# The Great Pumpkin Patch Prank

Grade 4 math · Addition, Subtraction, Place value, Rounding, Missing addends · Reading level grades 3-4

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

Someone scrambled the giant pumpkins at Glow Valley right before the big Halloween contest! Solve the clues to reveal the culprit.

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 Thief is** _____

## Possible suspects

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

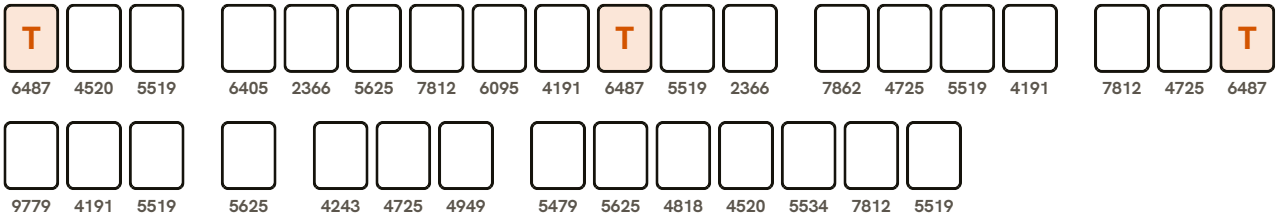
| NAME | TRICK MAGIC | SPOOKY GEAR | DOMINANT HAND | WIG COLOR | TRICK TRAP |
|---|---|---|---|---|---|
| **Tarot Tim** | Candy Blast | Spider Net | Right Handed | Purple Hair | Bright Flashlight |
| **Grim Reaper** | Pumpkin Bomb | Spooky Whistle | Right Handed | Green Hair | Garlic Spray |
| **Morticia Addams** | Ghost Float | Fog Machine | Right Handed | Purple Hair | Bright Flashlight |
| **Buster Ghost** | Pumpkin Bomb | Fog Machine | Right Handed | Green Hair | Garlic Spray |
| **Salem Cat** | Bat Swarm | Spider Net | Right Handed | Green Hair | Loud Alarm |
| **Bram Stoker** | Candy Blast | Skeleton Dance | Left Handed | Orange Hair | Bright Flashlight |
| **Sabrina Spell** | Shadow Cloak | Fog Machine | Right Handed | Orange Hair | Garlic Spray |
| **Mary Shelley** | Candy Blast | Skeleton Dance | Right Handed | Green Hair | Garlic Spray |
| **Draco Moon** | Ghost Float | Spooky Whistle | Left Handed | Green Hair | Garlic Spray |
| **Pip Pumpkin** | Pumpkin Bomb | Spider Net | Right Handed | Orange Hair | Garlic Spray |
| **Wednesday Fry** | Bat Swarm | Fog Machine | Left Handed | Purple Hair | Loud Alarm |
| **Pugsley Peak** | Candy Blast | Spider Net | Left Handed | Purple Hair | Bright Flashlight |
| **Fester Spark** | Ghost Float | Spider Net | Right Handed | Purple Hair | Garlic Spray |
| **Jack Lantern** | Shadow Cloak | Skeleton Dance | Right Handed | Orange Hair | Bright Flashlight |
| **Count Vlad** | Bat Swarm | Glowing Lantern | Right Handed | Purple Hair | Bright Flashlight |
| **Gorgon Gale** | Shadow Cloak | Spooky Whistle | Right Handed | Green Hair | Garlic Spray |
| **Wendy Witch** | Ghost Float | Spooky Whistle | Right Handed | Purple Hair | Loud Alarm |
| **Frankie Stein** | Pumpkin Bomb | Fog Machine | Left Handed | Orange Hair | Garlic Spray |
| **Mummy Manny** | Shadow Cloak | Fog Machine | Left Handed | Orange Hair | Bright Flashlight |
| **Elvira Shade** | Shadow Cloak | Fog Machine | Left Handed | Purple Hair | Bright Flashlight |
| **Igor Crunch** | Ghost Float | Glowing Lantern | Right Handed | Green Hair | Garlic Spray |

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## CLUE 1 Addition

Count up the total wrapped candies collected across the spooky barn to unlock the first clue.

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




2700 + 3787 = ☐ → T

2473 + 3932 = ☐ → P

1419 + 3101 = ☐ → H

3558 + 2537 = ☐ → K

1274 + 2969 = ☐ → F

3356 + 2123 = ☐ → M

934 + 1432 = ☐ → R

2528 + 2197 = ☐ → O

2049 + 2900 = ☐ → G

1860 + 2331 = ☐ → S

1881 + 2937 = ☐ → C

2622 + 3003 = ☐ → A

3485 + 4327 = ☐ → N

3042 + 2492 = ☐ → I

5179 + 4600 = ☐ → U

2879 + 2640 = ☐ → E

4612 + 3250 = ☐ → D

Scratch space:

## CLUE 2 Subtraction

Subtract the broken glow sticks from the total batch to reveal the next piece of evidence.

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




4881 - 1614 = ☐ → W

7334 - 1626 = ☐ → V

9010 - 3843 = ☐ → S

2749 - 342 = ☐ → T

10359 - 1482 = ☐ → R

11704 - 3595 = ☐ → L

12885 - 4254 = ☐ → E

9651 - 2612 = ☐ → D

9434 - 740 = ☐ → H

8163 - 2257 = ☐ → I

8572 - 3466 = ☐ → G

2119 - 1043 = ☐ → N

5290 - 324 = ☐ → A

Scratch space:

## CLUE 3 Place value

Look closely at the hundred digit on the glowing pumpkin counter to discover a hint.

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

| G | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8000 | 900 | 90 | 60 | 9000 | 300 | | 30 | 200 | 90 | 900 | 80 | | 30 | 70 | 100 | 200 | 200 | 6000 | 20 | | 70 | 7000 | 6000 | | 800 | 9000 | 60 | 60 | 900 | 9000 | 400 | | 10 | 500 | 9000 | 300 | 40 | 60 | 80 |

What is the value of the 8 in 8,071? ☐ → G

What is the value of the 3 in 6,931? ☐ → S

What is the value of the 8 in 821? ☐ → V

What is the value of the 8 in 1,186? ☐ → Y

What is the value of the 7 in 474? ☐ → T

What is the value of the 9 in 5,988? ☐ → A

What is the value of the 2 in 7,218? ☐ → P

What is the value of the 3 in 324? ☐ → C

What is the value of the 1 in 8,144? ☐ → O

What is the value of the 4 in 428? ☐ → N

What is the value of the 1 in 2,318? ☐ → Q

What is the value of the 6 in 163? ☐ → L

What is the value of the 4 in 745? ☐ → K

What is the value of the 6 in 6,210? ☐ → E

What is the value of the 7 in 7,419? ☐ → H

What is the value of the 2 in 9,424? ☐ → D

What is the value of the 5 in 594? ☐ → U

What is the value of the 9 in 29,260? ☐ → I

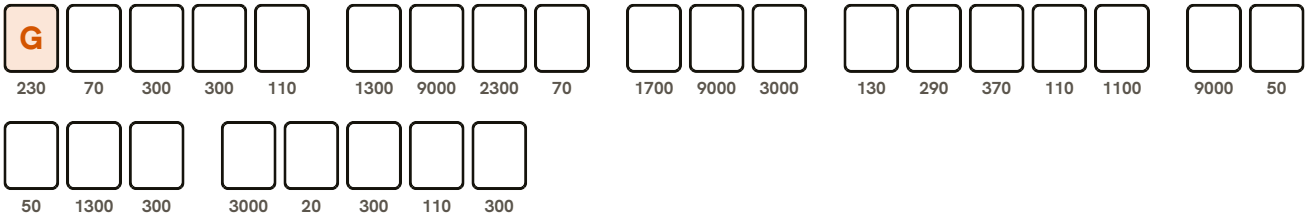
What is the value of the 9 in 3,795? ☐ → R

Scratch space:

## CLUE 4 Rounding

> The spooky score display rounds all points to the nearest ten to give this readout.

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




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

Round 2,858 to the nearest thousand ☐ → **S**

Round 373 to the nearest ten ☐ → **U**

Round 108 to the nearest ten ☐ → **N**

Round 2,335 to the nearest hundred ☐ → **I**

Round 1,060 to the nearest hundred ☐ → **D**

Round 17 to the nearest ten ☐ → **C**

Round 291 to the nearest ten ☐ → **O**

Round 1,692 to the nearest hundred ☐ → **W**

Round 133 to the nearest ten ☐ → **F**

Round 52 to the nearest ten ☐ → **T**

Round 253 to the nearest hundred ☐ → **E**

Round 70 to the nearest ten ☐ → **R**

Round 8,910 to the nearest thousand ☐ → **A**

Round 1,334 to the nearest hundred ☐ → **H**

Scratch space:

## CLUE 5 Missing addends - the last clue

Find the missing number of decorative bats needed to reach the full goal.

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:**

| | | | |
|---|---|---|---|
| 40 + ___ = 49 ☐ | 15 + ___ = 20 ☐ | 29 + ___ = 40 ☐ | 9 + ___ = 16 ☐ |
| 39 + ___ = 49 ☐ | 21 + ___ = 29 ☐ | 29 + ___ = 30 ☐ | 1 + ___ = 3 ☐ |
| 17 + ___ = 21 ☐ | 15 + ___ = 27 ☐ | 5 + ___ = 8 ☐ | |

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

1. The villain summoned a bat swarm, then blew a spooky whistle.
2. The villain summoned a bat swarm, then did a skeleton dance.
3. The villain vanished into a shadow cloak, then trapped the path in a spider net.
4. The villain summoned a bat swarm, then lit a glowing lantern.
5. The villain blasted sweet candy everywhere, then did a skeleton dance.
6. The villain floated like a ghost, then lit a glowing lantern.
7. The villain vanished into a shadow cloak, then turned on a fog machine.
8. The villain threw a pumpkin bomb, then did a skeleton dance.
9. The villain vanished into a shadow cloak, then blew a spooky whistle.
10. The villain floated like a ghost, then did a skeleton dance.
11. The villain threw a pumpkin bomb, then blew a spooky whistle.
12. The villain threw a pumpkin bomb, then trapped the path in a spider net.

TEACHER / PARENT

# Answer Key

**The Great Pumpkin Patch Prank**

## Culprit: Igor Crunch

Ghost Float · Glowing Lantern · Right Handed · Green Hair · Garlic Spray

Trail: Start 21 → Clue 1 14 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

### Clue 1 (Addition): "THE PRANKSTER DOES NOT USE A FOG MACHINE"

2700 + 3787 = 6487 (T) · 2473 + 3932 = 6405 (P) · 1419 + 3101 = 4520 (H) · 3558 + 2537 = 6095 (K) · 1274 + 2969 = 4243 (F) · 3356 + 2123 = 5479 (M) · 934 + 1432 = 2366 (R) · 2528 + 2197 = 4725 (O) · 2049 + 2900 = 4949 (G) · 1860 + 2331 = 4191 (S) · 1881 + 2937 = 4818 (C) · 2622 + 3003 = 5625 (A) · 3485 + 4327 = 7812 (N) · 3042 + 2492 = 5534 (I) · 5179 + 4600 = 9779 (U) · 2879 + 2640 = 5519 (E) · 4612 + 3250 = 7862 (D)

### Clue 2 (Subtraction): "WITNESS SAW A RIGHT HANDED VILLAIN LEAVE"

4881 - 1614 = 3267 (W) · 7334 - 1626 = 5708 (V) · 9010 - 3843 = 5167 (S) · 2749 - 342 = 2407 (T) · 10359 - 1482 = 8877 (R) · 11704 - 3595 = 8109 (L) · 12885 - 4254 = 8631 (E) · 9651 - 2612 = 7039 (D) · 9434 - 740 = 8694 (H) · 8163 - 2257 = 5906 (I) · 8572 - 3466 = 5106 (G) · 2119 - 1043 = 1076 (N) · 5290 - 324 = 4966 (A)

### Clue 3 (Place value): "GARLIC SPRAY STOPPED THE VILLAIN QUICKLY"

What is the value of the 8 in 8,071? = 8000 (G) · What is the value of the 3 in 6,931? = 30 (S) · What is the value of the 8 in 821? = 800 (V) · What is the value of the 8 in 1,186? = 80 (Y) · What is the value of the 7 in 474? = 70 (T) · What is the value of the 9 in 5,988? = 900 (A) · What is the value of the 2 in 7,218? = 200 (P) · What is the value of the 3 in 324? = 300 (C) · What is the value of the 1 in 8,144? = 100 (O) · What is the value of the 4 in 428? = 400 (N) · What is the value of the 1 in 2,318? = 10 (Q) · What is the value of the 6 in 163? = 60 (L) · What is the value of the 4 in 745? = 40 (K) · What is the value of the 6 in 6,210? = 6000 (E) · What is the value of the 7 in 7,419? = 7000 (H) · What is the value of the 2 in 9,424? = 20 (D) · What is the value of the 5 in 594? = 500 (U) · What is the value of the 9 in 29,260? = 9000 (I) · What is the value of the 9 in 3,795? = 90 (R)

### Clue 4 (Rounding): "GREEN HAIR WAS FOUND AT THE SCENE"

Round 234 to the nearest ten = 230 (G) · Round 2,858 to the nearest thousand = 3000 (S) · Round 373 to the nearest ten = 370 (U) · Round 108 to the nearest ten = 110 (N) · Round 2,335 to the nearest hundred = 2300 (I) · Round 1,060 to the nearest hundred = 1100 (D) · Round 17 to the nearest ten = 20 (C) · Round 291 to the nearest ten = 290 (O) · Round 1,692 to the nearest hundred = 1700 (W) · Round 133 to the nearest ten = 130 (F) · Round 52 to the nearest ten = 50 (T) · Round 253 to the nearest hundred = 300 (E) · Round 70 to the nearest ten = 70 (R) · Round 8,910 to the nearest thousand = 9000 (A) · Round 1,334 to the nearest hundred = 1300 (H)

### Clue 5 (Missing addends): surviving statement is box 6 → Igor Crunch

40 + ___ = 49 = 9 · 15 + ___ = 20 = 5 · 29 + ___ = 40 = 11 · 9 + ___ = 16 = 7 · 39 + ___ = 49 = 10 · 21 + ___ = 29 = 8 · 29 + ___ = 30 = 1 · 1 + ___ = 3 = 2 · 17 + ___ = 21 = 4 · 15 + ___ = 27 = 12 · 5 + ___ = 8 = 3