



The Great Green Gelatin Mystery

Grade 3 math · Place value, Addition, Subtraction, Rounding, Missing addends · Reading level grades 3-4

Detective: _____ **Date:** _____

The school cafeteria was locked tight, but someone still sneaked in and ate all the glowing green gelatin! The hungry culprit left a trail of muddy slime across the floor. You must help the detective squad track down the greedy zombie who did 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 Midnight Muncher is _____

Possible suspects

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

NAME	SCARY POWER	SECRET TRICK	CAFETERIA CLUE	COSTUME HAIR	FUNNY WEAKNESS
Rick Grimes	Laser Stare	Stinky Aura	Right-handed grab	Spiky green wig	Loud music
Zoey	Mega Jump	Stinky Aura	Right-handed grab	Spiky green wig	Bubble baths
Leon Kennedy	Acid Spit	Glow Teeth	Left-handed grab	Muddy blue wig	Squeaky toys
Grave Digger Dan	Laser Stare	Stinky Aura	Left-handed grab	Muddy blue wig	Squeaky toys
Michonne	Mega Jump	Glow Teeth	Right-handed grab	Spiky green wig	Loud music
Rotty Rita	Laser Stare	Glow Teeth	Left-handed grab	Spiky green wig	Loud music
Zeke	Mega Jump	Sonic Groan	Right-handed grab	Spiky green wig	Squeaky toys
Specter Sam	Ice Breath	Glow Teeth	Right-handed grab	Spiky green wig	Squeaky toys
Ghoulish Gabe	Acid Spit	Wall Climb	Right-handed grab	Muddy blue wig	Squeaky toys
Ed	Ice Breath	Stinky Aura	Right-handed grab	Muddy blue wig	Squeaky toys
Shaun	Ice Breath	Wall Climb	Left-handed grab	Muddy blue wig	Squeaky toys
Howling Helen	Laser Stare	Wall Climb	Left-handed grab	Muddy blue wig	Squeaky toys
Bony Ben	Mega Jump	Wall Climb	Right-handed grab	Muddy blue wig	Loud music
Wanda Walker	Ice Breath	Sonic Groan	Right-handed grab	Spiky green wig	Loud music
Chris Redfield	Ice Breath	Stinky Aura	Left-handed grab	Rusty orange wig	Squeaky toys
Slobbering Steve	Ice Breath	Speed Crawl	Right-handed grab	Spiky green wig	Loud music
Jill Valentine	Mega Jump	Glow Teeth	Right-handed grab	Spiky green wig	Squeaky toys
Zack Zombie	Mega Jump	Glow Teeth	Right-handed grab	Rusty orange wig	Bubble baths
Claire Redfield	Ice Breath	Wall Climb	Right-handed grab	Spiky green wig	Loud music
Mummy Mia	Super Squeeze	Speed Crawl	Right-handed grab	Muddy blue wig	Loud music
Benny Brains	Ice Breath	Wall Climb	Left-handed grab	Spiky green wig	Loud music

CLUE 1 Place value

We found a locked security box. The digital keypad shows values for hundreds, tens, and ones. Solve this place value puzzle to open the box and read the first file.

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

200 7000 2000 8000 20 90 300 60 4000 200 3000 6000 2000 400 10 6000 200

400 300 2000 2000 3000 8000 60 9000 1000 90

What is the value of the 2 in 3,216? → **T**

What is the value of the 9 in 19,150? → **A**

What is the value of the 8 in 48,334? → **C**

What is the value of the 2 in 92,514? → **E**

What is the value of the 6 in 468? → **R**

What is the value of the 6 in 6,248? → ☐

What is the value of the 3 in 2,378? → **P**

What is the value of the 3 in 93,109? → **D**

What is the value of the 1 in 616? → **N**

What is the value of the 7 in 17,093? → **H**

What is the value of the 1 in 81,862? → **W**

What is the value of the 2 in 3,128? → **U**

What is the value of the 4 in 4,723? →

What is the value of the 9 in 4,195? → **L**

What is the value of the 4 in 2,430? → **S**

Scratch space:

CLUE 2 Addition

Muddy footprints lead down the dark hallway. We need to tally up the tracks on the left side and the right side. Add them together to get the total.

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

T															T
290	401	502	586	828	828	758	977	404	562	404	249	824	396	401	290
401	404	925	307	502	307	396	249	404	395						

$188 + 102 = \boxed{} \rightarrow \boxed{\text{T}}$

$620 + 357 = \boxed{} \rightarrow \boxed{\text{S}}$

$133 + 262 = \boxed{} \rightarrow \boxed{\text{B}}$

$514 + 314 = \boxed{} \rightarrow \boxed{\text{O}}$

$215 + 181 = \boxed{} \rightarrow \boxed{\text{G}}$

$167 + 140 = \boxed{} \rightarrow \boxed{\text{D}}$

$415 + 409 = \boxed{} \rightarrow \boxed{\text{I}}$

$184 + 217 = \boxed{} \rightarrow \boxed{\text{H}}$

$453 + 305 = \boxed{} \rightarrow \boxed{\text{K}}$

$337 + 225 = \boxed{} \rightarrow \boxed{\text{W}}$

$310 + 276 = \boxed{} \rightarrow \boxed{\text{C}}$

$176 + 228 = \boxed{} \rightarrow \boxed{\text{A}}$

$458 + 467 = \boxed{} \rightarrow \boxed{\text{N}}$

$175 + 327 = \boxed{} \rightarrow \boxed{\text{E}}$

$110 + 139 = \boxed{} \rightarrow \boxed{\text{R}}$

Scratch space:

CLUE 3

Subtraction

The thief raided the snack bin. Let us count the total snack cakes we had and subtract the cakes that are now missing to see what remains.

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

T													T				
240	746	536	172	632	338	581	536	691	536	750	187	240	557	338	201	750	

822	201	313	588	632

$594 - 354 = \square \rightarrow \boxed{\text{T}}$

$742 - 185 = \square \rightarrow \boxed{\text{L}}$

$333 - 146 = \square \rightarrow \boxed{\text{A}}$

$794 - 258 = \square \rightarrow \boxed{\text{E}}$

$928 - 296 = \square \rightarrow \boxed{\text{C}}$

$969 - 381 = \square \rightarrow \boxed{\text{I}}$

$436 - 123 = \square \rightarrow \boxed{\text{S}}$

$234 - 62 = \square \rightarrow \boxed{\text{Y}}$

$990 - 299 = \square \rightarrow \boxed{\text{R}}$

$520 - 319 = \square \rightarrow \boxed{\text{U}}$

$746 - 165 = \square \rightarrow \boxed{\text{W}}$

$883 - 133 = \square \rightarrow \boxed{\text{D}}$

$867 - 45 = \square \rightarrow \boxed{\text{M}}$

$1026 - 280 = \square \rightarrow \boxed{\text{H}}$

$400 - 62 = \square \rightarrow \boxed{\text{O}}$

Scratch space:

CLUE 4 Rounding

A motion detector screen is fuzzy. It only displays zombie power numbers rounded to the nearest ten. Round the number to read the screen clearly.

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

W																	
6000	70	60	400	700	300	200	80	2000	90	3000	900	5000	4000	9000	70	70	300

W		
6000	3000	4000

Round 5,513 to the nearest thousand → **W**

Round 9,461 to the nearest thousand → **R**

Round 86 to the nearest ten → **P**

Round 323 to the nearest hundred → **N**

Round 740 to the nearest hundred → **U**

Round 73 to the nearest ten → **E**

Round 63 to the nearest ten → **F**

Round 182 to the nearest hundred → **D**

Round 83 to the nearest ten → **A**

Round 861 to the nearest hundred → **K**

Round 3,525 to the nearest thousand → **G**

Round 4,657 to the nearest thousand → **Y**

Round 417 to the nearest hundred → **O**

Round 3,404 to the nearest thousand → **I**

Round 2,052 to the nearest thousand → **S**

Scratch space:

CLUE 5**Missing addends - the last clue**

We need a target number of flashlights to search the dark gym. We have some already. Figure out how many more we must find to reach our goal.

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:

$5 + \underline{\quad} = 13$

$3 + \underline{\quad} = 15$

$3 + \underline{\quad} = 13$

$5 + \underline{\quad} = 10$

$5 + \underline{\quad} = 14$

$3 + \underline{\quad} = 9$

$2 + \underline{\quad} = 9$

$7 + \underline{\quad} = 8$

$9 + \underline{\quad} = 20$

$5 + \underline{\quad} = 7$

$5 + \underline{\quad} = 9$

Step 2 - cross out the sentence with each answer:

1. The villain crushes the gelatin mold with a super squeeze, then zooms away on the ground using speed crawl.
2. The villain dissolves the lock with acid spit, then zooms away on the ground using speed crawl.
3. The villain leaps over the cafeteria counter, then lights up the dark room with glowing teeth.
4. The villain melts the freezer door with a laser stare, then zooms away on the ground using speed crawl.
5. The villain leaps over the cafeteria counter, then zooms away on the ground using speed crawl.
6. The villain leaps over the cafeteria counter, then shatters the kitchen windows with a sonic groan.
7. The villain crushes the gelatin mold with a super squeeze, then shatters the kitchen windows with a sonic groan.
8. The villain melts the freezer door with a laser stare, then leaves behind a terrible stinky aura.
9. The villain melts the freezer door with a laser stare, then lights up the dark room with glowing teeth.
10. The villain freezes the kitchen floor with ice breath, then shatters the kitchen windows with a sonic groan.
11. The villain dissolves the lock with acid spit, then escapes by climbing straight up the wall.
12. The villain freezes the kitchen floor with ice breath, then escapes by climbing straight up the wall.

Answer Key

The Great Green Gelatin Mystery

Culprit: Michonne

Mega Jump · Glow Teeth · Right-handed grab · Spiky green wig · Loud music

Trail: Start 21 → Clue 1 19 → Clue 2 12 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE CULPRIT DOES NOT SPEED CRAWL"

What is the value of the 2 in 3,216? = 200 (T) · What is the value of the 9 in 19,150? = 9000 (A) · What is the value of the 8 in 48,334? = 8000 (C) · What is the value of the 2 in 92,514? = 2000 (E) · What is the value of the 6 in 468? = 60 (R) · What is the value of the 6 in 6,248? = 6000 (O) · What is the value of the 3 in 2,378? = 300 (P) · What is the value of the 3 in 93,109? = 3000 (D) · What is the value of the 1 in 616? = 10 (N) · What is the value of the 7 in 17,093? = 7000 (H) · What is the value of the 1 in 81,862? = 1000 (W) · What is the value of the 2 in 3,128? = 20 (U) · What is the value of the 4 in 4,723? = 4000 (I) · What is the value of the 9 in 4,195? = 90 (L) · What is the value of the 4 in 2,430? = 400 (S)

Clue 2 (Addition): "THE COOK SAW A RIGHT HANDED GRAB"

$188 + 102 = 290$ (T) · $620 + 357 = 977$ (S) · $133 + 262 = 395$ (B) · $514 + 314 = 828$ (O) · $215 + 181 = 396$ (G) · $167 + 140 = 307$ (D) · $415 + 409 = 824$ (I) · $184 + 217 = 401$ (H) · $453 + 305 = 758$ (K) · $337 + 225 = 562$ (W) · $310 + 276 = 586$ (C) · $176 + 228 = 404$ (A) · $458 + 467 = 925$ (N) · $175 + 327 = 502$ (E) · $110 + 139 = 249$ (R)

Clue 3 (Subtraction): "THEY COWERED AT LOUD MUSIC"

$594 - 354 = 240$ (T) · $742 - 185 = 557$ (L) · $333 - 146 = 187$ (A) · $794 - 258 = 536$ (E) · $928 - 296 = 632$ (C) · $969 - 381 = 588$ (I) · $436 - 123 = 313$ (S) · $234 - 62 = 172$ (Y) · $990 - 299 = 691$ (R) · $520 - 319 = 201$ (U) · $746 - 165 = 581$ (W) · $883 - 133 = 750$ (D) · $867 - 45 = 822$ (M) · $1026 - 280 = 746$ (H) · $400 - 62 = 338$ (O)

Clue 4 (Rounding): "WE FOUND A SPIKY GREEN WIG"

Round 5,513 to the nearest thousand = 6000 (W) · Round 9,461 to the nearest thousand = 9000 (R) · Round 86 to the nearest ten = 90 (P) · Round 323 to the nearest hundred = 300 (N) · Round 740 to the nearest hundred = 700 (U) · Round 73 to the nearest ten = 70 (E) · Round 63 to the nearest ten = 60 (F) · Round 182 to the nearest hundred = 200 (D) · Round 83 to the nearest ten = 80 (A) · Round 861 to the nearest hundred = 900 (K) · Round 3,525 to the nearest thousand = 4000 (G) · Round 4,657 to the nearest thousand = 5000 (Y) · Round 417 to the nearest hundred = 400 (O) · Round 3,404 to the nearest thousand = 3000 (I) · Round 2,052 to the nearest thousand = 2000 (S)

Clue 5 (Missing addends): surviving statement is box 3 → Michonne

$5 + \underline{\quad} = 13 = 8$ · $3 + \underline{\quad} = 15 = 12$ · $3 + \underline{\quad} = 13 = 10$ · $5 + \underline{\quad} = 10 = 5$ · $5 + \underline{\quad} = 14 = 9$ · $3 + \underline{\quad} = 9 = 6$ · $2 + \underline{\quad} = 9 = 7$ · $7 + \underline{\quad} = 8 = 1$ · $9 + \underline{\quad} = 20 = 11$ · $5 + \underline{\quad} = 7 = 2$ · $5 + \underline{\quad} = 9 = 4$