The Upside Mystery of Hawkins Town

Grade 5 math · Multiplication, Fractions of a number, Order of operations, Rounding, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

Something strange is happening in Hawkins Town! A shadowy villain snuck into the school basement and ruined the science fair project. Clues are hidden around the school, and only the local detectives can solve the mystery!

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 Shadow Creature is _____

Possible suspects

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

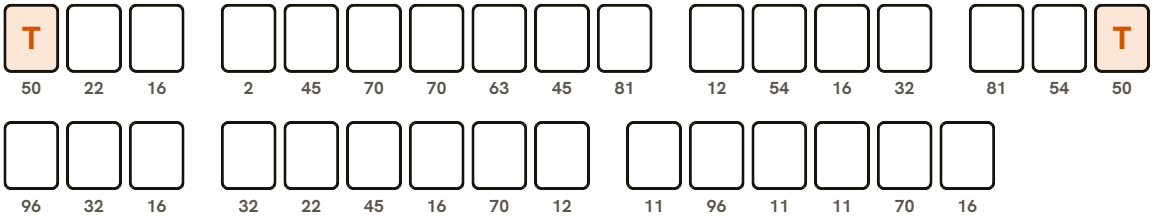
NAME	MAIN POWER	EXTRA POWER	HABIT TELL	HAIR STYLE	SECRET WEAKNESS
Eddie M	sonic scream	time loop	left handed	spiked black	bright lights
Mike W	flame cast	electric shock	right handed	messy brown	bright lights
Jason C	flame cast	shadow step	right handed	spiked black	loud music
Nancy W	sonic scream	frost touch	right handed	buzz cut	cold mist
Jonathan B	sonic scream	electric shock	left handed	messy brown	cold mist
Jim H	telepathic push	shield bubble	right handed	spiked black	cold mist
Vickie T	portal spark	frost touch	right handed	messy brown	cold mist
Suzie P	sonic scream	electric shock	right handed	messy brown	bright lights
Lucas S	flame cast	time loop	left handed	spiked black	bright lights
Steve H	telepathic push	electric shock	right handed	buzz cut	bright lights
Erica S	mind read	shield bubble	right handed	buzz cut	cold mist
Ted W	flame cast	electric shock	left handed	buzz cut	cold mist
Robin B	mind read	shadow step	left handed	buzz cut	loud music
Max M	telepathic push	time loop	left handed	buzz cut	loud music
Holly W	flame cast	time loop	right handed	buzz cut	cold mist
Dustin H	portal spark	time loop	right handed	buzz cut	cold mist
Murray B	portal spark	time loop	right handed	spiked black	cold mist
Karen W	telepathic push	frost touch	left handed	spiked black	loud music
Argyle K	telepathic push	time loop	right handed	buzz cut	cold mist
Will B	sonic scream	time loop	right handed	buzz cut	loud music
Chrissy C	portal spark	electric shock	left handed	spiked black	bright lights

make your own at mathcrackers.com

CLUE 1 Multiplication facts (1-12)

The AV Club counts stacks of glowing radio tubes arranged in equal rows to decode a mysterious message.

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



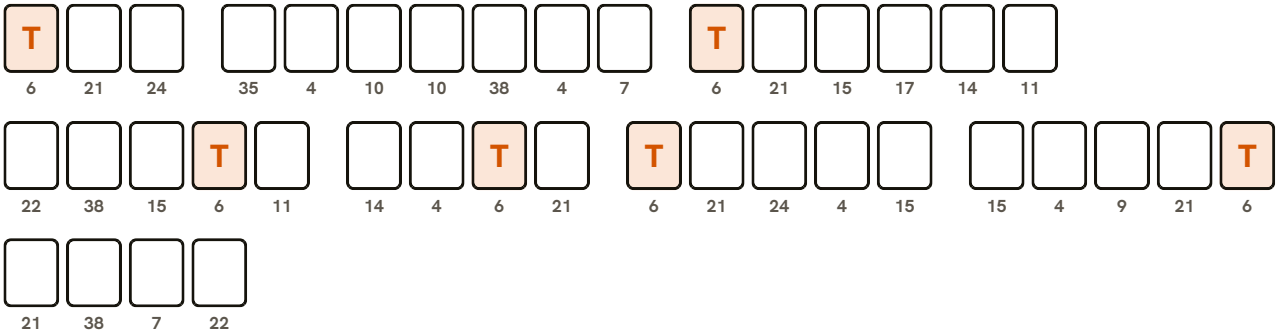
10 × 5 = ☐ → T	12 × 1 = ☐ → D	9 × 5 = ☐ → I	
2 × 11 = ☐ → H	4 × 4 = ☐ → E	1 × 2 = ☐ → V	8 × 4 = ☐ → S
9 × 9 = ☐ → N	8 × 12 = ☐ → U	9 × 7 = ☐ → A	
1 × 11 = ☐ → B	9 × 6 = ☐ → O	7 × 10 = ☐ → L	

Scratch space:

CLUE 2 Fractions of a number

The young investigators analyze a box of walkie talkies to see what fraction still receive the strange signal.

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



2/8 of 24 = ☐ → T

2/8 of 140 = ☐ → V

3/8 of 64 = ☐ → E

1/6 of 132 = ☐ → D

2/6 of 30 = ☐ → L

1/4 of 36 = ☐ → G

2/4 of 22 = ☐ → S

1/2 of 76 = ☐ → A

5/10 of 14 = ☐ → N

3/8 of 40 = ☐ → R

6/10 of 35 = ☐ → H

2/4 of 28 = ☐ → W

1/8 of 32 = ☐ → I

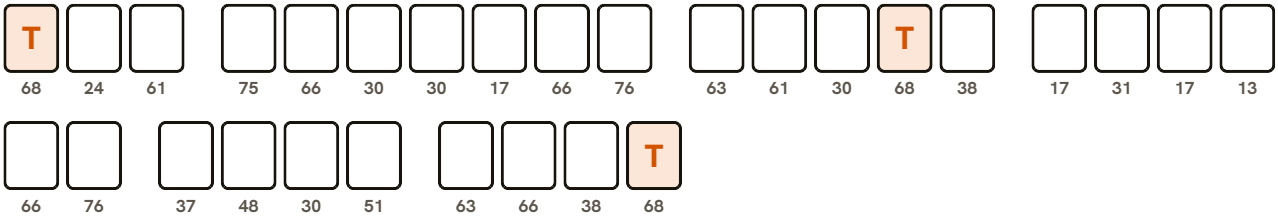
2/10 of 85 = ☐ → O

Scratch space:

CLUE 3 Order of operations

The team follows a multi step grid puzzle on the arcade screen to decrypt the hidden cipher.

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



8 × 12 - 28 = ☐ → T	8 × 7 - 5 = ☐ → D	53 + 5 × 2 = ☐ → M
5 × 12 - 12 = ☐ → O	2 × 9 - 5 = ☐ → Y	8 × 6 - 11 = ☐ → C
9 × 9 - 6 = ☐ → V	8 × 11 - 22 = ☐ → I	4 × 8 - 1 = ☐ → W
4 × 11 - 20 = ☐ → H	7 + 5 × 2 = ☐ → A	46 + 5 × 3 = ☐ → E
12 × 5 - 22 = ☐ → S	8 × 4 - 2 = ☐ → L	8 × 10 - 4 = ☐ → N

Scratch space:

CLUE 4 Rounding

The lab tracker screen flashes blurry power readings that only display to the nearest hundred.

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

E				E			E														
300	7000	20	70	300	430	370	300	1700	110	2000	30	1700	1300	3700	900	370	300	1700	2000	700	90	2300	290	290	370	2300	1300	110	900	20	3700

Round 324 to the nearest hundred ☐ → E

Round 2,077 to the nearest thousand ☐ → O

Round 370 to the nearest ten ☐ → C

Round 289 to the nearest ten ☐ → Z

Round 23 to the nearest ten ☐ → I

Round 682 to the nearest hundred ☐ → F

Round 1,332 to the nearest hundred ☐ → T

Round 7,380 to the nearest thousand ☐ → V

Round 1,685 to the nearest hundred ☐ → S

Round 431 to the nearest ten ☐ → N

Round 90 to the nearest ten ☐ → B

Round 28 to the nearest ten ☐ → W

Round 2,308 to the nearest hundred ☐ → U

Round 112 to the nearest ten ☐ → H

Round 3,749 to the nearest hundred ☐ → R

Round 926 to the nearest hundred ☐ → A

Round 69 to the nearest ten ☐ → D

Scratch space:

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

> The friends split up the remaining battery packs equally among their search squads.

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 ÷ 6 = ☐	48 ÷ 6 = ☐	15 ÷ 5 = ☐	11 ÷ 11 = ☐	28 ÷ 7 = ☐
88 ÷ 8 = ☐	120 ÷ 10 = ☐	60 ÷ 6 = ☐	7 ÷ 1 = ☐	90 ÷ 10 = ☐
30 ÷ 6 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain uses telepathic push to disrupt signals, then zaps the lights with electric shock.
2. The villain lets out a sonic scream to confuse clues, then leaves behind a frost touch.
3. The villain uses telepathic push to disrupt signals, then traps the room in a time loop.
4. The villain reads minds to swipe secret codes, then slips into a shadow step.
5. The villain uses telepathic push to disrupt signals, then slips into a shadow step.
6. The villain casts flame to scorch the records, then traps the room in a time loop.
7. The villain opens a portal spark in the dark, then leaves behind a frost touch.
8. The villain opens a portal spark in the dark, then traps the room in a time loop.
9. The villain lets out a sonic scream to confuse clues, then zaps the lights with electric shock.
10. The villain uses telepathic push to disrupt signals, then leaves behind a frost touch.
11. The villain casts flame to scorch the records, then leaves behind a frost touch.
12. The villain casts flame to scorch the records, then zaps the lights with electric shock.

TEACHER / PARENT

Answer Key

The Upside Mystery of Hawkins Town

Culprit: Holly W

flame cast · time loop · right handed · buzz cut · cold mist

Trail: Start 21 → Clue 1 19 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT USE SHIELD BUBBLE"

10 × 5 = 50 (T) · 12 × 1 = 12 (D) · 9 × 5 = 45 (I) · 2 × 11 = 22 (H) · 4 × 4 = 16 (E) · 1 × 2 = 2 (V) · 8 × 4 = 32 (S) · 9 × 9 = 81 (N) · 8 × 12 = 96 (U) · 9 × 7 = 63 (A) · 1 × 11 = 11 (B) · 9 × 6 = 54 (O) · 7 × 10 = 70 (L)

Clue 2 (Fractions of a number): "THE VILLAIN THROWS DARTS WITH THEIR RIGHT HAND"

2/8 of 24 = 6 (T) · 2/8 of 140 = 35 (V) · 3/8 of 64 = 24 (E) · 1/6 of 132 = 22 (D) · 2/6 of 30 = 10 (L) · 1/4 of 36 = 9 (G) · 2/4 of 22 = 11 (S) · 1/2 of 76 = 38 (A) · 5/10 of 14 = 7 (N) · 3/8 of 40 = 15 (R) · 6/10 of 35 = 21 (H) · 2/4 of 28 = 14 (W) · 1/8 of 32 = 4 (I) · 2/10 of 85 = 17 (O)

Clue 3 (Order of operations): "THE VILLAIN MELTS AWAY IN COLD MIST"

8 × 12 - 28 = 68 (T) · 8 × 7 - 5 = 51 (D) · 53 + 5 × 2 = 63 (M) · 5 × 12 - 12 = 48 (O) · 2 × 9 - 5 = 13 (Y) · 8 × 6 - 11 = 37 (C) · 9 × 9 - 6 = 75 (V) · 8 × 11 - 22 = 66 (I) · 4 × 8 - 1 = 31 (W) · 4 × 11 - 20 = 24 (H) · 7 + 5 × 2 = 17 (A) · 46 + 5 × 3 = 61 (E) · 12 × 5 - 22 = 38 (S) · 8 × 4 - 2 = 30 (L) · 8 × 10 - 4 = 76 (N)

Clue 4 (Rounding): "EVIDENCE SHOWS TRACES OF BUZZ CUT HAIR"

Round 324 to the nearest hundred = 300 (E) · Round 2,077 to the nearest thousand = 2000 (O) · Round 370 to the nearest ten = 370 (C) · Round 289 to the nearest ten = 290 (Z) · Round 23 to the nearest ten = 20 (I) · Round 682 to the nearest hundred = 700 (F) · Round 1,332 to the nearest hundred = 1300 (T) · Round 7,380 to the nearest thousand = 7000 (V) · Round 1,685 to the nearest hundred = 1700 (S) · Round 431 to the nearest ten = 430 (N) · Round 90 to the nearest ten = 90 (B) · Round 28 to the nearest ten = 30 (W) · Round 2,308 to the nearest hundred = 2300 (U) · Round 112 to the nearest ten = 110 (H) · Round 3,749 to the nearest hundred = 3700 (R) · Round 926 to the nearest hundred = 900 (A) · Round 69 to the nearest ten = 70 (D)

Clue 5 (Division facts (1-12)): surviving statement is box 6 → Holly W

12 ÷ 6 = 2 · 48 ÷ 6 = 8 · 15 ÷ 5 = 3 · 11 ÷ 11 = 1 · 28 ÷ 7 = 4 · 88 ÷ 8 = 11 · 120 ÷ 10 = 12 · 60 ÷ 6 = 10 · 7 ÷ 1 = 7 · 90 ÷ 10 = 9 · 30 ÷ 6 = 5