The Great Blocky Basin Vault Heist

Grade 5 math · Place value, Multiplication, Word problems, Multi-step word problems, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

A sneaky rogue snuck into the Blocky Basin vault last night and snatched precious blocky treasures! Use your detective skills to decode the clues and find 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 Griefing Rogue is _____

Possible suspects

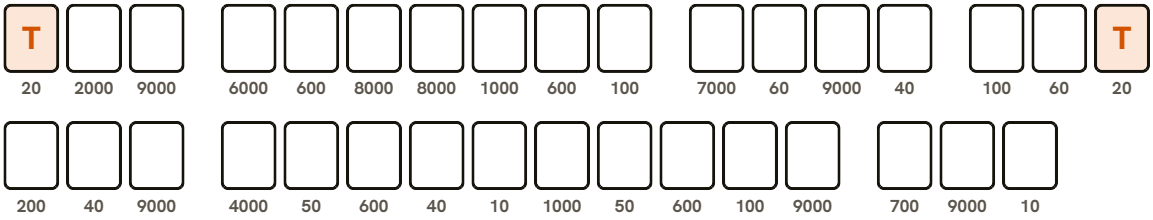
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	MOVEMENT ABILITY	STOLEN ARTIFACT	PICK STANCE	HAIR STYLE	SECRET FOIL
Stampy	Ender Teleport	Dragon Scale	Right Handed Pick	Pixel Spikes	Music Disc
Mumbo	Lava Shield	Prismarine Gem	Left Handed Pick	Blocky Mullet	Iron Golem
Tommy	Redstone Logic	Prismarine Gem	Right Handed Pick	Blocky Mullet	Iron Golem
Ranboo	Elytra Glide	Totem Pulse	Right Handed Pick	Blocky Mullet	Iron Golem
Axel	Ender Teleport	Nether Star	Left Handed Pick	Smooth Buzz	Music Disc
Jelly	Ender Teleport	Golden Apple	Right Handed Pick	Blocky Mullet	Iron Golem
Halo	Ender Teleport	Prismarine Gem	Right Handed Pick	Smooth Buzz	Splash Water
Jesse	Redstone Logic	Totem Pulse	Right Handed Pick	Pixel Spikes	Music Disc
Dan	Redstone Logic	Nether Star	Right Handed Pick	Blocky Mullet	Splash Water
Techno	Potion Brew	Prismarine Gem	Left Handed Pick	Smooth Buzz	Iron Golem
Skeppy	Elytra Glide	Totem Pulse	Left Handed Pick	Smooth Buzz	Splash Water
Tubbo	Potion Brew	Golden Apple	Left Handed Pick	Pixel Spikes	Music Disc
Grian	Potion Brew	Totem Pulse	Left Handed Pick	Pixel Spikes	Iron Golem
Sparklez	Elytra Glide	Totem Pulse	Left Handed Pick	Blocky Mullet	Splash Water
Steve	Ender Teleport	Dragon Scale	Left Handed Pick	Blocky Mullet	Iron Golem
Petra	Elytra Glide	Dragon Scale	Left Handed Pick	Pixel Spikes	Iron Golem
Stella	Ender Teleport	Totem Pulse	Right Handed Pick	Blocky Mullet	Iron Golem
Preston	Ender Teleport	Nether Star	Left Handed Pick	Smooth Buzz	Iron Golem
Olivia	Potion Brew	Nether Star	Right Handed Pick	Pixel Spikes	Iron Golem
Radar	Ender Teleport	Dragon Scale	Right Handed Pick	Blocky Mullet	Iron Golem
Alex	Ender Teleport	Nether Star	Left Handed Pick	Blocky Mullet	Splash Water

CLUE 1 Place value

The security coordinates on the redstone lamp reveal a clue when you read the place value.

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



What is the value of the 2 in 557,321? ☐ → T

What is the value of the 6 in 14,061? ☐ → O

What is the value of the 4 in 297,546? ☐ → S

What is the value of the 5 in 14,852? ☐ → R

What is the value of the 6 in 95,640? ☐ → I

What is the value of the 7 in 87,141? ☐ → D

What is the value of the 1 in 365,310? ☐ → M

What is the value of the 9 in 79,444? ☐ → E

What is the value of the 2 in 30,209? ☐ → U

What is the value of the 7 in 53,708? ☐ → G

What is the value of the 2 in 932,114? ☐ → H

What is the value of the 1 in 57,102? ☐ → N

What is the value of the 1 in 31,605? ☐ → A

What is the value of the 4 in 724,993? ☐ → P

What is the value of the 6 in 116,392? ☐ → V

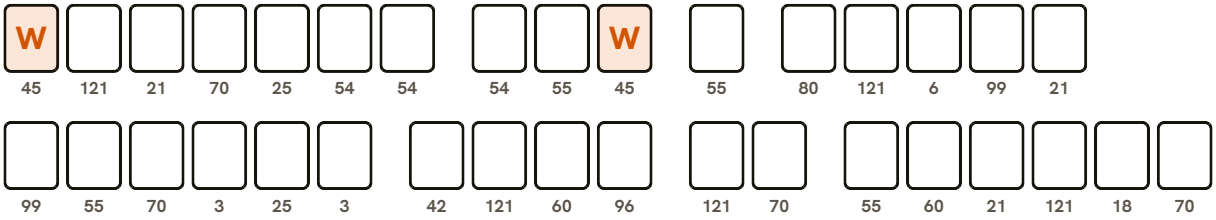
What is the value of the 8 in 18,422? ☐ → L

Scratch space:

CLUE 2 Multiplication facts (1-12)

> The builder counted identical rows of iron blocks stacked outside the vault.

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



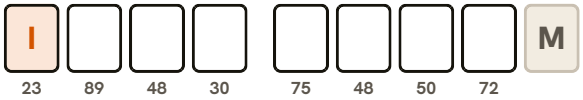
5 × 9 = ☐ → W	7 × 6 = ☐ → P	7 × 10 = ☐ → N	2 × 9 = ☐ → O
12 × 8 = ☐ → K	11 × 11 = ☐ → I	8 × 10 = ☐ → R	
1 × 3 = ☐ → D	7 × 3 = ☐ → T	11 × 9 = ☐ → H	5 × 5 = ☐ → E
6 × 9 = ☐ → S	12 × 5 = ☐ → C	6 × 1 = ☐ → G	
5 × 11 = ☐ → A			

Scratch space:

CLUE 3 Word problems

A helper wrote an inventory log listing all the recovered craftable items.

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

Someone scared the villain off with 

.

Master Miner found 14 oak logs yesterday and 9 more today. How many oak logs in all?

Answer: ☐ → **I**

There were 59 golden carrots. 11 were used up. How many golden carrots are left?

Answer: ☐ → **O**

Master Miner found 17 redstone dust yesterday and 58 more today. How many redstone dust in all?

Answer: ☐ → **G**

Master Miner lined up 5 rows of 10 emerald blocks. How many emerald blocks in all?

Answer: ☐ → **L**

There were 127 golden carrots. 38 were used up. How many golden carrots are left?

Answer: ☐ → **R**

Master Miner found 57 iron ingots yesterday and 15 more today. How many iron ingots in all?

Answer: ☐ → **E**

Master Miner found 27 redstone dust yesterday and 3 more today. How many redstone dust in all?

Answer: ☐ → **N**

Scratch space:

CLUE 4 Multi-step word problems

The mine supervisor calculated total ores after several crafting steps.

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

A strand of

B							U			E	T
10	30	84	69	53	28	25		30	30		

hair turned up at the scene.

There were 94 oak logs in all. 2 Block Crafters used 37 oak logs each. The other 2 Block Crafters shared the rest equally. How many oak logs did each of the other Block Crafters get?

Answer: ☐ → **B**

Master Miner collected 344 iron ingots in the morning and 160 iron ingots in the afternoon, then split them equally among 6 Block Crafters. How many iron ingots did each get?

Answer: ☐ → **O**

Master Miner collected 18 emerald blocks in the morning and 88 emerald blocks in the afternoon, then split them equally among 2 Block Crafters. How many emerald blocks did each get?

Answer: ☐ → **K**

Master Miner filled 4 boxes with 6 redstone dust each, then found 45 more redstone dust. How many redstone dust are there in all?

Answer: ☐ → **C**

There were 176 golden carrots in all. 26 golden carrots were set aside. The rest were shared equally among 6 Block Crafters. How many golden carrots did each get?

Answer: ☐ → **M**

Master Miner earned 7 oak logs in each of 5 rounds, plus 6 bonus oak logs. Then 13 oak logs were lost. How many oak logs are left?

Answer: ☐ → **Y**

Master Miner filled 5 boxes with 3 oak logs each, then found 15 more oak logs. How many oak logs are there in all?

Answer: ☐ → **L**

Scratch space:

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

> The village guard divided all the leftover emeralds evenly into safety chests.

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:

6 ÷ 3 = ☐ | 7 ÷ 1 = ☐ | 64 ÷ 8 = ☐ | 18 ÷ 6 = ☐ | 10 ÷ 10 = ☐

50 ÷ 5 = ☐ | 55 ÷ 11 = ☐ | 11 ÷ 1 = ☐ | 60 ÷ 10 = ☐ | 36 ÷ 9 = ☐

54 ÷ 6 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain teleported through the wall, then grabbed the prismarine gem.
2. The villain glided off the tower, then activated the totem pulse.
3. The villain wired a redstone trap, then snatched the nether star.
4. The villain wired a redstone trap, then grabbed the prismarine gem.
5. The villain teleported through the wall, then snatched the nether star.
6. The villain stepped across the lava, then activated the totem pulse.
7. The villain teleported through the wall, then stole the dragon scale.
8. The villain teleported through the wall, then activated the totem pulse.
9. The villain brewed a speed potion, then snatched the nether star.
10. The villain brewed a speed potion, then stole the dragon scale.
11. The villain stepped across the lava, then grabbed the prismarine gem.
12. The villain teleported through the wall, then ate the golden apple.

TEACHER / PARENT

Answer Key

The Great Blocky Basin Vault Heist

Culprit: Jelly

Ender Teleport · Golden Apple · Right Handed Pick · Blocky Mullet · Iron Golem

Trail: Start 21 → Clue 1 17 → Clue 2 8 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT USE PRISMARINE GEM"

What is the value of the 2 in 557,321? = 20 (T) · What is the value of the 6 in 14,061? = 60 (O) · What is the value of the 4 in 297,546? = 40 (S) · What is the value of the 5 in 14,852? = 50 (R) · What is the value of the 6 in 95,640? = 600 (I) · What is the value of the 7 in 87,141? = 7000 (D) · What is the value of the 1 in 365,310? = 10 (M) · What is the value of the 9 in 79,444? = 9000 (E) · What is the value of the 2 in 30,209? = 200 (U) · What is the value of the 7 in 53,708? = 700 (G) · What is the value of the 2 in 932,114? = 2000 (H) · What is the value of the 1 in 57,102? = 100 (N) · What is the value of the 1 in 31,605? = 1000 (A) · What is the value of the 4 in 724,993? = 4000 (P) · What is the value of the 6 in 116,392? = 6000 (V) · What is the value of the 8 in 18,422? = 8000 (L)

Clue 2 (Multiplication facts (1-12)): "WITNESS SAW A RIGHT HANDED PICK IN ACTION"

5 × 9 = 45 (W) · 7 × 6 = 42 (P) · 7 × 10 = 70 (N) · 2 × 9 = 18 (O) · 12 × 8 = 96 (K) · 11 × 11 = 121 (I) · 8 × 10 = 80 (R) · 1 × 3 = 3 (D) · 7 × 3 = 21 (T) · 11 × 9 = 99 (H) · 5 × 5 = 25 (E) · 6 × 9 = 54 (S) · 12 × 5 = 60 (C) · 6 × 1 = 6 (G) · 5 × 11 = 55 (A)

Clue 3 (Word problems): "IRON GOLEM"

Master Miner found 14 oak logs yesterday and 9 more today. How many oak logs in all? = 23 (I) · There were 59 golden carrots. 11 were used up. How many golden carrots are left? = 48 (O) · Master Miner found 17 redstone dust yesterday and 58 more today. How many redstone dust in all? = 75 (G) · Master Miner lined up 5 rows of 10 emerald blocks. How many emerald blocks in all? = 50 (L) · There were 127 golden carrots. 38 were used up. How many golden carrots are left? = 89 (R) · Master Miner found 57 iron ingots yesterday and 15 more today. How many iron ingots in all? = 72 (E) · Master Miner found 27 redstone dust yesterday and 3 more today. How many redstone dust in all? = 30 (N)

Clue 4 (Multi-step word problems): "BLOCKY MULLET"

There were 94 oak logs in all. 2 Block Crafters used 37 oak logs each. The other 2 Block Crafters shared the rest equally. How many oak logs did each of the other Block Crafters get? = 10 (B) · Master Miner collected 344 iron ingots in the morning and 160 iron ingots in the afternoon, then split them equally among 6 Block Crafters. How many iron ingots did each get? = 84 (O) · Master Miner collected 18 emerald blocks in the morning and 88 emerald blocks in the afternoon, then split them equally among 2 Block Crafters. How many emerald blocks did each get? = 53 (K) · Master Miner filled 4 boxes with 6 redstone dust each, then found 45 more redstone dust. How many redstone dust are there in all? = 69 (C) · There were 176 golden carrots in all. 26 golden carrots were set aside. The rest were shared equally among 6 Block Crafters. How many golden carrots did each get? = 25 (M) · Master Miner earned 7 oak logs in each of 5 rounds, plus 6 bonus oak logs. Then 13 oak logs were lost. How many oak logs are left? = 28 (Y) · Master Miner filled 5 boxes with 3 oak logs each, then found 15 more oak logs. How many oak logs are there in all? = 30 (L)

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

6 ÷ 3 = 2 · 7 ÷ 1 = 7 · 64 ÷ 8 = 8 · 18 ÷ 6 = 3 · 10 ÷ 10 = 1 · 50 ÷ 5 = 10 · 55 ÷ 11 = 5 · 11 ÷ 1 = 11 · 60 ÷ 10 = 6 · 36 ÷ 9 = 4 · 54 ÷ 6 = 9