The Great Block Heist

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

Detective: _____ **Date:** _____

Someone broke into the Master Builder vault and stole the golden beacon! The town square is full of broken blocks and wild tracks. Use your detective skills and solve the math clues to discover which suspect took the beacon before nightfall!

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.

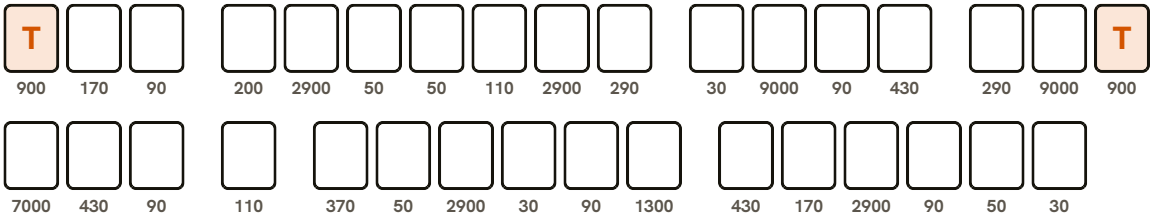
NAME	MAIN TOOL	SPECIAL ITEM	DOMINANT HAND	HAIR COLOR	FEAR FACTOR
Tinker Tess	Diamond Sword	Glider Shield	Left Handed	Creeper Green Hair	Splash Water Potion
Digger Dave	Ender Pearl	Totem Effect	Right Handed	Creeper Green Hair	Lava Bucket
Knight Ned	Golden Apple	Totem Effect	Left Handed	Redstone Red Hair	Cat Meow
Scribe Seth	Diamond Sword	Speed Potion	Left Handed	Creeper Green Hair	Splash Water Potion
Steve Block	Diamond Sword	Glider Shield	Right Handed	Obsidian Black Hair	Lava Bucket
Hero Herbie	TNT Block	Totem Effect	Right Handed	Obsidian Black Hair	Splash Water Potion
Farmer John	Ender Pearl	Elytra Wings	Left Handed	Redstone Red Hair	Cat Meow
Blacksmith Dan	Redstone Cannon	Elytra Wings	Left Handed	Obsidian Black Hair	Lava Bucket
Redstone Rita	Diamond Sword	Elytra Wings	Right Handed	Redstone Red Hair	Lava Bucket
Alex Crafter	Golden Apple	Elytra Wings	Right Handed	Redstone Red Hair	Splash Water Potion
Ranger Ray	Redstone Cannon	Glider Shield	Right Handed	Creeper Green Hair	Cat Meow
Mason Max	Diamond Sword	Speed Potion	Left Handed	Obsidian Black Hair	Lava Bucket
Archer Ava	TNT Block	Totem Effect	Right Handed	Obsidian Black Hair	Lava Bucket
Crafty Carl	Golden Apple	Elytra Wings	Right Handed	Obsidian Black Hair	Lava Bucket
Lumber Jack	Diamond Sword	Invisibility Potion	Left Handed	Redstone Red Hair	Splash Water Potion
Fisher Fred	Golden Apple	Totem Effect	Left Handed	Obsidian Black Hair	Cat Meow
Tracker Tim	TNT Block	Totem Effect	Right Handed	Obsidian Black Hair	Cat Meow
Pixel Penny	Redstone Cannon	Totem Effect	Right Handed	Creeper Green Hair	Lava Bucket
Captain Cole	Golden Apple	Invisibility Potion	Right Handed	Obsidian Black Hair	Lava Bucket
Scout Sam	Diamond Sword	Elytra Wings	Right Handed	Obsidian Black Hair	Cat Meow
Guard Gary	Diamond Sword	Totem Effect	Right Handed	Obsidian Black Hair	Lava Bucket

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CLUE 1 Rounding

The scanner readout rounds all pixel counts to the nearest ten.

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



Round 885 to the nearest hundred ☐ → **T**

Round 2,898 to the nearest hundred ☐ → **I**

Round 1,267 to the nearest hundred ☐ → **R**

Round 49 to the nearest ten ☐ → **L**

Round 7,490 to the nearest thousand ☐ → **U**

Round 29 to the nearest ten ☐ → **D**

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

Round 8,974 to the nearest thousand ☐ → **O**

Round 114 to the nearest ten ☐ → **A**

Round 367 to the nearest ten ☐ → **G**

Round 87 to the nearest ten ☐ → **E**

Round 433 to the nearest ten ☐ → **S**

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

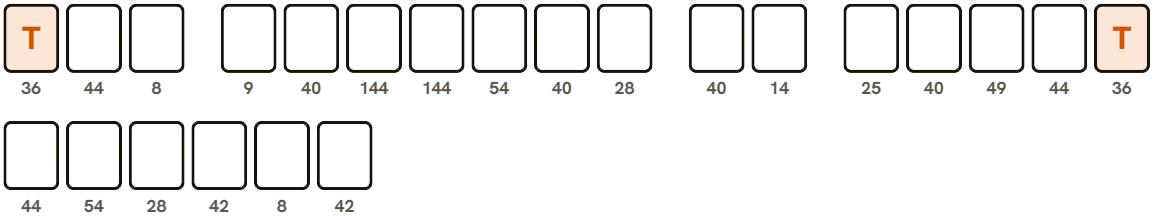
Round 220 to the nearest hundred ☐ → **V**

Scratch space:

CLUE 2 Multiplication facts (1-12)

> To check the block storage grid, you inspect equal rows of chest items.

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



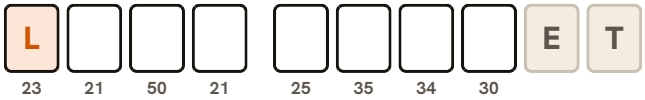
4 × 9 = ☐ → T	6 × 7 = ☐ → D	12 × 12 = ☐ → L
4 × 11 = ☐ → H	7 × 7 = ☐ → G	7 × 4 = ☐ → N	2 × 7 = ☐ → S
8 × 5 = ☐ → I	1 × 8 = ☐ → E	1 × 9 = ☐ → V	5 × 5 = ☐ → R
6 × 9 = ☐ → A			

Scratch space:

CLUE 3 Word problems

The craft master asks you to solve these supply trades to gather hints.

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

Someone scared the villain off with 

.

Villager found 13 diamond gems yesterday and 10 more today. How many diamond gems in all?

Answer: ☐ → **L**

Villager lined up 7 rows of 5 oak logs. How many oak logs in all?

Answer: ☐ → **U**

Villager lined up 7 rows of 3 emeralds. How many emeralds in all?

Answer: ☐ → **A**

Villager lined up 10 rows of 5 emeralds. How many emeralds in all?

Answer: ☐ → **V**

There were 54 iron ingots. 20 were used up. How many iron ingots are left?

Answer: ☐ → **C**

Villager found 21 iron ingots yesterday and 9 more today. How many iron ingots in all?

Answer: ☐ → **K**

There were 31 diamond gems. 6 were used up. How many diamond gems are left?

Answer: ☐ → **B**

Scratch space:

CLUE 4 Addition

You tally up all the iron bars found near the broken vault door.

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



3660 + 4604 = ☐ → B	1004 + 1706 = ☐ → E	1144 + 1649 = ☐ → D
4932 + 4053 = ☐ → S	1724 + 2472 = ☐ → L	1382 + 1866 = ☐ → N
2602 + 2246 = ☐ → T	1934 + 2054 = ☐ → W	3855 + 4898 = ☐ → H
2514 + 3637 = ☐ → C	1028 + 2094 = ☐ → K	938 + 1296 = ☐ → R
2382 + 2331 = ☐ → I	2091 + 1623 = ☐ → A	

Scratch space:

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

> You divide the remaining lapis gems equally among the search teams.

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:

35 ÷ 5 = ☐	18 ÷ 3 = ☐	81 ÷ 9 = ☐	45 ÷ 9 = ☐	80 ÷ 10 = ☐
12 ÷ 1 = ☐	40 ÷ 10 = ☐	7 ÷ 7 = ☐	88 ÷ 8 = ☐	90 ÷ 9 = ☐
8 ÷ 4 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain placed a tnt block, then drank invisibility potion.
2. The villain launched a redstone cannon, then raised a glider shield.
3. The villain placed a tnt block, then used a totem effect.
4. The villain placed a tnt block, then used a speed potion.
5. The villain threw an ender pearl, then raised a glider shield.
6. The villain ate a golden apple, then drank invisibility potion.
7. The villain swung a diamond sword, then used a totem effect.
8. The villain placed a tnt block, then soared with elytra wings.
9. The villain ate a golden apple, then soared with elytra wings.
10. The villain threw an ender pearl, then drank invisibility potion.
11. The villain ate a golden apple, then used a speed potion.
12. The villain swung a diamond sword, then raised a glider shield.

TEACHER / PARENT

Answer Key

The Great Block Heist

Culprit: Archer Ava

TNT Block · Totem Effect · Right Handed · Obsidian Black Hair · Lava Bucket

Trail: Start 21 → Clue 1 18 → Clue 2 11 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN DOES NOT USE A GLIDER SHIELD"

Round 885 to the nearest hundred = 900 (T) · Round 2,898 to the nearest hundred = 2900 (I) · Round 1,267 to the nearest hundred = 1300 (R) · Round 49 to the nearest ten = 50 (L) · Round 7,490 to the nearest thousand = 7000 (U) · Round 29 to the nearest ten = 30 (D) · Round 167 to the nearest ten = 170 (H) · Round 8,974 to the nearest thousand = 9000 (O) · Round 114 to the nearest ten = 110 (A) · Round 367 to the nearest ten = 370 (G) · Round 87 to the nearest ten = 90 (E) · Round 433 to the nearest ten = 430 (S) · Round 291 to the nearest ten = 290 (N) · Round 220 to the nearest hundred = 200 (V)

Clue 2 (Multiplication facts (1-12)): "THE VILLAIN IS RIGHT HANDED"

4 × 9 = 36 (T) · 6 × 7 = 42 (D) · 12 × 12 = 144 (L) · 4 × 11 = 44 (H) · 7 × 7 = 49 (G) · 7 × 4 = 28 (N) · 2 × 7 = 14 (S) · 8 × 5 = 40 (I) · 1 × 8 = 8 (E) · 1 × 9 = 9 (V) · 5 × 5 = 25 (R) · 6 × 9 = 54 (A)

Clue 3 (Word problems): "LAVA BUCKET"

Villager found 13 diamond gems yesterday and 10 more today. How many diamond gems in all? = 23 (L) · Villager lined up 7 rows of 5 oak logs. How many oak logs in all? = 35 (U) · Villager lined up 7 rows of 3 emeralds. How many emeralds in all? = 21 (A) · Villager lined up 10 rows of 5 emeralds. How many emeralds in all? = 50 (V) · There were 54 iron ingots. 20 were used up. How many iron ingots are left? = 34 (C) · Villager found 21 iron ingots yesterday and 9 more today. How many iron ingots in all? = 30 (K) · There were 31 diamond gems. 6 were used up. How many diamond gems are left? = 25 (B)

Clue 4 (Addition): "BLACK HAIR STRANDS WERE AT THE SCENE"

3660 + 4604 = 8264 (B) · 1004 + 1706 = 2710 (E) · 1144 + 1649 = 2793 (D) · 4932 + 4053 = 8985 (S) · 1724 + 2472 = 4196 (L) · 1382 + 1866 = 3248 (N) · 2602 + 2246 = 4848 (T) · 1934 + 2054 = 3988 (W) · 3855 + 4898 = 8753 (H) · 2514 + 3637 = 6151 (C) · 1028 + 2094 = 3122 (K) · 938 + 1296 = 2234 (R) · 2382 + 2331 = 4713 (I) · 2091 + 1623 = 3714 (A)

Clue 5 (Division facts (1-12)): surviving statement is box 3 → Archer Ava

35 ÷ 5 = 7 · 18 ÷ 3 = 6 · 81 ÷ 9 = 9 · 45 ÷ 9 = 5 · 80 ÷ 10 = 8 · 12 ÷ 1 = 12 · 40 ÷ 10 = 4 · 7 ÷ 7 = 1 · 88 ÷ 8 = 11 · 90 ÷ 9 = 10 · 8 ÷ 4 = 2