# The Great Pumpkin Patch Heist

Grade 5 math · Place value, Multiplication, Word problems, Bar models, Division · Reading level grades 3-4

**Detective:** _____ **Date:** _____

Tonight is the annual Spooky Hollow Halloween Carnival! But right before the big contest, someone snuck into the town square and stole the Golden Pumpkin Trophy. The Mayor needs your detective skills to follow the math clues, eliminate suspects, and catch the villain!

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 Prowler is** _____

## Possible suspects

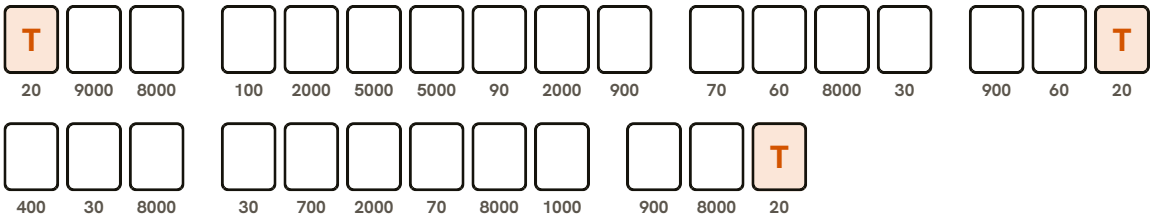
Cross off a row as each clue rules it out. The one left at the end is the culprit.

| NAME | TRICK USED | SPECIAL GEAR | OBSERVED HABIT | WIG COLOR | SECRET FEAR |
|---|---|---|---|---|---|
| **Wanda Witch** | Ghost Whistle | Spider Net | Left-handed | Green Wig | Crunchy Apples |
| **Jack Lantern** | Glow Lantern | Jack-o-Blast | Right-handed | Green Wig | Garlic Spray |
| **Drake Dragon** | Glow Lantern | Jack-o-Blast | Right-handed | Green Wig | Bright Light |
| **Victor Vane** | Spooky Fog | Jack-o-Blast | Right-handed | Orange Wig | Crunchy Apples |
| **Sammy Skeleton** | Ghost Whistle | Eerie Howl | Right-handed | Orange Wig | Bright Light |
| **Mandy Candy** | Glow Lantern | Jack-o-Blast | Right-handed | Orange Wig | Bright Light |
| **Bram Stoker** | Bat Swarm | Witch Broom | Right-handed | Purple Wig | Bright Light |
| **Stella Shadow** | Spooky Fog | Eerie Howl | Left-handed | Green Wig | Bright Light |
| **Raven Dark** | Glow Lantern | Spider Net | Left-handed | Purple Wig | Bright Light |
| **Bella Ghost** | Spooky Fog | Candy Toss | Left-handed | Purple Wig | Crunchy Apples |
| **Fiona Fog** | Shadow Cloak | Spider Net | Right-handed | Green Wig | Bright Light |
| **Luna Moon** | Glow Lantern | Eerie Howl | Left-handed | Orange Wig | Crunchy Apples |
| **Toby Treat** | Shadow Cloak | Eerie Howl | Left-handed | Orange Wig | Crunchy Apples |
| **Gabe Ghoul** | Bat Swarm | Witch Broom | Right-handed | Green Wig | Bright Light |
| **Chloe Cobweb** | Bat Swarm | Spider Net | Right-handed | Green Wig | Crunchy Apples |
| **Otto Owl** | Shadow Cloak | Candy Toss | Right-handed | Green Wig | Bright Light |
| **Casper White** | Spooky Fog | Jack-o-Blast | Right-handed | Green Wig | Bright Light |
| **Hazel Spell** | Spooky Fog | Spider Net | Right-handed | Green Wig | Crunchy Apples |
| **Penny Pumpkin** | Bat Swarm | Jack-o-Blast | Left-handed | Orange Wig | Bright Light |
| **Morty Monster** | Glow Lantern | Eerie Howl | Right-handed | Purple Wig | Crunchy Apples |
| **Frankie Stein** | Shadow Cloak | Jack-o-Blast | Right-handed | Orange Wig | Crunchy Apples |

## CLUE 1 Place value

> The digital vault lock displays numbers across place value columns. Figure out the digit values to unlock the initial hint!

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




What is the value of the 2 in 399,423? ☐ → T

What is the value of the 2 in 132,361? ☐ → I

What is the value of the 9 in 279,406? ☐ → H

What is the value of the 1 in 442,142? ☐ → V

What is the value of the 4 in 115,472? ☐ → U

What is the value of the 7 in 90,733? ☐ → P

What is the value of the 5 in 335,378? ☐ → L

What is the value of the 3 in 14,939? ☐ → S

What is the value of the 8 in 628,543? ☐ → E

What is the value of the 1 in 201,039? ☐ → R

What is the value of the 6 in 51,762? ☐ → O

What is the value of the 9 in 513,936? ☐ → N

What is the value of the 7 in 981,070? ☐ → D

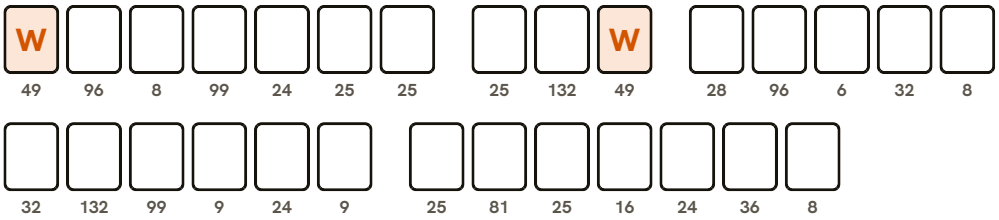
What is the value of the 9 in 85,497? ☐ → A

Scratch space:

## CLUE 2 Multiplication facts (1-12)

> The festival pumpkins are organized in matching rows across the field. Multiply the sets to crack the second clue.

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




| | | | |
|---|---|---|---|
| 7 × 7 = ☐ → W | 9 × 9 = ☐ → U | 5 × 5 = ☐ → S | 11 × 9 = ☐ → N |
| 8 × 1 = ☐ → T | 11 × 12 = ☐ → A | 8 × 2 = ☐ → P | |
| 4 × 8 = ☐ → H | 7 × 4 = ☐ → R | 3 × 3 = ☐ → D | 3 × 12 = ☐ → C |
| 8 × 12 = ☐ → I | 8 × 3 = ☐ → E | 1 × 6 = ☐ → G | |

Scratch space:

## CLUE 3 Word problems

> The party crew must keep track of all carnival supplies. Solve this Halloween story problem to reveal the third secret clue.

Solve each problem, then write its letter in the boxes to fill in the missing word.

Someone scared the villain off with

| B | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 118 | 79 | 81 | 96 | 25 | 38 | 33 | 81 | 96 | 25 | 38 |

.

Pumpkin Scout found 67 mini broomsticks yesterday and 51 more today. How many mini broomsticks in all?

**Answer:** ☐ → **B**

Pumpkin Scout lined up 5 rows of 5 gummy bats. How many gummy bats in all?

**Answer:** ☐ → **H**

Pumpkin Scout found 62 candy corns yesterday and 19 more today. How many candy corns in all?

**Answer:** ☐ → **I**

Pumpkin Scout lined up 8 rows of 12 gummy bats. How many gummy bats in all?

**Answer:** ☐ → **G**

There were 44 candy corns. 11 were used up. How many candy corns are left?

**Answer:** ☐ → **L**

There were 53 gummy bats. 15 were used up. How many gummy bats are left?

**Answer:** ☐ → **T**

There were 92 candy corns. 13 were used up. How many candy corns are left?

**Answer:** ☐ → **R**

Scratch space:

## CLUE 4 Bar model word problems

> The mayor compares treat bag totals on a bar model chart. Find the missing total on the bar model to get the fourth clue.

Draw a bar model to solve each word problem, then write its letter in the boxes to fill in the missing word.

A strand of

| G | | | | | | | G |
|---|---|---|---|---|---|---|---|
| 123 | 29 | 59 | 59 | 69 | 41 | 137 | 123 |

hair turned up at the scene.

One group collected 44 glow sticks and another group collected 79 glow sticks. How many glow sticks in all?

draw a bar model

Answer: ☐ → G

There were 79 gummy bats in all. 20 gummy bats were used. How many gummy bats are left?

draw a bar model

Answer: ☐ → E

Pumpkin Scout has 123 carved pumpkins, packed 3 to a bag. How many bags can be filled?

draw a bar model

Answer: ☐ → W

The red team has 79 carved pumpkins and the blue team has 10 carved pumpkins. How many more carved pumpkins does the red team have?

draw a bar model

Answer: ☐ → N

One group collected 20 mini broomsticks and another group collected 9 mini broomsticks. How many mini broomsticks in all?

draw a bar model

Answer: ☐ → R

The red team has 151 candy corns and the blue team has 14 candy corns. How many more candy corns does the red team have?

draw a bar model

Answer: ☐ → I

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

> The treats need to be split evenly among the prize booths. Divide the treats into equal groups to solve the final clue!

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:**

15 ÷ 3 = ☐ | 12 ÷ 12 = ☐ | 12 ÷ 4 = ☐ | 8 ÷ 1 = ☐ | 48 ÷ 4 = ☐

99 ÷ 11 = ☐ | 110 ÷ 11 = ☐ | 99 ÷ 9 = ☐ | 16 ÷ 8 = ☐ | 20 ÷ 5 = ☐

63 ÷ 9 = ☐

**Step 2 - cross out the sentence with each answer:**

1. The villain blew spooky fog, then blasted jack-o-lanterns.
2. The villain summoned a bat swarm, then shot a spider net.
3. The villain draped a shadow cloak, then threw sweet candy.
4. The villain lit a glow lantern, then shot a spider net.
5. The villain summoned a bat swarm, then flew a witch broom.
6. The villain lit a glow lantern, then blasted jack-o-lanterns.
7. The villain blew a ghost whistle, then flew a witch broom.
8. The villain blew spooky fog, then raised an eerie howl.
9. The villain summoned a bat swarm, then raised an eerie howl.
10. The villain lit a glow lantern, then flew a witch broom.
11. The villain summoned a bat swarm, then blasted jack-o-lanterns.
12. The villain blew a ghost whistle, then shot a spider net.

TEACHER / PARENT

# Answer Key

**The Great Pumpkin Patch Heist**

## Culprit: Drake Dragon

Glow Lantern · Jack-o-Blast · Right-handed · Green Wig · Bright Light

Trail: Start 21 → Clue 1 16 → Clue 2 11 → Clue 3 7 → Clue 4 4 → Clue 5 1

### Clue 1 (Place value): "THE VILLAIN DOES NOT USE SPIDER NET"

What is the value of the 2 in 399,423? = 20 (T) · What is the value of the 2 in 132,361? = 2000 (I) · What is the value of the 9 in 279,406? = 9000 (H) · What is the value of the 1 in 442,142? = 100 (V) · What is the value of the 4 in 115,472? = 400 (U) · What is the value of the 7 in 90,733? = 700 (P) · What is the value of the 5 in 335,378? = 5000 (L) · What is the value of the 3 in 14,939? = 30 (S) · What is the value of the 8 in 628,543? = 8000 (E) · What is the value of the 1 in 201,039? = 1000 (R) · What is the value of the 6 in 51,762? = 60 (O) · What is the value of the 9 in 513,936? = 900 (N) · What is the value of the 7 in 981,070? = 70 (D) · What is the value of the 9 in 85,497? = 90 (A)

### Clue 2 (Multiplication facts (1-12)): "WITNESS SAW RIGHT HANDED SUSPECT"

7 × 7 = 49 (W) · 9 × 9 = 81 (U) · 5 × 5 = 25 (S) · 11 × 9 = 99 (N) · 8 × 1 = 8 (T) · 11 × 12 = 132 (A) · 8 × 2 = 16 (P) · 4 × 8 = 32 (H) · 7 × 4 = 28 (R) · 3 × 3 = 9 (D) · 3 × 12 = 36 (C) · 8 × 12 = 96 (I) · 8 × 3 = 24 (E) · 1 × 6 = 6 (G)

### Clue 3 (Word problems): "BRIGHT LIGHT"

Pumpkin Scout found 67 mini broomsticks yesterday and 51 more today. How many mini broomsticks in all? = 118 (B) · Pumpkin Scout lined up 5 rows of 5 gummy bats. How many gummy bats in all? = 25 (H) · Pumpkin Scout found 62 candy corns yesterday and 19 more today. How many candy corns in all? = 81 (I) · Pumpkin Scout lined up 8 rows of 12 gummy bats. How many gummy bats in all? = 96 (G) · There were 44 candy corns. 11 were used up. How many candy corns are left? = 33 (L) · There were 53 gummy bats. 15 were used up. How many gummy bats are left? = 38 (T) · There were 92 candy corns. 13 were used up. How many candy corns are left? = 79 (R)

### Clue 4 (Bar model word problems): "GREEN WIG"

One group collected 44 glow sticks and another group collected 79 glow sticks. How many glow sticks in all? = 123 (G) · There were 79 gummy bats in all. 20 gummy bats were used. How many gummy bats are left? = 59 (E) · Pumpkin Scout has 123 carved pumpkins, packed 3 to a bag. How many bags can be filled? = 41 (W) · The red team has 79 carved pumpkins and the blue team has 10 carved pumpkins. How many more carved pumpkins does the red team have? = 69 (N) · One group collected 20 mini broomsticks and another group collected 9 mini broomsticks. How many mini broomsticks in all? = 29 (R) · The red team has 151 candy corns and the blue team has 14 candy corns. How many more candy corns does the red team have? = 137 (I)

### Clue 5 (Division facts (1-12)): surviving statement is box 6 → Drake Dragon

15 ÷ 3 = 5 · 12 ÷ 12 = 1 · 12 ÷ 4 = 3 · 8 ÷ 1 = 8 · 48 ÷ 4 = 12 · 99 ÷ 11 = 9 · 110 ÷ 11 = 10 · 99 ÷ 9 = 11 · 16 ÷ 8 = 2 · 20 ÷ 5 = 4 · 63 ÷ 9 = 7