



# The Loft Sabotage

Grade 3 math · Place value, Subtraction, Rounding, Skip counting, Division · Reading level grades 5-6

Detective: \_\_\_\_\_ Date: \_\_\_\_\_

The Shilo and Bros crew just finished building their ultimate custom Minecraft server, but someone snuck into the gaming loft and deleted the world save file! Now, a mysterious impostor gamer is holding the backup file hostage. We have to decode the clues to find out who did it before the stream starts!

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 impostor gamer 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      | LOOT GEAR      | CONTROLLER GRIP | HEAD ACCESSORY   | WEAKNESS     |
|--------|-------------------|----------------|-----------------|------------------|--------------|
| Ian    | prop disguise     | lucky block    | righty grip     | spiky gamer hair | water bucket |
| Josiah | prop disguise     | gold apple     | lefty grip      | blue beanie      | water bucket |
| Judah  | laser shield      | grappling hook | lefty grip      | blue beanie      | banana peel  |
| Brody  | speedrunner speed | lucky block    | lefty grip      | spiky gamer hair | squeaky toy  |
| Cole   | portal blaster    | lucky block    | lefty grip      | blue beanie      | banana peel  |
| Daniel | super jump hack   | lucky block    | lefty grip      | blue beanie      | banana peel  |
| Toby   | portal blaster    | redstone bomb  | lefty grip      | blue beanie      | banana peel  |
| Zach   | laser shield      | lucky block    | lefty grip      | hoodie hood up   | banana peel  |
| Leo    | portal blaster    | lucky block    | lefty grip      | blue beanie      | water bucket |
| Caleb  | super jump hack   | redstone bomb  | lefty grip      | hoodie hood up   | banana peel  |
| Trixie | laser shield      | redstone bomb  | righty grip     | blue beanie      | water bucket |
| Luke   | speedrunner speed | lucky block    | righty grip     | blue beanie      | banana peel  |
| Shilo  | speedrunner speed | diamond sword  | righty grip     | hoodie hood up   | squeaky toy  |
| Wyatt  | portal blaster    | grappling hook | righty grip     | blue beanie      | banana peel  |
| Gabe   | super jump hack   | lucky block    | righty grip     | blue beanie      | banana peel  |
| Max    | portal blaster    | diamond sword  | lefty grip      | blue beanie      | squeaky toy  |
| Ethan  | laser shield      | diamond sword  | righty grip     | blue beanie      | banana peel  |
| Jax    | speedrunner speed | diamond sword  | lefty grip      | hoodie hood up   | squeaky toy  |
| Micah  | laser shield      | diamond sword  | righty grip     | hoodie hood up   | water bucket |
| Colin  | super jump hack   | diamond sword  | lefty grip      | blue beanie      | banana peel  |
| Elijah | prop disguise     | grappling hook | righty grip     | hoodie hood up   | banana peel  |

## CLUE 1 Place value

We hacked into the lobby terminal. The computer's security code uses a specific digit in the hundreds place to unlock the first clue.

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

|              |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |              |
|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| <div>T</div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div>T</div> |
| 900          | 700         | 1000        | 4000        | 300         | 20          | 20          | 7000        | 300         | 10          | 70          | 2000        | 1000        | 500         | 10          | 2000        | 900         |              |

  

|             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> | <div></div> |
| 40          | 500         | 1000        | 7000        | 70          | 300         | 7000        | 8000        | 2000        | 10          | 70          | 500         | 800         | 2000        | 50          | 70          |

What is the value of the 9 in 2,957?  → 

T

What is the value of the 8 in 8,233?  → 

M

What is the value of the 7 in 1,970?  → 

D

What is the value of the 7 in 733?  → 

H

What is the value of the 7 in 7,636?  → 

A

What is the value of the 3 in 4,397?  → 

I

What is the value of the 1 in 319?  → 

N

What is the value of the 5 in 952?  → 

R

What is the value of the 2 in 2,907?  → 

O

What is the value of the 2 in 524?  → 

L

What is the value of the 5 in 2,592?  → 

S

What is the value of the 4 in 4,001?  → 

V

What is the value of the 4 in 5,941?  → 

U

What is the value of the 8 in 1,851?  → 

W

What is the value of the 1 in 71,482?  → 

E

Scratch space:

**CLUE 2** Subtraction

To open the locked storage chest, the crew needs to calculate how many gaming energy drinks are left after Marcus drank his share.

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

The diagram consists of two rows of boxes. The top row has 18 boxes, and the bottom row has 4 boxes. Below each box is a number. The boxes are arranged in a sequence, and some boxes are shaded orange and contain the letter 'T'.

| Box | Number | Shaded | Letter |
|-----|--------|--------|--------|
| 1   | 571    | Yes    | T      |
| 2   | 273    | No     |        |
| 3   | 339    | No     |        |
| 4   | 554    | No     |        |
| 5   | 328    | No     |        |
| 6   | 554    | No     |        |
| 7   | 807    | No     |        |
| 8   | 339    | No     |        |
| 9   | 187    | No     |        |
| 10  | 571    | Yes    | T      |
| 11  | 273    | No     |        |
| 12  | 598    | No     |        |
| 13  | 554    | No     |        |
| 14  | 598    | No     |        |
| 15  | 843    | No     |        |
| 16  | 339    | No     |        |
| 17  | 642    | No     |        |
| 18  | 571    | Yes    | T      |
| 19  | 878    | No     |        |
| 20  | 563    | No     |        |
| 21  | 345    | No     |        |
| 22  | 761    | No     |        |
| 23  | 807    | No     |        |

$909 - 338 = \boxed{\phantom{000}} \rightarrow \boxed{\text{T}}$

$761 - 163 = \boxed{\phantom{000}} \rightarrow \boxed{\mathbf{A}}$

$$360 - 21 = \boxed{\phantom{000}} \rightarrow \boxed{\text{E}}$$

1000 - 358 =  → **F**

$1182 - 339 = \boxed{\phantom{000}} \rightarrow \boxed{\text{L}}$

$$915 - 361 = \boxed{\phantom{000}} \rightarrow \boxed{\text{S}}$$

$$622 - 349 = \boxed{\phantom{000}} \rightarrow \boxed{\text{H}}$$

$$510 - 323 = \boxed{\phantom{000}} \rightarrow \boxed{\text{C}}$$

$632 - 69 = \boxed{\phantom{000}} \rightarrow \boxed{\text{G}}$

$$619 - 291 = \boxed{\phantom{000}} \rightarrow \boxed{\text{U}}$$

$980 - 219 = \boxed{\phantom{000}} \rightarrow \boxed{1}$

$1167 - 360 = \boxed{\phantom{000}} \rightarrow \boxed{\text{P}}$

$$691 - 346 = \boxed{\phantom{000}} \rightarrow \boxed{\text{R}}$$

$1033 - 155 = \boxed{\phantom{000}} \rightarrow \boxed{\text{Y}}$

Scratch space:

### CLUE 3 Rounding

Our radar scanner shows the villain's signal strength, but the screen only displays numbers rounded to the nearest ten.

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

|          |     |      |      |      |      |      |     |     |      |     |      |     |    |     |     |      |     |
|----------|-----|------|------|------|------|------|-----|-----|------|-----|------|-----|----|-----|-----|------|-----|
| <b>T</b> |     |      |      |      |      |      |     |     |      |     |      |     |    |     |     |      |     |
| 200      | 80  | 60   | 7000 | 600  | 4000 | 4000 | 800 | 600 | 9000 | 300 | 4000 | 600 | 30 | 300 | 500 | 9000 | 800 |
|          |     |      |      |      |      |      |     |     |      |     |      |     |    |     |     |      |     |
| 70       | 800 | 9000 | 800  | 9000 | 800  | 30   | 60  | 60  | 4000 |     |      |     |    |     |     |      |     |

Round 191 to the nearest hundred  → **T**

Round 479 to the nearest hundred  → **O**

Round 4,248 to the nearest thousand  → **L**

Round 68 to the nearest ten  → **B**

Round 57 to the nearest ten  → **E**

Round 33 to the nearest ten  → **P**

Round 6,524 to the nearest thousand  → **V**

Round 83 to the nearest ten  → **H**

Round 556 to the nearest hundred  → **I**

Round 8,615 to the nearest thousand  → **N**

Round 290 to the nearest hundred  → **S**

Round 783 to the nearest hundred  → **A**

Scratch space:

## CLUE 4 Skip counting

Micah noticed a pattern of neon footprints on the stairs, skip-counting by fives to find the hidden attic entrance.

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

|    |    |    |    |     |     |    |    |    |    |     |    |    |    |   |    |    |    |
|----|----|----|----|-----|-----|----|----|----|----|-----|----|----|----|---|----|----|----|
| W  |    |    |    |     |     |    |    |    |    |     |    |    |    |   |    |    |    |
| 24 | 16 | 36 | 14 | 110 | 45  | 21 | 8  | 60 | 65 | 110 | 16 | 60 | 16 | 8 | 45 | 39 | 16 |
|    |    |    |    |     |     |    |    |    |    |     |    |    |    |   |    |    |    |
| 8  | 26 | 26 | 80 | 16  | 140 | 18 | 16 | 45 | 16 |     |    |    |    |   |    |    |    |

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, \_\_, 27, 30  → **W**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, \_\_, 28, 30  → **T**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, \_\_, 70, 80  → **B**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, \_\_, 21, 24  → **C**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, \_\_, 70, 75  → **L**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, \_\_, 120, 130  → **U**

Skip-count by 2s. Fill the blank: 2, 4, 6, \_\_, 10, 12  → **A**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, \_\_, 150, 160  → **S**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, \_\_, 18, 20  → **E**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, \_\_, 24, 27  → **D**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, \_\_, 50, 55  → **N**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, \_\_, 16, 18  → **O**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, \_\_, 42, 45

→

I

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, \_\_, 90, 100

→

H

Scratch space:

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

Elijah found a crate of mystery loot boxes and needs to divide them equally among the team members to find the final clue slip.

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:**

$55 \div 5 = \boxed{\phantom{00}}$

$60 \div 12 = \boxed{\phantom{00}}$

$96 \div 8 = \boxed{\phantom{00}}$

$6 \div 3 = \boxed{\phantom{00}}$

$33 \div 11 = \boxed{\phantom{00}}$

$21 \div 3 = \boxed{\phantom{00}}$

$16 \div 2 = \boxed{\phantom{00}}$

$54 \div 9 = \boxed{\phantom{00}}$

$3 \div 3 = \boxed{\phantom{00}}$

$9 \div 1 = \boxed{\phantom{00}}$

$90 \div 9 = \boxed{\phantom{00}}$

**Step 2 - cross out the sentence with each answer:**

1. The villain transforms into a nearby cardboard box, then detonates a dangerous redstone bomb.
2. The villain hacks the gravity settings to jump super high, then swings away using a grappling hook.
3. The villain hacks the gravity settings to jump super high, then swings a pixelated diamond sword.
4. The villain shoots a glowing portal, then tosses a chaotic lucky block.
5. The villain activates a glowing neon shield, then swings away using a grappling hook.
6. The villain activates a glowing neon shield, then eats a glowing gold apple.
7. The villain transforms into a nearby cardboard box, then swings a pixelated diamond sword.
8. The villain speeds through the spawn lobby, then tosses a chaotic lucky block.
9. The villain activates a glowing neon shield, then tosses a chaotic lucky block.
10. The villain shoots a glowing portal, then eats a glowing gold apple.
11. The villain shoots a glowing portal, then detonates a dangerous redstone bomb.
12. The villain hacks the gravity settings to jump super high, then tosses a chaotic lucky block.

# Answer Key

## The Loft Sabotage

### Culprit: Cole

portal blaster · lucky block · lefty grip · blue beanie · banana peel

Trail: Start 21 → Clue 1 15 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

### Clue 1 (Place value): "THE VILLAIN DOES NOT USE A DIAMOND SWORD"

What is the value of the 9 in 2,957? = 900 (T) · What is the value of the 8 in 8,233? = 8000 (M) · What is the value of the 7 in 1,970? = 70 (D) · What is the value of the 7 in 733? = 700 (H) · What is the value of the 7 in 7,636? = 7000 (A) · What is the value of the 3 in 4,397? = 300 (I) · What is the value of the 1 in 319? = 10 (N) · What is the value of the 5 in 952? = 50 (R) · What is the value of the 2 in 2,907? = 2000 (O) · What is the value of the 2 in 524? = 20 (L) · What is the value of the 5 in 2,592? = 500 (S) · What is the value of the 4 in 4,001? = 4000 (V) · What is the value of the 4 in 5,941? = 40 (U) · What is the value of the 8 in 1,851? = 800 (W) · What is the value of the 1 in 71,482? = 1000 (E)

### Clue 2 (Subtraction): "THE SUSPECT HAS A LEFTY GRIP"

909 - 338 = 571 (T) · 761 - 163 = 598 (A) · 360 - 21 = 339 (E) · 1000 - 358 = 642 (F) · 1182 - 339 = 843 (L) · 915 - 361 = 554 (S) · 622 - 349 = 273 (H) · 510 - 323 = 187 (C) · 632 - 69 = 563 (G) · 619 - 291 = 328 (U) · 980 - 219 = 761 (I) · 1167 - 360 = 807 (P) · 691 - 346 = 345 (R) · 1033 - 155 = 878 (Y)

### Clue 3 (Rounding): "THE VILLAIN SLIPS ON A BANANA PEEL"

Round 191 to the nearest hundred = 200 (T) · Round 479 to the nearest hundred = 500 (O) · Round 4,248 to the nearest thousand = 4000 (L) · Round 68 to the nearest ten = 70 (B) · Round 57 to the nearest ten = 60 (E) · Round 33 to the nearest ten = 30 (P) · Round 6,524 to the nearest thousand = 7000 (V) · Round 83 to the nearest ten = 80 (H) · Round 556 to the nearest hundred = 600 (I) · Round 8,615 to the nearest thousand = 9000 (N) · Round 290 to the nearest hundred = 300 (S) · Round 783 to the nearest hundred = 800 (A)

### Clue 4 (Skip counting): "WE FOUND A BLUE BEANIE AT THE SCENE"

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, \_\_, 27, 30 = 24 (W) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, \_\_, 28, 30 = 26 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, \_\_, 70, 80 = 60 (B) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, \_\_, 21, 24 = 18 (C) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, \_\_, 70, 75 = 65 (L) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, \_\_, 120, 130 = 110 (U) · Skip-count by 2s. Fill the blank: 2, 4, 6, \_\_, 10, 12 = 8 (A) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, \_\_, 150, 160 = 140 (S) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, \_\_, 18, 20 = 16 (E) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, \_\_, 24, 27 = 21 (D) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, \_\_, 50, 55 = 45 (N) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, \_\_, 16, 18 = 14 (O) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, \_\_, 39, 42 = 36 (F) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, \_\_, 42, 45 = 39 (I) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, \_\_, 90, 100 = 80 (H)

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

55 ÷ 5 = 11 · 60 ÷ 12 = 5 · 96 ÷ 8 = 12 · 6 ÷ 3 = 2 · 33 ÷ 11 = 3 · 21 ÷ 3 = 7 · 16 ÷ 2 = 8 · 54 ÷ 9 = 6 · 3 ÷ 3 = 1 · 9 ÷ 1 = 9 · 90 ÷ 9 = 10