The Case of the Missing Diamond Block

Grade 1 math · Multiplication, Addition, Subtraction, Skip counting, Missing addends · Reading level grades 3-4

Detective: _____ **Date:** _____

Someone snuck into the Blocky Peaks Crafting Hall last night and swapped the golden trophy with a block of common dirt! The village guards found blocky footprints and strange clues left behind. It is up to you to inspect the evidence, solve the puzzles, and find out which pixelated prankster took the golden trophy!

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 griefing rogue is _____

Possible suspects

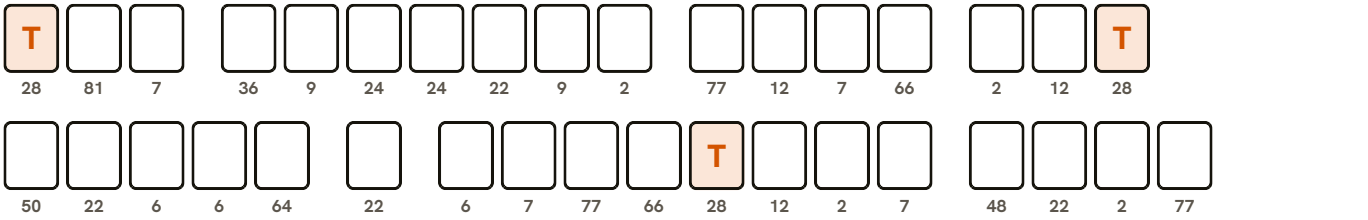
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	SPECIAL ABILITY	HELD TOOL	INVENTORY STRAP	HELMET TYPE	DISLIKED ITEM
Slime Sally	Night Vision	Diamond Sword	Right Belt Strap	Turtle Shell	Splash Potion
Anvil Andy	Ender Dash	Diamond Sword	Right Belt Strap	Leather Cap	Musical Jukebox
Bedrock Bella	Lava Walking	Netherite Axe	Right Belt Strap	Leather Cap	Water Bucket
Shulker Sam	Night Vision	Golden Pickaxe	Left Belt Strap	Turtle Shell	Splash Potion
Armor Artie	Lava Walking	Diamond Sword	Left Belt Strap	Turtle Shell	Water Bucket
Steve	Super Mining	Netherite Axe	Left Belt Strap	Iron Helmet	Water Bucket
Diamond Dave	Super Mining	Golden Pickaxe	Right Belt Strap	Turtle Shell	Splash Potion
Miner Max	Teleporting	Diamond Sword	Right Belt Strap	Turtle Shell	Splash Potion
Flint Fiona	Super Mining	Enchanted Bow	Right Belt Strap	Iron Helmet	Water Bucket
Redstone Rita	Ender Dash	Redstone Wand	Left Belt Strap	Iron Helmet	Musical Jukebox
Quartz Quincy	Super Mining	Diamond Sword	Left Belt Strap	Turtle Shell	Musical Jukebox
Alex	Lava Walking	Golden Pickaxe	Right Belt Strap	Iron Helmet	Splash Potion
Gravel Grace	Lava Walking	Redstone Wand	Left Belt Strap	Leather Cap	Water Bucket
Torch Tom	Night Vision	Golden Pickaxe	Right Belt Strap	Turtle Shell	Musical Jukebox
Pixel Pete	Night Vision	Golden Pickaxe	Right Belt Strap	Leather Cap	Musical Jukebox
Lapis Laura	Lava Walking	Redstone Wand	Right Belt Strap	Turtle Shell	Splash Potion
Cobble Chris	Lava Walking	Golden Pickaxe	Left Belt Strap	Turtle Shell	Splash Potion
Blocky Ben	Teleporting	Diamond Sword	Right Belt Strap	Iron Helmet	Splash Potion
Hopper Hannah	Ender Dash	Diamond Sword	Right Belt Strap	Turtle Shell	Splash Potion
Beacon Bob	Night Vision	Netherite Axe	Right Belt Strap	Leather Cap	Water Bucket
Piston Paul	Lava Walking	Enchanted Bow	Right Belt Strap	Iron Helmet	Splash Potion

CLUE 1 Multiplication facts (1-12)

To read the hidden note on the crafting table, you must count equal stacks of obsidian.

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



7 × 4 = ☐ → T

9 × 4 = ☐ → V

2 × 11 = ☐ → A

1 × 2 = ☐ → N

11 × 7 = ☐ → D

3 × 3 = ☐ → I

6 × 4 = ☐ → L

11 × 6 = ☐ → S

1 × 7 = ☐ → E

4 × 12 = ☐ → W

9 × 9 = ☐ → H

10 × 5 = ☐ → C

3 × 2 = ☐ → R

8 × 8 = ☐ → Y

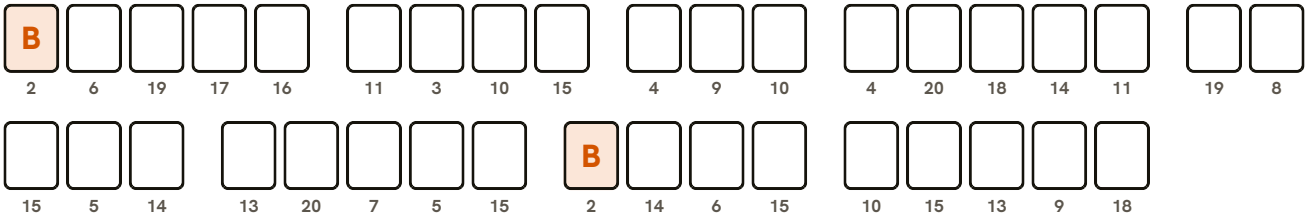
12 × 1 = ☐ → O

Scratch space:

CLUE 2 Addition

You search the chest by combining the total count of iron ingots found in both rows.

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



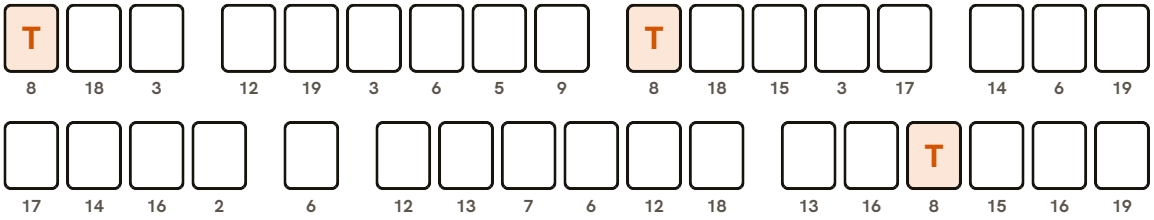
1 + 1 = ☐ → B	2 + 2 = ☐ → W	3 + 10 = ☐ → R	5 + 1 = ☐ → L
6 + 4 = ☐ → S	9 + 7 = ☐ → K	1 + 4 = ☐ → H	2 + 1 = ☐ → U
7 + 4 = ☐ → D	6 + 14 = ☐ → I	10 + 7 = ☐ → C	
2 + 5 = ☐ → G	11 + 7 = ☐ → P	6 + 8 = ☐ → E	3 + 5 = ☐ → N
11 + 4 = ☐ → T	8 + 11 = ☐ → O	7 + 2 = ☐ → A	

Scratch space:

CLUE 3 Subtraction

> A trapped chest lost several emeralds when it popped open on the sandstone floor.

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



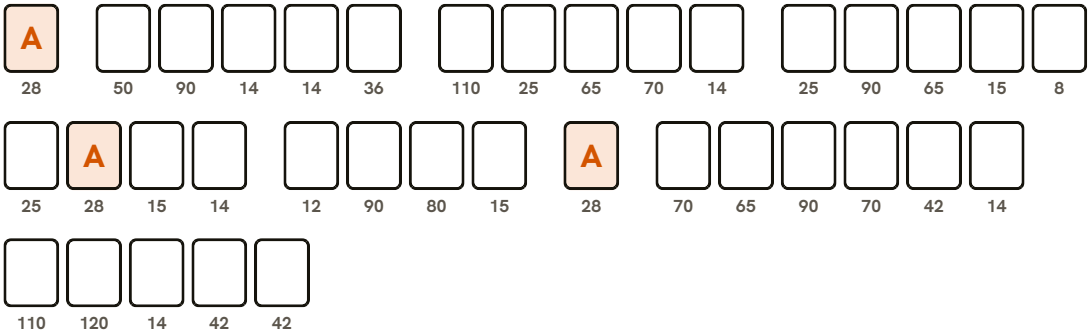
16 - 8 = ☐ → T	10 - 8 = ☐ → M	7 - 2 = ☐ → K	19 - 2 = ☐ → F
20 - 8 = ☐ → S	18 - 4 = ☐ → R	9 - 6 = ☐ → E	17 - 8 = ☐ → Y
10 - 3 = ☐ → L	20 - 1 = ☐ → N	16 - 3 = ☐ → P	
20 - 2 = ☐ → H	15 - 9 = ☐ → A	20 - 4 = ☐ → O	
16 - 1 = ☐ → I			

Scratch space:

CLUE 4 Skip counting

You track footprints along the wooden fence by counting every second torch beam.

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



Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, ___, 30, 32 ☐ → **A**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, ___, 75, 80 ☐ → **T**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, ___, 90, 100 ☐ → **O**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, ___, 120, 130 ☐ → **S**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, ___, 45, 48 ☐ → **L**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, ___, 130, 140 ☐ → **H**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, ___, 70, 75 ☐ → **U**

Skip-count by 2s. Fill the blank: 2, 4, 6, ___, 10, 12 ☐ → **B**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, ___, 55, 60 ☐ → **G**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, ___, 16, 18 ☐ → **E**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, ___, 18, 21 ☐ → **M**

Skip-count by 3s. Fill the blank: 3, 6, 9, ___, 15, 18 ☐ → **F**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, ___, 39, 42 ☐ → **N**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, ___, 30, 35 ☐ → **C**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, ___, 100, 110 ☐ → **R**

Scratch space:

CLUE 5 Missing addends - the last clue

> The beacon needs extra glowstone dust to reach full power and reveal 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:

5 + ___ = 17 ☐	7 + ___ = 11 ☐	6 + ___ = 8 ☐	8 + ___ = 17 ☐
8 + ___ = 18 ☐	10 + ___ = 21 ☐	1 + ___ = 4 ☐	3 + ___ = 11 ☐
1 + ___ = 7 ☐	1 + ___ = 6 ☐	2 + ___ = 9 ☐	

Step 2 - cross out the sentence with each answer:

1. The villain teleported through the wall, then swung a diamond sword.
2. The villain glided through the dark cavern, then swung a diamond sword.
3. The villain mined straight through stone, then zapped the door with a redstone wand.
4. The villain dashed past the village guards, then swung a diamond sword.
5. The villain glided through the dark cavern, then chopped through beams with a netherite axe.
6. The villain teleported through the wall, then shot an enchanted bow.
7. The villain mined straight through stone, then swung a diamond sword.
8. The villain mined straight through stone, then shot an enchanted bow.
9. The villain glided through the dark cavern, then chipped blocks with a golden pickaxe.
10. The villain teleported through the wall, then chipped blocks with a golden pickaxe.
11. The villain teleported through the wall, then zapped the door with a redstone wand.
12. The villain mined straight through stone, then chipped blocks with a golden pickaxe.

TEACHER / PARENT

Answer Key

The Case of the Missing Diamond Block

Culprit: Miner Max

Teleporting · Diamond Sword · Right Belt Strap · Turtle Shell · Splash Potion

Trail: Start 21 → Clue 1 18 → Clue 2 13 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT CARRY A REDSTONE WAND"

7 × 4 = 28 (T) · 9 × 4 = 36 (V) · 2 × 11 = 22 (A) · 1 × 2 = 2 (N) · 11 × 7 = 77 (D) · 3 × 3 = 9 (I) · 6 × 4 = 24 (L) · 11 × 6 = 66 (S) · 1 × 7 = 7 (E) · 4 × 12 = 48 (W) · 9 × 9 = 81 (H) · 10 × 5 = 50 (C) · 3 × 2 = 6 (R) · 8 × 8 = 64 (Y) · 12 × 1 = 12 (O)

Clue 2 (Addition): "BLOCK DUST WAS WIPED ON THE RIGHT BELT STRAP"

1 + 1 = 2 (B) · 2 + 2 = 4 (W) · 3 + 10 = 13 (R) · 5 + 1 = 6 (L) · 6 + 4 = 10 (S) · 9 + 7 = 16 (K) · 1 + 4 = 5 (H) · 2 + 1 = 3 (U) · 7 + 4 = 11 (D) · 6 + 14 = 20 (I) · 10 + 7 = 17 (C) · 2 + 5 = 7 (G) · 11 + 7 = 18 (P) · 6 + 8 = 14 (E) · 3 + 5 = 8 (N) · 11 + 4 = 15 (T) · 8 + 11 = 19 (O) · 7 + 2 = 9 (A)

Clue 3 (Subtraction): "THE SNEAKY THIEF RAN FROM A SPLASH POTION"

16 - 8 = 8 (T) · 10 - 8 = 2 (M) · 7 - 2 = 5 (K) · 19 - 2 = 17 (F) · 20 - 8 = 12 (S) · 18 - 4 = 14 (R) · 9 - 6 = 3 (E) · 17 - 8 = 9 (Y) · 10 - 3 = 7 (L) · 20 - 1 = 19 (N) · 16 - 3 = 13 (P) · 20 - 2 = 18 (H) · 15 - 9 = 6 (A) · 20 - 4 = 16 (O) · 16 - 1 = 15 (I)

Clue 4 (Skip counting): "A GREEN SCUTE CRUMB CAME FROM A TURTLE SHELL"

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, ___, 30, 32 = 28 (A) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, ___, 75, 80 = 70 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, ___, 90, 100 = 80 (O) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, ___, 120, 130 = 110 (S) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, ___, 45, 48 = 42 (L) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, ___, 130, 140 = 120 (H) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, ___, 70, 75 = 65 (U) · Skip-count by 2s. Fill the blank: 2, 4, 6, ___, 10, 12 = 8 (B) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, ___, 55, 60 = 50 (G) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, ___, 16, 18 = 14 (E) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, ___, 18, 21 = 15 (M) · Skip-count by 3s. Fill the blank: 3, 6, 9, ___, 15, 18 = 12 (F) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, ___, 39, 42 = 36 (N) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, ___, 30, 35 = 25 (C) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, ___, 100, 110 = 90 (R)

Clue 5 (Missing addends): surviving statement is box 1 → Miner Max

5 + ___ = 17 = 12 · 7 + ___ = 11 = 4 · 6 + ___ = 8 = 2 · 8 + ___ = 17 = 9 · 8 + ___ = 18 = 10 · 10 + ___ = 21 = 11 · 1 + ___ = 4 = 3 · 3 + ___ = 11 = 8 · 1 + ___ = 7 = 6 · 1 + ___ = 6 = 5 · 2 + ___ = 9 = 7