Mystery of the Lost Explorer Map

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

Detective: _____ **Date:** _____

Someone snuck into Chief Ranger Rick's cabin and snatched the secret gold map! Use your deduction skills to uncover who took it.

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 rogue explorer is _____

Possible suspects

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

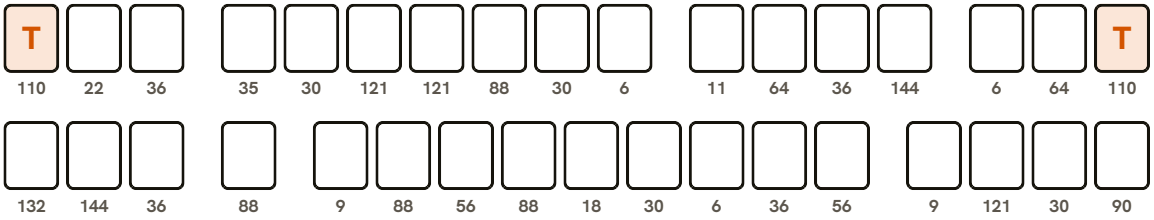
NAME	MAIN TOOL	GADGET	HANDEDNESS	BANDANA COLOR	FEAR
Mia	Rope Launcher	Carabiner Clip	Right Handed	Green Bandana	Fear Of Bees
Sam	Golden Compass	Pocket Whistle	Right Handed	Red Bandana	Fear Of Dark
Caleb	Golden Compass	Camp Flashlight	Right Handed	Green Bandana	Fear Of Mud
Finn	Brass Spyglass	Pocket Whistle	Right Handed	Red Bandana	Fear Of Bees
Maya	Signal Flare	Walkie Talkie	Right Handed	Green Bandana	Fear Of Dark
Jack	Rope Launcher	Camp Flashlight	Left Handed	Blue Bandana	Fear Of Mud
Ruby	Grappling Hook	Pocket Whistle	Right Handed	Blue Bandana	Fear Of Mud
Emma	Grappling Hook	Camp Flashlight	Left Handed	Red Bandana	Fear Of Bees
Ella	Signal Flare	Pocket Whistle	Right Handed	Green Bandana	Fear Of Dark
Lily	Signal Flare	Walkie Talkie	Right Handed	Blue Bandana	Fear Of Mud
Toby	Golden Compass	Pocket Whistle	Left Handed	Red Bandana	Fear Of Mud
Ava	Signal Flare	Carabiner Clip	Right Handed	Blue Bandana	Fear Of Mud
Ivy	Signal Flare	Pocket Whistle	Right Handed	Green Bandana	Fear Of Mud
Chloe	Golden Compass	Pocket Whistle	Right Handed	Red Bandana	Fear Of Mud
Zoe	Signal Flare	Camp Flashlight	Right Handed	Blue Bandana	Fear Of Dark
Owen	Rope Launcher	Smoke Bomb	Right Handed	Blue Bandana	Fear Of Mud
Eli	Rope Launcher	Camp Flashlight	Right Handed	Blue Bandana	Fear Of Mud
Noah	Grappling Hook	Carabiner Clip	Right Handed	Red Bandana	Fear Of Dark
Mason	Brass Spyglass	Carabiner Clip	Right Handed	Blue Bandana	Fear Of Mud
Nora	Golden Compass	Smoke Bomb	Right Handed	Green Bandana	Fear Of Mud
Grace	Grappling Hook	Smoke Bomb	Left Handed	Red Bandana	Fear Of Mud

make your own at mathcrackers.com

CLUE 1 Multiplication facts (1-12)

> You find supply crates stacked in neat equal rows near the cabin.

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



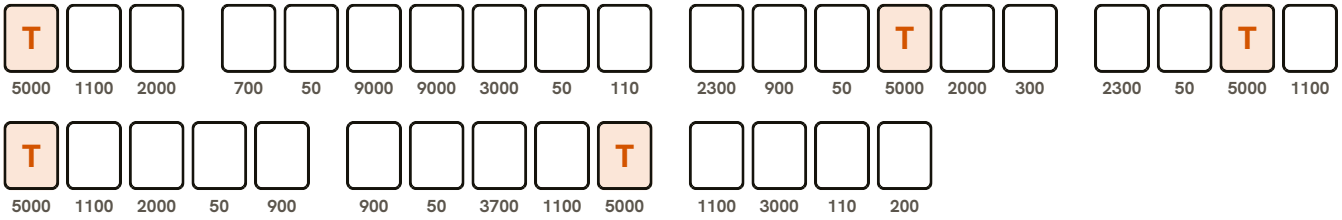
- 10 × 11 = ☐ → **T**
- 9 × 4 = ☐ → **E**
- 6 × 3 = ☐ → **B**
- 11 × 2 = ☐ → **H**
- 8 × 7 = ☐ → **R**
- 12 × 12 = ☐ → **S**
- 5 × 6 = ☐ → **I**
- 8 × 8 = ☐ → **O**
- 5 × 7 = ☐ → **V**
- 11 × 8 = ☐ → **A**
- 11 × 12 = ☐ → **U**
- 2 × 3 = ☐ → **N**
- 11 × 1 = ☐ → **D**
- 10 × 9 = ☐ → **P**
- 11 × 11 = ☐ → **L**
- 9 × 1 = ☐ → **C**

Scratch space:

CLUE 2 Rounding

A blurry trail camera screen shows a rounded code number.

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



Round 5,232 to the nearest thousand ☐ → T

Round 47 to the nearest ten ☐ → I

Round 2,620 to the nearest thousand ☐ → A

Round 904 to the nearest hundred ☐ → R

Round 1,116 to the nearest hundred ☐ → H

Round 112 to the nearest ten ☐ → N

Round 2,313 to the nearest hundred ☐ → W

Round 157 to the nearest hundred ☐ → D

Round 2,134 to the nearest thousand ☐ → E

Round 260 to the nearest hundred ☐ → S

Round 9,462 to the nearest thousand ☐ → L

Round 3,659 to the nearest hundred ☐ → G

Round 723 to the nearest hundred ☐ → V

Scratch space:

CLUE 3 Addition

You add up all the lost canteen totals from the two camp cabins.

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



5093 + 3929 = ☐ → T

1510 + 848 = ☐ → M

2534 + 3206 = ☐ → L

4158 + 3973 = ☐ → I

3982 + 2858 = ☐ → V

2794 + 5881 = ☐ → B

3052 + 4501 = ☐ → P

684 + 1398 = ☐ → D

1744 + 2487 = ☐ → N

2496 + 2945 = ☐ → A

5191 + 3682 = ☐ → O

4194 + 3513 = ☐ → U

894 + 1790 = ☐ → H

3354 + 6159 = ☐ → Y

1672 + 989 = ☐ → G

2594 + 4118 = ☐ → E

Scratch space:

CLUE 4 Subtraction

> You compare total muddy boots to find how many clean pairs remain.

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



13022 - 4768 = ☐ → **A**

4849 - 568 = ☐ → **W**

13304 - 4978 = ☐ → **U**

9247 - 4904 = ☐ → **D**

8594 - 4850 = ☐ → **I**

5402 - 1644 = ☐ → **G**

7494 - 1483 = ☐ → **B**

8292 - 1318 = ☐ → **L**

9792 - 4150 = ☐ → **H**

12037 - 4549 = ☐ → **S**

8090 - 691 = ☐ → **N**

7446 - 2022 = ☐ → **E**

8279 - 338 = ☐ → **F**

3350 - 1032 = ☐ → **T**

Scratch space:

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

You split the found trail clues evenly into small detective bags.

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 = ☐ | 56 ÷ 7 = ☐ | 10 ÷ 10 = ☐ | 108 ÷ 9 = ☐ | 22 ÷ 11 = ☐

10 ÷ 2 = ☐ | 3 ÷ 1 = ☐ | 80 ÷ 8 = ☐ | 30 ÷ 5 = ☐ | 132 ÷ 12 = ☐

72 ÷ 8 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain lit up the night sky with a signal flare, then chattered over a walkie talkie.
2. The villain spied on the campsite with a brass spyglass, then vanished behind a smoke bomb.
3. The villain lit up the night sky with a signal flare, then vanished behind a smoke bomb.
4. The villain scaled the stone cliff with a grappling hook, then blew a loud pocket whistle.
5. The villain lit up the night sky with a signal flare, then clipped onto the wire with a carabiner clip.
6. The villain lit up the night sky with a signal flare, then shone a bright camp flashlight.
7. The villain zipped across the canyon with a rope launcher, then vanished behind a smoke bomb.
8. The villain zipped across the canyon with a rope launcher, then shone a bright camp flashlight.
9. The villain spied on the campsite with a brass spyglass, then blew a loud pocket whistle.
10. The villain spied on the campsite with a brass spyglass, then shone a bright camp flashlight.
11. The villain scaled the stone cliff with a grappling hook, then shone a bright camp flashlight.
12. The villain unlocked the old chest with a golden compass, then vanished behind a smoke bomb.

TEACHER / PARENT

Answer Key

Mystery of the Lost Explorer Map

Culprit: Owen

Rope Launcher · Smoke Bomb · Right Handed · Blue Bandana · Fear Of Mud

Trail: Start 21 → Clue 1 17 → Clue 2 13 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT USE A CARABINER CLIP"

10 × 11 = 110 (T) · 9 × 4 = 36 (E) · 6 × 3 = 18 (B) · 11 × 2 = 22 (H) · 8 × 7 = 56 (R) · 12 × 12 = 144 (S) · 5 × 6 = 30 (I) · 8 × 8 = 64 (O) · 5 × 7 = 35 (V) · 11 × 8 = 88 (A) · 11 × 12 = 132 (U) · 2 × 3 = 6 (N) · 11 × 1 = 11 (D) · 10 × 9 = 90 (P) · 11 × 11 = 121 (L) · 9 × 1 = 9 (C)

Clue 2 (Rounding): "THE VILLAIN WRITES WITH THEIR RIGHT HAND"

Round 5,232 to the nearest thousand = 5000 (T) · Round 47 to the nearest ten = 50 (I) · Round 2,620 to the nearest thousand = 3000 (A) · Round 904 to the nearest hundred = 900 (R) · Round 1,116 to the nearest hundred = 1100 (H) · Round 112 to the nearest ten = 110 (N) · Round 2,313 to the nearest hundred = 2300 (W) · Round 157 to the nearest hundred = 200 (D) · Round 2,134 to the nearest thousand = 2000 (E) · Round 260 to the nearest hundred = 300 (S) · Round 9,462 to the nearest thousand = 9000 (L) · Round 3,659 to the nearest hundred = 3700 (G) · Round 723 to the nearest hundred = 700 (V)

Clue 3 (Addition): "THE VILLAIN AVOIDED A BIG MUDDY PUDDLE"

5093 + 3929 = 9022 (T) · 1510 + 848 = 2358 (M) · 2534 + 3206 = 5740 (L) · 4158 + 3973 = 8131 (I) · 3982 + 2858 = 6840 (V) · 2794 + 5881 = 8675 (B) · 3052 + 4501 = 7553 (P) · 684 + 1398 = 2082 (D) · 1744 + 2487 = 4231 (N) · 2496 + 2945 = 5441 (A) · 5191 + 3682 = 8873 (O) · 4194 + 3513 = 7707 (U) · 894 + 1790 = 2684 (H) · 3354 + 6159 = 9513 (Y) · 1672 + 989 = 2661 (G) · 2594 + 4118 = 6712 (E)

Clue 4 (Subtraction): "A SNAGGED BLUE BANDANA WAS LEFT BEHIND"

13022 - 4768 = 8254 (A) · 4849 - 568 = 4281 (W) · 13304 - 4978 = 8326 (U) · 9247 - 4904 = 4343 (D) · 8594 - 4850 = 3744 (I) · 5402 - 1644 = 3758 (G) · 7494 - 1483 = 6011 (B) · 8292 - 1318 = 6974 (L) · 9792 - 4150 = 5642 (H) · 12037 - 4549 = 7488 (S) · 8090 - 691 = 7399 (N) · 7446 - 2022 = 5424 (E) · 8279 - 338 = 7941 (F) · 3350 - 1032 = 2318 (T)

Clue 5 (Division facts (1-12)): surviving statement is box 7 → Owen

40 ÷ 10 = 4 · 56 ÷ 7 = 8 · 10 ÷ 10 = 1 · 108 ÷ 9 = 12 · 22 ÷ 11 = 2 · 10 ÷ 2 = 5 · 3 ÷ 1 = 3 · 80 ÷ 8 = 10 · 30 ÷ 5 = 6 · 132 ÷ 12 = 11 · 72 ÷ 8 = 9