# The Mystery of Whispering Island

Grade 5 math · Place value, Addition, Subtraction, Multiplication, Division · Reading level grades 5-6

**Detective:** _____ **Date:** _____

The Golden Compass of Whispering Island has vanished from the Grand Treehouse! A rogue explorer snatched it right before our big expedition. We must track them down before they find the Lost Temple first.

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

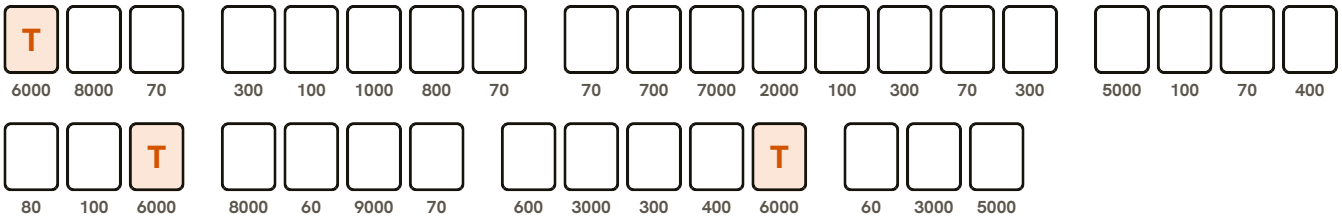
Cross off a row as each clue rules it out. The one left at the end is the culprit.

| NAME | SIGNATURE TOOL | SURVIVAL BADGE | NAVIGATION TOOL | EXPLORER HAT | FEAR |
|---|---|---|---|---|---|
| **Jessie Flint** | spyglass | knot tying | uses a map | pith helmet | scared of spiders |
| **Chris Pine** | spyglass | knot tying | uses a map | safari cap | dislikes mud |
| **Sam Oakley** | compact shovel | trail blazing | uses a map | safari cap | afraid of heights |
| **Sandy Banks** | compact shovel | weather tracking | uses a compass | bandana | dislikes mud |
| **Terry Moss** | climbing pick | trail blazing | uses a compass | pith helmet | afraid of heights |
| **Morgan Finch** | compact shovel | knot tying | uses a map | safari cap | scared of spiders |
| **Ren Hunter** | laser flashlight | fire making | uses a compass | safari cap | dislikes mud |
| **Jordan Wells** | grappling hook | weather tracking | uses a map | safari cap | dislikes mud |
| **Kelly Ridge** | grappling hook | first aid | uses a compass | safari cap | dislikes mud |
| **Val Valley** | climbing pick | fire making | uses a compass | safari cap | dislikes mud |
| **Taylor Brooks** | climbing pick | fire making | uses a compass | bandana | dislikes mud |
| **Pat Riley** | spyglass | weather tracking | uses a compass | safari cap | dislikes mud |
| **Ranger Evans** | spyglass | fire making | uses a compass | bandana | scared of spiders |
| **Casey Vance** | grappling hook | first aid | uses a map | safari cap | dislikes mud |
| **Camper Cody** | compact shovel | first aid | uses a compass | safari cap | scared of spiders |
| **Kit Carver** | climbing pick | trail blazing | uses a compass | safari cap | dislikes mud |
| **Alex Rivera** | spyglass | knot tying | uses a compass | safari cap | afraid of heights |
| **Tracker Thompson** | spyglass | trail blazing | uses a map | safari cap | dislikes mud |
| **Jamie Wilder** | compact shovel | knot tying | uses a map | safari cap | afraid of heights |
| **Skyler Cruz** | compact shovel | first aid | uses a compass | safari cap | dislikes mud |
| **Dana Stone** | spyglass | trail blazing | uses a map | bandana | dislikes mud |

## CLUE 1 Place value

We found a locked GPS device dropped near the treehouse ladder. To unlock the screen and reveal the first clue, we need to find the digit in the thousands place of the altitude reading.

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




What is the value of the 6 in 26,799? ☐ → T

What is the value of the 7 in 935,274? ☐ → E

What is the value of the 7 in 987,862? ☐ → P

What is the value of the 4 in 897,420? ☐ → S

What is the value of the 3 in 863,215? ☐ → I

What is the value of the 9 in 69,208? ☐ → V

What is the value of the 8 in 498,562? ☐ → H

What is the value of the 8 in 553,866? ☐ → U

What is the value of the 6 in 19,631? ☐ → F

What is the value of the 2 in 32,074? ☐ → L

What is the value of the 3 in 94,321? ☐ → R

What is the value of the 1 in 708,173? ☐ → O

What is the value of the 5 in 905,939? ☐ → D

What is the value of the 7 in 212,741? ☐ → X

What is the value of the 1 in 521,583? ☐ → G

What is the value of the 6 in 518,067? ☐ → A

What is the value of the 8 in 400,484? ☐ → N

Scratch space:

## CLUE 2 Addition

> A crumpled packing list lies on the trail. We must add up the weights of the canteen, the sleeping bag, and the portable radio to see how much gear the runaway carried.

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

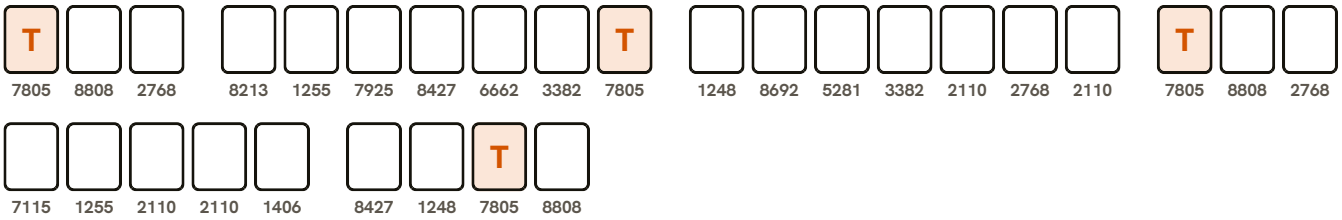

| | | |
|---|---|---|
| 3670 + 2984 = ☐ → T | 1938 + 3528 = ☐ → G | 2315 + 3602 = ☐ → S |
| 1096 + 1369 = ☐ → H | 4030 + 4297 = ☐ → N | 1042 + 1661 = ☐ → A |
| 1701 + 1184 = ☐ → M | 938 + 1556 = ☐ → W | 4230 + 3681 = ☐ → O |
| 3058 + 4591 = ☐ → I | 666 + 1518 = ☐ → E | 3234 + 4943 = ☐ → C |
| 4818 + 4823 = ☐ → L | 3391 + 2489 = ☐ → P | 2114 + 1271 = ☐ → V |

Scratch space:

## CLUE 3 Subtraction

> Our team checked the river depth gauge near the rope bridge. By subtracting yesterday's low-water level from today's high-water mark, we can calculate how deep the crossing was.

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



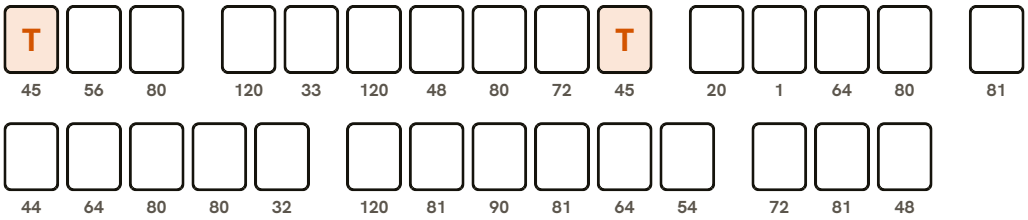

| | | |
|---|---|---|
| 10638 - 2833 = ☐ → T | 5599 - 318 = ☐ → O | 2927 - 1672 = ☐ → U |
| 12412 - 3985 = ☐ → P | 4137 - 2731 = ☐ → Y | 11706 - 3014 = ☐ → V |
| 11464 - 3539 = ☐ → L | 6743 - 4633 = ☐ → D | 9097 - 2435 = ☐ → R |
| 4063 - 681 = ☐ → I | 12370 - 4157 = ☐ → C | 2580 - 1332 = ☐ → A |
| 10729 - 1921 = ☐ → H | 5094 - 2326 = ☐ → E | 7707 - 592 = ☐ → M |

Scratch space:

## CLUE 4 Multiplication facts (1-12)

> Ancient stone stairs lead up the misty ridge in equal rows. If there are several steps in each row, multiplying them will reveal the total steps the suspect climbed to escape.

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




| | | | | |
|---|---|---|---|---|
| 9 × 5 = ☐ → T | 12 × 10 = ☐ → S | 7 × 8 = ☐ → H | | |
| 10 × 8 = ☐ → E | 5 × 4 = ☐ → W | 8 × 8 = ☐ → R | 9 × 9 = ☐ → A | |
| 10 × 9 = ☐ → F | 8 × 4 = ☐ → N | 11 × 4 = ☐ → G | | |
| 9 × 6 = ☐ → I | 1 × 1 = ☐ → O | 12 × 6 = ☐ → C | 8 × 6 = ☐ → P | |
| 3 × 11 = ☐ → U | | | | |

Scratch space:

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

> We recovered a bundle of climbing ropes left at the gorge. If we divide the total length of the rope evenly among the search team members, we will find how many meters each scout gets.

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:**

| | | | | |
|---|---|---|---|---|
| 9 ÷ 3 = ☐ | 63 ÷ 9 = ☐ | 84 ÷ 7 = ☐ | 36 ÷ 9 = ☐ | 25 ÷ 5 = ☐ |
| 10 ÷ 1 = ☐ | 12 ÷ 2 = ☐ | 22 ÷ 11 = ☐ | 96 ÷ 12 = ☐ | 99 ÷ 11 = ☐ |
| 9 ÷ 9 = ☐ | | | | |

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

1. The villain scouted the path ahead with a spyglass, then secured the escape rope with expert knot tying.
2. The villain scaled the muddy cliff using a climbing pick, then timed the quick getaway using weather tracking.
3. The villain scaled the muddy cliff using a climbing pick, then marked the getaway route by trail blazing.
4. The villain cleared the dark cave with a laser flashlight, then timed the quick getaway using weather tracking.
5. The villain scaled the muddy cliff using a climbing pick, then patched up a scraped knee with first aid.
6. The villain swung across the gorge using a grappling hook, then patched up a scraped knee with first aid.
7. The villain scaled the muddy cliff using a climbing pick, then warmed up the camp by fire making.
8. The villain cleared the dark cave with a laser flashlight, then secured the escape rope with expert knot tying.
9. The villain cleared the dark cave with a laser flashlight, then marked the getaway route by trail blazing.
10. The villain dug up the hidden trail marker with a compact shovel, then secured the escape rope with expert knot tying.
11. The villain scouted the path ahead with a spyglass, then timed the quick getaway using weather tracking.
12. The villain cleared the dark cave with a laser flashlight, then warmed up the camp by fire making.

TEACHER / PARENT

# Answer Key

The Mystery of Whispering Island

## Culprit: Pat Riley

spyglass · weather tracking · uses a compass · safari cap · dislikes mud

Trail: Start 21 → Clue 1 17 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

### Clue 1 (Place value): "THE ROGUE EXPLORER DOES NOT HAVE FIRST AID"

What is the value of the 6 in 26,799? = 6000 (T) · What is the value of the 7 in 935,274? = 70 (E) · What is the value of the 7 in 987,862? = 7000 (P) · What is the value of the 4 in 897,420? = 400 (S) · What is the value of the 3 in 863,215? = 3000 (I) · What is the value of the 9 in 69,208? = 9000 (V) · What is the value of the 8 in 498,562? = 8000 (H) · What is the value of the 8 in 553,866? = 800 (U) · What is the value of the 6 in 19,631? = 600 (F) · What is the value of the 2 in 32,074? = 2000 (L) · What is the value of the 3 in 94,321? = 300 (R) · What is the value of the 1 in 708,173? = 100 (O) · What is the value of the 5 in 905,939? = 5000 (D) · What is the value of the 7 in 212,741? = 700 (X) · What is the value of the 1 in 521,583? = 1000 (G) · What is the value of the 6 in 518,067? = 60 (A) · What is the value of the 8 in 400,484? = 80 (N)

### Clue 2 (Addition): "THE VILLAIN NAVIGATES WITH A COMPASS"

3670 + 2984 = 6654 (T) · 1938 + 3528 = 5466 (G) · 2315 + 3602 = 5917 (S) · 1096 + 1369 = 2465 (H) · 4030 + 4297 = 8327 (N) · 1042 + 1661 = 2703 (A) · 1701 + 1184 = 2885 (M) · 938 + 1556 = 2494 (W) · 4230 + 3681 = 7911 (O) · 3058 + 4591 = 7649 (I) · 666 + 1518 = 2184 (E) · 3234 + 4943 = 8177 (C) · 4818 + 4823 = 9641 (L) · 3391 + 2489 = 5880 (P) · 2114 + 1271 = 3385 (V)

### Clue 3 (Subtraction): "THE CULPRIT AVOIDED THE MUDDY PATH"

10638 - 2833 = 7805 (T) · 5599 - 318 = 5281 (O) · 2927 - 1672 = 1255 (U) · 12412 - 3985 = 8427 (P) · 4137 - 2731 = 1406 (Y) · 11706 - 3014 = 8692 (V) · 11464 - 3539 = 7925 (L) · 6743 - 4633 = 2110 (D) · 9097 - 2435 = 6662 (R) · 4063 - 681 = 3382 (I) · 12370 - 4157 = 8213 (C) · 2580 - 1332 = 1248 (A) · 10729 - 1921 = 8808 (H) · 5094 - 2326 = 2768 (E) · 7707 - 592 = 7115 (M)

### Clue 4 (Multiplication facts (1-12)): "THE SUSPECT WORE A GREEN SAFARI CAP"

9 × 5 = 45 (T) · 12 × 10 = 120 (S) · 7 × 8 = 56 (H) · 10 × 8 = 80 (E) · 5 × 4 = 20 (W) · 8 × 8 = 64 (R) · 9 × 9 = 81 (A) · 10 × 9 = 90 (F) · 8 × 4 = 32 (N) · 11 × 4 = 44 (G) · 9 × 6 = 54 (I) · 1 × 1 = 1 (O) · 12 × 6 = 72 (C) · 8 × 6 = 48 (P) · 3 × 11 = 33 (U)

### Clue 5 (Division facts (1-12)): surviving statement is box 11 → Pat Riley

9 ÷ 3 = 3 · 63 ÷ 9 = 7 · 84 ÷ 7 = 12 · 36 ÷ 9 = 4 · 25 ÷ 5 = 5 · 10 ÷ 1 = 10 · 12 ÷ 2 = 6 · 22 ÷ 11 = 2 · 96 ÷ 12 = 8 · 99 ÷ 11 = 9 · 9 ÷ 9 = 1