The Mystery of the Missing Vault Block

Grade 3 math · Multiplication, Word problems, Rounding, Addition, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

Someone snuck into the Cubeton spawn vault and stole the legendary Golden Apple trophy! Solve the math clues to figure out which player is the Block Bandit before they log off.

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 Block Bandit is _____

Possible suspects

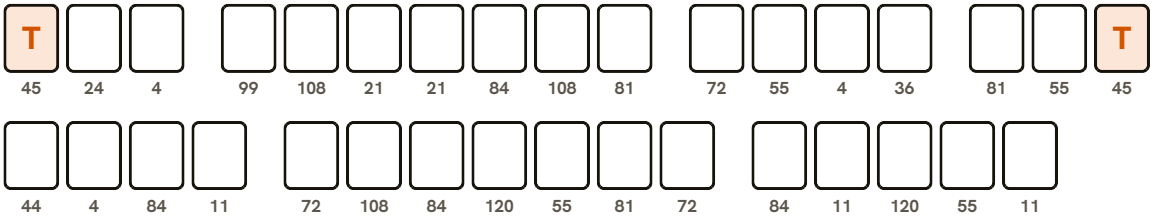
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	PRIMARY TOOL	ARMOR TYPE	DOMINANT HAND	HEADGEAR COLOR	FEAR FACTOR
Builder Sam	Netherite Sword	Netherite Armor	Left Handed	Blue Hood	Scared of Creepers
Alex Craft	Redstone Torch	Netherite Armor	Right Handed	Green Mask	Scared of Cats
Torch Tyler	Redstone Torch	Diamond Armor	Left Handed	Red Cap	Scared of Cats
Creeper Chris	Redstone Torch	Gold Armor	Left Handed	Red Cap	Scared of Cats
Lapis Leo	Redstone Torch	Netherite Armor	Right Handed	Green Mask	Scared of Creepers
Emerald Emma	Netherite Sword	Netherite Armor	Right Handed	Blue Hood	Scared of Cats
Diamond Dan	Golden Shovel	Iron Armor	Left Handed	Red Cap	Scared of Creepers
Steve Miner	Redstone Torch	Chainmail Armor	Right Handed	Blue Hood	Scared of Cats
Quartz Quinn	Bow and Arrow	Netherite Armor	Left Handed	Green Mask	Scared of Cats
Mossy Mia	Netherite Sword	Iron Armor	Left Handed	Blue Hood	Scared of Cats
Redstone Rita	Redstone Torch	Gold Armor	Right Handed	Red Cap	Scared of Water
Ender Ethan	Golden Shovel	Diamond Armor	Right Handed	Blue Hood	Scared of Creepers
Crafty Claire	Golden Shovel	Iron Armor	Left Handed	Red Cap	Scared of Cats
Lava Lily	Netherite Sword	Chainmail Armor	Left Handed	Blue Hood	Scared of Cats
Nether Nate	Golden Shovel	Gold Armor	Left Handed	Red Cap	Scared of Water
Blocky Ben	Redstone Torch	Netherite Armor	Left Handed	Red Cap	Scared of Cats
Brick Brody	Diamond Pickaxe	Netherite Armor	Left Handed	Red Cap	Scared of Creepers
Redstone Rachel	Golden Shovel	Chainmail Armor	Right Handed	Blue Hood	Scared of Water
Pixel Pete	Redstone Torch	Gold Armor	Right Handed	Red Cap	Scared of Creepers
Gravel Grace	Netherite Sword	Netherite Armor	Left Handed	Red Cap	Scared of Cats
Cobalt Kate	Redstone Torch	Gold Armor	Right Handed	Red Cap	Scared of Cats

CLUE 1 Multiplication facts (1-12)

> The server admin counted the broken inventory chests to find the first clue.

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



9 × 5 = ☐ → T	12 × 7 = ☐ → A	12 × 6 = ☐ → D
11 × 5 = ☐ → O	6 × 6 = ☐ → S	2 × 2 = ☐ → E
12 × 10 = ☐ → M	9 × 11 = ☐ → V	9 × 9 = ☐ → N
3 × 7 = ☐ → L	12 × 9 = ☐ → I	11 × 1 = ☐ → R
4 × 11 = ☐ → W	8 × 3 = ☐ → H	

Scratch space:

CLUE 2 Word problems

You inspect the rows of redstone repeaters lined up near the vault entrance.

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

A witness saw the villain was

L							D		D
28	6	50	14	16	65	18		6	

.

Builder Alex lined up 7 rows of 4 emeralds. How many emeralds in all?

Answer: ☐ → **L**

Builder Alex found 5 redstone dust yesterday and 9 more today. How many redstone dust in all?

Answer: ☐ → **T**

Builder Alex found 28 emeralds yesterday and 37 more today. How many emeralds in all?

Answer: ☐ → **A**

Builder Alex lined up 2 rows of 3 redstone dust. How many redstone dust in all?

Answer: ☐ → **E**

Builder Alex lined up 3 rows of 6 golden carrots. How many golden carrots in all?

Answer: ☐ → **N**

Builder Alex lined up 5 rows of 10 redstone dust. How many redstone dust in all?

Answer: ☐ → **F**

There were 22 redstone dust. 6 were used up. How many redstone dust are left?

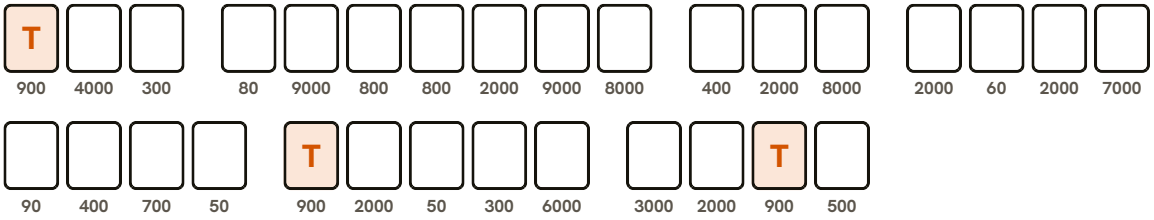
Answer: ☐ → **H**

Scratch space:

CLUE 3 Rounding

> The spawn gate radar gives a rounded readout of the bandit level.

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



Round 867 to the nearest hundred ☐ → T

Round 3,727 to the nearest thousand ☐ → H

Round 2,800 to the nearest thousand ☐ → C

Round 6,297 to the nearest thousand ☐ → D

Round 339 to the nearest hundred ☐ → E

Round 1,852 to the nearest thousand ☐ → A

Round 846 to the nearest hundred ☐ → L

Round 7,260 to the nearest thousand ☐ → Y

Round 409 to the nearest hundred ☐ → R

Round 502 to the nearest hundred ☐ → S

Round 87 to the nearest ten ☐ → F

Round 9,396 to the nearest thousand ☐ → I

Round 7,678 to the nearest thousand ☐ → N

Round 84 to the nearest ten ☐ → V

Round 722 to the nearest hundred ☐ → O

Round 47 to the nearest ten ☐ → M

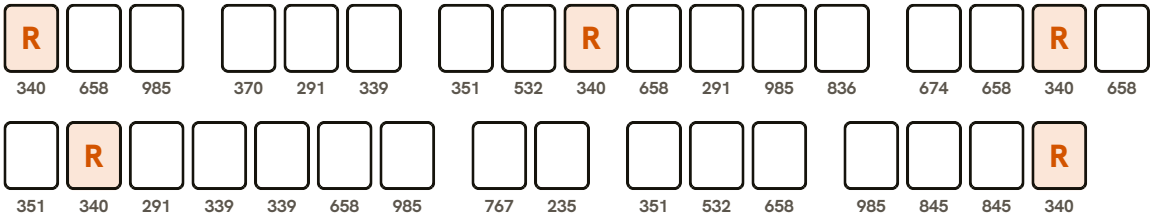
Round 57 to the nearest ten ☐ → W

Scratch space:

CLUE 4 Addition

You tally up all the leftover emeralds found along the secret escape tunnel.

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



237 + 103 = ☐ → R

270 + 262 = ☐ → H

141 + 198 = ☐ → P

558 + 287 = ☐ → O

200 + 170 = ☐ → C

361 + 297 = ☐ → E

300 + 467 = ☐ → I

245 + 106 = ☐ → T

142 + 93 = ☐ → N

424 + 250 = ☐ → W

352 + 484 = ☐ → S

200 + 91 = ☐ → A

432 + 553 = ☐ → D

Scratch space:

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

> To open the locked door you divide the golden apples equally among the guard golems.

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:

70 ÷ 7 = ☐	72 ÷ 6 = ☐	72 ÷ 8 = ☐	1 ÷ 1 = ☐	24 ÷ 4 = ☐
88 ÷ 8 = ☐	15 ÷ 3 = ☐	63 ÷ 9 = ☐	40 ÷ 5 = ☐	44 ÷ 11 = ☐
27 ÷ 9 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain dug a quick tunnel underneath, then rattled softly in chainmail gear.
2. The villain swung a sharp blade at the door, then stomped off in heavy netherite gear.
3. The villain shot an arrow through the window, then glimmered brightly in golden gear.
4. The villain shot an arrow through the window, then sparkled while running in diamond gear.
5. The villain dug a quick tunnel underneath, then sparkled while running in diamond gear.
6. The villain mined through the obsidian wall, then glimmered brightly in golden gear.
7. The villain wired a sneaky trapdoor, then sparkled while running in diamond gear.
8. The villain mined through the obsidian wall, then stomped off in heavy netherite gear.
9. The villain wired a sneaky trapdoor, then stomped off in heavy netherite gear.
10. The villain dug a quick tunnel underneath, then clattered away in iron gear.
11. The villain shot an arrow through the window, then rattled softly in chainmail gear.
12. The villain wired a sneaky trapdoor, then glimmered brightly in golden gear.

TEACHER / PARENT

Answer Key

The Mystery of the Missing Vault Block

Culprit: Gravel Grace

Netherite Sword · Netherite Armor · Left Handed · Red Cap · Scared of Cats

Trail: Start 21 → Clue 1 19 → Clue 2 11 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT WEAR DIAMOND ARMOR"

9 × 5 = 45 (T) · 12 × 7 = 84 (A) · 12 × 6 = 72 (D) · 11 × 5 = 55 (O) · 6 × 6 = 36 (S) · 2 × 2 = 4 (E) · 12 × 10 = 120 (M) · 9 × 11 = 99 (V) · 9 × 9 = 81 (N) · 3 × 7 = 21 (L) · 12 × 9 = 108 (I) · 11 × 1 = 11 (R) · 4 × 11 = 44 (W) · 8 × 3 = 24 (H)

Clue 2 (Word problems): "LEFT HANDED"

Builder Alex lined up 7 rows of 4 emeralds. How many emeralds in all? = 28 (L) · Builder Alex found 5 redstone dust yesterday and 9 more today. How many redstone dust in all? = 14 (T) · Builder Alex found 28 emeralds yesterday and 37 more today. How many emeralds in all? = 65 (A) · Builder Alex lined up 2 rows of 3 redstone dust. How many redstone dust in all? = 6 (E) · Builder Alex lined up 3 rows of 6 golden carrots. How many golden carrots in all? = 18 (N) · Builder Alex lined up 5 rows of 10 redstone dust. How many redstone dust in all? = 50 (F) · There were 22 redstone dust. 6 were used up. How many redstone dust are left? = 16 (H)

Clue 3 (Rounding): "THE VILLAIN RAN AWAY FROM TAMED CATS"

Round 867 to the nearest hundred = 900 (T) · Round 3,727 to the nearest thousand = 4000 (H) · Round 2,800 to the nearest thousand = 3000 (C) · Round 6,297 to the nearest thousand = 6000 (D) · Round 339 to the nearest hundred = 300 (E) · Round 1,852 to the nearest thousand = 2000 (A) · Round 846 to the nearest hundred = 800 (L) · Round 7,260 to the nearest thousand = 7000 (Y) · Round 409 to the nearest hundred = 400 (R) · Round 502 to the nearest hundred = 500 (S) · Round 87 to the nearest ten = 90 (F) · Round 9,396 to the nearest thousand = 9000 (I) · Round 7,678 to the nearest thousand = 8000 (N) · Round 84 to the nearest ten = 80 (V) · Round 722 to the nearest hundred = 700 (O) · Round 47 to the nearest ten = 50 (M) · Round 57 to the nearest ten = 60 (W)

Clue 4 (Addition): "RED CAP THREADS WERE TRAPPED IN THE DOOR"

237 + 103 = 340 (R) · 270 + 262 = 532 (H) · 141 + 198 = 339 (P) · 558 + 287 = 845 (O) · 200 + 170 = 370 (C) · 361 + 297 = 658 (E) · 300 + 467 = 767 (I) · 245 + 106 = 351 (T) · 142 + 93 = 235 (N) · 424 + 250 = 674 (W) · 352 + 484 = 836 (S) · 200 + 91 = 291 (A) · 432 + 553 = 985 (D)

Clue 5 (Division facts (1-12)): surviving statement is box 2 → Gravel Grace

70 ÷ 7 = 10 · 72 ÷ 6 = 12 · 72 ÷ 8 = 9 · 1 ÷ 1 = 1 · 24 ÷ 4 = 6 · 88 ÷ 8 = 11 · 15 ÷ 3 = 5 · 63 ÷ 9 = 7 · 40 ÷ 5 = 8 · 44 ÷ 11 = 4 · 27 ÷ 9 = 3