The Great Pumpkin Hollow Mystery

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

Detective: _____ **Date:** _____

Someone snuck into the Pumpkin Hollow Festival and swiped the golden prize pumpkin! Solve the math clues to track down the culprit before midnight.

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

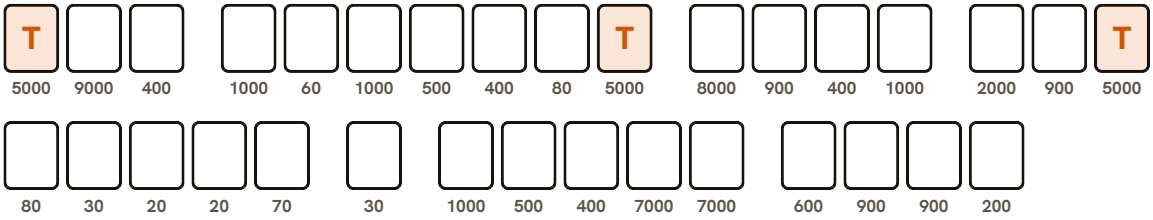
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	SPOOKY POWER	CARRIED ITEM	EYEWEAR	HAIRSTYLE	WEAKNESS
Jasper Ghost	Ghost Float	Candy Sack	No Spectacles	Purple Witch Hair	Bright Flashlights
Vesper Cloak	Shadow Dash	Candy Sack	No Spectacles	Green Warlock Hair	Garlic Juice
Bram Stoker	Pumpkin Blast	Haunted Mirror	Wears Spectacles	Orange Pumpkin Wig	Salt Sprinkles
Raven Dark	Ghost Float	Magic Wand	No Spectacles	Orange Pumpkin Wig	Garlic Juice
Piper Pumpkin	Ghost Float	Candy Sack	No Spectacles	Purple Witch Hair	Garlic Juice
Ember Dusk	Pumpkin Blast	Spell Book	No Spectacles	Purple Witch Hair	Garlic Juice
Opal Cauldron	Broom Glide	Candy Sack	No Spectacles	Purple Witch Hair	Garlic Juice
Victor Frankenstein	Broom Glide	Magic Wand	No Spectacles	Purple Witch Hair	Garlic Juice
Astrid Fane	Bat Swarm	Magic Wand	Wears Spectacles	Purple Witch Hair	Garlic Juice
Willow Web	Bat Swarm	Haunted Mirror	Wears Spectacles	Green Warlock Hair	Bright Flashlights
Tabitha Spell	Shadow Dash	Magic Wand	Wears Spectacles	Orange Pumpkin Wig	Salt Sprinkles
Luna Night	Bat Swarm	Magic Wand	Wears Spectacles	Orange Pumpkin Wig	Garlic Juice
Gideon Graves	Ghost Float	Spell Book	No Spectacles	Orange Pumpkin Wig	Salt Sprinkles
Wendy Witch	Broom Glide	Glow Lantern	No Spectacles	Green Warlock Hair	Garlic Juice
Jack Lantern	Ghost Float	Haunted Mirror	No Spectacles	Purple Witch Hair	Garlic Juice
Sabrina Spellman	Bat Swarm	Magic Wand	Wears Spectacles	Purple Witch Hair	Bright Flashlights
Hazel Witch	Ghost Float	Glow Lantern	Wears Spectacles	Purple Witch Hair	Garlic Juice
Mortimer Bones	Shadow Dash	Spell Book	No Spectacles	Purple Witch Hair	Salt Sprinkles
Corvin Raven	Bat Swarm	Glow Lantern	Wears Spectacles	Purple Witch Hair	Bright Flashlights
Merlin Stone	Broom Glide	Magic Wand	Wears Spectacles	Orange Pumpkin Wig	Salt Sprinkles
Silas Shadow	Shadow Dash	Magic Wand	No Spectacles	Purple Witch Hair	Bright Flashlights

CLUE 1 Place value

The spooky security lock checked the digital numbers on the haunted gate.

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



What is the value of the 5 in 85,901? ☐ → T

What is the value of the 5 in 9,573? ☐ → P

What is the value of the 2 in 12,947? ☐ → N

What is the value of the 6 in 4,965? ☐ → U

What is the value of the 9 in 920? ☐ → O

What is the value of the 9 in 59,006? ☐ → H

What is the value of the 8 in 28,125? ☐ → D

What is the value of the 7 in 7,863? ☐ → L

What is the value of the 8 in 9,085? ☐ → C

What is the value of the 3 in 738? ☐ → A

What is the value of the 2 in 268? ☐ → K

What is the value of the 4 in 8,475? ☐ → E

What is the value of the 2 in 525? ☐ → R

What is the value of the 6 in 654? ☐ → B

What is the value of the 7 in 371? ☐ → Y

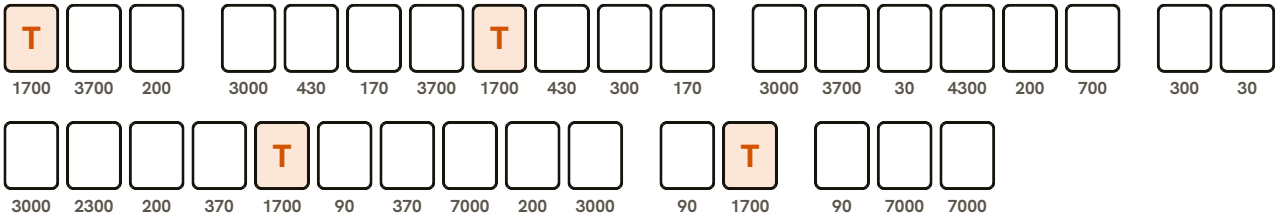
What is the value of the 1 in 21,558? ☐ → S

Scratch space:

CLUE 2 Rounding

The bat radar screen only shows numbers rounded to the nearest hundred.

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



Round 1,695 to the nearest hundred ☐ → T

Round 704 to the nearest hundred ☐ → D

Round 4,263 to the nearest hundred ☐ → W

Round 172 to the nearest ten ☐ → G

Round 221 to the nearest hundred ☐ → E

Round 7,194 to the nearest thousand ☐ → L

Round 428 to the nearest ten ☐ → I

Round 3,709 to the nearest hundred ☐ → H

Round 27 to the nearest ten ☐ → O

Round 2,825 to the nearest thousand ☐ → S

Round 302 to the nearest hundred ☐ → N

Round 2,347 to the nearest hundred ☐ → P

Round 367 to the nearest ten ☐ → C

Round 90 to the nearest ten ☐ → A

Scratch space:

CLUE 3 Addition

> The festival workers tallied up all the carved pumpkins in the main yard.

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



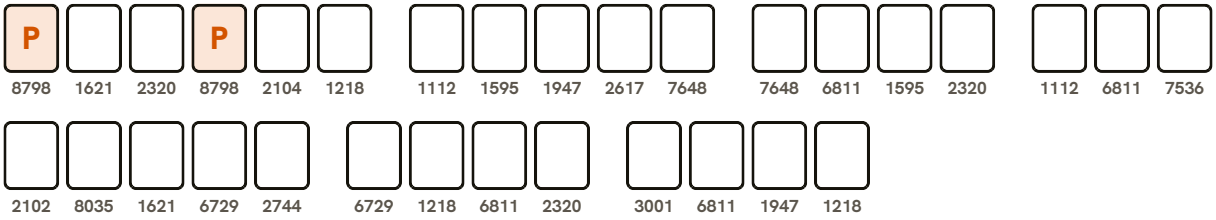
3560 + 4571 = ☐ → G	3421 + 1716 = ☐ → A	5093 + 3815 = ☐ → D
3660 + 5015 = ☐ → E	3421 + 2916 = ☐ → H	2665 + 3150 = ☐ → I
3944 + 3264 = ☐ → M	3257 + 2322 = ☐ → N	3231 + 2600 = ☐ → F
5566 + 3147 = ☐ → L	5423 + 3308 = ☐ → R	3941 + 2132 = ☐ → J
2928 + 2454 = ☐ → S	2879 + 2738 = ☐ → V	1818 + 2830 = ☐ → T
3352 + 2497 = ☐ → C	4029 + 4916 = ☐ → U	

Scratch space:

CLUE 4 Subtraction

The baker calculated how many spider cupcakes were taken from the counter.

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



12760 - 3962 = ☐ → P

5113 - 4001 = ☐ → W

4402 - 2082 = ☐ → R

6165 - 4544 = ☐ → U

9565 - 1917 = ☐ → H

6449 - 3705 = ☐ → D

5610 - 3506 = ☐ → L

3321 - 320 = ☐ → G

3738 - 1791 = ☐ → T

7446 - 717 = ☐ → N

9317 - 1781 = ☐ → S

6603 - 4501 = ☐ → F

5899 - 3282 = ☐ → C

11434 - 3399 = ☐ → O

1434 - 216 = ☐ → E

5162 - 3567 = ☐ → I

9830 - 3019 = ☐ → A

Scratch space:

CLUE 5 Missing addends - the last clue

> The candy inspector found a partial tally sheet with one missing number.

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:

12 + ___ = 18 ☐	28 + ___ = 38 ☐	17 + ___ = 18 ☐	39 + ___ = 47 ☐
7 + ___ = 9 ☐	40 + ___ = 45 ☐	30 + ___ = 42 ☐	13 + ___ = 16 ☐
30 + ___ = 39 ☐	5 + ___ = 16 ☐	29 + ___ = 33 ☐	

Step 2 - cross out the sentence with each answer:

1. The villain glided on a broomstick, then grabbed a heavy candy sack.
2. The villain summoned bats, then shined a glow lantern.
3. The villain glided on a broomstick, then shined a glow lantern.
4. The villain glided on a broomstick, then dropped a spell book.
5. The villain blasted glowing pumpkins, then grabbed a heavy candy sack.
6. The villain floated like a ghost, then gazed into a haunted mirror.
7. The villain glided on a broomstick, then waved a magic wand.
8. The villain floated like a ghost, then shined a glow lantern.
9. The villain blasted glowing pumpkins, then shined a glow lantern.
10. The villain floated like a ghost, then grabbed a heavy candy sack.
11. The villain blasted glowing pumpkins, then waved a magic wand.
12. The villain dashed through shadows, then gazed into a haunted mirror.

TEACHER / PARENT

Answer Key

The Great Pumpkin Hollow Mystery

Culprit: Victor Frankenstein

Broom Glide · Magic Wand · No Spectacles · Purple Witch Hair · Garlic Juice

Trail: Start 21 → Clue 1 18 → Clue 2 9 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE SUSPECT DOES NOT CARRY A SPELL BOOK"

What is the value of the 5 in 85,901? = 5000 (T) · What is the value of the 5 in 9,573? = 500 (P) · What is the value of the 2 in 12,947? = 2000 (N) · What is the value of the 6 in 4,965? = 60 (U) · What is the value of the 9 in 920? = 900 (O) · What is the value of the 9 in 59,006? = 9000 (H) · What is the value of the 8 in 28,125? = 8000 (D) · What is the value of the 7 in 7,863? = 7000 (L) · What is the value of the 8 in 9,085? = 80 (C) · What is the value of the 3 in 738? = 30 (A) · What is the value of the 2 in 268? = 200 (K) · What is the value of the 4 in 8,475? = 400 (E) · What is the value of the 2 in 525? = 20 (R) · What is the value of the 6 in 654? = 600 (B) · What is the value of the 7 in 371? = 70 (Y) · What is the value of the 1 in 21,558? = 1000 (S)

Clue 2 (Rounding): "THE SIGHTING SHOWED NO SPECTACLES AT ALL"

Round 1,695 to the nearest hundred = 1700 (T) · Round 704 to the nearest hundred = 700 (D) · Round 4,263 to the nearest hundred = 4300 (W) · Round 172 to the nearest ten = 170 (G) · Round 221 to the nearest hundred = 200 (E) · Round 7,194 to the nearest thousand = 7000 (L) · Round 428 to the nearest ten = 430 (I) · Round 3,709 to the nearest hundred = 3700 (H) · Round 27 to the nearest ten = 30 (O) · Round 2,825 to the nearest thousand = 3000 (S) · Round 302 to the nearest hundred = 300 (N) · Round 2,347 to the nearest hundred = 2300 (P) · Round 367 to the nearest ten = 370 (C) · Round 90 to the nearest ten = 90 (A)

Clue 3 (Addition): "GARLIC JUICE MADE THE VILLAIN FLEE FAST"

3560 + 4571 = 8131 (G) · 3421 + 1716 = 5137 (A) · 5093 + 3815 = 8908 (D) · 3660 + 5015 = 8675 (E) · 3421 + 2916 = 6337 (H) · 2665 + 3150 = 5815 (I) · 3944 + 3264 = 7208 (M) · 3257 + 2322 = 5579 (N) · 3231 + 2600 = 5831 (F) · 5566 + 3147 = 8713 (L) · 5423 + 3308 = 8731 (R) · 3941 + 2132 = 6073 (J) · 2928 + 2454 = 5382 (S) · 2879 + 2738 = 5617 (V) · 1818 + 2830 = 4648 (T) · 3352 + 2497 = 5849 (C) · 4029 + 4916 = 8945 (U)

Clue 4 (Subtraction): "PURPLE WITCH HAIR WAS FOUND NEAR GATE"

12760 - 3962 = 8798 (P) · 5113 - 4001 = 1112 (W) · 4402 - 2082 = 2320 (R) · 6165 - 4544 = 1621 (U) · 9565 - 1917 = 7648 (H) · 6449 - 3705 = 2744 (D) · 5610 - 3506 = 2104 (L) · 3321 - 320 = 3001 (G) · 3738 - 1791 = 1947 (T) · 7446 - 717 = 6729 (N) · 9317 - 1781 = 7536 (S) · 6603 - 4501 = 2102 (F) · 5899 - 3282 = 2617 (C) · 11434 - 3399 = 8035 (O) · 1434 - 216 = 1218 (E) · 5162 - 3567 = 1595 (I) · 9830 - 3019 = 6811 (A)

Clue 5 (Missing addends): surviving statement is box 7 → Victor Frankenstein

12 + ___ = 18 = 6 · 28 + ___ = 38 = 10 · 17 + ___ = 18 = 1 · 39 + ___ = 47 = 8 · 7 + ___ = 9 = 2 · 40 + ___ = 45 = 5 · 30 + ___ = 42 = 12 · 13 + ___ = 16 = 3 · 30 + ___ = 39 = 9 · 5 + ___ = 16 = 11 · 29 + ___ = 33 = 4