The Great Diamond Vault Heist

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

Detective: _____ **Date:** _____

Someone snuck into the craft hall and stole the golden trophy block! Solve the math clues to figure out who raided the vault.

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.

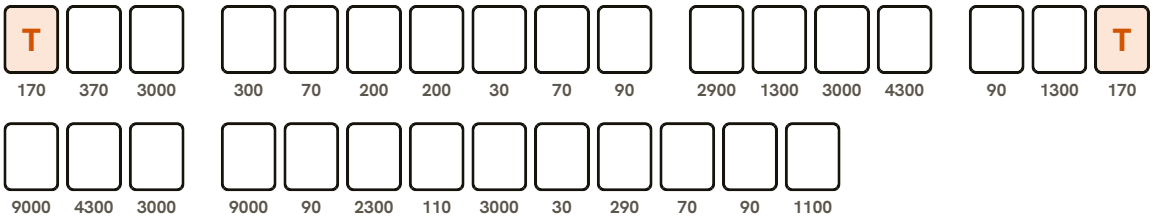
NAME	MAIN TOOL	ENCHANTMENT	DOMINANT HAND	HELMET	WEAKNESS
Blocky Ben	Redstone Torch	Silk Touch	Left Handed	Iron Helmet	Splash Potions
Gravel Grace	Netherite Sword	Fortune	Left Handed	Gold Helmet	Water Buckets
Iron Mia	Enchanted Bow	Fire Aspect	Left Handed	Gold Helmet	Splash Potions
Glow Meg	Golden Shovel	Efficiency	Right Handed	Iron Helmet	Water Buckets
Crafty Sam	Netherite Sword	Silk Touch	Right Handed	Turtle Shell	Creeper Hisses
Stone Sam	Redstone Torch	Efficiency	Right Handed	Turtle Shell	Creeper Hisses
Creeper Carl	Golden Shovel	Fire Aspect	Left Handed	Turtle Shell	Water Buckets
Steve Block	Diamond Pickaxe	Fire Aspect	Right Handed	Turtle Shell	Creeper Hisses
Pixel Pete	Enchanted Bow	Unbreaking	Left Handed	Iron Helmet	Water Buckets
Fern Forest	Diamond Pickaxe	Efficiency	Left Handed	Iron Helmet	Water Buckets
Redstone Ray	Redstone Torch	Fire Aspect	Left Handed	Iron Helmet	Water Buckets
Lava Luke	Redstone Torch	Silk Touch	Left Handed	Turtle Shell	Water Buckets
Mossy Max	Golden Shovel	Efficiency	Left Handed	Iron Helmet	Water Buckets
Ender Eli	Diamond Pickaxe	Silk Touch	Right Handed	Gold Helmet	Water Buckets
Builder Jax	Enchanted Bow	Fire Aspect	Left Handed	Turtle Shell	Water Buckets
Obsidian Ned	Redstone Torch	Fortune	Right Handed	Gold Helmet	Water Buckets
Torch Tim	Netherite Sword	Efficiency	Right Handed	Turtle Shell	Creeper Hisses
Diamond Dan	Netherite Sword	Fortune	Right Handed	Gold Helmet	Splash Potions
Oakley Wood	Netherite Sword	Fortune	Left Handed	Iron Helmet	Creeper Hisses
Cobble Cory	Enchanted Bow	Fortune	Left Handed	Gold Helmet	Splash Potions
Quartz Quinn	Enchanted Bow	Silk Touch	Left Handed	Iron Helmet	Water Buckets

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CLUE 1 Rounding

> The blocky security screen rounds diamond counts to the nearest hundred. Round the supply values to read the clue.

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



Round 171 to the nearest ten ☐ → **T**

Round 275 to the nearest hundred ☐ → **V**

Round 91 to the nearest ten ☐ → **N**

Round 2,288 to the nearest hundred ☐ → **B**

Round 32 to the nearest ten ☐ → **A**

Round 107 to the nearest ten ☐ → **R**

Round 373 to the nearest ten ☐ → **H**

Round 2,903 to the nearest hundred ☐ → **D**

Round 3,169 to the nearest thousand ☐ → **E**

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

Round 8,927 to the nearest thousand ☐ → **U**

Round 68 to the nearest ten ☐ → **I**

Round 1,293 to the nearest hundred ☐ → **O**

Round 1,063 to the nearest hundred ☐ → **G**

Round 208 to the nearest hundred ☐ → **L**

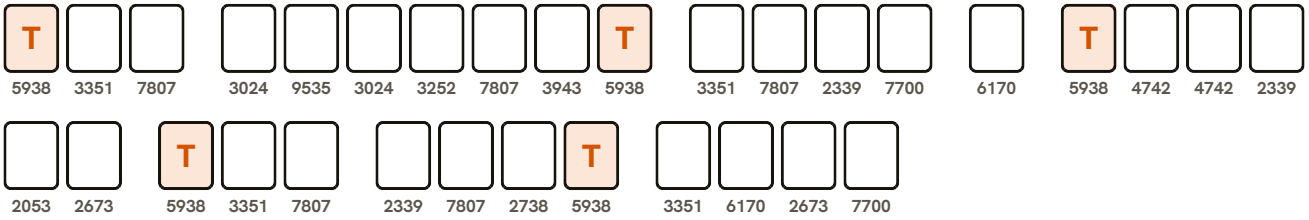
Round 4,315 to the nearest hundred ☐ → **S**

Scratch space:

CLUE 2 Addition

We gathered all the iron ingots from the chest deposits. Add the totals together to discover the next clue.

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



2418 + 3520 = ☐ → T	3481 + 4326 = ☐ → E	1411 + 1613 = ☐ → S
1084 + 1255 = ☐ → L	2327 + 2415 = ☐ → O	2659 + 1284 = ☐ → C
4410 + 3290 = ☐ → D	1428 + 625 = ☐ → I	1147 + 1591 = ☐ → F
1580 + 1093 = ☐ → N	2552 + 3618 = ☐ → A	1246 + 2006 = ☐ → P
1542 + 1809 = ☐ → H	4806 + 4729 = ☐ → U	

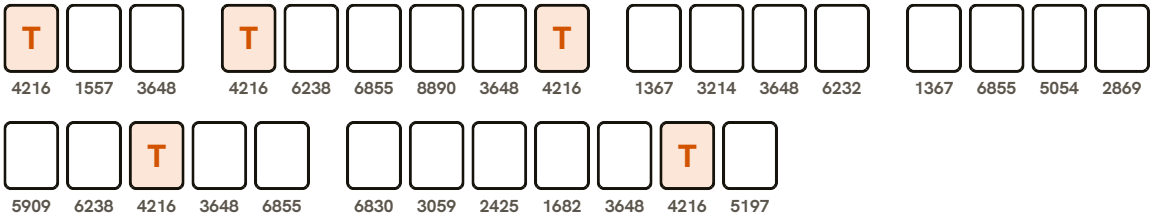
Scratch space:

CLUE 3

Subtraction

Some emeralds were taken from the village vault. Subtract the missing count to unlock this piece of evidence.

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



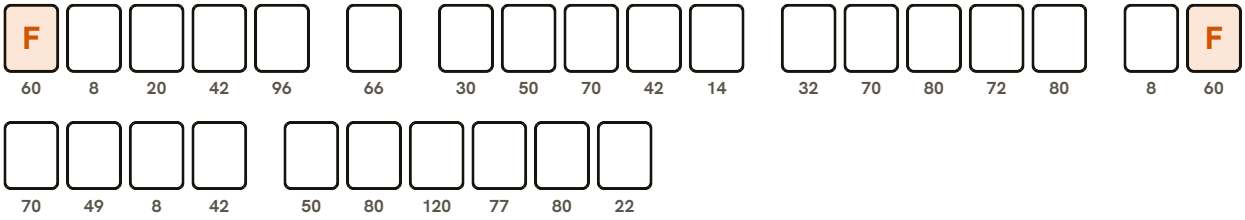
4494 - 278 = ☐ → T	8623 - 4975 = ☐ → E	9508 - 3599 = ☐ → W
4737 - 3370 = ☐ → F	5428 - 374 = ☐ → O	3275 - 406 = ☐ → M
4242 - 1817 = ☐ → C	4066 - 2384 = ☐ → K	9362 - 2532 = ☐ → B
3892 - 2335 = ☐ → H	11981 - 3091 = ☐ → G	7569 - 714 = ☐ → R
7258 - 2061 = ☐ → S	8490 - 2252 = ☐ → A	6372 - 3313 = ☐ → U
9924 - 3692 = ☐ → D	5252 - 2038 = ☐ → L	

Scratch space:

CLUE 4 Multiplication facts (1-12)

The redstone wiring runs in equal rows across the floor. Multiply the rows to solve the redstone puzzle.

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



12 × 5 = ☐ → F	7 × 7 = ☐ → R	10 × 7 = ☐ → I
8 × 10 = ☐ → E	7 × 11 = ☐ → M	8 × 12 = ☐ → D
5 × 10 = ☐ → H	5 × 6 = ☐ → S	6 × 11 = ☐ → A
2 × 7 = ☐ → Y	4 × 2 = ☐ → O	7 × 6 = ☐ → N
11 × 2 = ☐ → T		
8 × 9 = ☐ → C	8 × 4 = ☐ → P	10 × 12 = ☐ → L
5 × 4 = ☐ → U		

Scratch space:

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

> The mining guild divided the leftover torches equally among five guard posts. Divide the total to reveal 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:

10 ÷ 1 = ☐	64 ÷ 8 = ☐	11 ÷ 11 = ☐	11 ÷ 1 = ☐	36 ÷ 6 = ☐
14 ÷ 7 = ☐	132 ÷ 11 = ☐	24 ÷ 8 = ☐	54 ÷ 6 = ☐	16 ÷ 4 = ☐
14 ÷ 2 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain aimed an enchanted bow, then mined blocks with silk touch.
2. The villain placed a redstone torch, then mined blocks with silk touch.
3. The villain swung a diamond pickaxe, then ignited sparks with fire aspect.
4. The villain aimed an enchanted bow, then guarded durability with unbreaking.
5. The villain placed a redstone torch, then ignited sparks with fire aspect.
6. The villain swung a diamond pickaxe, then guarded durability with unbreaking.
7. The villain brandished a netherite sword, then mined blocks with silk touch.
8. The villain swung a diamond pickaxe, then boosted speed with efficiency.
9. The villain dug with a golden shovel, then multiplied gems with fortune.
10. The villain dug with a golden shovel, then boosted speed with efficiency.
11. The villain dug with a golden shovel, then guarded durability with unbreaking.
12. The villain swung a diamond pickaxe, then multiplied gems with fortune.

TEACHER / PARENT

Answer Key

The Great Diamond Vault Heist

Culprit: Redstone Ray

Redstone Torch · Fire Aspect · Left Handed · Iron Helmet · Water Buckets

Trail: Start 21 → Clue 1 20 → Clue 2 12 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN DOES NOT USE UNBREAKING"

Round 171 to the nearest ten = 170 (T) · Round 275 to the nearest hundred = 300 (V) · Round 91 to the nearest ten = 90 (N) · Round 2,288 to the nearest hundred = 2300 (B) · Round 32 to the nearest ten = 30 (A) · Round 107 to the nearest ten = 110 (R) · Round 373 to the nearest ten = 370 (H) · Round 2,903 to the nearest hundred = 2900 (D) · Round 3,169 to the nearest thousand = 3000 (E) · Round 291 to the nearest ten = 290 (K) · Round 8,927 to the nearest thousand = 9000 (U) · Round 68 to the nearest ten = 70 (I) · Round 1,293 to the nearest hundred = 1300 (O) · Round 1,063 to the nearest hundred = 1100 (G) · Round 208 to the nearest hundred = 200 (L) · Round 4,315 to the nearest hundred = 4300 (S)

Clue 2 (Addition): "THE SUSPECT HELD A TOOL IN THE LEFT HAND"

2418 + 3520 = 5938 (T) · 3481 + 4326 = 7807 (E) · 1411 + 1613 = 3024 (S) · 1084 + 1255 = 2339 (L) · 2327 + 2415 = 4742 (O) · 2659 + 1284 = 3943 (C) · 4410 + 3290 = 7700 (D) · 1428 + 625 = 2053 (I) · 1147 + 1591 = 2738 (F) · 1580 + 1093 = 2673 (N) · 2552 + 3618 = 6170 (A) · 1246 + 2006 = 3252 (P) · 1542 + 1809 = 3351 (H) · 4806 + 4729 = 9535 (U)

Clue 3 (Subtraction): "THE TARGET FLED FROM WATER BUCKETS"

4494 - 278 = 4216 (T) · 8623 - 4975 = 3648 (E) · 9508 - 3599 = 5909 (W) · 4737 - 3370 = 1367 (F) · 5428 - 374 = 5054 (O) · 3275 - 406 = 2869 (M) · 4242 - 1817 = 2425 (C) · 4066 - 2384 = 1682 (K) · 9362 - 2532 = 6830 (B) · 3892 - 2335 = 1557 (H) · 11981 - 3091 = 8890 (G) · 7569 - 714 = 6855 (R) · 7258 - 2061 = 5197 (S) · 8490 - 2252 = 6238 (A) · 6372 - 3313 = 3059 (U) · 9924 - 3692 = 6232 (D) · 5252 - 2038 = 3214 (L)

Clue 4 (Multiplication facts (1-12)): "FOUND A SHINY PIECE OF IRON HELMET"

12 × 5 = 60 (F) · 7 × 7 = 49 (R) · 10 × 7 = 70 (I) · 8 × 10 = 80 (E) · 7 × 11 = 77 (M) · 8 × 12 = 96 (D) · 5 × 10 = 50 (H) · 5 × 6 = 30 (S) · 6 × 11 = 66 (A) · 2 × 7 = 14 (Y) · 4 × 2 = 8 (O) · 7 × 6 = 42 (N) · 11 × 2 = 22 (T) · 8 × 9 = 72 (C) · 8 × 4 = 32 (P) · 10 × 12 = 120 (L) · 5 × 4 = 20 (U)

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

10 ÷ 1 = 10 · 64 ÷ 8 = 8 · 11 ÷ 11 = 1 · 11 ÷ 1 = 11 · 36 ÷ 6 = 6 · 14 ÷ 7 = 2 · 132 ÷ 11 = 12 · 24 ÷ 8 = 3 · 54 ÷ 6 = 9 · 16 ÷ 4 = 4 · 14 ÷ 2 = 7