

# MATH MYSTERY:

## CASE OF THE MONSTER MIX-UP

*Date: Week of April 20<sup>th</sup> - This assignment covers the entire week*

It has been a known fact for some time that there are many monsters living in Mathhattan. Most keep to themselves, however, one of them has been causing trouble in our town lately. A number of victims have been calling the police with reports similar to those given below:

**"A monster sometimes lurks in my closet. It always wakes me up with its growling and then I can never go back to sleep because I'm frightened!"** Complained Harmony.

**"A monster has been creeping into my room at night, I'm always too scared to look, I just stay under my bed covers until it is gone!"** Claimed Fred.

**"One of those pesky monsters keeps breaking into my home at night, scaring my cat and stealing my jellybeans!"** Myrtle angrily exclaimed.

There may be some good news for the citizens of Mathhattan; Coolrog, a blue monster, was arrested late last night for scaring a group of children camping. However, Coolrog is claiming that the police have caught the wrong monster and is certain that no one will be safe from the night frights for long.

Coolrog gave the following statement from his prison cell:

**"There's been a mix-up! I was framed by the real culprit! I wasn't the one who scared that group of children camping last night. You see, I was just out for my usual late night stroll, but when I heard screaming I became frightened and started running! The next thing I knew, sirens were wailing, lights flashing and I was surrounded by lots of police. I honestly didn't go anywhere near the children camping! I am warning you that the monster night frights won't stop because there's been a mix-up!"**

The Chief of Police has ordered that a great math detective join the police to return to the scene of the crime from last night and investigate this case. Officer Luke stated, **"If we can find out which monster was responsible for last night's events, then we can be pretty sure we have the culprit responsible for all of the recent night scare crimes."**

### MATH DETECTIVE WANTED TO INVESTIGATE THE MONSTER MIX-UP

The police have made a list of all the possible suspects, including Coolrog. They need a brilliant math detective to either uncover enough evidence to prove that Coolrog is responsible for last night's scare crime or to discover who is the real monster that needs to be arrested. The police will be keeping Coolrog behind bars until either proven guilty or innocent.



# POSSIBLE SUSPECTS

| Suspect Name | Covered in . . . | Number of Eyes | Color | Has a tail?<br>Yes/No | Teeth Size<br>Big/Small |
|--------------|------------------|----------------|-------|-----------------------|-------------------------|
| Coolrog      | Goo              | Two            | Blue  | Yes                   | Big                     |
| Gutling      | Goo              | One            | Green | Yes                   | Small                   |
| Sadfang      | Spikes           | Two            | Blue  | Yes                   | Big                     |
| Rustclaw     | Spikes           | Three          | Green | Yes                   | Big                     |
| Rotspawn     | Goo              | Three          | Green | Yes                   | Big                     |
| Boogiebog    | Goo              | One            | Green | No                    | Small                   |
| Fuzzyfoot    | Fur              | Two            | Blue  | No                    | Big                     |
| Stinkstep    | Fur              | Two            | Green | Yes                   | Big                     |
| Slimewort    | Goo              | Two            | Green | No                    | Big                     |
| Thunderwig   | Fur              | One            | Pink  | Yes                   | Big                     |
| Warple       | Spikes           | One            | Pink  | No                    | Small                   |
| Snarlzgool   | Spikes           | Three          | Blue  | Yes                   | Big                     |
| Sloggil      | Fur              | One            | Pink  | No                    | Big                     |
| Toxikin      | Goo              | One            | Blue  | Yes                   | Big                     |
| Firestomp    | Spikes           | Two            | Green | Yes                   | Big                     |
| Rockbyte     | Spikes           | Three          | Green | No                    | Big                     |
| Flamepoooh   | Goo              | Three          | Green | No                    | Small                   |
| Shademask    | Fur              | Two            | Blue  | Yes                   | Big                     |

**Solve the clues and then cross the suspects off the list until one remains! The last suspect remaining is the Monster who needs to be arrested for the scare crimes!**



# MIXED MULTIPLICATION FACTS – CLUE 1

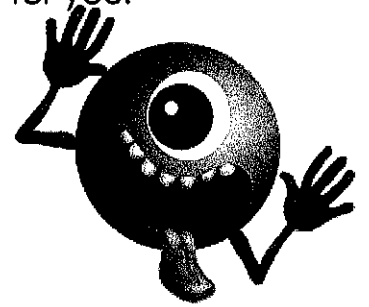
Crack the code by completing the multiplication questions. Use your answers to match and place the letters in the boxes to reveal a clue discovered at the camping scene from last night. Put the letter in every box that it matches your answer in (there may be more than one!) The first one has been done for you!

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110      48      32

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132      20      20      132      108



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108      4      72      20      28

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30      55      20

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100      4      81      36      63

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48      36

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132      108      20

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132      20      36      132

$$2 \times 2 = \underline{4}$$

O

$$8 \times 6 = \underline{\quad}$$

I

$$7 \times 4 = \underline{\quad}$$

S

$$12 \times 9 = \underline{\quad}$$

H

$$5 \times 11 = \underline{\quad}$$

R

$$9 \times 9 = \underline{\quad}$$

U

$$12 \times 3 = \underline{\quad}$$

N

$$10 \times 11 = \underline{\quad}$$

B

$$6 \times 5 = \underline{\quad}$$

A

$$2 \times 10 = \underline{\quad}$$

E

$$9 \times 7 = \underline{\quad}$$

D

$$6 \times 12 = \underline{\quad}$$

L

$$10 \times 10 = \underline{\quad}$$

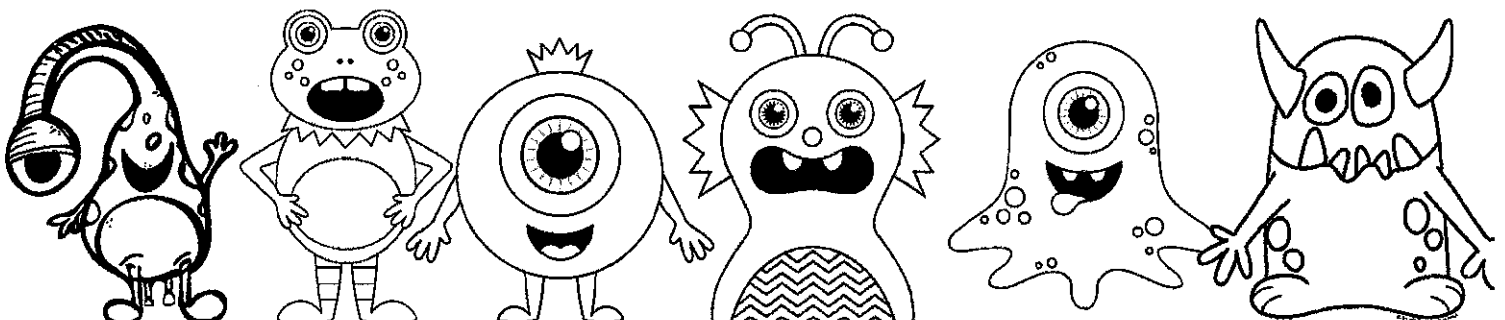
F

$$4 \times 8 = \underline{\quad}$$

G

$$11 \times 12 = \underline{\quad}$$

T





# MULTIPLYING 2-DIGIT by 1-DIGIT NUMBERS – CLUE 2

Crack the code by completing the multiplication questions. Use your answers to match and place the letters in the boxes to reveal a clue. Put the letter in every box that it matches your answer in (there may be more than one!)

|     |     |     |
|-----|-----|-----|
|     |     |     |
| 135 | 279 | 432 |

|     |     |     |     |
|-----|-----|-----|-----|
|     |     |     |     |
| 432 | 165 | 432 | 430 |

|     |     |     |    |     |     |     |    |
|-----|-----|-----|----|-----|-----|-----|----|
|     |     |     |    |     |     |     |    |
| 168 | 135 | 279 | 50 | 188 | 432 | 343 | 50 |



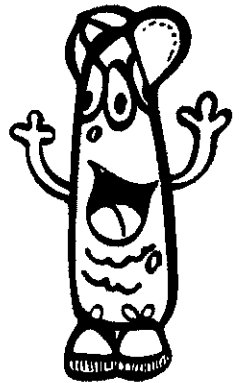
|     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|
|     |     |     |     |     |     |
| 148 | 305 | 279 | 279 | 135 | 188 |

|    |     |     |
|----|-----|-----|
|    |     |     |
| 50 | 432 | 432 |

|     |     |
|-----|-----|
|     |     |
| 469 | 279 |

|     |     |     |
|-----|-----|-----|
|     |     |     |
| 188 | 492 | 432 |

|     |     |     |     |
|-----|-----|-----|-----|
|     |     |     |     |
| 430 | 305 | 343 | 344 |



$$\begin{array}{r} 25 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 37 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 61 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 49 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 82 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ \times 9 \\ \hline \end{array}$$

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|---|
| S |
|---|

|   |
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| C |
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| H |
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| O |
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$$\begin{array}{r} 55 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 43 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 28 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 31 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 94 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 67 \\ \times 7 \\ \hline \end{array}$$

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|---|
| Y |
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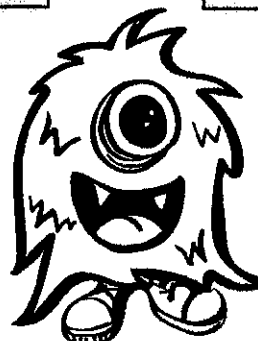
|   |
|---|
| I |
|---|

$$\begin{array}{r} 86 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 72 \\ \times 6 \\ \hline \end{array}$$

|   |
|---|
| D |
|---|

|   |
|---|
| E |
|---|





# MULTIPLY NUMBERS ENDING IN ZEROES – CLUE 3

Crack the code by completing the multiplication questions. Use your answers to match and place the letters in the boxes to reveal a clue discovered at the camping scene from last night. Put the letter in every box that it matches your answer in (there may be more than one!) The first one has been done for you!

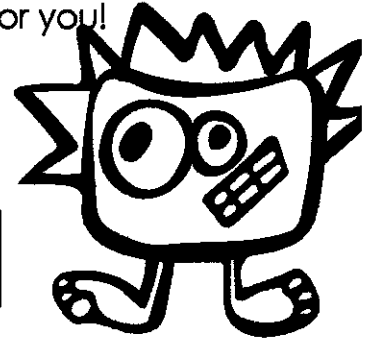
|     |       |       |       |       |
|-----|-------|-------|-------|-------|
|     |       |       |       |       |
| 900 | 8,000 | 9,000 | 1,500 | 9,000 |

|       |       |       |
|-------|-------|-------|
|       |       |       |
| 4,000 | 1,500 | 9,000 |

|        |     |        |       |        |
|--------|-----|--------|-------|--------|
|        |     |        |       |        |
| 35,000 | 700 | 54,000 | 3,200 | 35,000 |

|       |     |
|-------|-----|
|       |     |
| 2,000 | 800 |

|       |
|-------|
|       |
| 4,000 |



|     |       |     |       |
|-----|-------|-----|-------|
|     |       |     |       |
| 900 | 4,000 | 700 | 7,200 |

|        |       |       |     |        |     |       |        |
|--------|-------|-------|-----|--------|-----|-------|--------|
|        |       |       | C   |        |     |       |        |
| 60,000 | 3,200 | 2,000 | 400 | 60,000 | 700 | 3,200 | 54,000 |

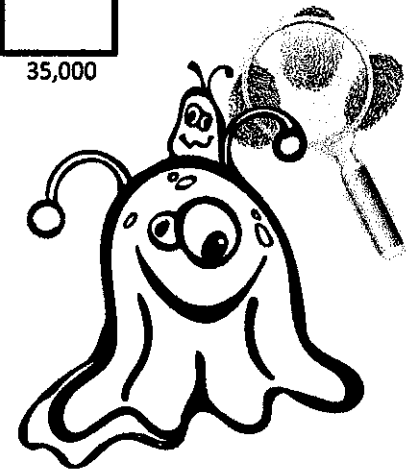
|     |       |     |       |
|-----|-------|-----|-------|
|     |       |     |       |
| 700 | 3,200 | 900 | 2,000 |

|     |       |       |       |        |
|-----|-------|-------|-------|--------|
|     |       |       |       |        |
| 900 | 1,500 | 9,000 | 9,000 | 35,000 |

|       |       |       |       |
|-------|-------|-------|-------|
|       |       |       |       |
| 3,200 | 9,000 | 4,000 | 1,500 |

|     |       |       |
|-----|-------|-------|
|     |       |       |
| 900 | 8,000 | 9,000 |

|     |       |     |        |        |     |     |       |
|-----|-------|-----|--------|--------|-----|-----|-------|
| C   |       |     |        |        |     |     |       |
| 400 | 4,000 | 600 | 81,000 | 35,000 | 700 | 900 | 9,000 |



$$20 \times 20 = \underline{400}$$

**C**

$$7 \times 100 = \underline{\quad}$$

**I**

$$80 \times 40 = \underline{\quad}$$

**N**

$$50 \times 30 = \underline{\quad}$$

**R**

$$10 \times 200 = \underline{\quad}$$

**O**

$$30 \times 30 = \underline{\quad}$$

**T**

$$300 \times 30 = \underline{\quad}$$

**E**

$$60 \times 10 = \underline{\quad}$$

**M**

$$70 \times 500 = \underline{\quad}$$

**S**

$$40 \times 100 = \underline{\quad}$$

**A**

$$100 \times 600 = \underline{\quad}$$

**K**

$$90 \times 600 = \underline{\quad}$$

**G**

$$80 \times 90 = \underline{\quad}$$

**L**

$$90 \times 900 = \underline{\quad}$$

**P**

$$10 \times 80 = \underline{\quad}$$

**F**

$$400 \times 20 = \underline{\quad}$$

**H**



# MULTIPLICATION WORD PROBLEMS – CLUE 4

Crack the code by the word problems. Use your answers (numbers only) to match and place the letters in the boxes to reveal a clue given by a witness from last night. Put the letter in every box that it matches your answer in (there may be more than one!)

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1,536    391    1,092

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327    1,092    1,220    432

|   |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| C |  |  |  |  |  |  |
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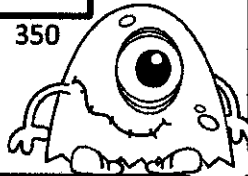
165    162    432    144    327    140    1,536

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140    56

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1,682    327    1,092    1,092    350



Snarltooth ate 11 boxes of chocolates. There were 15 chocolates in each box. How many chocolates did Snarltooth eat? **165 chocolates** C

Fuzzyfoot bought 14 bags of monster rolls. There were 10 monster rolls in each bag. How many monster rolls did Fuzzyfoot buy? \_\_\_\_\_ I

17 monsters went to McSpooks Diner. They each ordered 23 burgers. How many burgers did the group of monsters buy in total? \_\_\_\_\_ H

Gogglejaws can eat 36 fish in one minute. How many fish could Gogglejaws eat in 12 minutes? \_\_\_\_\_ L

Slimewort eats 50 rotten eggs a day to maintain his daily monster nutritional requirements. How many rotten eggs in total would Slimewort eat in 1 week? \_\_\_\_\_ N

Warple has 3 arms. He has 109 very sharp spikes on each arm. How many arm spikes does Warple have? \_\_\_\_\_ R

Boogiebog makes 64 boogies per hour. How many boogies does Boogiebog make in 24 hours? \_\_\_\_\_ T

Rockbyte bought 61 packets of raisin rocks from the Monster Delicacy store. There are 20 raisin rocks in each packet. How many raisin rocks did Rockbyte buy? \_\_\_\_\_ A

Shademask can only be in the sunshine for a maximum of 4 hours a day. Over 14 days, what is the maximum amount of sunshine Shademask could enjoy? \_\_\_\_\_ S

Judy set up 18 rows of pillows to guard her toys from any monsters. There were 9 pillows in each row. How many pillows did Judy use to set up her pillow fortress? \_\_\_\_\_ U

Sadfang bought 42 boxes of super mushy monster muffins. There are 26 muffins in each box. How many super mushy monster muffins did Sadfang buy? \_\_\_\_\_ E

Gutling ordered 29 trays of worm nuggets at McSpooks Diner. There are 58 worm nuggets on each tray. How many worm nuggets did Gutling order? \_\_\_\_\_ G

There are 9 rooms in Carl's house. Carl set up 16 monster traps in each room of his house. How many monster traps did Carl set up? \_\_\_\_\_ P



# MULTIPLYING WITH LARGER NUMBERS – CLUE 5

Crack the code by completing the multiplication questions (you may need some extra paper to work out your answers). Use your answers to match and place the letters in the boxes to reveal a clue discovered at the camping scene from last night. Put the letter in every box that it matches your answer in (there may be more than one!) The first one has been done for you!

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15,385    2,232    576    2,682    3,705    3,358

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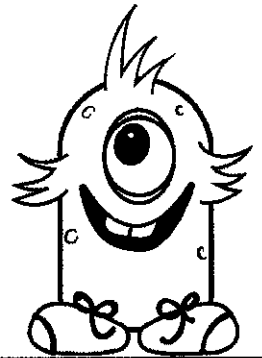
25,206    2,682    780    780    3,358    1,100

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|  | H |  |
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2,145    810    3,358

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576    2,682    2,145    2,145    576    3,358



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15,385    2,028    1,100    1,100    576    3,358    780

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2,232    1,178

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13,664    2,232    2,232

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5,616    576    576

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5,616    11,532    2,232    2,028    10,520    1,100

|  |   |  |
|--|---|--|
|  | H |  |
|--|---|--|

2,145    810    3,358

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

3,705    5,616    25,206    15,385    780    2,682    2,145    3,358

$$\begin{array}{r} 135 \\ \times 6 \\ \hline 810 \end{array}$$

H

$$\begin{array}{r} 390 \\ \times 2 \\ \hline \end{array}$$

S

$$\begin{array}{r} 507 \\ \times 4 \\ \hline \end{array}$$

U

$$\begin{array}{r} 936 \\ \times 6 \\ \hline \end{array}$$

A

$$\begin{array}{r} 298 \\ \times 9 \\ \hline \end{array}$$

I

$$\begin{array}{r} 741 \\ \times 5 \\ \hline \end{array}$$

C

$$\begin{array}{r} 55 \\ \times 20 \\ \hline \end{array}$$

D

$$\begin{array}{r} 19 \\ \times 62 \\ \hline \end{array}$$

F

$$\begin{array}{r} 73 \\ \times 46 \\ \hline \end{array}$$

E

$$\begin{array}{r} 24 \\ \times 93 \\ \hline \end{array}$$

O

$$\begin{array}{r} 65 \\ \times 33 \\ \hline \end{array}$$

T

$$\begin{array}{r} 48 \\ \times 12 \\ \hline \end{array}$$

L

$$\begin{array}{r} 4,201 \\ \times 6 \\ \hline \end{array}$$

M

$$\begin{array}{r} 5,260 \\ \times 2 \\ \hline \end{array}$$

N

$$\begin{array}{r} 2,883 \\ \times 4 \\ \hline \end{array}$$

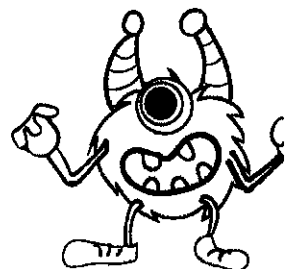
R

$$\begin{array}{r} 1,952 \\ \times 7 \\ \hline \end{array}$$

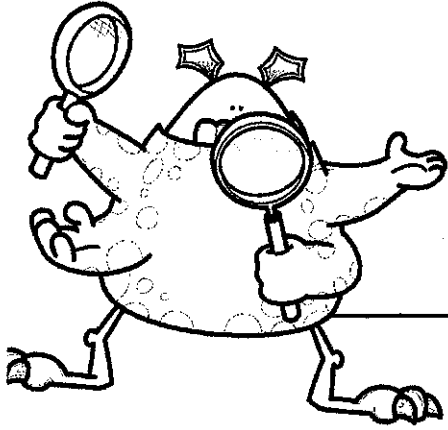
G

$$\begin{array}{r} 3,077 \\ \times 5 \\ \hline \end{array}$$

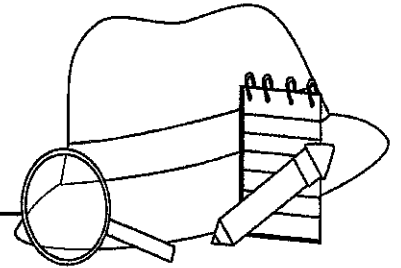
P



# SOLVE THE MYSTERY: CASE OF THE MONSTER MIX-UP



**Detective**



(your name)



**Has discovered that the Monster to arrested for  
the scare crimes is:**

\_\_\_\_\_

## Clues Checklist:

Clue 1

Clue 2

Clue 3

Clue 4

Clue 5



Well done! You have discovered the correct monster behind the scare crimes all over Mathhattan! The police have the monster in jail and now everyone in town can sleep easily tonight. Many children are grateful for your hard work and making sure there is no mix-up on which monster needs to be kept behind bars!



Oops! No that is not the correct monster behind the scare crimes. Take off the handcuffs from the suspect, check your work and try again!