The Midnight Monster Mystery

Grade 4 math · Addition, Subtraction, Multiplication, Word problems, Missing addends · Reading level grades 3-4

Detective: _____ **Date:** _____

Someone crashed the Midnight Monster Masquerade and hid the golden pumpkin trophy! Detective, search for clues around the creepy mansion to catch the culprit.

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 Party Crasher is _____

Possible suspects

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

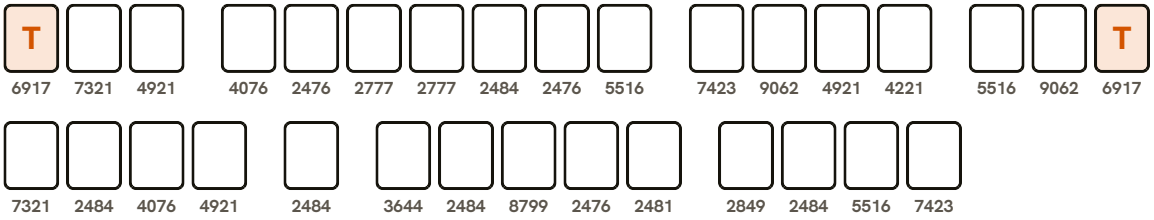
NAME	MONSTER ABILITY	SPOOKY ITEM	GLOW STYLE	FUR OR HAIR	WEAKNESS
Gargoyle Gary	Mummy Wrap	Silver Lantern	Left Hand Glow	Silver Monster Fur	Garlic Smell
Dracula	Vampire Dash	Bat Cloak	Left Hand Glow	Silver Monster Fur	Bright Flashlight
Banshee Bella	Zombie Walk	Shadow Ring	Right Hand Glow	Silver Monster Fur	Garlic Smell
Haunter Hal	Vampire Dash	Silver Lantern	Right Hand Glow	Silver Monster Fur	Bright Flashlight
Spooky Spike	Vampire Dash	Magic Wand	Left Hand Glow	Silver Monster Fur	Bright Flashlight
Mummy Curse	Ghost Float	Glow Pumpkin	Right Hand Glow	Silver Monster Fur	Garlic Smell
Frankenstein	Zombie Walk	Glow Pumpkin	Right Hand Glow	Silver Monster Fur	Garlic Smell
Zombie Zee	Wolf Howl	Silver Lantern	Left Hand Glow	Shaggy Green Hair	Loud Whistle
Crypt Chris	Ghost Float	Bat Cloak	Right Hand Glow	Silver Monster Fur	Garlic Smell
Creepy Carl	Wolf Howl	Bat Cloak	Left Hand Glow	Shaggy Green Hair	Loud Whistle
Specter Sue	Zombie Walk	Silver Lantern	Left Hand Glow	Silver Monster Fur	Loud Whistle
Count Vlad	Zombie Walk	Bat Cloak	Right Hand Glow	Wild Purple Hair	Garlic Smell
Wolfman Jack	Wolf Howl	Glow Pumpkin	Left Hand Glow	Silver Monster Fur	Garlic Smell
Goblin Gabe	Vampire Dash	Silver Lantern	Left Hand Glow	Wild Purple Hair	Loud Whistle
Witch Hazel	Zombie Walk	Glow Pumpkin	Right Hand Glow	Silver Monster Fur	Bright Flashlight
Swampy Sid	Ghost Float	Shadow Ring	Left Hand Glow	Wild Purple Hair	Bright Flashlight
Shadow Sean	Zombie Walk	Shadow Ring	Right Hand Glow	Shaggy Green Hair	Loud Whistle
Ghoul Guy	Mummy Wrap	Magic Wand	Right Hand Glow	Silver Monster Fur	Garlic Smell
Vampira Val	Zombie Walk	Bat Cloak	Right Hand Glow	Silver Monster Fur	Loud Whistle
Casper Ghost	Wolf Howl	Bat Cloak	Left Hand Glow	Shaggy Green Hair	Garlic Smell
Skeleton Sam	Zombie Walk	Magic Wand	Left Hand Glow	Silver Monster Fur	Garlic Smell

make your own at mathcrackers.com

CLUE 1 Addition

We counted all the pumpkin candy wrappers left on the floor to find our first track.

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



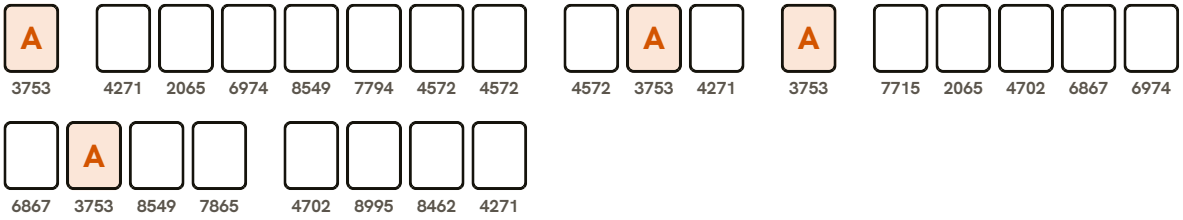
2086 + 4831 = ☐ → T	1547 + 1230 = ☐ → L	2628 + 2888 = ☐ → N
4285 + 3138 = ☐ → D	4248 + 4551 = ☐ → G	4297 + 4765 = ☐ → O
1500 + 976 = ☐ → I	3603 + 3718 = ☐ → H	2730 + 1491 = ☐ → S
1054 + 1427 = ☐ → C	855 + 1629 = ☐ → A	1707 + 3214 = ☐ → E
1353 + 2291 = ☐ → M	1848 + 1001 = ☐ → W	1992 + 2084 = ☐ → V

Scratch space:

CLUE 2 Subtraction

We took away the fake footsteps from the real tracks left near the trophy display.

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



7686 - 3933 = ☐ → A

9385 - 2518 = ☐ → H

8497 - 4226 = ☐ → W

13763 - 4768 = ☐ → L

8853 - 391 = ☐ → O

11381 - 3666 = ☐ → R

5434 - 862 = ☐ → S

11317 - 2768 = ☐ → N

4050 - 1985 = ☐ → I

8370 - 3668 = ☐ → G

11887 - 4913 = ☐ → T

12008 - 4143 = ☐ → D

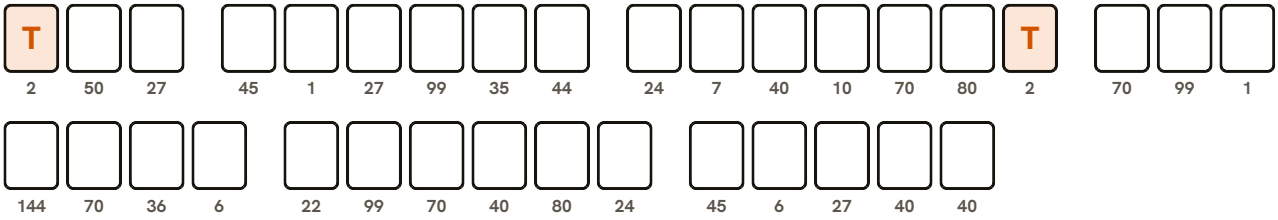
8056 - 262 = ☐ → E

Scratch space:

CLUE 3 Multiplication facts (1-12)

> The villain stepped on equal rows of creepy spiderwebs across the mansion hall.

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



1 × 2 = ☐ → T	7 × 10 = ☐ → R	9 × 11 = ☐ → A
2 × 3 = ☐ → M	8 × 5 = ☐ → L	2 × 5 = ☐ → P
10 × 8 = ☐ → I	1 × 1 = ☐ → N	11 × 4 = ☐ → Y
8 × 3 = ☐ → C	2 × 11 = ☐ → G	5 × 9 = ☐ → S
7 × 1 = ☐ → U	3 × 9 = ☐ → E	7 × 5 = ☐ → K
10 × 5 = ☐ → H	4 × 9 = ☐ → O	12 × 12 = ☐ → F

Scratch space:

CLUE 4 Word problems

Our detective crew solved monster riddle clues left behind in the dark library.

Solve each problem, then write its letter in the boxes to fill in the missing word.

A strand of

S							O	N	S	T			F	U		
20	55	25	40	52	6	62			20		52	6			6	

hair turned up at the scene.

Junior Detective lined up 2 rows of 10 mini pumpkins. How many mini pumpkins in all?

Answer: ☐ → **S**

There were 66 spooky stickers. 11 were used up. How many spooky stickers are left?

Answer: ☐ → **I**

There were 40 glow sticks. 34 were used up. How many glow sticks are left?

Answer: ☐ → **R**

Junior Detective found 12 vampire fangs yesterday and 50 more today. How many vampire fangs in all?

Answer: ☐ → **M**

There were 88 glow sticks. 36 were used up. How many glow sticks are left?

Answer: ☐ → **E**

Junior Detective lined up 10 rows of 4 spooky stickers. How many spooky stickers in all?

Answer: ☐ → **V**

Junior Detective found 6 glow sticks yesterday and 19 more today. How many glow sticks in all?

Answer: ☐ → **L**

Scratch space:

CLUE 5 Missing addends - the last clue

> We filled in the missing numbers on the locked dungeon keypad to open the door.

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:

33 + ___ = 43 ☐	12 + ___ = 21 ☐	21 + ___ = 32 ☐	10 + ___ = 18 ☐
1 + ___ = 3 ☐	27 + ___ = 33 ☐	40 + ___ = 43 ☐	35 + ___ = 40 ☐
34 + ___ = 41 ☐	4 + ___ = 5 ☐	37 + ___ = 41 ☐	

Step 2 - cross out the sentence with each answer:

1. The villain floated through the haunted hallway, then turned a shadow ring.
2. The villain wrapped up the secret doorway, then swished a bat cloak.
3. The villain howled loudly at the full moon, then lit up a glow pumpkin.
4. The villain stumbled past the cobwebs, then shined a silver lantern.
5. The villain howled loudly at the full moon, then turned a shadow ring.
6. The villain howled loudly at the full moon, then waved a magic wand.
7. The villain stumbled past the cobwebs, then waved a magic wand.
8. The villain dashed fast across the ballroom, then swished a bat cloak.
9. The villain floated through the haunted hallway, then lit up a glow pumpkin.
10. The villain stumbled past the cobwebs, then turned a shadow ring.
11. The villain stumbled past the cobwebs, then lit up a glow pumpkin.
12. The villain floated through the haunted hallway, then swished a bat cloak.

TEACHER / PARENT

Answer Key

The Midnight Monster Mystery

Culprit: Crypt Chris

Ghost Float · Bat Cloak · Right Hand Glow · Silver Monster Fur · Garlic Smell

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

Clue 1 (Addition): "THE VILLAIN DOES NOT HAVE A MAGIC WAND"

2086 + 4831 = 6917 (T) · 1547 + 1230 = 2777 (L) · 2628 + 2888 = 5516 (N) · 4285 + 3138 = 7423 (D) · 4248 + 4551 = 8799 (G) · 4297 + 4765 = 9062 (O) · 1500 + 976 = 2476 (I) · 3603 + 3718 = 7321 (H) · 2730 + 1491 = 4221 (S) · 1054 + 1427 = 2481 (C) · 855 + 1629 = 2484 (A) · 1707 + 3214 = 4921 (E) · 1353 + 2291 = 3644 (M) · 1848 + 1001 = 2849 (W) · 1992 + 2084 = 4076 (V)

Clue 2 (Subtraction): "A WITNESS SAW A RIGHT HAND GLOW"

7686 - 3933 = 3753 (A) · 9385 - 2518 = 6867 (H) · 8497 - 4226 = 4271 (W) · 13763 - 4768 = 8995 (L) · 8853 - 391 = 8462 (O) · 11381 - 3666 = 7715 (R) · 5434 - 862 = 4572 (S) · 11317 - 2768 = 8549 (N) · 4050 - 1985 = 2065 (I) · 8370 - 3668 = 4702 (G) · 11887 - 4913 = 6974 (T) · 12008 - 4143 = 7865 (D) · 8056 - 262 = 7794 (E)

Clue 3 (Multiplication facts (1-12)): "THE SNEAKY CULPRIT RAN FROM GARLIC SMELL"

1 × 2 = 2 (T) · 7 × 10 = 70 (R) · 9 × 11 = 99 (A) · 2 × 3 = 6 (M) · 8 × 5 = 40 (L) · 2 × 5 = 10 (P) · 10 × 8 = 80 (I) · 1 × 1 = 1 (N) · 11 × 4 = 44 (Y) · 8 × 3 = 24 (C) · 2 × 11 = 22 (G) · 5 × 9 = 45 (S) · 7 × 1 = 7 (U) · 3 × 9 = 27 (E) · 7 × 5 = 35 (K) · 10 × 5 = 50 (H) · 4 × 9 = 36 (O) · 12 × 12 = 144 (F)

Clue 4 (Word problems): "SILVER MONSTER FUR"

Junior Detective lined up 2 rows of 10 mini pumpkins. How many mini pumpkins in all? = 20 (S) · There were 66 spooky stickers. 11 were used up. How many spooky stickers are left? = 55 (I) · There were 40 glow sticks. 34 were used up. How many glow sticks are left? = 6 (R) · Junior Detective found 12 vampire fangs yesterday and 50 more today. How many vampire fangs in all? = 62 (M) · There were 88 glow sticks. 36 were used up. How many glow sticks are left? = 52 (E) · Junior Detective lined up 10 rows of 4 spooky stickers. How many spooky stickers in all? = 40 (V) · Junior Detective found 6 glow sticks yesterday and 19 more today. How many glow sticks in all? = 25 (L)

Clue 5 (Missing addends): surviving statement is box 12 → Crypt Chris

33 + ___ = 43 = 10 · 12 + ___ = 21 = 9 · 21 + ___ = 32 = 11 · 10 + ___ = 18 = 8 · 1 + ___ = 3 = 2 · 27 + ___ = 33 = 6 · 40 + ___ = 43 = 3 · 35 + ___ = 40 = 5 · 34 + ___ = 41 = 7 · 4 + ___ = 5 = 1 · 37 + ___ = 41 = 4