The Great Redstone Heist

Grade 4 math · Place value, Multiplication, Rounding, Fractions of a number, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

Someone snuck into the block studio and stole the golden pickaxe. Solve the craft log clues to catch the villain.

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 griefing rogue is _____

Possible suspects

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

NAME	TOOL OF CHOICE	SPECIAL BLOCK	DOMINANT HAND	HELMET STYLE	FEAR
Rory Redstone	Netherite Axe	Obsidian Brick	Left Handed	Leather Cap	Lava Pools
Ruby Redstone	Iron Pickaxe	Glowstone Dust	Left Handed	Leather Cap	Lava Pools
Digger Dan	Netherite Axe	Slime Block	Left Handed	Leather Cap	Lava Pools
Sammy Slime	Diamond Sword	Obsidian Brick	Left Handed	Iron Helmet	Lava Pools
Miner Mia	Enchanted Bow	Glowstone Dust	Right Handed	Diamond Crown	Water Buckets
Pippa Pixel	Netherite Axe	Glowstone Dust	Right Handed	Diamond Crown	Water Buckets
Bruno Builder	Golden Shovel	Obsidian Brick	Right Handed	Leather Cap	Water Buckets
Nico Nether	Netherite Axe	Slime Block	Left Handed	Leather Cap	Water Buckets
Blocky Ben	Diamond Sword	TNT Block	Right Handed	Diamond Crown	Lava Pools
Builder Bobbie	Netherite Axe	TNT Block	Left Handed	Leather Cap	Lava Pools
Fiona Forge	Netherite Axe	Slime Block	Right Handed	Leather Cap	Water Buckets
Penny Pick	Diamond Sword	Obsidian Brick	Right Handed	Iron Helmet	Lava Pools
Zack Zone	Netherite Axe	TNT Block	Left Handed	Leather Cap	Water Buckets
Ores Olivia	Golden Shovel	Obsidian Brick	Right Handed	Iron Helmet	Water Buckets
Gabe Grid	Enchanted Bow	TNT Block	Left Handed	Iron Helmet	Lava Pools
Alex Craft	Enchanted Bow	Glowstone Dust	Right Handed	Leather Cap	Creepers
Creeper Carl	Enchanted Bow	Obsidian Brick	Left Handed	Leather Cap	Creepers
Pixel Pete	Enchanted Bow	TNT Block	Right Handed	Leather Cap	Lava Pools
Grit Stone	Netherite Axe	Obsidian Brick	Left Handed	Iron Helmet	Creepers
Cobble Chris	Golden Shovel	TNT Block	Left Handed	Leather Cap	Lava Pools
Quinn Quartz	Golden Shovel	Redstone Lamp	Right Handed	Diamond Crown	Lava Pools

CLUE 1 Place value

The craft hall chest lock shows a secret code written in place values.

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

T																	T		
300	70	80	7000	2000	3000	3000	50	2000	40	30	200	80	5000	40	200	300			
100	5000	80	200	4000	5000	2000	30	2000	50	40	4000	1000	2000	90	900				

What is the value of the 3 in 1,368? ☐ → T

What is the value of the 2 in 8,294? ☐ → O

What is the value of the 2 in 62,541? ☐ → I

What is the value of the 4 in 3,341? ☐ → N

What is the value of the 1 in 1,782? ☐ → R

What is the value of the 4 in 4,256? ☐ → B

What is the value of the 9 in 956? ☐ → K

What is the value of the 5 in 858? ☐ → A

What is the value of the 8 in 1,980? ☐ → E

What is the value of the 9 in 398? ☐ → C

What is the value of the 7 in 4,370? ☐ → H

What is the value of the 3 in 3,745? ☐ → L

What is the value of the 7 in 27,308? ☐ → V

What is the value of the 3 in 235? ☐ → D

What is the value of the 1 in 9,149? ☐ → U

What is the value of the 5 in 45,076? ☐ → S

Scratch space:

CLUE 2 Multiplication facts (1-12)

> The builder inspects identical rows of iron ores in the smelting room.

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

W									W					
28	12	66	100	30	1	1	1	40	28	40	45	30	15	66

33	40	100	96	30	96	108	4	40	15	66	30	4	45	30	40	132	12	100	3

4 × 7 = ☐ → W

3 × 1 = ☐ → G

9 × 12 = ☐ → C

5 × 3 = ☐ → F

1 × 1 = ☐ → S

11 × 6 = ☐ → T

5 × 9 = ☐ → L

11 × 3 = ☐ → H

10 × 10 = ☐ → N

8 × 5 = ☐ → A

3 × 4 = ☐ → I

1 × 4 = ☐ → R

12 × 8 = ☐ → D

6 × 5 = ☐ → E

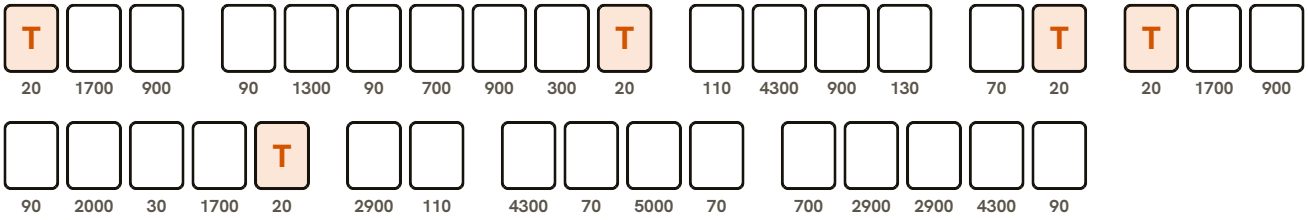
11 × 12 = ☐ → V

Scratch space:

CLUE 3 Rounding

A digital inventory scanner rounds up the total number of blocks.

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



Round 21 to the nearest ten ☐ → T

Round 68 to the nearest ten ☐ → A

Round 109 to the nearest ten ☐ → F

Round 1,833 to the nearest thousand ☐ → I

Round 26 to the nearest ten ☐ → G

Round 660 to the nearest hundred ☐ → P

Round 295 to the nearest hundred ☐ → C

Round 4,702 to the nearest thousand ☐ → V

Round 2,908 to the nearest hundred ☐ → O

Round 938 to the nearest hundred ☐ → E

Round 1,733 to the nearest hundred ☐ → H

Round 132 to the nearest ten ☐ → D

Round 4,271 to the nearest hundred ☐ → L

Round 1,299 to the nearest hundred ☐ → U

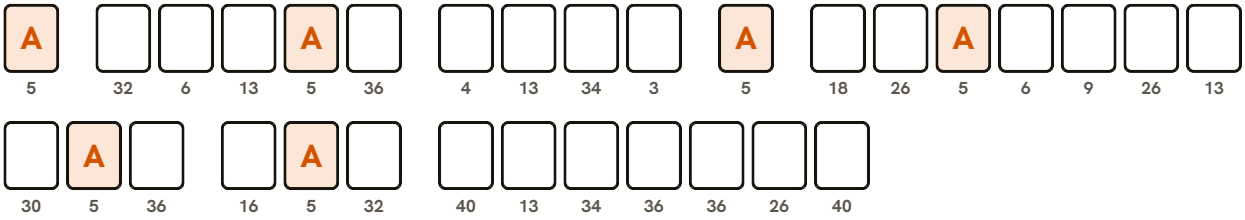
Round 91 to the nearest ten ☐ → S

Scratch space:

CLUE 4 Fractions of a number

> The detective calculates a fraction of the craft station supplies.

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



1/6 of 30 = ☐ → A	1/6 of 96 = ☐ → W	4/6 of 6 = ☐ → F
2/6 of 102 = ☐ → O	3/10 of 120 = ☐ → P	3/5 of 10 = ☐ → T
1/5 of 90 = ☐ → L	4/6 of 39 = ☐ → E	1/2 of 6 = ☐ → M
1/6 of 192 = ☐ → S	4/5 of 50 = ☐ → D	2/10 of 65 = ☐ → R
2/4 of 18 = ☐ → H	5/10 of 60 = ☐ → C	

Scratch space:

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

> The villagers share leftover emeralds into equal piles to spot the missing loot.

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:

72 ÷ 12 = ☐ | 11 ÷ 11 = ☐ | 12 ÷ 4 = ☐ | 12 ÷ 6 = ☐ | 44 ÷ 4 = ☐

35 ÷ 5 = ☐ | 24 ÷ 3 = ☐ | 90 ÷ 10 = ☐ | 40 ÷ 8 = ☐ | 132 ÷ 11 = ☐

120 ÷ 12 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain mined with an iron pickaxe, then scattered glowstone dust.
2. The villain swung a diamond sword, then bounced on a slime block.
3. The villain chopped with a netherite axe, then bounced on a slime block.
4. The villain chopped with a netherite axe, then placed a tnt block.
5. The villain swung a diamond sword, then placed a tnt block.
6. The villain dug with a golden shovel, then placed a tnt block.
7. The villain mined with an iron pickaxe, then stacked an obsidian brick.
8. The villain dug with a golden shovel, then lit a redstone lamp.
9. The villain chopped with a netherite axe, then scattered glowstone dust.
10. The villain aimed an enchanted bow, then lit a redstone lamp.
11. The villain dug with a golden shovel, then scattered glowstone dust.
12. The villain dug with a golden shovel, then bounced on a slime block.

TEACHER / PARENT

Answer Key

The Great Redstone Heist

Culprit: Builder Bobbie

Netherite Axe · TNT Block · Left Handed · Leather Cap · Lava Pools

Trail: Start 21 → Clue 1 14 → Clue 2 7 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT USE OBSIDIAN BRICK"

What is the value of the 3 in 1,368? = 300 (T) · What is the value of the 2 in 8,294? = 200 (O) · What is the value of the 2 in 62,541? = 2000 (I) · What is the value of the 4 in 3,341? = 40 (N) · What is the value of the 1 in 1,782? = 1000 (R) · What is the value of the 4 in 4,256? = 4000 (B) · What is the value of the 9 in 956? = 900 (K) · What is the value of the 5 in 858? = 50 (A) · What is the value of the 8 in 1,980? = 80 (E) · What is the value of the 9 in 398? = 90 (C) · What is the value of the 7 in 4,370? = 70 (H) · What is the value of the 3 in 3,745? = 3000 (L) · What is the value of the 7 in 27,308? = 7000 (V) · What is the value of the 3 in 235? = 30 (D) · What is the value of the 1 in 9,149? = 100 (U) · What is the value of the 5 in 45,076? = 5000 (S)

Clue 2 (Multiplication facts (1-12)): "WITNESS SAW A LEFT HANDED CRAFTER LEAVING"

4 × 7 = 28 (W) · 3 × 1 = 3 (G) · 9 × 12 = 108 (C) · 5 × 3 = 15 (F) · 1 × 1 = 1 (S) · 11 × 6 = 66 (T) · 5 × 9 = 45 (L) · 11 × 3 = 33 (H) · 10 × 10 = 100 (N) · 8 × 5 = 40 (A) · 3 × 4 = 12 (I) · 1 × 4 = 4 (R) · 12 × 8 = 96 (D) · 6 × 5 = 30 (E) · 11 × 12 = 132 (V)

Clue 3 (Rounding): "THE SUSPECT FLED AT THE SIGHT OF LAVA POOLS"

Round 21 to the nearest ten = 20 (T) · Round 68 to the nearest ten = 70 (A) · Round 109 to the nearest ten = 110 (F) · Round 1,833 to the nearest thousand = 2000 (I) · Round 26 to the nearest ten = 30 (G) · Round 660 to the nearest hundred = 700 (P) · Round 295 to the nearest hundred = 300 (C) · Round 4,702 to the nearest thousand = 5000 (V) · Round 2,908 to the nearest hundred = 2900 (O) · Round 938 to the nearest hundred = 900 (E) · Round 1,733 to the nearest hundred = 1700 (H) · Round 132 to the nearest ten = 130 (D) · Round 4,271 to the nearest hundred = 4300 (L) · Round 1,299 to the nearest hundred = 1300 (U) · Round 91 to the nearest ten = 90 (S)

Clue 4 (Fractions of a number): "A STRAP FROM A LEATHER CAP WAS DROPPED"

1/6 of 30 = 5 (A) · 1/6 of 96 = 16 (W) · 4/6 of 6 = 4 (F) · 2/6 of 102 = 34 (O) · 3/10 of 120 = 36 (P) · 3/5 of 10 = 6 (T) · 1/5 of 90 = 18 (L) · 4/6 of 39 = 26 (E) · 1/2 of 6 = 3 (M) · 1/6 of 192 = 32 (S) · 4/5 of 50 = 40 (D) · 2/10 of 65 = 13 (R) · 2/4 of 18 = 9 (H) · 5/10 of 60 = 30 (C)

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

72 ÷ 12 = 6 · 11 ÷ 11 = 1 · 12 ÷ 4 = 3 · 12 ÷ 6 = 2 · 44 ÷ 4 = 11 · 35 ÷ 5 = 7 · 24 ÷ 3 = 8 · 90 ÷ 10 = 9 · 40 ÷ 8 = 5 · 132 ÷ 11 = 12 · 120 ÷ 12 = 10