The Halloween Haunt Mystery

Grade 3 math · Fractions of a number, Multiplication, Rounding, Addition · Reading level grades 1-2

Detective: _____ **Date:** _____

Someone ruined the Halloween party! Solve the clues to catch the ghoul.

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 Prankster Ghoul is _____

Possible suspects

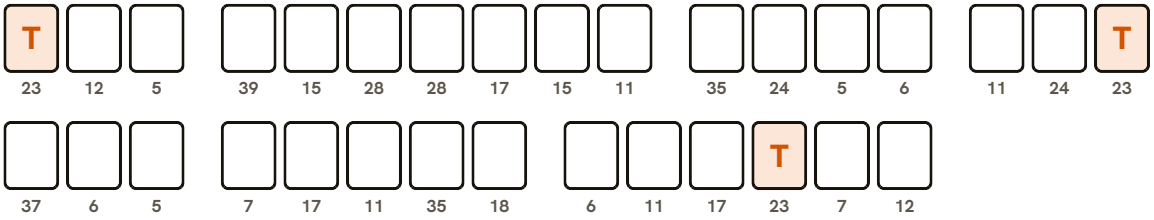
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	MAIN TRICK	EXTRA TRICK	HAND USED	HAIR WIG	WEAKNESS
Pippin Pumpkin	Bat Swarm	Spooky Howl	Left Handed	Purple Hair	Salt Circle
Jack O Lantern	Pumpkin Blast	Spooky Howl	Right Handed	Green Locks	Salt Circle
Igor Helper	Pumpkin Blast	Candy Snatch	Right Handed	Orange Wig	Garlic Spray
Trixie Treat	Broom Fly	Skeleton Dance	Right Handed	Purple Hair	Salt Circle
Casper Ghost	Broom Fly	Candy Snatch	Right Handed	Orange Wig	Salt Circle
Wendy Witch	Broom Fly	Shadow Step	Right Handed	Orange Wig	Salt Circle
Stella Star	Ghost Shield	Skeleton Dance	Left Handed	Orange Wig	Garlic Spray
Pugsley Night	Pumpkin Blast	Spooky Howl	Right Handed	Orange Wig	Garlic Spray
Shadow Sean	Bat Swarm	Shadow Step	Right Handed	Green Locks	Garlic Spray
Mavis Dracula	Bat Swarm	Skeleton Dance	Right Handed	Orange Wig	Garlic Spray
Gloom Gary	Pumpkin Blast	Candy Snatch	Left Handed	Purple Hair	Salt Circle
Cobweb Carl	Slime Wave	Glowing Eyes	Right Handed	Orange Wig	Garlic Spray
Salem Cat	Bat Swarm	Glowing Eyes	Right Handed	Orange Wig	Garlic Spray
Wednesday Night	Broom Fly	Skeleton Dance	Left Handed	Orange Wig	Bright Flashlight
Bramble Toad	Bat Swarm	Candy Snatch	Left Handed	Orange Wig	Garlic Spray
Luna Moon	Ghost Shield	Spooky Howl	Right Handed	Purple Hair	Garlic Spray
Count Vlad	Bat Swarm	Shadow Step	Left Handed	Orange Wig	Garlic Spray
Uncle Fester	Slime Wave	Spooky Howl	Left Handed	Green Locks	Bright Flashlight
Hester Spell	Slime Wave	Shadow Step	Right Handed	Green Locks	Garlic Spray
Frankie Stein	Pumpkin Blast	Skeleton Dance	Left Handed	Purple Hair	Salt Circle
Gasket Ghoul	Slime Wave	Shadow Step	Right Handed	Orange Wig	Bright Flashlight

CLUE 1 Fractions of a number

> We found a recipe for magic potion but only part of the bowl was filled.

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



2/10 of 115 = ☐ → T

2/8 of 20 = ☐ → E

1/5 of 90 = ☐ → Y

3/6 of 22 = ☐ → N

2/4 of 30 = ☐ → I

2/6 of 51 = ☐ → A

2/4 of 78 = ☐ → V

2/10 of 140 = ☐ → L

1/4 of 140 = ☐ → D

1/4 of 24 = ☐ → S

2/10 of 185 = ☐ → U

4/8 of 48 = ☐ → O

3/6 of 24 = ☐ → H

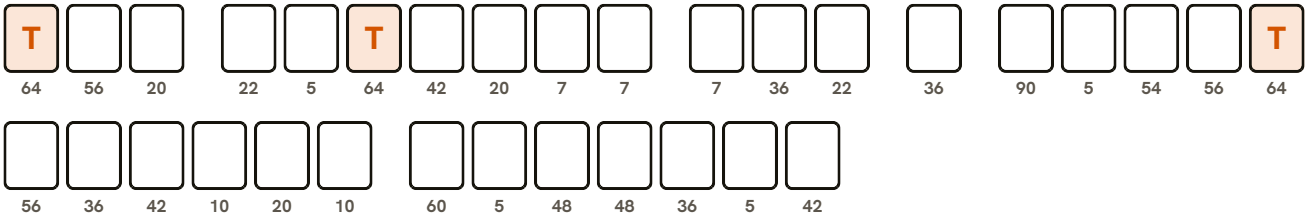
1/4 of 28 = ☐ → C

Scratch space:

CLUE 2 Multiplication facts (1-12)

> The trick or treaters gathered their candy bags in equal rows on the porch.

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



8 × 8 = ☐ → T

10 × 9 = ☐ → R

2 × 11 = ☐ → W

8 × 7 = ☐ → H

7 × 1 = ☐ → S

6 × 7 = ☐ → N

1 × 5 = ☐ → I

4 × 5 = ☐ → E

12 × 4 = ☐ → L

4 × 9 = ☐ → A

5 × 2 = ☐ → D

12 × 5 = ☐ → V

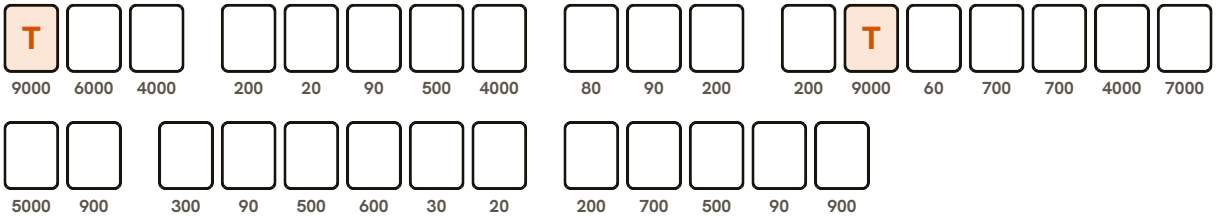
9 × 6 = ☐ → G

Scratch space:

CLUE 3 Rounding

The pumpkin scale only shows rounded numbers on its digital screen.

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



Round 8,949 to the nearest thousand ☐ → T

Round 77 to the nearest ten ☐ → W

Round 26 to the nearest ten ☐ → I

Round 57 to the nearest ten ☐ → O

Round 241 to the nearest hundred ☐ → S

Round 6,856 to the nearest thousand ☐ → D

Round 317 to the nearest hundred ☐ → G

Round 18 to the nearest ten ☐ → C

Round 4,725 to the nearest thousand ☐ → B

Round 5,524 to the nearest thousand ☐ → H

Round 3,654 to the nearest thousand ☐ → E

Round 702 to the nearest hundred ☐ → P

Round 88 to the nearest ten ☐ → A

Round 860 to the nearest hundred ☐ → Y

Round 478 to the nearest hundred ☐ → R

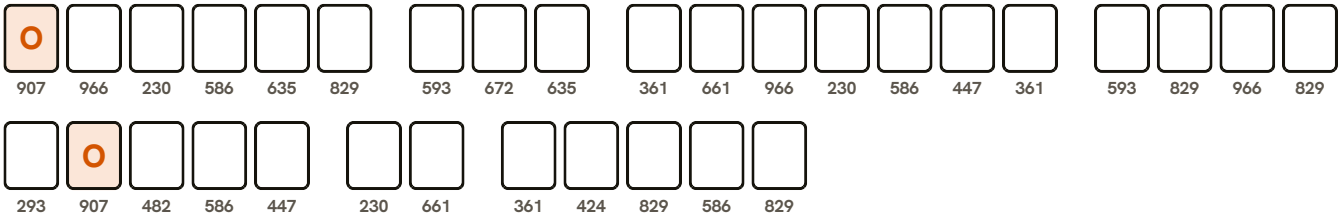
Round 606 to the nearest hundred ☐ → L

Scratch space:

CLUE 4 Addition

We tallied up all the spooky costumes in the town parade.

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



490 + 417 = ☐ → **O**

617 + 349 = ☐ → **R**

389 + 246 = ☐ → **G**

257 + 190 = ☐ → **D**

131 + 99 = ☐ → **A**

304 + 289 = ☐ → **W**

299 + 287 = ☐ → **N**

180 + 181 = ☐ → **S**

212 + 449 = ☐ → **T**

163 + 130 = ☐ → **F**

260 + 164 = ☐ → **C**

224 + 258 = ☐ → **U**

446 + 383 = ☐ → **E**

428 + 244 = ☐ → **I**

Scratch space:

CLUE 5

Fractions of a number - the last clue

> Only a small fraction of the haunted house lamps were still lit.

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:

4/8 of 6 = ☐	1/6 of 24 = ☐	2/8 of 44 = ☐	8/10 of 15 = ☐
7/10 of 10 = ☐	3/6 of 4 = ☐	2/6 of 30 = ☐	6/8 of 12 = ☐
3/10 of 20 = ☐	1/5 of 25 = ☐	1/4 of 32 = ☐	

Step 2 - cross out the sentence with each answer:

1. The villain shot a slime wave, then shone glowing eyes.
2. The villain blasted a pumpkin, then did a skeleton dance.
3. The villain blasted a pumpkin, then made a spooky howl.
4. The villain sent a bat swarm, then shone glowing eyes.
5. The villain flew on a broom, then made a spooky howl.
6. The villain flew on a broom, then stepped into shadow.
7. The villain sent a bat swarm, then made a spooky howl.
8. The villain raised a ghost shield, then made a spooky howl.
9. The villain flew on a broom, then did a skeleton dance.
10. The villain raised a ghost shield, then stepped into shadow.
11. The villain sent a bat swarm, then did a skeleton dance.
12. The villain blasted a pumpkin, then shone glowing eyes.

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TEACHER / PARENT

Answer Key

The Halloween Haunt Mystery

Culprit: Cobweb Carl

Slime Wave · Glowing Eyes · Right Handed · Orange Wig · Garlic Spray

Trail: Start 21 → Clue 1 17 → Clue 2 11 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE VILLAIN DOES NOT USE CANDY SNATCH"

2/10 of 115 = 23 (T) · 2/8 of 20 = 5 (E) · 1/5 of 90 = 18 (Y) · 3/6 of 22 = 11 (N) · 2/4 of 30 = 15 (I) · 2/6 of 51 = 17 (A) · 2/4 of 78 = 39 (V) · 2/10 of 140 = 28 (L) · 1/4 of 140 = 35 (D) · 1/4 of 24 = 6 (S) · 2/10 of 185 = 37 (U) · 4/8 of 48 = 24 (O) · 3/6 of 24 = 12 (H) · 1/4 of 28 = 7 (C)

Clue 2 (Multiplication facts (1-12)): "THE WITNESS SAW A RIGHT HANDED VILLAIN"

8 × 8 = 64 (T) · 10 × 9 = 90 (R) · 2 × 11 = 22 (W) · 8 × 7 = 56 (H) · 7 × 1 = 7 (S) · 6 × 7 = 42 (N) · 1 × 5 = 5 (I) · 4 × 5 = 20 (E) · 12 × 4 = 48 (L) · 4 × 9 = 36 (A) · 5 × 2 = 10 (D) · 12 × 5 = 60 (V) · 9 × 6 = 54 (G)

Clue 3 (Rounding): "THE SCARE WAS STOPPED BY GARLIC SPRAY"

Round 8,949 to the nearest thousand = 9000 (T) · Round 77 to the nearest ten = 80 (W) · Round 26 to the nearest ten = 30 (I) · Round 57 to the nearest ten = 60 (O) · Round 241 to the nearest hundred = 200 (S) · Round 6,856 to the nearest thousand = 7000 (D) · Round 317 to the nearest hundred = 300 (G) · Round 18 to the nearest ten = 20 (C) · Round 4,725 to the nearest thousand = 5000 (B) · Round 5,524 to the nearest thousand = 6000 (H) · Round 3,654 to the nearest thousand = 4000 (E) · Round 702 to the nearest hundred = 700 (P) · Round 88 to the nearest ten = 90 (A) · Round 860 to the nearest hundred = 900 (Y) · Round 478 to the nearest hundred = 500 (R) · Round 606 to the nearest hundred = 600 (L)

Clue 4 (Addition): "ORANGE WIG STRANDS WERE FOUND AT SCENE"

490 + 417 = 907 (O) · 617 + 349 = 966 (R) · 389 + 246 = 635 (G) · 257 + 190 = 447 (D) · 131 + 99 = 230 (A) · 304 + 289 = 593 (W) · 299 + 287 = 586 (N) · 180 + 181 = 361 (S) · 212 + 449 = 661 (T) · 163 + 130 = 293 (F) · 260 + 164 = 424 (C) · 224 + 258 = 482 (U) · 446 + 383 = 829 (E) · 428 + 244 = 672 (I)

Clue 5 (Fractions of a number): surviving statement is box 1 → Cobweb Carl

4/8 of 6 = 3 · 1/6 of 24 = 4 · 2/8 of 44 = 11 · 8/10 of 15 = 12 · 7/10 of 10 = 7 · 3/6 of 4 = 2 · 2/6 of 30 = 10 · 6/8 of 12 = 9 · 3/10 of 20 = 6 · 1/5 of 25 = 5 · 1/4 of 32 = 8