The Case of the Missing Golden Pumpkin

Grade 3 math · Place value, Addition, Subtraction, Rounding, Fractions of a number · Reading level grades 3-4

Detective: _____ **Date:** _____

The Golden Pumpkin was stolen from the town square right before the midnight parade! Crack the math clues to discover who took it.

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

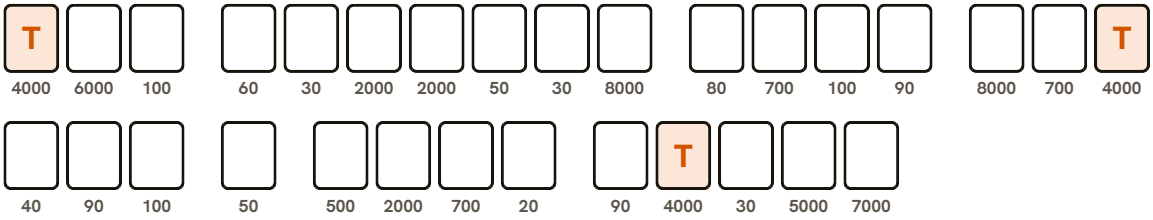
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	DISGUISE	GADGET	HABIT	WIG COLOR	BAIT
Pugsley Addams	Witch Hat	Magic Broom	Left Handed	Purple Hair	Caramel Apple
Wednesday Addams	Ghost Cape	Fog Machine	Left Handed	Purple Hair	Chocolate Bar
Wicked Witch	Vampire Fangs	Glow Stick	Left Handed	Orange Hair	Caramel Apple
Norman Babcock	Bat Wings	Fog Machine	Left Handed	Orange Hair	Chocolate Bar
Gomez Addams	Zombie Mask	Flashlight	Left Handed	Black Hair	Candy Corn
Mavis Dracula	Zombie Mask	Spider Web	Left Handed	Orange Hair	Caramel Apple
Mayor Of Halloween	Zombie Mask	Flashlight	Left Handed	Black Hair	Chocolate Bar
Morticia Addams	Vampire Fangs	Fog Machine	Left Handed	Orange Hair	Chocolate Bar
Count Dracula	Bat Wings	Flashlight	Left Handed	Orange Hair	Caramel Apple
Coraline Jones	Bat Wings	Magic Broom	Left Handed	Purple Hair	Chocolate Bar
Zero Hound	Zombie Mask	Magic Broom	Left Handed	Orange Hair	Caramel Apple
Beetle Juice	Witch Hat	Glow Stick	Right Handed	Purple Hair	Candy Corn
Dr Finkelstein	Ghost Cape	Fog Machine	Right Handed	Purple Hair	Caramel Apple
Denis Dracula	Zombie Mask	Spider Web	Left Handed	Black Hair	Candy Corn
Bride Of Frank	Zombie Mask	Flashlight	Right Handed	Orange Hair	Chocolate Bar
Casper Ghost	Vampire Fangs	Flashlight	Left Handed	Purple Hair	Caramel Apple
Igor Helper	Vampire Fangs	Magic Broom	Left Handed	Orange Hair	Caramel Apple
Sally Skellington	Vampire Fangs	Glow Stick	Left Handed	Black Hair	Caramel Apple
Glinda Good	Zombie Mask	Fog Machine	Right Handed	Black Hair	Chocolate Bar
Frankenstein Monster	Zombie Mask	Flashlight	Right Handed	Orange Hair	Caramel Apple
Jonathan Loughran	Ghost Cape	Flashlight	Left Handed	Orange Hair	Chocolate Bar

CLUE 1 Place value

You examine the door lock. Read the place value decoder on the keypad to find the first clue.

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



What is the value of the 4 in 64,090? ☐ → T

What is the value of the 1 in 164? ☐ → E

What is the value of the 9 in 397? ☐ → S

What is the value of the 2 in 721? ☐ → W

What is the value of the 8 in 6,385? ☐ → D

What is the value of the 4 in 9,540? ☐ → U

What is the value of the 3 in 7,635? ☐ → I

What is the value of the 2 in 2,573? ☐ → L

What is the value of the 7 in 7,129? ☐ → K

What is the value of the 8 in 98,534? ☐ → N

What is the value of the 5 in 259? ☐ → A

What is the value of the 5 in 5,219? ☐ → C

What is the value of the 7 in 1,768? ☐ → O

What is the value of the 6 in 6,828? ☐ → H

What is the value of the 5 in 3,541? ☐ → G

What is the value of the 6 in 5,962? ☐ → V

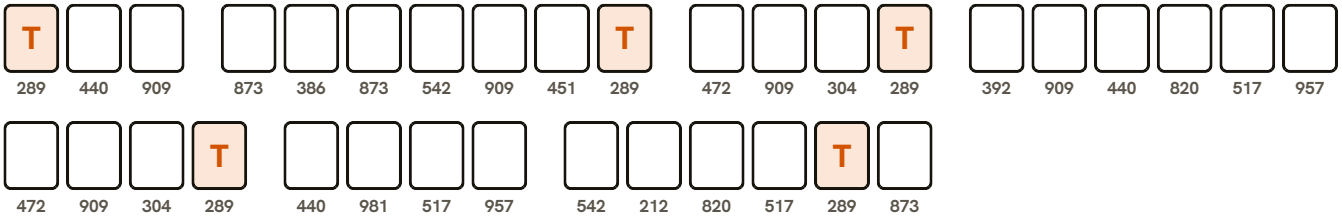
Scratch space:

CLUE 2

Addition

You tally up the spooky footprints near the pumpkin patch. Add them together to uncover another clue.

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



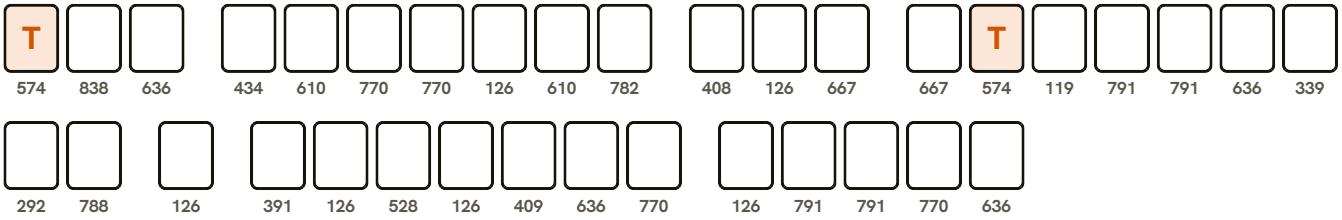
139 + 150 = ☐ → T	182 + 210 = ☐ → B	145 + 306 = ☐ → C
515 + 394 = ☐ → E	207 + 97 = ☐ → F	329 + 491 = ☐ → I
489 + 492 = ☐ → A	349 + 524 = ☐ → S	318 + 224 = ☐ → P
121 + 91 = ☐ → R	305 + 212 = ☐ → N	206 + 180 = ☐ → U
216 + 256 = ☐ → L	517 + 440 = ☐ → D	212 + 228 = ☐ → H

Scratch space:

CLUE 3 Subtraction

Some candy bags are missing from the potion cart. Subtract the difference to reveal the next clue.

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



629 - 55 = ☐ → T

616 - 6 = ☐ → I

877 - 107 = ☐ → L

282 - 163 = ☐ → O

860 - 69 = ☐ → P

649 - 215 = ☐ → V

691 - 352 = ☐ → D

596 - 187 = ☐ → M

923 - 256 = ☐ → S

486 - 360 = ☐ → A

732 - 324 = ☐ → W

1218 - 380 = ☐ → H

659 - 268 = ☐ → C

567 - 39 = ☐ → R

811 - 29 = ☐ → N

911 - 275 = ☐ → E

1134 - 346 = ☐ → Y

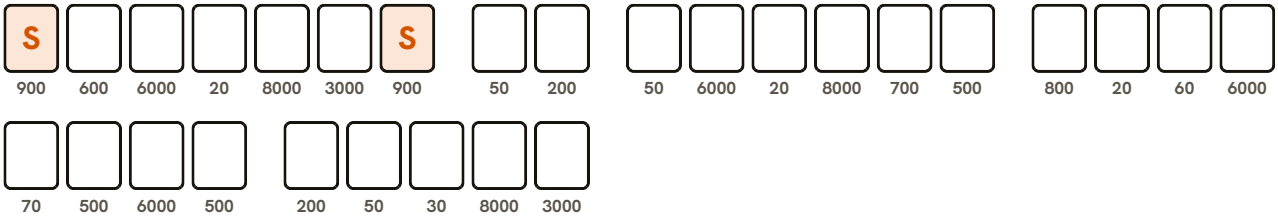
306 - 14 = ☐ → B

Scratch space:

CLUE 4 Rounding

The radar scanner shows an estimated distance rounded to the nearest ten. Round the digits to get the clue.

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



Round 871 to the nearest hundred ☐ → S

Round 52 to the nearest ten ☐ → O

Round 195 to the nearest hundred ☐ → F

Round 21 to the nearest ten ☐ → A

Round 2,599 to the nearest thousand ☐ → D

Round 722 to the nearest hundred ☐ → G

Round 637 to the nearest hundred ☐ → T

Round 32 to the nearest ten ☐ → U

Round 804 to the nearest hundred ☐ → H

Round 7,986 to the nearest thousand ☐ → N

Round 60 to the nearest ten ☐ → I

Round 66 to the nearest ten ☐ → W

Round 521 to the nearest hundred ☐ → E

Round 5,709 to the nearest thousand ☐ → R

Scratch space:

CLUE 5 Fractions of a number - the last clue

The spider web breaks into fractions of silk threads. Calculate the fraction to decode 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:

4/6 of 3 = ☐	1/8 of 64 = ☐	1/3 of 36 = ☐	5/10 of 14 = ☐
2/10 of 25 = ☐	5/10 of 22 = ☐	1/8 of 72 = ☐	4/10 of 25 = ☐
2/6 of 3 = ☐	1/3 of 12 = ☐	1/10 of 60 = ☐	

Step 2 - cross out the sentence with each answer:

1. The villain snickered with vampire fangs, then shot out a spider web.
2. The villain snickered with vampire fangs, then swept past on a magic broom.
3. The villain stumbled in a zombie mask, then shot out a spider web.
4. The villain flew around in a ghost cape, then shined a flashlight.
5. The villain stumbled in a zombie mask, then snapped a glow stick.
6. The villain snickered with vampire fangs, then snapped a glow stick.
7. The villain stumbled in a zombie mask, then pumped out thick fog.
8. The villain flapped away with bat wings, then shined a flashlight.
9. The villain flapped away with bat wings, then pumped out thick fog.
10. The villain cackled under a witch hat, then shined a flashlight.
11. The villain cackled under a witch hat, then snapped a glow stick.
12. The villain stumbled in a zombie mask, then swept past on a magic broom.

TEACHER / PARENT

Answer Key

The Case of the Missing Golden Pumpkin

Culprit: Mavis Dracula

Zombie Mask · Spider Web · Left Handed · Orange Hair · Caramel Apple

Trail: Start 21 → Clue 1 18 → Clue 2 14 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT USE A GLOW STICK"

What is the value of the 4 in 64,090? = 4000 (T) · What is the value of the 1 in 164? = 100 (E) · What is the value of the 9 in 397? = 90 (S) · What is the value of the 2 in 721? = 20 (W) · What is the value of the 8 in 6,385? = 80 (D) · What is the value of the 4 in 9,540? = 40 (U) · What is the value of the 3 in 7,635? = 30 (I) · What is the value of the 2 in 2,573? = 2000 (L) · What is the value of the 7 in 7,129? = 7000 (K) · What is the value of the 8 in 98,534? = 8000 (N) · What is the value of the 5 in 259? = 50 (A) · What is the value of the 5 in 5,219? = 5000 (C) · What is the value of the 7 in 1,768? = 700 (O) · What is the value of the 6 in 6,828? = 6000 (H) · What is the value of the 5 in 3,541? = 500 (G) · What is the value of the 6 in 5,962? = 60 (V)

Clue 2 (Addition): "THE SUSPECT LEFT BEHIND LEFT HAND PRINTS"

139 + 150 = 289 (T) · 182 + 210 = 392 (B) · 145 + 306 = 451 (C) · 515 + 394 = 909 (E) · 207 + 97 = 304 (F) · 329 + 491 = 820 (I) · 489 + 492 = 981 (A) · 349 + 524 = 873 (S) · 318 + 224 = 542 (P) · 121 + 91 = 212 (R) · 305 + 212 = 517 (N) · 206 + 180 = 386 (U) · 216 + 256 = 472 (L) · 517 + 440 = 957 (D) · 212 + 228 = 440 (H)

Clue 3 (Subtraction): "THE VILLAIN WAS STOPPED BY A CARAMEL APPLE"

629 - 55 = 574 (T) · 616 - 6 = 610 (I) · 877 - 107 = 770 (L) · 282 - 163 = 119 (O) · 860 - 69 = 791 (P) · 649 - 215 = 434 (V) · 691 - 352 = 339 (D) · 596 - 187 = 409 (M) · 923 - 256 = 667 (S) · 486 - 360 = 126 (A) · 732 - 324 = 408 (W) · 1218 - 380 = 838 (H) · 659 - 268 = 391 (C) · 567 - 39 = 528 (R) · 811 - 29 = 782 (N) · 911 - 275 = 636 (E) · 1134 - 346 = 788 (Y) · 306 - 14 = 292 (B)

Clue 4 (Rounding): "STRANDS OF ORANGE HAIR WERE FOUND"

Round 871 to the nearest hundred = 900 (S) · Round 52 to the nearest ten = 50 (O) · Round 195 to the nearest hundred = 200 (F) · Round 21 to the nearest ten = 20 (A) · Round 2,599 to the nearest thousand = 3000 (D) · Round 722 to the nearest hundred = 700 (G) · Round 637 to the nearest hundred = 600 (T) · Round 32 to the nearest ten = 30 (U) · Round 804 to the nearest hundred = 800 (H) · Round 7,986 to the nearest thousand = 8000 (N) · Round 60 to the nearest ten = 60 (I) · Round 66 to the nearest ten = 70 (W) · Round 521 to the nearest hundred = 500 (E) · Round 5,709 to the nearest thousand = 6000 (R)

Clue 5 (Fractions of a number): surviving statement is box 3 → Mavis Dracula

4/6 of 3 = 2 · 1/8 of 64 = 8 · 1/3 of 36 = 12 · 5/10 of 14 = 7 · 2/10 of 25 = 5 · 5/10 of 22 = 11 · 1/8 of 72 = 9 · 4/10 of 25 = 10 · 2/6 of 3 = 1 · 1/3 of 12 = 4 · 1/10 of 60 = 6