The Sapphire Island Map Mystery

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

Detective: _____ **Date:** _____

Someone snuck into the camp tent and swiped the golden compass map! Detective, help us inspect the island clues to find out who did 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 Treasure Thief is _____

Possible suspects

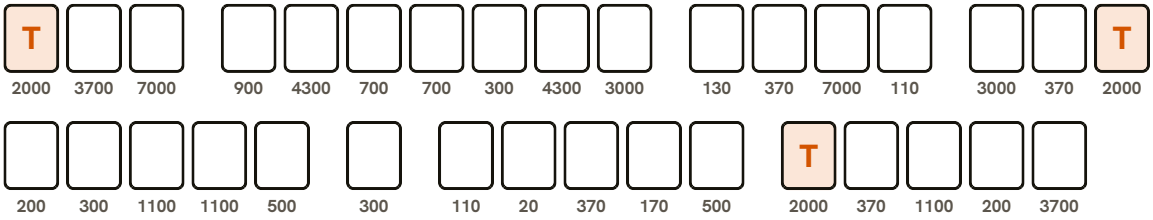
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	JUNGLE GEAR	ISLAND TOOL	STANCE	BANDANA COLOR	SCENT DISLIKE
Una Underwood	Climbing Rope	Metal Canteen	Right Handed	Red Bandana	Garlic Juice
Captain Avery	Brass Telescope	Smoky Torch	Right Handed	Green Bandana	Garlic Juice
Olivia Oakley	Brass Telescope	Canvas Sack	Right Handed	Blue Bandana	Citrus Spray
Jasper Jones	Grappling Hook	Bamboo Whistle	Left Handed	Blue Bandana	Citrus Spray
Sierra Stone	Grappling Hook	Canvas Sack	Right Handed	Green Bandana	Garlic Juice
Xander Yates	Climbing Rope	Smoky Torch	Right Handed	Blue Bandana	Citrus Spray
Georgia Gale	Grappling Hook	Smoky Torch	Left Handed	Red Bandana	Citrus Spray
Quinn Reed	Brass Telescope	Canvas Sack	Left Handed	Blue Bandana	Peppermint Oil
Isla Irving	Jungle Machete	Signal Flare	Right Handed	Red Bandana	Garlic Juice
Vince Vance	Brass Telescope	Signal Flare	Right Handed	Green Bandana	Peppermint Oil
Piper Parker	Pocket Compass	Bamboo Whistle	Right Handed	Green Bandana	Garlic Juice
Leo Lawson	Climbing Rope	Metal Canteen	Left Handed	Green Bandana	Garlic Juice
Maya Miller	Pocket Compass	Metal Canteen	Left Handed	Red Bandana	Peppermint Oil
Toby Turner	Climbing Rope	Signal Flare	Right Handed	Red Bandana	Peppermint Oil
Barnaby Blake	Brass Telescope	Signal Flare	Right Handed	Red Bandana	Citrus Spray
Nico Nelson	Climbing Rope	Canvas Sack	Left Handed	Red Bandana	Citrus Spray
Coralia Cruz	Jungle Machete	Canvas Sack	Left Handed	Red Bandana	Citrus Spray
Drake Dawson	Pocket Compass	Canvas Sack	Left Handed	Blue Bandana	Citrus Spray
Finn Foster	Grappling Hook	Metal Canteen	Left Handed	Red Bandana	Citrus Spray
Hector Hayes	Climbing Rope	Canvas Sack	Right Handed	Green Bandana	Peppermint Oil
Willa West	Jungle Machete	Metal Canteen	Left Handed	Red Bandana	Citrus Spray

CLUE 1 Rounding

The digital handheld scanner only shows rounded numbers when tracking camp gear.

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



Round 1,911 to the nearest thousand ☐ → T

Round 167 to the nearest ten ☐ → K

Round 4,284 to the nearest hundred ☐ → I

Round 114 to the nearest ten ☐ → S

Round 3,663 to the nearest hundred ☐ → H

Round 507 to the nearest hundred ☐ → Y

Round 133 to the nearest ten ☐ → D

Round 17 to the nearest ten ☐ → M

Round 226 to the nearest hundred ☐ → C

Round 726 to the nearest hundred ☐ → L

Round 3,463 to the nearest thousand ☐ → N

Round 942 to the nearest hundred ☐ → V

Round 6,510 to the nearest thousand ☐ → E

Round 374 to the nearest ten ☐ → O

Round 1,105 to the nearest hundred ☐ → R

Round 326 to the nearest hundred ☐ → A

Scratch space:

CLUE 2

Addition

The search crew gathered and added all footprint records found along the muddy river.

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



5511 + 2946 = ☐ → A	2850 + 6016 = ☐ → H	4585 + 3385 = ☐ → U
6344 + 3003 = ☐ → W	1558 + 2138 = ☐ → F	3118 + 2440 = ☐ → L
1832 + 1686 = ☐ → D	2722 + 5728 = ☐ → S	2543 + 1885 = ☐ → I
3931 + 2819 = ☐ → P	2790 + 1940 = ☐ → T	2847 + 1533 = ☐ → E
3596 + 2920 = ☐ → N	1542 + 3170 = ☐ → C	

Scratch space:

CLUE 3 Subtraction

> We compared the supply crate counts before and after the map went missing.

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



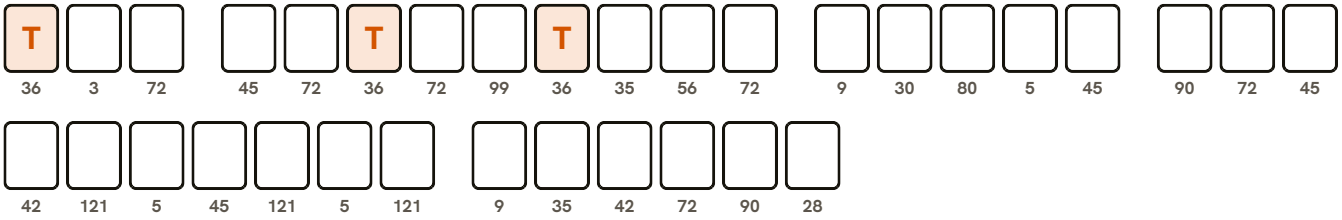
6138 - 2517 = ☐ → T	5060 - 661 = ☐ → Y	11653 - 4689 = ☐ → A
5084 - 2948 = ☐ → R	9083 - 3750 = ☐ → S	10391 - 4490 = ☐ → B
5853 - 2815 = ☐ → U	6196 - 2024 = ☐ → P	9904 - 3983 = ☐ → I
1591 - 563 = ☐ → W	7835 - 574 = ☐ → C	6762 - 4348 = ☐ → F
8871 - 3015 = ☐ → D	6842 - 1766 = ☐ → O	9706 - 4280 = ☐ → H
8728 - 102 = ☐ → E		

Scratch space:

CLUE 4 Multiplication facts (1-12)

> The team arranged supply boxes into equal rows along the sandy shore.

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



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

Scratch space:

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

> The camp counselor split remaining lanterns equally among all search groups.

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:

15 ÷ 5 = ☐ | 16 ÷ 2 = ☐ | 120 ÷ 12 = ☐ | 32 ÷ 8 = ☐ | 77 ÷ 11 = ☐

11 ÷ 11 = ☐ | 55 ÷ 11 = ☐ | 48 ÷ 4 = ☐ | 6 ÷ 1 = ☐ | 14 ÷ 7 = ☐

81 ÷ 9 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain climbed up the ridge using a climbing rope, then took a long sip from a metal canteen.
2. The villain swung across the canyon using a grappling hook, then lit the dark path with a smoky torch.
3. The villain cleared thick branches using a jungle machete, then packed the stolen map into a canvas sack.
4. The villain scouted ahead using a brass telescope, then took a long sip from a metal canteen.
5. The villain cleared thick branches using a jungle machete, then lit the dark path with a smoky torch.
6. The villain swung across the canyon using a grappling hook, then signaled the crew with a signal flare.
7. The villain cleared thick branches using a jungle machete, then alerted birds with a bamboo whistle.
8. The villain cleared thick branches using a jungle machete, then took a long sip from a metal canteen.
9. The villain cleared thick branches using a jungle machete, then signaled the crew with a signal flare.
10. The villain swung across the canyon using a grappling hook, then took a long sip from a metal canteen.
11. The villain climbed up the ridge using a climbing rope, then packed the stolen map into a canvas sack.
12. The villain scouted ahead using a brass telescope, then packed the stolen map into a canvas sack.

TEACHER / PARENT

Answer Key

The Sapphire Island Map Mystery

Culprit: Nico Nelson

Climbing Rope · Canvas Sack · Left Handed · Red Bandana · Citrus Spray

Trail: Start 21 → Clue 1 18 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN DOES NOT CARRY A SMOKY TORCH"

Round 1,911 to the nearest thousand = 2000 (T) · Round 167 to the nearest ten = 170 (K) · Round 4,284 to the nearest hundred = 4300 (I) · Round 114 to the nearest ten = 110 (S) · Round 3,663 to the nearest hundred = 3700 (H) · Round 507 to the nearest hundred = 500 (Y) · Round 133 to the nearest ten = 130 (D) · Round 17 to the nearest ten = 20 (M) · Round 226 to the nearest hundred = 200 (C) · Round 726 to the nearest hundred = 700 (L) · Round 3,463 to the nearest thousand = 3000 (N) · Round 942 to the nearest hundred = 900 (V) · Round 6,510 to the nearest thousand = 7000 (E) · Round 374 to the nearest ten = 370 (O) · Round 1,105 to the nearest hundred = 1100 (R) · Round 326 to the nearest hundred = 300 (A)

Clue 2 (Addition): "A WITNESS SAW A LEFT HANDED SUSPECT"

5511 + 2946 = 8457 (A) · 2850 + 6016 = 8866 (H) · 4585 + 3385 = 7970 (U) · 6344 + 3003 = 9347 (W) · 1558 + 2138 = 3696 (F) · 3118 + 2440 = 5558 (L) · 1832 + 1686 = 3518 (D) · 2722 + 5728 = 8450 (S) · 2543 + 1885 = 4428 (I) · 3931 + 2819 = 6750 (P) · 2790 + 1940 = 4730 (T) · 2847 + 1533 = 4380 (E) · 3596 + 2920 = 6516 (N) · 1542 + 3170 = 4712 (C)

Clue 3 (Subtraction): "THE THIEF WAS STOPPED BY CITRUS SPRAY"

6138 - 2517 = 3621 (T) · 5060 - 661 = 4399 (Y) · 11653 - 4689 = 6964 (A) · 5084 - 2948 = 2136 (R) · 9083 - 3750 = 5333 (S) · 10391 - 4490 = 5901 (B) · 5853 - 2815 = 3038 (U) · 6196 - 2024 = 4172 (P) · 9904 - 3983 = 5921 (I) · 1591 - 563 = 1028 (W) · 7835 - 574 = 7261 (C) · 6762 - 4348 = 2414 (F) · 8871 - 3015 = 5856 (D) · 6842 - 1766 = 5076 (O) · 9706 - 4280 = 5426 (H) · 8728 - 102 = 8626 (E)

Clue 4 (Multiplication facts (1-12)): "THE DETECTIVE FOUND RED BANDANA FIBERS"

9 × 4 = 36 (T) · 11 × 9 = 99 (C) · 8 × 10 = 80 (U) · 5 × 9 = 45 (D) · 7 × 8 = 56 (V) · 10 × 9 = 90 (R) · 11 × 11 = 121 (A) · 7 × 5 = 35 (I) · 7 × 4 = 28 (S) · 9 × 8 = 72 (E) · 1 × 5 = 5 (N) · 7 × 6 = 42 (B) · 6 × 5 = 30 (O) · 9 × 1 = 9 (F) · 1 × 3 = 3 (H)

Clue 5 (Division facts (1-12)): surviving statement is box 11 → Nico Nelson

15 ÷ 5 = 3 · 16 ÷ 2 = 8 · 120 ÷ 12 = 10 · 32 ÷ 8 = 4 · 77 ÷ 11 = 7 · 11 ÷ 11 = 1 · 55 ÷ 11 = 5 · 48 ÷ 4 = 12 · 6 ÷ 1 = 6 · 14 ÷ 7 = 2 · 81 ÷ 9 = 9