



The Diamond Block Mystery

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

Detective: _____ **Date:** _____

Someone took the legendary Giant Diamond Block right before the grand build contest! The village needs your help. Look for clues, solve the puzzles, and find the Grief Bandit!

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 Grief Bandit is _____

Possible suspects

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

NAME	MAIN TOOL	ESCAPE GEAR	STANCE TELL	HAIR COLOR	DREADED BLOCK
Puffy	Diamond Sword	Totem of Undying	Carries a shield	Brown Hair	Snowballs
Skeppy	Netherite Pick	Water Bucket	Holds a torch	Orange Hair	Water Splash
Sapnap	Netherite Pick	Totem of Undying	Holds a torch	Blue Hair	Lava Bucket
Lizzie	Ender Pearl	Elytra Wings	Holds a torch	Brown Hair	Water Splash
Sparklez	Ender Pearl	Elytra Wings	Carries a shield	Orange Hair	Snowballs
Dream	Diamond Sword	Splash Potion	Holds a torch	Orange Hair	Lava Bucket
Sam	Redstone Dust	Totem of Undying	Holds a torch	Orange Hair	Snowballs
Mumbo	Redstone Dust	Water Bucket	Holds a torch	Brown Hair	Water Splash
Purpled	Ender Pearl	Firework Rocket	Holds a torch	Brown Hair	Water Splash
Alex	Ender Pearl	Splash Potion	Holds a torch	Orange Hair	Lava Bucket
Grian	Ender Pearl	Splash Potion	Holds a torch	Brown Hair	Water Splash
Tubbo	Ender Pearl	Totem of Undying	Holds a torch	Blue Hair	Snowballs
Tommy	Redstone Dust	Splash Potion	Carries a shield	Brown Hair	Snowballs
DanTDM	Redstone Dust	Totem of Undying	Carries a shield	Brown Hair	Water Splash
George	Netherite Pick	Elytra Wings	Holds a torch	Brown Hair	Lava Bucket
Ranboo	Netherite Pick	Splash Potion	Holds a torch	Brown Hair	Snowballs
Hermit	Golden Apple	Elytra Wings	Holds a torch	Blue Hair	Water Splash
Steve	Ender Pearl	Elytra Wings	Holds a torch	Orange Hair	Snowballs
BadBoyHalo	Ender Pearl	Totem of Undying	Carries a shield	Brown Hair	Water Splash
Joel	Diamond Sword	Water Bucket	Holds a torch	Brown Hair	Snowballs
Hannah	Diamond Sword	Water Bucket	Holds a torch	Brown Hair	Water Splash

CLUE 1

You find a chest of emeralds left behind in the mineshaft. The number of emeralds has a seven in the tens place.

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

80 300 1000

7000 8000 5000 5000 600 8000 800

40 100 1000 900

800 100 80

4000 900 1000

600 6000 8000 9000 1000 400 100 9000 90

9000 100 200 90 1000 80

What is the value of the 8 in 4,587? → **T**

What is the value of the 4 in 472? → **W**

What is the value of the 1 in 1,436? → **E**

What is the value of the 9 in 591? → **K**

What is the value of the 9 in 9,827?	→	R
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What is the value of the 4 in 7,847? → **D**

What is the value of the 8 in 4,895?	→	N
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What is the value of the 5 in 5,649?	→	L
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What is the value of the 6 in 36,545? → **F**

What is the value of the 4 in 4,856? → **U**

What is the value of the 3 in 311? → **H**

What is the value of the 2 in 1,230? → **C**

What is the value of the 8 in 8,977? →

What is the value of the 6 in 9,604? → **A**

What is the value of the 9 in 5,942? → **S**

What is the value of the 1 in 5,140? → ☐

What is the value of the 7 in 7,500?	→	V
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Scratch space:

CLUE 2 Addition

To open the secret dungeon door, you must add the number of iron blocks to the number of gold blocks in the wall.

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

A										A						
951	246	710	243	947	382	540	540	540	951	246	243	761	382			

				A						A						
373	710	856	856	951	710	947	761	943	856	353	951	243	943	649	641	761

320 + 631 = → A	94 + 152 = → W	116 + 257 = → V
109 + 134 = → T	472 + 475 = → N	583 + 273 = → L
447 + 314 = → H	350 + 291 = → C	452 + 258 = → I
175 + 207 = → E	197 + 343 = → S	109 + 244 = → D
411 + 238 = → R	578 + 365 = → O	

Scratch space:

CLUE 3 Rounding

The computer console shows a fuzzy map coordinate. You have to round the number of blocks to the nearest ten to find the path.

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

T																	
4000	400	9000	20	70	6000	6000	60	70	50	200	60	50	60	30	60	8000	
								T									
3000	200	300	600	60	30	60	4000	9000	200	2000	900	6000	60	2000	400		

Round 3,837 to the nearest thousand → T

Round 237 to the nearest hundred → R

Round 48 to the nearest ten → N

Round 6,126 to the nearest thousand → L

Round 30 to the nearest ten → W

Round 941 to the nearest hundred → P

Round 8,600 to the nearest thousand → E

Round 2,473 to the nearest thousand → S

Round 74 to the nearest ten → I

Round 365 to the nearest hundred → H

Round 57 to the nearest ten → A

Round 8,008 to the nearest thousand → Y

Round 2,805 to the nearest thousand → F

Round 612 to the nearest hundred → M

Round 24 to the nearest ten → V

Round 343 to the nearest hundred → O

Scratch space:

CLUE 4

Subtraction

You find a locked chest. The code is the number of health points you have left after subtracting the zombie damage.

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

Y																
251	789	137	402	597	278	176	182	639	789	233	278	309	329	597	639	329 321

321	309	481	888	613	481 278 481

$338 - 87 = \square \rightarrow \boxed{\text{Y}}$

$768 - 287 = \square \rightarrow \boxed{\text{E}}$

$584 - 182 = \square \rightarrow \boxed{\text{F}}$

$367 - 191 = \square \rightarrow \boxed{\text{D}}$

$742 - 145 = \square \rightarrow \boxed{\text{I}}$

$1071 - 282 = \square \rightarrow \boxed{\text{O}}$

$502 - 181 = \square \rightarrow \boxed{\text{T}}$

$657 - 379 = \square \rightarrow \boxed{\text{N}}$

$255 - 118 = \square \rightarrow \boxed{\text{U}}$

$205 - 23 = \square \rightarrow \boxed{\text{B}}$

$969 - 330 = \square \rightarrow \boxed{\text{R}}$

$589 - 280 = \square \rightarrow \boxed{\text{H}}$

$529 - 296 = \square \rightarrow \boxed{\text{W}}$

$1088 - 200 = \square \rightarrow \boxed{\text{S}}$

$683 - 354 = \square \rightarrow \boxed{\text{A}}$

$781 - 168 = \square \rightarrow \boxed{\text{C}}$

Scratch space:

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

To share the redstone torches equally among the three minecarts, you must divide the total stack.

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:

$32 \div 4 = \boxed{}$

$12 \div 4 = \boxed{}$

$45 \div 9 = \boxed{}$

$9 \div 9 = \boxed{}$

$7 \div 1 = \boxed{}$

$14 \div 7 = \boxed{}$

$72 \div 8 = \boxed{}$

$12 \div 3 = \boxed{}$

$30 \div 3 = \boxed{}$

$48 \div 4 = \boxed{}$

$11 \div 1 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain eats a golden snack, then throws a dizzy potion.
2. The villain eats a golden snack, then escapes with rocket power.
3. The villain teleports into the village, then throws a dizzy potion.
4. The villain eats a golden snack, then flies away using wings.
5. The villain breaks through the obsidian wall, then pours water to escape.
6. The villain powers up the redstone door, then pours water to escape.
7. The villain teleports into the village, then survives a fall with a totem.
8. The villain teleports into the village, then flies away using wings.
9. The villain eats a golden snack, then survives a fall with a totem.
10. The villain digs up the chest room, then escapes with rocket power.
11. The villain breaks through the obsidian wall, then flies away using wings.
12. The villain digs up the chest room, then throws a dizzy potion.

Answer Key

The Diamond Block Mystery

Culprit: Mumbo

Redstone Dust · Water Bucket · Holds a torch · Brown Hair · Water Splash

Trail: Start 21 → Clue 1 20 → Clue 2 15 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT USE A FIREWORK ROCKET"

What is the value of the 8 in 4,587? = 80 (T) · What is the value of the 4 in 472? = 400 (W) · What is the value of the 1 in 1,436? = 1000 (E) · What is the value of the 9 in 591? = 90 (K) · What is the value of the 9 in 9,827? = 9000 (R) · What is the value of the 4 in 7,847? = 40 (D) · What is the value of the 8 in 4,895? = 800 (N) · What is the value of the 5 in 5,649? = 5000 (L) · What is the value of the 6 in 36,545? = 6000 (F) · What is the value of the 4 in 4,856? = 4000 (U) · What is the value of the 3 in 311? = 300 (H) · What is the value of the 2 in 1,230? = 200 (C) · What is the value of the 8 in 8,977? = 8000 (I) · What is the value of the 6 in 9,604? = 600 (A) · What is the value of the 9 in 5,942? = 900 (S) · What is the value of the 1 in 5,140? = 100 (O) · What is the value of the 7 in 7,500? = 7000 (V)

Clue 2 (Addition): "A WITNESS SAW THE VILLAIN HOLD A TORCH"

$320 + 631 = 951$ (A) · $94 + 152 = 246$ (W) · $116 + 257 = 373$ (V) · $109 + 134 = 243$ (T) · $472 + 475 = 947$ (N) · $583 + 273 = 856$ (L) · $447 + 314 = 761$ (H) · $350 + 291 = 641$ (C) · $452 + 258 = 710$ (I) · $175 + 207 = 382$ (E) · $197 + 343 = 540$ (S) · $109 + 244 = 353$ (D) · $411 + 238 = 649$ (R) · $578 + 365 = 943$ (O)

Clue 3 (Rounding): "THE VILLAIN RAN AWAY FROM A WATER SPLASH"

Round 3,837 to the nearest thousand = 4000 (T) · Round 237 to the nearest hundred = 200 (R) · Round 48 to the nearest ten = 50 (N) · Round 6,126 to the nearest thousand = 6000 (L) · Round 30 to the nearest ten = 30 (W) · Round 941 to the nearest hundred = 900 (P) · Round 8,600 to the nearest thousand = 9000 (E) · Round 2,473 to the nearest thousand = 2000 (S) · Round 74 to the nearest ten = 70 (I) · Round 365 to the nearest hundred = 400 (H) · Round 57 to the nearest ten = 60 (A) · Round 8,008 to the nearest thousand = 8000 (Y) · Round 2,805 to the nearest thousand = 3000 (F) · Round 612 to the nearest hundred = 600 (M) · Round 24 to the nearest ten = 20 (V) · Round 343 to the nearest hundred = 300 (O)

Clue 4 (Subtraction): "YOU FIND BROWN HAIR AT THE SCENE"

$338 - 87 = 251$ (Y) · $768 - 287 = 481$ (E) · $584 - 182 = 402$ (F) · $367 - 191 = 176$ (D) · $742 - 145 = 597$ (I) · $1071 - 282 = 789$ (O) · $502 - 181 = 321$ (T) · $657 - 379 = 278$ (N) · $255 - 118 = 137$ (U) · $205 - 23 = 182$ (B) · $969 - 330 = 639$ (R) · $589 - 280 = 309$ (H) · $529 - 296 = 233$ (W) · $1088 - 200 = 888$ (S) · $683 - 354 = 329$ (A) · $781 - 168 = 613$ (C)

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

$32 \div 4 = 8$ · $12 \div 4 = 3$ · $45 \div 9 = 5$ · $9 \div 9 = 1$ · $7 \div 1 = 7$ · $14 \div 7 = 2$ · $72 \div 8 = 9$ · $12 \div 3 = 4$ · $30 \div 3 = 10$ · $48 \div 4 = 12$ · $11 \div 1 = 11$