The Case of the Missing Diamond Vault

Grade 1 math · Addition, Subtraction, Multiplication, Skip counting, Division · Reading level grades 1-2

Detective: _____ **Date:** _____

Someone snuck into the Blocky Mountain Base and emptied the Master Builder diamond chest! Use your math clues to track down the sneaky griefer.

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 Griefer is _____

Possible suspects

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

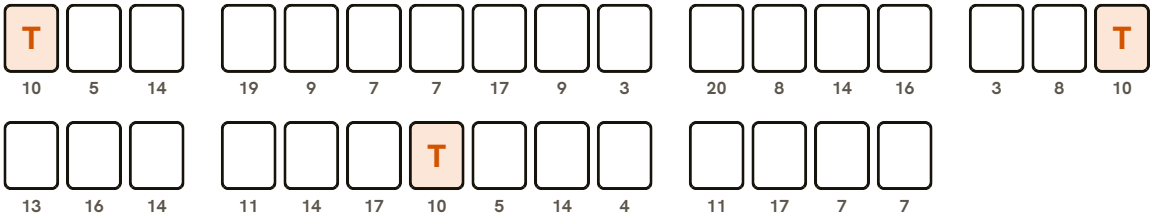
NAME	MAIN ABILITY	BONUS GEAR	DOMINANT HAND	HELMET TYPE	ITEM WEAKNESS
Sora Flint	Ender Teleport	Speed Potion	Right Handed	Diamond Helmet	Sweet Berry
Jax Phantom	Anvil Drop	Feather Fall	Left Handed	Diamond Helmet	Sweet Berry
Finn Cobble	Ender Teleport	Speed Potion	Left Handed	Iron Helmet	Cold Milk
Zoe Ender	Redstone Blast	Shield Block	Right Handed	Diamond Helmet	Water Bucket
Max Redstone	Lava Dash	Feather Fall	Right Handed	Iron Helmet	Water Bucket
Kai Arrow	Lava Dash	Feather Fall	Left Handed	Diamond Helmet	Cold Milk
Ben Creeper	Redstone Blast	Shield Block	Right Handed	Diamond Helmet	Cold Milk
Ava Golem	Lava Dash	Shield Block	Left Handed	Green Helmet	Cold Milk
Steve Block	Ender Teleport	Glow Dust	Left Handed	Diamond Helmet	Cold Milk
Toby Torch	Redstone Blast	Feather Fall	Left Handed	Iron Helmet	Sweet Berry
Lily Sprout	TNT Spark	Slime Bounce	Right Handed	Iron Helmet	Water Bucket
Mia Obsidian	Ender Teleport	Slime Bounce	Left Handed	Green Helmet	Sweet Berry
Maya Beacon	Redstone Blast	Glow Dust	Left Handed	Diamond Helmet	Water Bucket
Owen Hopper	Ender Teleport	Slime Bounce	Left Handed	Iron Helmet	Cold Milk
Eli Glider	TNT Spark	Shield Block	Left Handed	Diamond Helmet	Cold Milk
Ruby Quartz	Anvil Drop	Speed Potion	Right Handed	Iron Helmet	Water Bucket
Sam Miner	Anvil Drop	Feather Fall	Left Handed	Iron Helmet	Cold Milk
Ella Emerald	TNT Spark	Shield Block	Right Handed	Green Helmet	Sweet Berry
Nico Lapis	Ender Teleport	Feather Fall	Right Handed	Iron Helmet	Sweet Berry
Alex Craft	Lava Dash	Glow Dust	Left Handed	Diamond Helmet	Cold Milk
Noah Nether	Lava Dash	Slime Bounce	Left Handed	Diamond Helmet	Cold Milk

make your own at mathcrackers.com

CLUE 1 Addition

You add up all the lost torches on the cave floor to find Clue 1.

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



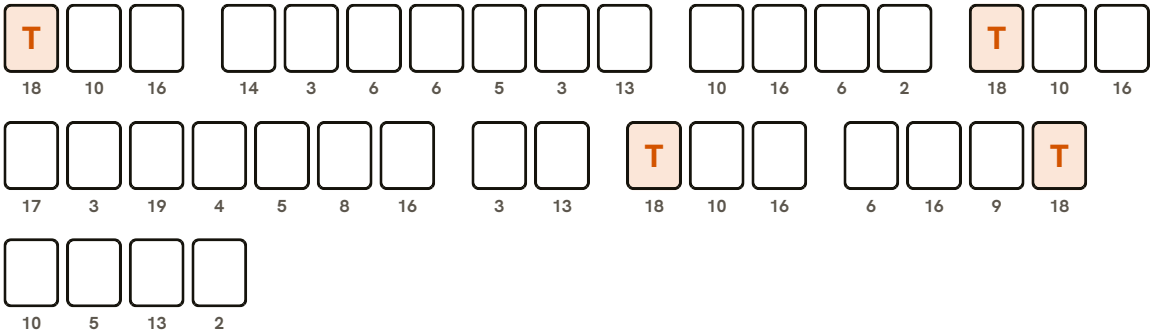
5 + 5 = ☐ → T	8 + 3 = ☐ → F	2 + 2 = ☐ → R	8 + 6 = ☐ → E
12 + 4 = ☐ → S	11 + 9 = ☐ → D	9 + 10 = ☐ → V	
1 + 2 = ☐ → N	5 + 12 = ☐ → A	4 + 3 = ☐ → L	6 + 3 = ☐ → I
9 + 4 = ☐ → U	3 + 5 = ☐ → O	1 + 4 = ☐ → H	

Scratch space:

CLUE 2 Subtraction

You take away the broken blocks from the pile to reveal Clue 2.

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



20 - 2 = ☐ → T

12 - 9 = ☐ → I

7 - 1 = ☐ → L

11 - 6 = ☐ → A

19 - 6 = ☐ → N

18 - 2 = ☐ → E

20 - 3 = ☐ → P

13 - 3 = ☐ → H

20 - 1 = ☐ → C

17 - 3 = ☐ → V

13 - 5 = ☐ → X

10 - 8 = ☐ → D

12 - 3 = ☐ → F

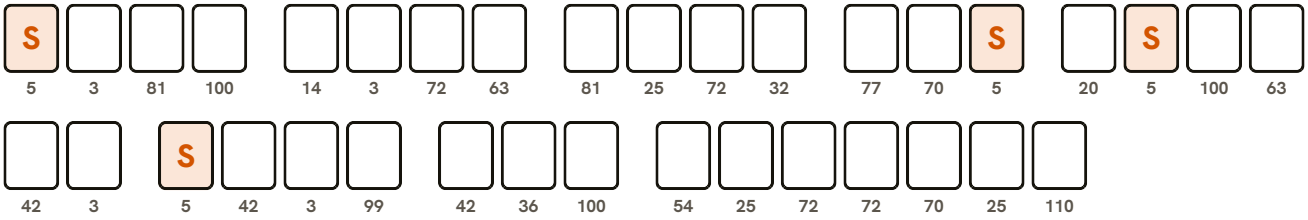
13 - 9 = ☐ → K

Scratch space:

CLUE 3 Multiplication facts (1-12)

> You count rows of shiny emerald blocks in the chest for Clue 3.

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



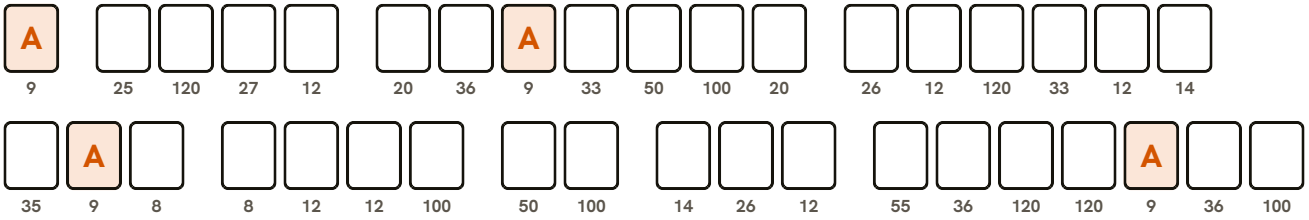
5 × 1 = ☐ → S	6 × 12 = ☐ → L	6 × 7 = ☐ → T	
9 × 11 = ☐ → P	10 × 10 = ☐ → E	9 × 9 = ☐ → M	
7 × 10 = ☐ → A	5 × 5 = ☐ → I	10 × 11 = ☐ → N	
9 × 6 = ☐ → V	5 × 4 = ☐ → U	3 × 1 = ☐ → O	11 × 7 = ☐ → W
7 × 9 = ☐ → D	8 × 4 = ☐ → K	2 × 7 = ☐ → C	6 × 6 = ☐ → H

Scratch space:

CLUE 4 Skip counting

You skip count the redstone trail by twos to reach Clue 4.

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



Skip-count by 3s. Fill the blank: 3, 6, ___, 12, 15 ☐ → A

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

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

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

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

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

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, ___, 25, 30 ☐ → D

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, ___, 14, 16 ☐ → E

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, ___, 110, 120 ☐ → N

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

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

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

Scratch space:

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

> You split the golden apples into equal groups to unlock Clue 5.

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:

66 ÷ 11 = ☐ | 15 ÷ 5 = ☐ | 70 ÷ 10 = ☐ | 30 ÷ 3 = ☐ | 64 ÷ 8 = ☐

5 ÷ 1 = ☐ | 6 ÷ 6 = ☐ | 14 ÷ 7 = ☐ | 24 ÷ 2 = ☐ | 88 ÷ 8 = ☐

81 ÷ 9 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain fired a redstone blast, then raised a shield block.
2. The villain used ender teleport to warp, then used a slime bounce.
3. The villain made a fast lava dash, then scattered glow dust.
4. The villain lit a loud tnt spark, then raised a shield block.
5. The villain made a fast lava dash, then drank a speed potion.
6. The villain used ender teleport to warp, then scattered glow dust.
7. The villain made a fast lava dash, then used a slime bounce.
8. The villain fired a redstone blast, then scattered glow dust.
9. The villain caused a heavy anvil drop, then used a slime bounce.
10. The villain lit a loud tnt spark, then used a slime bounce.
11. The villain fired a redstone blast, then activated feather fall.
12. The villain used ender teleport to warp, then drank a speed potion.

TEACHER / PARENT

Answer Key

The Case of the Missing Diamond Vault

Culprit: Eli Glider

TNT Spark · Shield Block · Left Handed · Diamond Helmet · Cold Milk

Trail: Start 21 → Clue 1 15 → Clue 2 9 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT USE FEATHER FALL"

5 + 5 = 10 (T) · 8 + 3 = 11 (F) · 2 + 2 = 4 (R) · 8 + 6 = 14 (E) · 12 + 4 = 16 (S) · 11 + 9 = 20 (D) · 9 + 10 = 19 (V) · 1 + 2 = 3 (N) · 5 + 12 = 17 (A) · 4 + 3 = 7 (L) · 6 + 3 = 9 (I) · 9 + 4 = 13 (U) · 3 + 5 = 8 (O) · 1 + 4 = 5 (H)

Clue 2 (Subtraction): "THE VILLAIN HELD THE PICKAXE IN THE LEFT HAND"

20 - 2 = 18 (T) · 12 - 9 = 3 (I) · 7 - 1 = 6 (L) · 11 - 6 = 5 (A) · 19 - 6 = 13 (N) · 18 - 2 = 16 (E) · 20 - 3 = 17 (P) · 13 - 3 = 10 (H) · 20 - 1 = 19 (C) · 17 - 3 = 14 (V) · 13 - 5 = 8 (X) · 10 - 8 = 2 (D) · 12 - 3 = 9 (F) · 13 - 9 = 4 (K)

Clue 3 (Multiplication facts (1-12)): "SOME COLD MILK WAS USED TO STOP THE VILLAIN"

5 × 1 = 5 (S) · 6 × 12 = 72 (L) · 6 × 7 = 42 (T) · 9 × 11 = 99 (P) · 10 × 10 = 100 (E) · 9 × 9 = 81 (M) · 7 × 10 = 70 (A) · 5 × 5 = 25 (I) · 10 × 11 = 110 (N) · 9 × 6 = 54 (V) · 5 × 4 = 20 (U) · 3 × 1 = 3 (O) · 11 × 7 = 77 (W) · 7 × 9 = 63 (D) · 8 × 4 = 32 (K) · 2 × 7 = 14 (C) · 6 × 6 = 36 (H)

Clue 4 (Skip counting): "A BLUE DIAMOND HELMET WAS SEEN ON THE VILLAIN"

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

Clue 5 (Division facts (1-12)): surviving statement is box 4 → Eli Glider

66 ÷ 11 = 6 · 15 ÷ 5 = 3 · 70 ÷ 10 = 7 · 30 ÷ 3 = 10 · 64 ÷ 8 = 8 · 5 ÷ 1 = 5 · 6 ÷ 6 = 1 · 14 ÷ 7 = 2 · 24 ÷ 2 = 12 · 88 ÷ 8 = 11 · 81 ÷ 9 = 9