The Secret of Sunken Island

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

Detective: _____ **Date:** _____

Someone scrambled the compass coordinates and hid the golden idol! Help Detective Maya crack the coded notes and catch the sneaky saboteur before the ship sails.

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 Island Saboteur is _____

Possible suspects

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

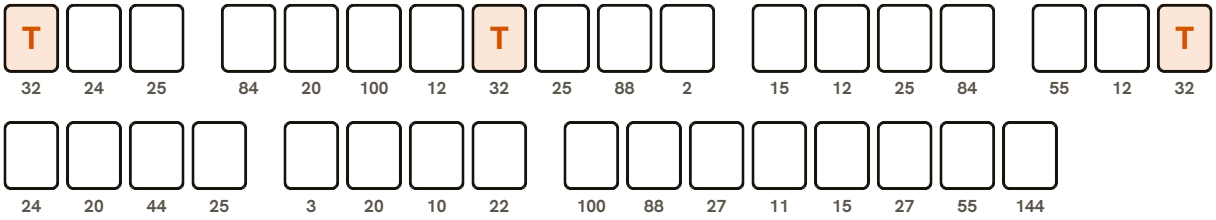
NAME	GEAR TOOL	BADGE SKILL	STRAP SIDE	HAT COLOR	DISTRACTION
Hiker Hank	Glider Pack	Rope Knotting	Right Strap	Blue Cap	Bright Lights
Sailor Sally	Grappling Hook	Rope Knotting	Right Strap	Red Cap	Squeaky Toys
Rover Rex	Pocket Compass	Camp Building	Right Strap	Red Cap	Bright Lights
Tracker Tom	Signal Flare	Cave Diving	Right Strap	Green Cap	Loud Whistles
Scout Ben	Glider Pack	Camp Building	Right Strap	Red Cap	Loud Whistles
Agent Amy	Decoder Ring	Cave Diving	Right Strap	Red Cap	Loud Whistles
Sailor Sid	Pocket Compass	Rope Knotting	Right Strap	Red Cap	Bright Lights
Navigator Nina	Glider Pack	Track Finding	Left Strap	Blue Cap	Bright Lights
Scout Sam	Glider Pack	Cave Diving	Right Strap	Red Cap	Loud Whistles
Scout Skye	Decoder Ring	Track Finding	Right Strap	Red Cap	Loud Whistles
Ranger Rick	Grappling Hook	Cave Diving	Left Strap	Blue Cap	Bright Lights
Hiker Holly	Decoder Ring	Track Finding	Left Strap	Blue Cap	Loud Whistles
Captain Cody	Decoder Ring	Map Reading	Left Strap	Red Cap	Squeaky Toys
Tracker Tara	Pocket Compass	Track Finding	Left Strap	Red Cap	Squeaky Toys
Ranger Rosa	Glider Pack	Map Reading	Right Strap	Red Cap	Loud Whistles
Navigator Nate	Glider Pack	Track Finding	Right Strap	Blue Cap	Bright Lights
Agent Artie	Pocket Compass	Camp Building	Left Strap	Red Cap	Bright Lights
Guide Leo	Pocket Compass	Track Finding	Left Strap	Green Cap	Squeaky Toys
Pilot Pete	Decoder Ring	Map Reading	Left Strap	Green Cap	Loud Whistles
Guide Greta	Signal Flare	Map Reading	Left Strap	Red Cap	Loud Whistles
Pilot Penny	Pocket Compass	Cave Diving	Right Strap	Green Cap	Loud Whistles

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CLUE 1 Multiplication facts (1-12)

Maya counts several supply crates packed in equal rows on the dock to decode the first clue.

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



4 × 8 = ☐ → T

4 × 11 = ☐ → V

1 × 12 = ☐ → O

7 × 12 = ☐ → S

8 × 3 = ☐ → H

11 × 1 = ☐ → L

12 × 12 = ☐ → G

2 × 1 = ☐ → R

4 × 5 = ☐ → A

10 × 10 = ☐ → B

2 × 11 = ☐ → P

5 × 5 = ☐ → E

10 × 1 = ☐ → M

11 × 5 = ☐ → N

3 × 1 = ☐ → C

9 × 3 = ☐ → I

3 × 5 = ☐ → D

8 × 11 = ☐ → U

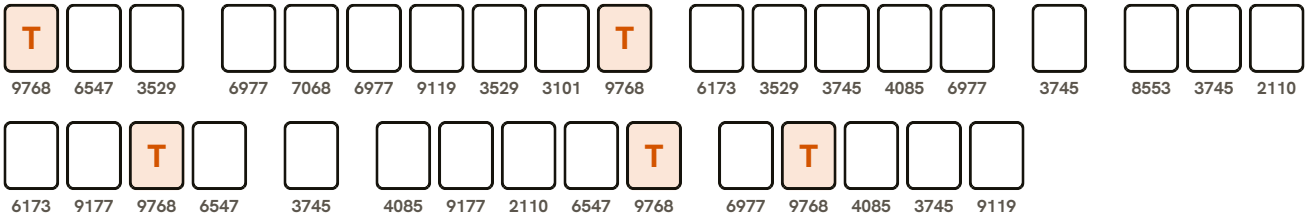
Scratch space:

CLUE 2

Addition

Maya adds up the total miles logged in the expedition journals to unlock the second note.

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



3972 + 5796 = ☐ → T

6246 + 2931 = ☐ → I

1352 + 2177 = ☐ → E

4459 + 2088 = ☐ → H

1216 + 894 = ☐ → G

1712 + 2373 = ☐ → R

3811 + 5308 = ☐ → P

1203 + 2542 = ☐ → A

4756 + 2221 = ☐ → S

2702 + 4366 = ☐ → U

2554 + 3619 = ☐ → W

3573 + 4980 = ☐ → B

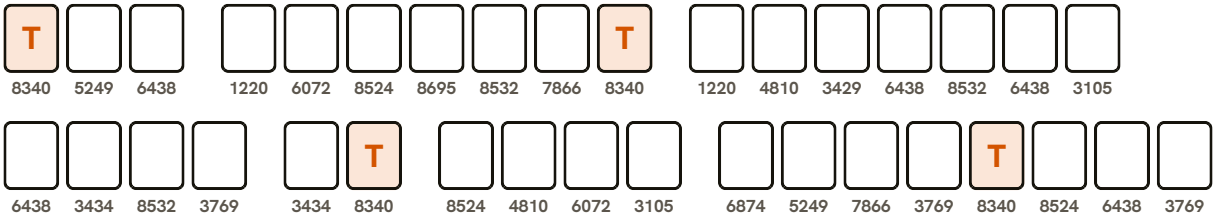
1155 + 1946 = ☐ → C

Scratch space:

CLUE 3 Subtraction

Maya calculates how many canteen refills remain after a day on the trail to reveal the third hint.

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



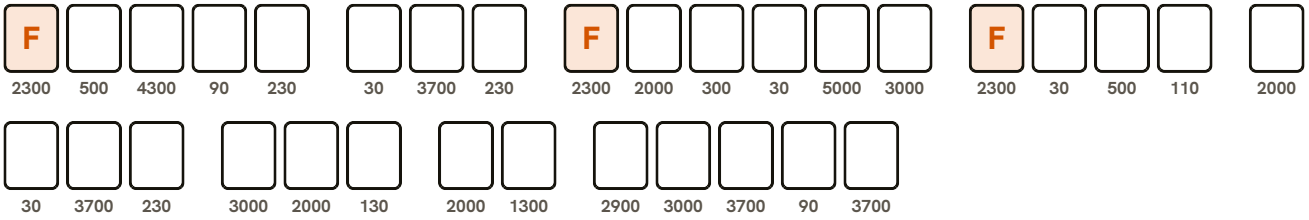
9584 - 1244 = ☐ → T	13390 - 4695 = ☐ → P	5817 - 1007 = ☐ → O
3432 - 327 = ☐ → D	5804 - 555 = ☐ → H	11613 - 3747 = ☐ → I
10225 - 3351 = ☐ → W	5838 - 2404 = ☐ → A	8310 - 4541 = ☐ → S
9425 - 3353 = ☐ → U	6340 - 2911 = ☐ → V	3958 - 2738 = ☐ → C
10262 - 1738 = ☐ → L	6501 - 63 = ☐ → E	9977 - 1445 = ☐ → R

Scratch space:

CLUE 4 Rounding

The digital scanner on the boat bridge only shows rounded altitude numbers for the fourth clue.

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



Round 2,310 to the nearest hundred ☐ → **F**

Round 2,858 to the nearest hundred ☐ → **S**

Round 227 to the nearest ten ☐ → **D**

Round 458 to the nearest hundred ☐ → **O**

Round 2,096 to the nearest thousand ☐ → **A**

Round 4,580 to the nearest thousand ☐ → **I**

Round 1,293 to the nearest hundred ☐ → **T**

Round 127 to the nearest ten ☐ → **P**

Round 343 to the nearest hundred ☐ → **B**

Round 88 to the nearest ten ☐ → **N**

Round 112 to the nearest ten ☐ → **M**

Round 4,333 to the nearest hundred ☐ → **U**

Round 2,668 to the nearest thousand ☐ → **C**

Round 3,736 to the nearest hundred ☐ → **E**

Round 32 to the nearest ten ☐ → **R**

Scratch space:

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

Maya splits the remaining energy bars equally among the scout patrols to decode the final clue.

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:

30 ÷ 5 = ☐	72 ÷ 8 = ☐	110 ÷ 11 = ☐	96 ÷ 8 = ☐	77 ÷ 11 = ☐
10 ÷ 2 = ☐	7 ÷ 7 = ☐	20 ÷ 10 = ☐	30 ÷ 10 = ☐	88 ÷ 8 = ☐
24 ÷ 6 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain swung across the ravine with a grappling hook, then set up a quick shelter with camp building.
2. The villain checked the direction with a pocket compass, then tied up the cargo using rope knotting.
3. The villain unlocked the ancient chest using a decoder ring, then used map reading to find the hidden path.
4. The villain soared past the jungle trees with a glider pack, then followed fresh footprints using track finding.
5. The villain swung across the ravine with a grappling hook, then used map reading to find the hidden path.
6. The villain unlocked the ancient chest using a decoder ring, then searched underwater tunnels with cave diving.
7. The villain shot a bright signal flare into the sky, then tied up the cargo using rope knotting.
8. The villain soared past the jungle trees with a glider pack, then used map reading to find the hidden path.
9. The villain unlocked the ancient chest using a decoder ring, then followed fresh footprints using track finding.
10. The villain soared past the jungle trees with a glider pack, then searched underwater tunnels with cave diving.
11. The villain unlocked the ancient chest using a decoder ring, then tied up the cargo using rope knotting.
12. The villain shot a bright signal flare into the sky, then set up a quick shelter with camp building.

TEACHER / PARENT

Answer Key

The Secret of Sunken Island

Culprit: Ranger Rosa

Glider Pack · Map Reading · Right Strap · Red Cap · Loud Whistles

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE SABOTEUR DOES NOT HAVE CAMP BUILDING"

4 × 8 = 32 (T) · 4 × 11 = 44 (V) · 1 × 12 = 12 (O) · 7 × 12 = 84 (S) · 8 × 3 = 24 (H) · 11 × 1 = 11 (L) · 12 × 12 = 144 (G) · 2 × 1 = 2 (R) · 4 × 5 = 20 (A) · 10 × 10 = 100 (B) · 2 × 11 = 22 (P) · 5 × 5 = 25 (E) · 10 × 1 = 10 (M) · 11 × 5 = 55 (N) · 3 × 1 = 3 (C) · 9 × 3 = 27 (I) · 3 × 5 = 15 (D) · 8 × 11 = 88 (U)

Clue 2 (Addition): "THE SUSPECT WEARS A BAG WITH A RIGHT STRAP"

3972 + 5796 = 9768 (T) · 6246 + 2931 = 9177 (I) · 1352 + 2177 = 3529 (E) · 4459 + 2088 = 6547 (H) · 1216 + 894 = 2110 (G) · 1712 + 2373 = 4085 (R) · 3811 + 5308 = 9119 (P) · 1203 + 2542 = 3745 (A) · 4756 + 2221 = 6977 (S) · 2702 + 4366 = 7068 (U) · 2554 + 3619 = 6173 (W) · 3573 + 4980 = 8553 (B) · 1155 + 1946 = 3101 (C)

Clue 3 (Subtraction): "THE CULPRIT COVERED EARS AT LOUD WHISTLES"

9584 - 1244 = 8340 (T) · 13390 - 4695 = 8695 (P) · 5817 - 1007 = 4810 (O) · 3432 - 327 = 3105 (D) · 5804 - 555 = 5249 (H) · 11613 - 3747 = 7866 (I) · 10225 - 3351 = 6874 (W) · 5838 - 2404 = 3434 (A) · 8310 - 4541 = 3769 (S) · 9425 - 3353 = 6072 (U) · 6340 - 2911 = 3429 (V) · 3958 - 2738 = 1220 (C) · 10262 - 1738 = 8524 (L) · 6501 - 63 = 6438 (E) · 9977 - 1445 = 8532 (R)

Clue 4 (Rounding): "FOUND RED FABRIC FROM A RED CAP AT SCENE"

Round 2,310 to the nearest hundred = 2300 (F) · Round 2,858 to the nearest hundred = 2900 (S) · Round 227 to the nearest ten = 230 (D) · Round 458 to the nearest hundred = 500 (O) · Round 2,096 to the nearest thousand = 2000 (A) · Round 4,580 to the nearest thousand = 5000 (I) · Round 1,293 to the nearest hundred = 1300 (T) · Round 127 to the nearest ten = 130 (P) · Round 343 to the nearest hundred = 300 (B) · Round 88 to the nearest ten = 90 (N) · Round 112 to the nearest ten = 110 (M) · Round 4,333 to the nearest hundred = 4300 (U) · Round 2,668 to the nearest thousand = 3000 (C) · Round 3,736 to the nearest hundred = 3700 (E) · Round 32 to the nearest ten = 30 (R)

Clue 5 (Division facts (1-12)): surviving statement is box 8 → Ranger Rosa

30 ÷ 5 = 6 · 72 ÷ 8 = 9 · 110 ÷ 11 = 10 · 96 ÷ 8 = 12 · 77 ÷ 11 = 7 · 10 ÷ 2 = 5 · 7 ÷ 7 = 1 · 20 ÷ 10 = 2 · 30 ÷ 10 = 3 · 88 ÷ 8 = 11 · 24 ÷ 6 = 4