The Midnight Pumpkin Mystery

Grade 5 math · Place value, Multiplication, Rounding, Addition, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

A mysterious prankster snuck into Spooky Hollow Manor on Halloween night and hid the mayor glowing pumpkin! Crack the code clues to help the detective team solve the case.

1. Solve each math problem. The answer is a number, and the letter beside it is what that number stands for.
2. In the clue boxes, write that letter in every box showing the same number, then read the secret clue.
3. Use each clue to cross suspects off the list. The one suspect left at the end is the culprit!

My answer: the Pumpkin Mischief Maker is _____

Possible suspects

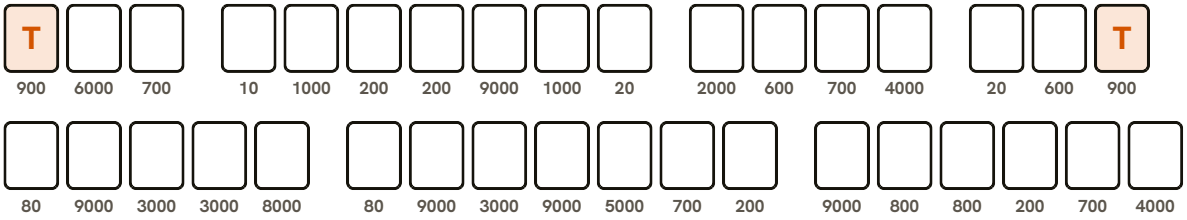
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	MAGIC ITEM	CANDY STASH	HANDEDNESS	HAIRSTYLE	SCARED BY
Gary Ghost	Glow Wand	Sour Gummies	Left Handed	Glowing Green Hair	Bright Flashlights
Maya Mummy	Fog Pipe	Caramel Apples	Right Handed	Bright Orange Wig	Loud Laughter
Drake Dracula	Bat Whistle	Caramel Apples	Right Handed	Bright Orange Wig	Bright Flashlights
Piper Pumpkin	Ghost Lantern	Candy Corn	Right Handed	Glowing Green Hair	Loud Laughter
Felix Fright	Shadow Staff	Candy Corn	Left Handed	Glowing Green Hair	Loud Laughter
Wanda Witch	Fog Pipe	Sour Gummies	Left Handed	Bright Orange Wig	Bright Flashlights
Sam Shadow	Glow Wand	Candy Corn	Right Handed	Spider Web Hair	Loud Laughter
Bruno Bat	Ghost Lantern	Chocolate Bats	Right Handed	Spider Web Hair	Loud Laughter
Fiona Fog	Fog Pipe	Chocolate Bats	Right Handed	Glowing Green Hair	Bright Flashlights
Stella Skeleton	Glow Wand	Sour Gummies	Right Handed	Spider Web Hair	Loud Laughter
Cleo Cat	Bat Whistle	Sour Gummies	Left Handed	Glowing Green Hair	Bright Flashlights
Toby Tomb	Ghost Lantern	Chocolate Bats	Left Handed	Spider Web Hair	Loud Laughter
Hannah Haunt	Fog Pipe	Licorice Rope	Right Handed	Spider Web Hair	Loud Laughter
Ollie Owl	Shadow Staff	Caramel Apples	Left Handed	Bright Orange Wig	Loud Laughter
Zelda Zombie	Fog Pipe	Chocolate Bats	Left Handed	Bright Orange Wig	Garlic Breath
Raven Night	Bat Whistle	Caramel Apples	Right Handed	Spider Web Hair	Loud Laughter
Jack Lantern	Glow Wand	Chocolate Bats	Right Handed	Spider Web Hair	Garlic Breath
Milo Moon	Fog Pipe	Licorice Rope	Right Handed	Spider Web Hair	Bright Flashlights
Victor Vampire	Glow Wand	Licorice Rope	Right Handed	Bright Orange Wig	Loud Laughter
Wendy Web	Shadow Staff	Chocolate Bats	Left Handed	Glowing Green Hair	Loud Laughter
Nora Night	Shadow Staff	Sour Gummies	Left Handed	Spider Web Hair	Bright Flashlights

CLUE 1 Place value

You inspect the mansion door keypad code to read digit values.

Solve each problem, then write its letter in every clue box that shows the same number.



What is the value of the 9 in 660,970? ☐ → T

What is the value of the 4 in 64,113? ☐ → S

What is the value of the 6 in 52,637? ☐ → O

What is the value of the 8 in 946,083? ☐ → C

What is the value of the 6 in 36,182? ☐ → H

What is the value of the 1 in 53,214? ☐ → V

What is the value of the 2 in 956,261? ☐ → L

What is the value of the 2 in 32,945? ☐ → D

What is the value of the 7 in 450,758? ☐ → E

What is the value of the 2 in 657,028? ☐ → N

What is the value of the 8 in 798,043? ☐ → Y

What is the value of the 9 in 59,614? ☐ → A

What is the value of the 5 in 85,104? ☐ → M

What is the value of the 3 in 93,660? ☐ → R

What is the value of the 8 in 513,892? ☐ → P

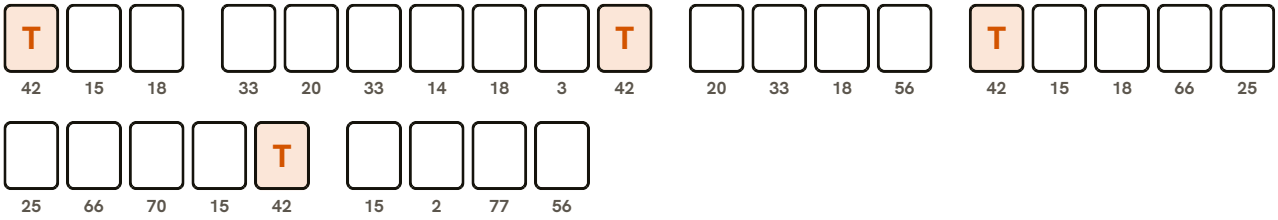
What is the value of the 1 in 391,753? ☐ → I

Scratch space:

CLUE 2 Multiplication facts (1-12)

> You count rows of carved pumpkins sitting on the porch to gather clues.

Solve each problem, then write its letter in every clue box that shows the same number.



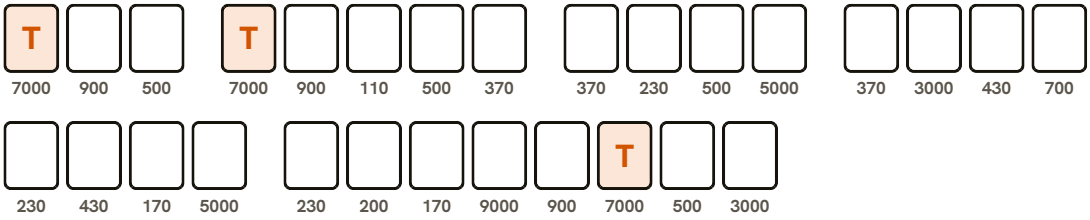
6 × 7 = ☐ → T	2 × 1 = ☐ → A	2 × 7 = ☐ → P	3 × 1 = ☐ → C
8 × 7 = ☐ → D	3 × 5 = ☐ → H	11 × 6 = ☐ → I	
11 × 7 = ☐ → N	3 × 11 = ☐ → S	5 × 4 = ☐ → U	
2 × 9 = ☐ → E	5 × 5 = ☐ → R	10 × 7 = ☐ → G	

Scratch space:

CLUE 3 Rounding

The spook detector screen rounds the ghost energy values to the nearest hundred.

Solve each problem, then write its letter in every clue box that shows the same number.



Round 7,355 to the nearest thousand ☐ → **T**

Round 669 to the nearest hundred ☐ → **M**

Round 234 to the nearest ten ☐ → **L**

Round 5,195 to the nearest thousand ☐ → **D**

Round 371 to the nearest ten ☐ → **F**

Round 2,887 to the nearest thousand ☐ → **R**

Round 501 to the nearest hundred ☐ → **E**

Round 883 to the nearest hundred ☐ → **H**

Round 174 to the nearest ten ☐ → **U**

Round 426 to the nearest ten ☐ → **O**

Round 171 to the nearest hundred ☐ → **A**

Round 8,649 to the nearest thousand ☐ → **G**

Round 110 to the nearest ten ☐ → **I**

Scratch space:

CLUE 4

Addition

You tally up all the trick or treat bags found scattered in the courtyard.

Solve each problem, then write its letter in every clue box that shows the same number.



3935 + 5652 = ☐ → F

2781 + 1296 = ☐ → W

4075 + 4886 = ☐ → U

1560 + 1000 = ☐ → R

1620 + 2377 = ☐ → C

2040 + 3871 = ☐ → O

3080 + 3512 = ☐ → E

2434 + 2846 = ☐ → I

2746 + 3546 = ☐ → N

2610 + 2628 = ☐ → A

1146 + 1553 = ☐ → H

1223 + 2614 = ☐ → S

3185 + 6131 = ☐ → B

1741 + 1166 = ☐ → P

2417 + 2903 = ☐ → D

2113 + 2530 = ☐ → T

Scratch space:

CLUE 5 Division facts (1-12) - the last clue

> You share the secret clues equally among the detective team members.

First solve each problem. Then find each answer in the numbered list below and cross that sentence out. One sentence will be left - that is exactly what the villain did!

Step 1 - solve these:

28 ÷ 7 = ☐ | 63 ÷ 9 = ☐ | 72 ÷ 6 = ☐ | 24 ÷ 12 = ☐ | 22 ÷ 2 = ☐

35 ÷ 7 = ☐ | 36 ÷ 4 = ☐ | 33 ÷ 11 = ☐ | 9 ÷ 9 = ☐ | 56 ÷ 7 = ☐

100 ÷ 10 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain raised a shadow staff, then packed caramel apples.
2. The villain lit a ghost lantern, then unraveled licorice rope.
3. The villain blew a fog pipe, then munched on sour gummies.
4. The villain lit a ghost lantern, then tossed chocolate bats.
5. The villain blew a fog pipe, then tossed chocolate bats.
6. The villain blew a fog pipe, then unraveled licorice rope.
7. The villain waved a glow wand, then munched on sour gummies.
8. The villain raised a shadow staff, then unraveled licorice rope.
9. The villain raised a shadow staff, then munched on sour gummies.
10. The villain sounded a bat whistle, then dropped candy corn.
11. The villain sounded a bat whistle, then packed caramel apples.
12. The villain waved a glow wand, then dropped candy corn.

TEACHER / PARENT

Answer Key

The Midnight Pumpkin Mystery

Culprit: Hannah Haunt

Fog Pipe · Licorice Rope · Right Handed · Spider Web Hair · Loud Laughter

Trail: Start 21 → Clue 1 17 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT CARRY CARAMEL APPLES"

What is the value of the 9 in 660,970? = 900 (T) · What is the value of the 4 in 64,113? = 4000 (S) · What is the value of the 6 in 52,637? = 600 (O) · What is the value of the 8 in 946,083? = 80 (C) · What is the value of the 6 in 36,182? = 6000 (H) · What is the value of the 1 in 53,214? = 10 (V) · What is the value of the 2 in 956,261? = 200 (L) · What is the value of the 2 in 32,945? = 2000 (D) · What is the value of the 7 in 450,758? = 700 (E) · What is the value of the 2 in 657,028? = 20 (N) · What is the value of the 8 in 798,043? = 8000 (Y) · What is the value of the 9 in 59,614? = 9000 (A) · What is the value of the 5 in 85,104? = 5000 (M) · What is the value of the 3 in 93,660? = 3000 (R) · What is the value of the 8 in 513,892? = 800 (P) · What is the value of the 1 in 391,753? = 1000 (I)

Clue 2 (Multiplication facts (1-12)): "THE SUSPECT USED THEIR RIGHT HAND"

6 × 7 = 42 (T) · 2 × 1 = 2 (A) · 2 × 7 = 14 (P) · 3 × 1 = 3 (C) · 8 × 7 = 56 (D) · 3 × 5 = 15 (H) · 11 × 6 = 66 (I) · 11 × 7 = 77 (N) · 3 × 11 = 33 (S) · 5 × 4 = 20 (U) · 2 × 9 = 18 (E) · 5 × 5 = 25 (R) · 10 × 7 = 70 (G)

Clue 3 (Rounding): "THE THIEF FLED FROM LOUD LAUGHTER"

Round 7,355 to the nearest thousand = 7000 (T) · Round 669 to the nearest hundred = 700 (M) · Round 234 to the nearest ten = 230 (L) · Round 5,195 to the nearest thousand = 5000 (D) · Round 371 to the nearest ten = 370 (F) · Round 2,887 to the nearest thousand = 3000 (R) · Round 501 to the nearest hundred = 500 (E) · Round 883 to the nearest hundred = 900 (H) · Round 174 to the nearest ten = 170 (U) · Round 426 to the nearest ten = 430 (O) · Round 171 to the nearest hundred = 200 (A) · Round 8,649 to the nearest thousand = 9000 (G) · Round 110 to the nearest ten = 110 (I)

Clue 4 (Addition): "FOUND SPIDER WEB HAIR AT SCENE"

3935 + 5652 = 9587 (F) · 2781 + 1296 = 4077 (W) · 4075 + 4886 = 8961 (U) · 1560 + 1000 = 2560 (R) · 1620 + 2377 = 3997 (C) · 2040 + 3871 = 5911 (O) · 3080 + 3512 = 6592 (E) · 2434 + 2846 = 5280 (I) · 2746 + 3546 = 6292 (N) · 2610 + 2628 = 5238 (A) · 1146 + 1553 = 2699 (H) · 1223 + 2614 = 3837 (S) · 3185 + 6131 = 9316 (B) · 1741 + 1166 = 2907 (P) · 2417 + 2903 = 5320 (D) · 2113 + 2530 = 4643 (T)

Clue 5 (Division facts (1-12)): surviving statement is box 6 → Hannah Haunt

28 ÷ 7 = 4 · 63 ÷ 9 = 7 · 72 ÷ 6 = 12 · 24 ÷ 12 = 2 · 22 ÷ 2 = 11 · 35 ÷ 7 = 5 · 36 ÷ 4 = 9 · 33 ÷ 11 = 3 · 9 ÷ 9 = 1 · 56 ÷ 7 = 8 · 100 ÷ 10 = 10