1 | 0.99 | 0.3 | 2.5 | 10.8 | 0.4 | 0.6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

## Clue 5

The SOCOs have found a footprint in the mud by the gate that does not match Farmer Palmer's boots or anyone who helps him, so it must belong to the culprit.

Using the grid below, solve the calculation in the order it is given to find the shoe size. From the Start square, use the compass directions to find the next step in the calculation.

For example, from the start, NW1 would take you to 9; from there, SE3, W1 would take you to - ; from there, N4 takes you to 4.


## The Confession

When the goat stealer was finally caught, they had this to say...


| 12 | 8 | 30 | 15 | 35 | 56 | 12 | 16 | 35 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |


| 27 | 56 | 20 | 64 | 27 | 21 | 20 | 16 | 27 | 9 | 64 | 45 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |


| 12 | 8 | 30 | 15 | 56 | 16 | 42 | 72 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |


| 54 | 48 | 12 | 36 | 36 | 12 | 16 | 35 | 54 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |

## Answers

## Clue 1:

1. $20(3.1-2.8)=6$
2. $2^{3}-(0.03 \times 100)=5$
3. $\frac{11^{2}+3^{2}}{10}=13$
4. $0.02+0.7+0.28=1$
5. $8+(20 \div 5)=12$
6. $\sqrt{ }(0.25 \times 100)=5$

## Answer Female

Clue 2:

| 1. 25.5 | 2. 19 |
| :---: | :---: |
| 3. 25.4 | 4. 25.5 |
| 5. 25.4 | 6.25 .4 |

## Answer 25.4 cm so the culprit had a quad bike.

## Clue 3:

Using the rules:
Straight line $=180^{\circ}$;
Vertically opposite angles are equal;
Interior angles of a triangle $=180^{\circ}$;

| $120^{\circ}$ | $65^{\circ}$ | $95^{\circ}$ | $145^{\circ}$ | $80^{\circ}$ | $95^{\circ}$ | $60^{\circ}$ | $165^{\circ}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{S}$ | T | $\mathbf{O}$ | W | F | $\mathbf{O}$ | R | D |

Clue 4:

| Decimal Calculation | Letters | Answers |
| :---: | :---: | :---: |
| $0.3 \times 6$ | $=a$ | $=1.8$ |
| $0.25 \times 5$ | $=\mathrm{b}$ | $=1.25$ |
| $2.8 \div 4$ | $=\mathrm{c}$ | $=0.7$ |
| $0.8 \div 2$ | = $e$ | $=0.4$ |
| $0.5 \times 5$ | = g | $=2.5$ |
| $0.7 \times 8$ | $=k$ | $=5.6$ |
| $8.1 \div 9$ | $=1$ | $=0.9$ |
| $1 \div 10$ | $=\mathrm{n}$ | $=0.1$ |
| $0.33 \times 3$ | = 0 | $=0.99$ |
| $2.7 \times 4$ | $=r$ | $=10.8$ |
| $0.9 \div 3$ | $=\mathrm{t}$ | $=0.3$ |
| $3.6 \div 6$ | $=y$ | $=0.6$ |


| 0.1 | 0.99 | 0.3 | 2.5 | 10.8 | 0.4 | 0.6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{N}$ | $\mathbf{O}$ | T | G | R | E | Y |

Clue 5:
$16 \div 2 \times 3 \div 24+9-3=7$ (Shoe size 7)

The Culprit:

## April Azalea

The Confession:
I was going to return them, I was only 'kidding'

