



The Obsidian Vault Heist

Grade 6 math · Multiplication, Skip counting, Multi-step word problems, Percentages, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

A mysterious griever broke into the master diamond vault, disabled the spawn shields, and scattered rare server blocks across the realm. The Head Realm Architect needs your deduction skills to identify the suspect.

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 Server Griever 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	ENCHANTMENT	STANCE	HELMET TYPE	BAN TRIGGER
Zombie Cleo	Netherite Pickaxe	Feather Falling	Left Hand Dominant	Leather Cap	Splash Potion of Harming
Stampy Cat	Diamond Sword	Loyalty	Right Hand Dominant	Leather Cap	Music Disc Eleven
Grian Redstone	Netherite Pickaxe	Fire Aspect	Left Hand Dominant	Leather Cap	Music Disc Eleven
Tango Tek	Netherite Pickaxe	Feather Falling	Right Hand Dominant	Turtle Shell	Splash Potion of Harming
Iskall Eighty	Iron Axe	Silk Touch	Right Hand Dominant	Leather Cap	Golden Apple
Captain Spark	Golden Shovel	Feather Falling	Left Hand Dominant	Netherite Helmet	Splash Potion of Harming
Gem Init	Trident	Loyalty	Left Hand Dominant	Leather Cap	Splash Potion of Harming
Cub Fanatic	Golden Shovel	Feather Falling	Left Hand Dominant	Leather Cap	Splash Potion of Harming
Alex Craft	Iron Axe	Fire Aspect	Left Hand Dominant	Netherite Helmet	Splash Potion of Harming
Docm Seventy	Iron Axe	Blast Protection	Left Hand Dominant	Netherite Helmet	Splash Potion of Harming
False Symmetry	Trident	Silk Touch	Left Hand Dominant	Netherite Helmet	Splash Potion of Harming
Scar Goodtime	Diamond Sword	Feather Falling	Left Hand Dominant	Netherite Helmet	Music Disc Eleven
Rendog Bark	Netherite Pickaxe	Silk Touch	Right Hand Dominant	Netherite Helmet	Splash Potion of Harming
Bdouble O	Netherite Pickaxe	Feather Falling	Right Hand Dominant	Leather Cap	Music Disc Eleven
Keralis Eyes	Golden Shovel	Fire Aspect	Left Hand Dominant	Turtle Shell	Splash Potion of Harming
Etho Slab	Iron Axe	Silk Touch	Left Hand Dominant	Turtle Shell	Splash Potion of Harming
Aphmau Sun	Golden Shovel	Blast Protection	Left Hand Dominant	Leather Cap	Splash Potion of Harming
Mumbo Jumbo	Netherite Pickaxe	Feather Falling	Right Hand Dominant	Leather Cap	Splash Potion of Harming
Skelo King	Iron Axe	Feather Falling	Left Hand Dominant	Netherite Helmet	Splash Potion of Harming
Xisuma Void	Trident	Silk Touch	Right Hand Dominant	Netherite Helmet	Golden Apple
Steve Block	Trident	Silk Touch	Left Hand Dominant	Leather Cap	Splash Potion of Harming

CLUE 1
Multiplication facts (1-12)

The griefer placed stacks of obsidian blocks in grid formation near spawn. Calculating the total blocks reveals the first clue signal.

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

T																T	
64	120	18	40	81	22	22	77	81	16	36	32	18	4	16	32	64	
						T				T			T				
27	4	18	25	22	77	4	64	63	66	32	64	18	3	64	81	32	16

$8 \times 8 = \square \rightarrow \boxed{\text{T}}$

$11 \times 2 = \square \rightarrow \boxed{\text{L}}$

$3 \times 6 = \square \rightarrow \boxed{\text{E}}$

$3 \times 9 = \square \rightarrow \boxed{\text{U}}$

$4 \times 9 = \square \rightarrow \boxed{\text{D}}$

$7 \times 11 = \square \rightarrow \boxed{\text{A}}$

$8 \times 2 = \square \rightarrow \boxed{\text{N}}$

$4 \times 8 = \square \rightarrow \boxed{\text{O}}$

$9 \times 7 = \square \rightarrow \boxed{\text{P}}$

$4 \times 10 = \square \rightarrow \boxed{\text{V}}$

$12 \times 10 = \square \rightarrow \boxed{\text{H}}$

$2 \times 2 = \square \rightarrow \boxed{\text{S}}$

$5 \times 5 = \square \rightarrow \boxed{\text{B}}$

$1 \times 3 = \square \rightarrow \boxed{\text{C}}$

$11 \times 6 = \square \rightarrow \boxed{\text{R}}$

$9 \times 9 = \square \rightarrow \boxed{\text{I}}$

Scratch space:

CLUE 2 Skip counting

Redstone repeater torches pulse at set intervals down the dark tunnel. Counting each jump in the sequence uncovers a hidden server code.

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

W											W							
45	130	15	16	30	70	70	30	70	70	26	45	26	28	30	50	15		
60	26	16	140	140	80	12	130	16	26	16	15	100	24	130	28	140	30	18

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 → **W**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, __, 70, 80 → **H**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 → **D**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 → **B**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 → **M**

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

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

Skip-count by 10s. Fill the blank: 10, 20, __, 40, 50 → **E**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, __, 60, 70 → **F**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 → **N**

Skip-count by 5s. Fill the blank: 5, 10, __, 20, 25 → **T**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, __, 21, 24 → **R**

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, __, 26, 28 → **U**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 → **A**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 → **I**

Scratch space:

CLUE 3

Multi-step word problems

To clear the trapped portal, players gathered ingredients, crafted potions, and traded with piglins. Working through the steps shows where the suspect fled.

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

Someone scared the villain off with

S				S				I		N		F			R	M	I	N	G
33	13	16	83	33	70	13	74	36	74	74	74	70	83						

There were 301 golden apples in all. 37 golden apples were set aside. The rest were shared equally among 8 guild. How many golden apples did each get?

Answer: → **S**

Builder filled 7 boxes with 9 diamond ores each, then found 7 more diamond ores. How many diamond ores are there in all?

Answer: → **H**

Builder filled 5 boxes with 6 diamond ores each, then found 6 more diamond ores. How many diamond ores are there in all?

Answer: → **T**

There were 696 golden apples in all. 32 golden apples were set aside. The rest were shared equally among 8 guild. How many golden apples did each get?

Answer: → **A**

Builder filled 3 boxes with 2 redstone dust each, then found 7 more redstone dust. How many redstone dust are there in all?

Answer: → **P**

There were 105 emerald blocks in all. 25 emerald blocks were set aside. The rest were shared equally among 5 guild. How many emerald blocks did each get?

Answer: → **L**

Builder earned 7 emerald blocks in each of 6 rounds, plus 34 bonus emerald blocks. Then 2 emerald blocks were lost. How many emerald blocks are left?

Answer: → **O**

Scratch space:

CLUE 4

The server terminal shows what percentage of emerald stores were raided from each village vault. Solving this pinpoints the griefer signature.

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

The diagram shows three rows of boxes. The first row has 13 boxes, the second row has 18 boxes, and the third row has 4 boxes. The boxes are numbered 1 to 31. The box containing 'A' is box 13.

13	41	10	15	19	7	10	41	38	17	11	13						
41	25	38	3	25	7	10	38	25	3	25	35	15	25	38	21	13	12
12	25	25	41														

20% of 65 = → A	10% of 30 = → H	25% of 40 = → I
60% of 35 = → W	50% of 30 = → M	25% of 68 = → O
10% of 110 = → F	20% of 95 = → P	50% of 82 = → N
10% of 250 = → E	5% of 700 = → L	5% of 760 = → T
75% of 16 = → S	5% of 140 = → R	

Scratch space:

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

The admin split the remaining inventory chests equally among five server guards. Dividing the loot uncovers the final clue.

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:

$3 \div 1 = \boxed{}$

$45 \div 9 = \boxed{}$

$36 \div 9 = \boxed{}$

$48 \div 8 = \boxed{}$

$72 \div 8 = \boxed{}$

$14 \div 7 = \boxed{}$

$3 \div 3 = \boxed{}$

$120 \div 12 = \boxed{}$

$60 \div 5 = \boxed{}$

$77 \div 11 = \boxed{}$

$55 \div 5 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain chopped the wooden supports, then placed lava everywhere.
2. The villain sliced the spawn gates, then placed lava everywhere.
3. The villain threw water buckets around, then summoned phantom swarms.
4. The villain mined through obsidian walls, then glided away with elytra.
5. The villain threw water buckets around, then gathered emerald blocks.
6. The villain sliced the spawn gates, then glided away with elytra.
7. The villain dug under the chest room, then set off TNT traps.
8. The villain dug under the chest room, then glided away with elytra.
9. The villain mined through obsidian walls, then set off TNT traps.
10. The villain sliced the spawn gates, then set off TNT traps.
11. The villain sliced the spawn gates, then summoned phantom swarms.
12. The villain dug under the chest room, then summoned phantom swarms.

Answer Key

The Obsidian Vault Heist

Culprit: Cub Fanatic

Golden Shovel · Feather Falling · Left Hand Dominant · Leather Cap · Splash Potion of Harming

Trail: Start 21 → Clue 1 19 → Clue 2 12 → Clue 3 10 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT USE BLAST PROTECTION"

$8 \times 8 = 64$ (T) · $11 \times 2 = 22$ (L) · $3 \times 6 = 18$ (E) · $3 \times 9 = 27$ (U) · $4 \times 9 = 36$ (D) · $7 \times 11 = 77$ (A) · $8 \times 2 = 16$ (N) · $4 \times 8 = 32$ (O) · $9 \times 7 = 63$ (P) · $4 \times 10 = 40$ (V) · $12 \times 10 = 120$ (H) · $2 \times 2 = 4$ (S) · $5 \times 5 = 25$ (B) · $1 \times 3 = 3$ (C) · $11 \times 6 = 66$ (R) · $9 \times 9 = 81$ (I)

Clue 2 (Skip counting): "WITNESSES SAW A LEFT HAND DOMINANT BUILDER"

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 = 45 (W) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, __, 70, 80 = 60 (H) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 = 140 (D) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (B) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 = 12 (M) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (O) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, __, 75, 80 = 70 (S) · Skip-count by 10s. Fill the blank: 10, 20, __, 40, 50 = 30 (E) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, __, 60, 70 = 50 (F) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 = 16 (N) · Skip-count by 5s. Fill the blank: 5, 10, __, 20, 25 = 15 (T) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, __, 21, 24 = 18 (R) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 = 28 (L) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, __, 26, 28 = 24 (U) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (A) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 = 130 (I)

Clue 3 (Multi-step word problems): "SPLASH POTION OF HARMING"

There were 301 golden apples in all. 37 golden apples were set aside. The rest were shared equally among 8 guild. How many golden apples did each get? = 33 (S) · Builder filled 7 boxes with 9 diamond ores each, then found 7 more diamond ores. How many diamond ores are there in all? = 70 (H) · Builder filled 5 boxes with 6 diamond ores each, then found 6 more diamond ores. How many diamond ores are there in all? = 36 (T) · There were 696 golden apples in all. 32 golden apples were set aside. The rest were shared equally among 8 guild. How many golden apples did each get? = 83 (A) · Builder filled 3 boxes with 2 redstone dust each, then found 7 more redstone dust. How many redstone dust are there in all? = 13 (P) · There were 105 emerald blocks in all. 25 emerald blocks were set aside. The rest were shared equally among 5 guild. How many emerald blocks did each get? = 16 (L) · Builder earned 7 emerald blocks in each of 6 rounds, plus 34 bonus emerald blocks. Then 2 emerald blocks were lost. How many emerald blocks are left? = 74 (O)

Clue 4 (Percentages): "AN IMPRINT OF A NETHERITE HELMET WAS SEEN"

20% of 65 = 13 (A) · 10% of 30 = 3 (H) · 25% of 40 = 10 (I) · 60% of 35 = 21 (W) · 50% of 30 = 15 (M) · 25% of 68 = 17 (O) · 10% of 110 = 11 (F) · 20% of 95 = 19 (P) · 50% of 82 = 41 (N) · 10% of 250 = 25 (E) · 5% of 700 = 35 (L) · 5% of 760 = 38 (T) · 75% of 16 = 12 (S) · 5% of 140 = 7 (R)

Clue 5 (Division facts (1-12)): surviving statement is box 8 → Cub Fanatic

$3 \div 1 = 3$ · $45 \div 9 = 5$ · $36 \div 9 = 4$ · $48 \div 8 = 6$ · $72 \div 8 = 9$ · $14 \div 7 = 2$ · $3 \div 3 = 1$ · $120 \div 12 = 10$ · $60 \div 5 = 12$ · $77 \div 11 = 7$ · $55 \div 5 = 11$