The Great Block Heist

Grade 4 math · Addition, Subtraction, Rounding, Multiplication, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

Someone snuck into the Master Builder vault at Pixel Peak Fortress and swapped the golden beacon for a fake block. Uncover the clues to find out which griefer committed the crime.

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	GEAR TOOL	BLOCK TYPE	HANDEDNESS	HELMET STYLE	BANE
ImpulseSV	Enchanted Bow	Magma Block	Left Handed	Iron Helmet	Music Disc
Hermit Pixel	Redstone Repeater	Magma Block	Right Handed	Iron Helmet	Music Disc
TangoTek	Diamond Pickaxe	Magma Block	Left Handed	Iron Helmet	Splash Potion
SWRV Builder	Diamond Pickaxe	Magma Block	Left Handed	Leather Cap	Music Disc
Smallishbeans	Golden Shovel	Sculk Block	Left Handed	Iron Helmet	Music Disc
ZombieCleo	Redstone Repeater	Sculk Block	Left Handed	Iron Helmet	Music Disc
Etho Slab	Redstone Repeater	Glowstone Block	Left Handed	Leather Cap	Splash Potion
Alex Blocksmith	Diamond Pickaxe	Obsidian Block	Left Handed	Turtle Shell	Music Disc
GoodTimesWithScar	Enchanted Bow	Prismarine Block	Left Handed	Iron Helmet	Music Disc
FalseSymmetry	Enchanted Bow	Obsidian Block	Left Handed	Turtle Shell	Music Disc
LDShadowLady	Golden Shovel	Obsidian Block	Left Handed	Iron Helmet	Music Disc
Mumbo Jumbo	Golden Shovel	Magma Block	Left Handed	Turtle Shell	Water Bucket
Cubfan135	Golden Shovel	Glowstone Block	Right Handed	Turtle Shell	Water Bucket
PearlescentMoon	Diamond Pickaxe	Obsidian Block	Left Handed	Leather Cap	Splash Potion
DanTDM	Diamond Pickaxe	Prismarine Block	Left Handed	Iron Helmet	Splash Potion
Rendog	Enchanted Bow	Prismarine Block	Right Handed	Iron Helmet	Music Disc
Stampy Cat	Diamond Pickaxe	Sculk Block	Right Handed	Leather Cap	Music Disc
Aphmau Star	Golden Shovel	Prismarine Block	Right Handed	Iron Helmet	Music Disc
Docm77	Enchanted Bow	Obsidian Block	Right Handed	Leather Cap	Water Bucket
BdoubleO100	Diamond Pickaxe	Sculk Block	Left Handed	Iron Helmet	Water Bucket
Steve Carver	Golden Shovel	Magma Block	Right Handed	Turtle Shell	Music Disc

make your own at mathcrackers.com

CLUE 1 Addition

You tally up all the redstone dust piles left around the vault floor to reveal the first hidden clue.

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



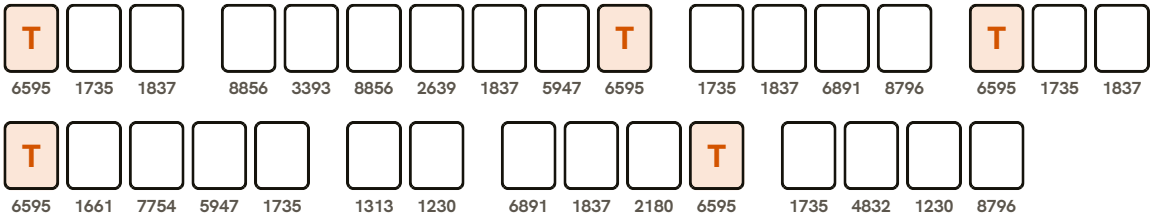
2038 + 3511 = ☐ → T	3455 + 3804 = ☐ → N	1777 + 1271 = ☐ → S
1883 + 3058 = ☐ → P	3052 + 1791 = ☐ → V	1254 + 1010 = ☐ → L
1078 + 1008 = ☐ → B	2196 + 3302 = ☐ → A	2657 + 1294 = ☐ → O
2509 + 4505 = ☐ → M	1578 + 986 = ☐ → U	3609 + 2046 = ☐ → H
3694 + 3822 = ☐ → I	4383 + 3205 = ☐ → R	3057 + 2362 = ☐ → D
5274 + 4237 = ☐ → C	2678 + 2273 = ☐ → K	2080 + 2417 = ☐ → E

Scratch space:

CLUE 2 Subtraction

You calculate how many emerald blocks are missing from the chest to decode the second message.

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



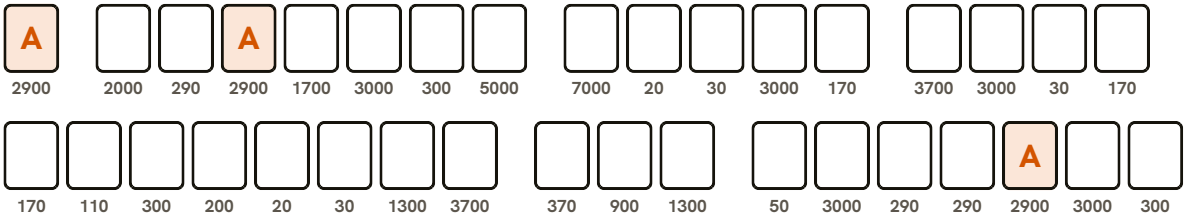
7187 - 592 = ☐ → T	8964 - 4132 = ☐ → A	4727 - 3497 = ☐ → N
11668 - 2812 = ☐ → S	6429 - 482 = ☐ → C	5978 - 4243 = ☐ → H
5352 - 1959 = ☐ → U	5794 - 3155 = ☐ → P	8816 - 1925 = ☐ → L
11572 - 2776 = ☐ → D	2568 - 388 = ☐ → F	10433 - 2679 = ☐ → R
5180 - 3519 = ☐ → O	2671 - 1358 = ☐ → I	6250 - 4413 = ☐ → E

Scratch space:

CLUE 3 Rounding

The fortress security sensor only displays rounded pixel energy levels hiding the third clue.

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



Round 2,871 to the nearest hundred ☐ → **A**

Round 374 to the nearest ten ☐ → **T**

Round 6,808 to the nearest thousand ☐ → **M**

Round 903 to the nearest hundred ☐ → **H**

Round 2,149 to the nearest thousand ☐ → **P**

Round 33 to the nearest ten ☐ → **S**

Round 4,546 to the nearest thousand ☐ → **G**

Round 178 to the nearest hundred ☐ → **F**

Round 291 to the nearest ten ☐ → **L**

Round 167 to the nearest ten ☐ → **C**

Round 3,293 to the nearest thousand ☐ → **I**

Round 23 to the nearest ten ☐ → **U**

Round 1,702 to the nearest hundred ☐ → **Y**

Round 272 to the nearest hundred ☐ → **N**

Round 106 to the nearest ten ☐ → **O**

Round 1,338 to the nearest hundred ☐ → **E**

Round 3,728 to the nearest hundred ☐ → **D**

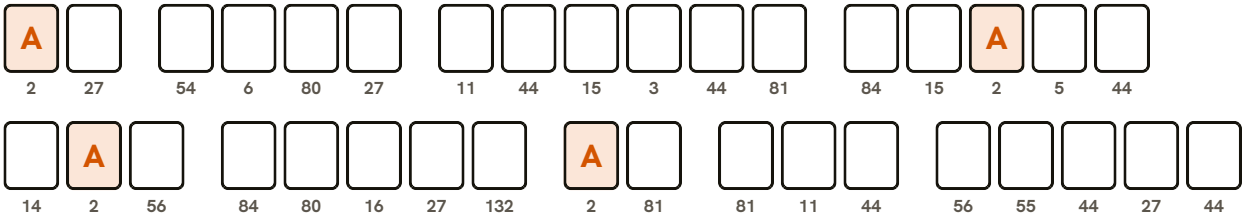
Round 46 to the nearest ten ☐ → **V**

Scratch space:

CLUE 4 Multiplication facts (1-12)

You count the craftable grid patterns arranged in matching rows to unlock the fourth clue.

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



2 × 1 = ☐ → A

11 × 5 = ☐ → C

11 × 12 = ☐ → D

12 × 7 = ☐ → F

1 × 11 = ☐ → H

3 × 1 = ☐ → M

8 × 2 = ☐ → U

9 × 9 = ☐ → T

9 × 6 = ☐ → I

9 × 3 = ☐ → N

3 × 2 = ☐ → R

7 × 8 = ☐ → S

4 × 11 = ☐ → E

5 × 3 = ☐ → L

5 × 1 = ☐ → K

8 × 10 = ☐ → O

7 × 2 = ☐ → W

Scratch space:

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

> You split the total stack of lapis lazuli equally among the storage hoppers to find 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:

40 ÷ 10 = ☐	80 ÷ 8 = ☐	54 ÷ 6 = ☐	96 ÷ 8 = ☐	49 ÷ 7 = ☐
99 ÷ 9 = ☐	32 ÷ 4 = ☐	12 ÷ 6 = ☐	2 ÷ 2 = ☐	24 ÷ 4 = ☐
21 ÷ 7 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain dug under the fortress foundation, then stole a magma block.
2. The villain dug under the fortress foundation, then stole a prismarine block.
3. The villain dug under the fortress foundation, then stole a glowstone block.
4. The villain sniped the target from a high tower, then stole a magma block.
5. The villain dug under the fortress foundation, then stole a sculk block.
6. The villain sniped the target from a high tower, then stole a prismarine block.
7. The villain placed a sneaky redstone circuit, then stole a glowstone block.
8. The villain mined through the obsidian wall, then stole a prismarine block.
9. The villain placed a sneaky redstone circuit, then stole a sculk block.
10. The villain dug under the fortress foundation, then stole an obsidian block.
11. The villain placed a sneaky redstone circuit, then stole an obsidian block.
12. The villain sniped the target from a high tower, then stole a sculk block.

TEACHER / PARENT

Answer Key

The Great Block Heist

Culprit: Smallishbeans

Golden Shovel · Sculk Block · Left Handed · Iron Helmet · Music Disc

Trail: Start 21 → Clue 1 17 → Clue 2 12 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DID NOT USE A PRISMARINE BLOCK"

2038 + 3511 = 5549 (T) · 3455 + 3804 = 7259 (N) · 1777 + 1271 = 3048 (S) · 1883 + 3058 = 4941 (P) · 3052 + 1791 = 4843 (V) · 1254 + 1010 = 2264 (L) · 1078 + 1008 = 2086 (B) · 2196 + 3302 = 5498 (A) · 2657 + 1294 = 3951 (O) · 2509 + 4505 = 7014 (M) · 1578 + 986 = 2564 (U) · 3609 + 2046 = 5655 (H) · 3694 + 3822 = 7516 (I) · 4383 + 3205 = 7588 (R) · 3057 + 2362 = 5419 (D) · 5274 + 4237 = 9511 (C) · 2678 + 2273 = 4951 (K) · 2080 + 2417 = 4497 (E)

Clue 2 (Subtraction): "THE SUSPECT HELD THE TORCH IN LEFT HAND"

7187 - 592 = 6595 (T) · 8964 - 4132 = 4832 (A) · 4727 - 3497 = 1230 (N) · 11668 - 2812 = 8856 (S) · 6429 - 482 = 5947 (C) · 5978 - 4243 = 1735 (H) · 5352 - 1959 = 3393 (U) · 5794 - 3155 = 2639 (P) · 8816 - 1925 = 6891 (L) · 11572 - 2776 = 8796 (D) · 2568 - 388 = 2180 (F) · 10433 - 2679 = 7754 (R) · 5180 - 3519 = 1661 (O) · 2671 - 1358 = 1313 (I) · 6250 - 4413 = 1837 (E)

Clue 3 (Rounding): "A PLAYING MUSIC DISC CONFUSED THE VILLAIN"

Round 2,871 to the nearest hundred = 2900 (A) · Round 374 to the nearest ten = 370 (T) · Round 6,808 to the nearest thousand = 7000 (M) · Round 903 to the nearest hundred = 900 (H) · Round 2,149 to the nearest thousand = 2000 (P) · Round 33 to the nearest ten = 30 (S) · Round 4,546 to the nearest thousand = 5000 (G) · Round 178 to the nearest hundred = 200 (F) · Round 291 to the nearest ten = 290 (L) · Round 167 to the nearest ten = 170 (C) · Round 3,293 to the nearest thousand = 3000 (I) · Round 23 to the nearest ten = 20 (U) · Round 1,702 to the nearest hundred = 1700 (Y) · Round 272 to the nearest hundred = 300 (N) · Round 106 to the nearest ten = 110 (O) · Round 1,338 to the nearest hundred = 1300 (E) · Round 3,728 to the nearest hundred = 3700 (D) · Round 46 to the nearest ten = 50 (V)

Clue 4 (Multiplication facts (1-12)): "AN IRON HELMET FLAKE WAS FOUND AT THE SCENE"

2 × 1 = 2 (A) · 11 × 5 = 55 (C) · 11 × 12 = 132 (D) · 12 × 7 = 84 (F) · 1 × 11 = 11 (H) · 3 × 1 = 3 (M) · 8 × 2 = 16 (U) · 9 × 9 = 81 (T) · 9 × 6 = 54 (I) · 9 × 3 = 27 (N) · 3 × 2 = 6 (R) · 7 × 8 = 56 (S) · 4 × 11 = 44 (E) · 5 × 3 = 15 (L) · 5 × 1 = 5 (K) · 8 × 10 = 80 (O) · 7 × 2 = 14 (W)

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

40 ÷ 10 = 4 · 80 ÷ 8 = 10 · 54 ÷ 6 = 9 · 96 ÷ 8 = 12 · 49 ÷ 7 = 7 · 99 ÷ 9 = 11 · 32 ÷ 4 = 8 · 12 ÷ 6 = 2 · 2 ÷ 2 = 1 · 24 ÷ 4 = 6 · 21 ÷ 7 = 3