Mystery of Thunder Island

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

Detective: _____ **Date:** _____

Someone snuck into the Thunder Island camp and took the master map! The Treehouse Crew needs your math skills to figure out 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 Sneaky Rogue is _____

Possible suspects

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

NAME	ISLAND TOOL	SECRET BADGE	COMPASS HAND	BANDANA COLOR	TRAP PHOBIA
Pioneer Max	Signal Flare	Sun Medallion	Right Handed	Red Bandana	Scared Of Bees
Scout Jax	Signal Flare	Cloud Patch	Right Handed	Red Bandana	Scared Of Bees
Trailing Nora	Signal Flare	Wave Symbol	Right Handed	Red Bandana	Scared Of Bees
Hiker Toby	Grappling Hook	Cloud Patch	Right Handed	Blue Bandana	Scared Of Bees
Cap Sam	Grappling Hook	Wave Symbol	Right Handed	Gold Bandana	Scared Of Bats
Adventurer Maya	Rope Ladder	Star Crest	Right Handed	Gold Bandana	Scared Of Crabs
Finder Mia	Torch Light	Sun Medallion	Right Handed	Blue Bandana	Scared Of Crabs
Diver Kai	Brass Telescope	Moon Coin	Left Handed	Gold Bandana	Scared Of Bees
Wayfarer Ella	Grappling Hook	Sun Medallion	Right Handed	Gold Bandana	Scared Of Bees
Sailor Pip	Signal Flare	Star Crest	Left Handed	Gold Bandana	Scared Of Crabs
Surveyor Ruby	Signal Flare	Moon Coin	Right Handed	Gold Bandana	Scared Of Bees
Voyager Finn	Torch Light	Moon Coin	Right Handed	Blue Bandana	Scared Of Bats
Pathfinder Lily	Rope Ladder	Wave Symbol	Right Handed	Red Bandana	Scared Of Bats
Ranger Ava	Signal Flare	Cloud Patch	Left Handed	Red Bandana	Scared Of Bees
Hunter Chloe	Brass Telescope	Star Crest	Right Handed	Red Bandana	Scared Of Bees
Trekker Noah	Brass Telescope	Moon Coin	Left Handed	Gold Bandana	Scared Of Crabs
Explorer Ben	Rope Ladder	Moon Coin	Right Handed	Red Bandana	Scared Of Bees
Skipper Lou	Signal Flare	Cloud Patch	Right Handed	Gold Bandana	Scared Of Bees
Pioneer Ivy	Grappling Hook	Wave Symbol	Left Handed	Red Bandana	Scared Of Bees
Cartographer Eli	Rope Ladder	Sun Medallion	Right Handed	Gold Bandana	Scared Of Bats
Navigator Zoe	Grappling Hook	Wave Symbol	Left Handed	Blue Bandana	Scared Of Bats

CLUE 1 Addition

You count the total gold coins found in two wooden chests to crack the first secret door lock.

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



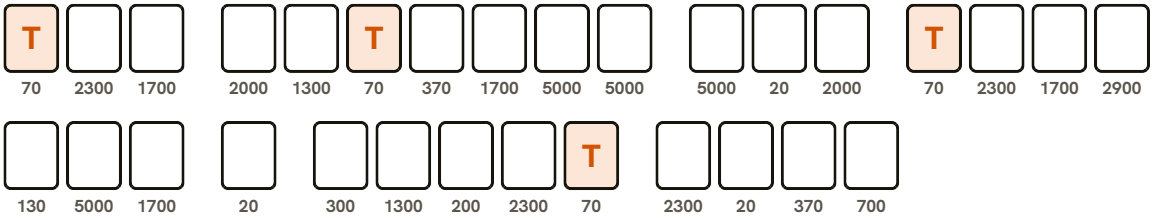
2757 + 2723 = ☐ → T	1380 + 2991 = ☐ → E	4113 + 2858 = ☐ → N
3753 + 2069 = ☐ → O	3215 + 5420 = ☐ → R	4160 + 5062 = ☐ → C
2334 + 2512 = ☐ → I	1339 + 2287 = ☐ → V	4671 + 4564 = ☐ → D
1251 + 2318 = ☐ → H	1604 + 1160 = ☐ → A	3526 + 3892 = ☐ → S
1831 + 1409 = ☐ → L		

Scratch space:

CLUE 2 Rounding

A dusty ancient compass readout only shows rounded map coordinates to help you track the suspect.

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



Round 74 to the nearest ten ☐ → T

Round 368 to the nearest ten ☐ → N

Round 2,855 to the nearest hundred ☐ → M

Round 1,666 to the nearest hundred ☐ → E

Round 346 to the nearest hundred ☐ → R

Round 23 to the nearest ten ☐ → A

Round 224 to the nearest hundred ☐ → G

Round 128 to the nearest ten ☐ → U

Round 1,666 to the nearest thousand ☐ → W

Round 1,265 to the nearest hundred ☐ → I

Round 689 to the nearest hundred ☐ → D

Round 2,290 to the nearest hundred ☐ → H

Round 5,485 to the nearest thousand ☐ → S

Scratch space:

CLUE 3 Subtraction

You compare the total supply crates before and after the incident to see how much was taken.

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



5693 - 1505 = ☐ → A

6856 - 1967 = ☐ → G

8154 - 2056 = ☐ → S

5383 - 741 = ☐ → C

5856 - 1440 = ☐ → T

5143 - 343 = ☐ → O

9369 - 2482 = ☐ → D

7546 - 1749 = ☐ → U

6757 - 3119 = ☐ → N

7237 - 9 = ☐ → B

8535 - 1650 = ☐ → E

7390 - 1035 = ☐ → Z

6473 - 4671 = ☐ → F

2443 - 897 = ☐ → M

7819 - 2680 = ☐ → I

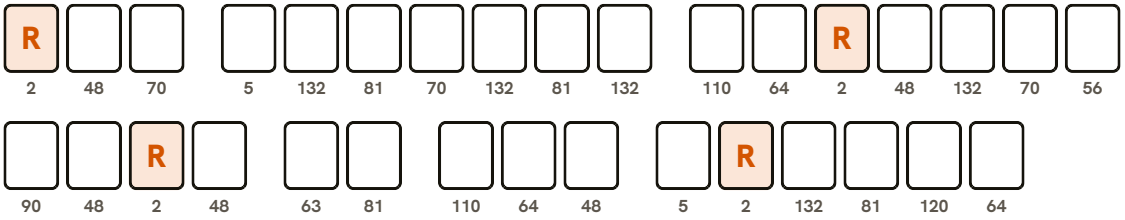
6963 - 769 = ☐ → H

Scratch space:

CLUE 4 Multiplication facts (1-12)

The cavern wall has several equal rows of carved symbols that must be multiplied to open the passage.

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



2 × 1 = ☐ → R

10 × 7 = ☐ → D

11 × 10 = ☐ → T

9 × 9 = ☐ → N

9 × 7 = ☐ → O

5 × 1 = ☐ → B

10 × 9 = ☐ → W

12 × 4 = ☐ → E

8 × 7 = ☐ → S

10 × 12 = ☐ → C

11 × 12 = ☐ → A

8 × 8 = ☐ → H

Scratch space:

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

You divide the remaining trail markers equally among your team to search all path options.

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:

63 ÷ 9 = ☐ | 27 ÷ 3 = ☐ | 36 ÷ 12 = ☐ | 80 ÷ 8 = ☐ | 8 ÷ 2 = ☐

99 ÷ 9 = ☐ | 20 ÷ 10 = ☐ | 6 ÷ 1 = ☐ | 48 ÷ 4 = ☐ | 32 ÷ 4 = ☐

10 ÷ 2 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain lit a signal flare, then waved a wave symbol.
2. The villain dropped a rope ladder, then pinned on a cloud patch.
3. The villain lit a signal flare, then flashed a sun medallion.
4. The villain lit a signal flare, then dropped a moon coin.
5. The villain swung with a grappling hook, then flashed a sun medallion.
6. The villain dropped a rope ladder, then flashed a sun medallion.
7. The villain lit a signal flare, then pinned on a cloud patch.
8. The villain swung with a grappling hook, then showed a star crest.
9. The villain dropped a rope ladder, then dropped a moon coin.
10. The villain swung with a grappling hook, then waved a wave symbol.
11. The villain dropped a rope ladder, then showed a star crest.
12. The villain peered through a brass telescope, then showed a star crest.

TEACHER / PARENT

Answer Key

Mystery of Thunder Island

Culprit: Trailing Nora

Signal Flare · Wave Symbol · Right Handed · Red Bandana · Scared Of Bees

Trail: Start 21 → Clue 1 18 → Clue 2 13 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT HAVE A STAR CREST"

2757 + 2723 = 5480 (T) · 1380 + 2991 = 4371 (E) · 4113 + 2858 = 6971 (N) · 3753 + 2069 = 5822 (O) · 3215 + 5420 = 8635 (R) · 4160 + 5062 = 9222 (C) · 2334 + 2512 = 4846 (I) · 1339 + 2287 = 3626 (V) · 4671 + 4564 = 9235 (D) · 1251 + 2318 = 3569 (H) · 1604 + 1160 = 2764 (A) · 3526 + 3892 = 7418 (S) · 1831 + 1409 = 3240 (L)

Clue 2 (Rounding): "THE WITNESS SAW THEM USE A RIGHT HAND"

Round 74 to the nearest ten = 70 (T) · Round 368 to the nearest ten = 370 (N) · Round 2,855 to the nearest hundred = 2900 (M) · Round 1,666 to the nearest hundred = 1700 (E) · Round 346 to the nearest hundred = 300 (R) · Round 23 to the nearest ten = 20 (A) · Round 224 to the nearest hundred = 200 (G) · Round 128 to the nearest ten = 130 (U) · Round 1,666 to the nearest thousand = 2000 (W) · Round 1,265 to the nearest hundred = 1300 (I) · Round 689 to the nearest hundred = 700 (D) · Round 2,290 to the nearest hundred = 2300 (H) · Round 5,485 to the nearest thousand = 5000 (S)

Clue 3 (Subtraction): "A BUZZING BEE CHASED THEM OFF"

5693 - 1505 = 4188 (A) · 6856 - 1967 = 4889 (G) · 8154 - 2056 = 6098 (S) · 5383 - 741 = 4642 (C) · 5856 - 1440 = 4416 (T) · 5143 - 343 = 4800 (O) · 9369 - 2482 = 6887 (D) · 7546 - 1749 = 5797 (U) · 6757 - 3119 = 3638 (N) · 7237 - 9 = 7228 (B) · 8535 - 1650 = 6885 (E) · 7390 - 1035 = 6355 (Z) · 6473 - 4671 = 1802 (F) · 2443 - 897 = 1546 (M) · 7819 - 2680 = 5139 (I) · 6963 - 769 = 6194 (H)

Clue 4 (Multiplication facts (1-12)): "RED BANDANA THREADS WERE ON THE BRANCH"

2 × 1 = 2 (R) · 10 × 7 = 70 (D) · 11 × 10 = 110 (T) · 9 × 9 = 81 (N) · 9 × 7 = 63 (O) · 5 × 1 = 5 (B) · 10 × 9 = 90 (W) · 12 × 4 = 48 (E) · 8 × 7 = 56 (S) · 10 × 12 = 120 (C) · 11 × 12 = 132 (A) · 8 × 8 = 64 (H)

Clue 5 (Division facts (1-12)): surviving statement is box 1 → Trailing Nora

63 ÷ 9 = 7 · 27 ÷ 3 = 9 · 36 ÷ 12 = 3 · 80 ÷ 8 = 10 · 8 ÷ 2 = 4 · 99 ÷ 9 = 11 · 20 ÷ 10 = 2 · 6 ÷ 1 = 6 · 48 ÷ 4 = 12 · 32 ÷ 4 = 8 · 10 ÷ 2 = 5