



The Midnight Monster Mystery

Grade 5 math · Multiplication, Fractions of a number, Order of operations, Rounding, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

Oh no! Someone broke into the Academy vault and stole the Golden Scare Trophy right before the big pep rally. The Chief Scare Instructor needs your help to track down the sneaky monster suspect!

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 Slime Snatcher is _____

Possible suspects

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

NAME	SCARE TACTIC	MUTATION	CLAW SIDE	FUR COLOR	SCARE STOPPER
Gillman Swamp	Thunder Stomp	Glow Eyes	Right clawed	Midnight Blue	Flashlight
Jack Howler	Acid Spit	Glow Eyes	Right clawed	Static Purple	Flashlight
Count Drac	Sonic Howl	Spiky Tail	Left clawed	Static Purple	Flashlight
Frankie Stein	Thunder Stomp	Spiky Tail	Right clawed	Neon Green	Loud Whistle
Grim Reaper	Sonic Howl	Spiky Tail	Right clawed	Static Purple	Flashlight
Shawn Shadow	Slime Trail	Bat Wings	Right clawed	Neon Green	Flashlight
Blobby Sue	Sonic Howl	Spiky Tail	Left clawed	Midnight Blue	Loud Whistle
Wanda Witch	Slime Trail	Glow Eyes	Right clawed	Neon Green	Flashlight
Pennywise Clown	Sonic Howl	Spiky Tail	Right clawed	Static Purple	Squeaky Toy
Bob Bigfoot	Shadow Merge	Spiky Tail	Right clawed	Neon Green	Flashlight
Zoey Zombie	Thunder Stomp	Glow Eyes	Left clawed	Neon Green	Flashlight
Vlad Alucard	Sonic Howl	Glow Eyes	Right clawed	Midnight Blue	Flashlight
Spike Goblin	Acid Spit	Glow Eyes	Right clawed	Neon Green	Squeaky Toy
Gorgon Medusa	Sonic Howl	Bat Wings	Left clawed	Static Purple	Loud Whistle
Grog Ogre	Shadow Merge	Horn Crown	Right clawed	Neon Green	Flashlight
Fang Wolfman	Slime Trail	Spiky Tail	Left clawed	Neon Green	Loud Whistle
York Yeti	Acid Spit	Horn Crown	Left clawed	Static Purple	Squeaky Toy
Bones Skeleton	Sonic Howl	Spiky Tail	Right clawed	Neon Green	Flashlight
Orlok Nosferatu	Thunder Stomp	Horn Crown	Right clawed	Midnight Blue	Loud Whistle
Gary Gargoyle	Acid Spit	Horn Crown	Left clawed	Midnight Blue	Loud Whistle
Nessie Loch	Slime Trail	Horn Crown	Right clawed	Neon Green	Loud Whistle

CLUE 1

Multiplication facts (1-12)

We found rows of muddy footprints in the hallway. Let us count them by multiplying the rows to decode our first lead.

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

T																T
50	11	54	48	4	9	9	120	4	10	45	132	54	3	10	132	50
11	120	48	54	120	11	132	44	10	63	44	132	77	10			

$10 \times 5 = \square \rightarrow \text{T}$

$1 \times 11 = \square \rightarrow \text{H}$

$6 \times 9 = \square \rightarrow \text{E}$

$12 \times 10 = \square \rightarrow \text{A}$

$4 \times 12 = \square \rightarrow \text{V}$

$5 \times 2 = \square \rightarrow \text{N}$

$9 \times 5 = \square \rightarrow \text{D}$

$11 \times 4 = \square \rightarrow \text{R}$

$11 \times 7 = \square \rightarrow \text{W}$

$3 \times 1 = \square \rightarrow \text{S}$

$7 \times 9 = \square \rightarrow \text{C}$

$1 \times 9 = \square \rightarrow \text{L}$

$12 \times 11 = \square \rightarrow \text{O}$

$1 \times 4 = \square \rightarrow \text{I}$

Scratch space:

CLUE 2
Fractions of a number

The suspect spilled a jar of monster glowing eyes. Only a fraction of them are still shining. Calculate the fraction to reveal the next clue.

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

T																	
19	10	37	2	28	37	27	14	8	33	6	11	11	27	6	28	6	2

				T						
25	6	9	10	19	5	11	27	30	37	32

$3/6 \text{ of } 38 = \square \rightarrow \boxed{\text{T}}$

$2/10 \text{ of } 30 = \square \rightarrow \boxed{\text{I}}$

$2/6 \text{ of } 96 = \square \rightarrow \boxed{\text{D}}$

$3/6 \text{ of } 50 = \square \rightarrow \boxed{\text{R}}$

$2/4 \text{ of } 60 = \square \rightarrow \boxed{\text{W}}$

$5/6 \text{ of } 12 = \square \rightarrow \boxed{\text{H}}$

$3/6 \text{ of } 56 = \square \rightarrow \boxed{\text{N}}$

$5/8 \text{ of } 8 = \square \rightarrow \boxed{\text{C}}$

$3/5 \text{ of } 15 = \square \rightarrow \boxed{\text{G}}$

$2/8 \text{ of } 108 = \square \rightarrow \boxed{\text{A}}$

$4/10 \text{ of } 35 = \square \rightarrow \boxed{\text{K}}$

$5/10 \text{ of } 16 = \square \rightarrow \boxed{\text{Y}}$

$1/5 \text{ of } 10 = \square \rightarrow \boxed{\text{S}}$

$2/4 \text{ of } 74 = \square \rightarrow \boxed{\text{E}}$

$2/4 \text{ of } 22 = \square \rightarrow \boxed{\text{L}}$

$5/10 \text{ of } 66 = \square \rightarrow \boxed{\text{V}}$

Scratch space:

CLUE 3
Order of operations

A strange monster lock requires us to solve a puzzle in the exact order of operations before it will open.

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

A									A							
80	79	31	65	74	67	27	36	44	80	21	67	44	65	74	67	27

54	65	44	44	21	27	38	40	27	67	71	60

$8 \times 11 - 8 = \square \rightarrow \text{A}$

$39 + 8 \times 4 = \square \rightarrow \text{E}$

$8 \times 4 - 1 = \square \rightarrow \text{R}$

$10 \times 5 - 6 = \square \rightarrow \text{L}$

$5 \times 11 - 15 = \square \rightarrow \text{P}$

$53 + 3 \times 4 = \square \rightarrow \text{I}$

$49 + 5 \times 5 = \square \rightarrow \text{G}$

$13 + 2 \times 4 = \square \rightarrow \text{S}$

$6 \times 10 - 22 = \square \rightarrow \text{O}$

$9 \times 11 - 20 = \square \rightarrow \text{B}$

$11 + 8 \times 7 = \square \rightarrow \text{H}$

$15 + 2 \times 6 = \square \rightarrow \text{T}$

$12 + 8 \times 6 = \square \rightarrow \text{M}$

$19 + 7 \times 5 = \square \rightarrow \text{W}$

$11 \times 6 - 30 = \square \rightarrow \text{F}$

Scratch space:

CLUE 4 Rounding

The heavy weight of the thief broke our scale, so we can only read the rounded weight estimate. Round the number to unlock this secret.

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

T							T												
7000	20	2000	430	900	2000	110	7000	3000	2000	20	200	5000	300	5000	2000	370	5000		
230	1100	2000	2000	5000	110	2900	1100												

Round 6,958 to the nearest thousand → **T**

Round 427 to the nearest ten → **Y**

Round 107 to the nearest ten → **F**

Round 1,141 to the nearest hundred → **R**

Round 2,919 to the nearest hundred → **U**

Round 282 to the nearest hundred → **D**

Round 20 to the nearest ten → **H**

Round 164 to the nearest hundred → **I**

Round 228 to the nearest ten → **G**

Round 1,754 to the nearest thousand → **E**

Round 4,523 to the nearest thousand → **N**

Round 370 to the nearest ten → **O**

Round 3,148 to the nearest thousand → **B**

Round 862 to the nearest hundred → **L**

Scratch space:

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

The monsters had to split their energy potions equally. Divide the total potions to get the final code.

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:

$77 \div 7 = \boxed{}$

$7 \div 1 = \boxed{}$

$18 \div 3 = \boxed{}$

$36 \div 3 = \boxed{}$

$120 \div 12 = \boxed{}$

$20 \div 5 = \boxed{}$

$48 \div 6 = \boxed{}$

$33 \div 11 = \boxed{}$

$50 \div 10 = \boxed{}$

$5 \div 5 = \boxed{}$

$2 \div 1 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain fades into a shadow merge, then flashes their glow eyes.
2. The villain sprays hot acid spit, then flashes their glow eyes.
3. The villain shakes the room with a thunder stomp, then waves their webbed hands.
4. The villain lets out a sonic howl, then flashes their glow eyes.
5. The villain leaves a sticky slime trail, then waves their webbed hands.
6. The villain lets out a sonic howl, then whips their spiky tail.
7. The villain fades into a shadow merge, then whips their spiky tail.
8. The villain sprays hot acid spit, then flaps their bat wings.
9. The villain leaves a sticky slime trail, then flaps their bat wings.
10. The villain sprays hot acid spit, then shakes their horn crown.
11. The villain leaves a sticky slime trail, then flashes their glow eyes.
12. The villain sprays hot acid spit, then whips their spiky tail.

Answer Key

The Midnight Monster Mystery

Culprit: Shawn Shadow

Slime Trail · Bat Wings · Right clawed · Neon Green · Flashlight

Trail: Start 21 → Clue 1 16 → Clue 2 11 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT HAVE A HORN CROWN"

$10 \times 5 = 50$ (T) · $1 \times 11 = 11$ (H) · $6 \times 9 = 54$ (E) · $12 \times 10 = 120$ (A) · $4 \times 12 = 48$ (V) · $5 \times 2 = 10$ (N) · $9 \times 5 = 45$ (D) · $11 \times 4 = 44$ (R) · $11 \times 7 = 77$ (W) · $3 \times 1 = 3$ (S) · $7 \times 9 = 63$ (C) · $1 \times 9 = 9$ (L) · $12 \times 11 = 132$ (O) · $1 \times 4 = 4$ (I)

Clue 2 (Fractions of a number): "THE SNEAKY VILLAIN IS RIGHT CLAWED"

$\frac{3}{6}$ of 38 = 19 (T) · $\frac{2}{10}$ of 30 = 6 (I) · $\frac{2}{6}$ of 96 = 32 (D) · $\frac{3}{6}$ of 50 = 25 (R) · $\frac{2}{4}$ of 60 = 30 (W) · $\frac{5}{6}$ of 12 = 10 (H) · $\frac{3}{6}$ of 56 = 28 (N) · $\frac{5}{8}$ of 8 = 5 (C) · $\frac{3}{5}$ of 15 = 9 (G) · $\frac{2}{8}$ of 108 = 27 (A) · $\frac{4}{10}$ of 35 = 14 (K) · $\frac{5}{10}$ of 16 = 8 (Y) · $\frac{1}{5}$ of 10 = 2 (S) · $\frac{2}{4}$ of 74 = 37 (E) · $\frac{2}{4}$ of 22 = 11 (L) · $\frac{5}{10}$ of 66 = 33 (V)

Clue 3 (Order of operations): "A BRIGHT FLASHLIGHT WILL STOP THEM"

$8 \times 11 - 8 = 80$ (A) · $39 + 8 \times 4 = 71$ (E) · $8 \times 4 - 1 = 31$ (R) · $10 \times 5 - 6 = 44$ (L) · $5 \times 11 - 15 = 40$ (P) · $53 + 3 \times 4 = 65$ (I) · $49 + 5 \times 5 = 74$ (G) · $13 + 2 \times 4 = 21$ (S) · $6 \times 10 - 22 = 38$ (O) · $9 \times 11 - 20 = 79$ (B) · $11 + 8 \times 7 = 67$ (H) · $15 + 2 \times 6 = 27$ (T) · $12 + 8 \times 6 = 60$ (M) · $19 + 7 \times 5 = 54$ (W) · $11 \times 6 - 30 = 36$ (F)

Clue 4 (Rounding): "THEY LEFT BEHIND NEON GREEN FUR"

Round 6,958 to the nearest thousand = 7000 (T) · Round 427 to the nearest ten = 430 (Y) · Round 107 to the nearest ten = 110 (F) · Round 1,141 to the nearest hundred = 1100 (R) · Round 2,919 to the nearest hundred = 2900 (U) · Round 282 to the nearest hundred = 300 (D) · Round 20 to the nearest ten = 20 (H) · Round 164 to the nearest hundred = 200 (I) · Round 228 to the nearest ten = 230 (G) · Round 1,754 to the nearest thousand = 2000 (E) · Round 4,523 to the nearest thousand = 5000 (N) · Round 370 to the nearest ten = 370 (O) · Round 3,148 to the nearest thousand = 3000 (B) · Round 862 to the nearest hundred = 900 (L)

Clue 5 (Division facts (1-12)): surviving statement is box 9 → Shawn Shadow

$77 \div 7 = 11$ · $7 \div 1 = 7$ · $18 \div 3 = 6$ · $36 \div 3 = 12$ · $120 \div 12 = 10$ · $20 \div 5 = 4$ · $48 \div 6 = 8$ · $33 \div 11 = 3$ · $50 \div 10 = 5$ · $5 \div 5 = 1$ · $2 \div 1 = 2$