



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.

T																			
6000	8000	70	300	100	1000	800	70	70	700	7000	2000	100	300	70	300	5000	100	70	400
		T									T								
80	100	6000	8000	60	9000	70	600	3000	300	400	6000	60	3000	5000					

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

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.

Diagram showing two rows of boxes with numbers and a 'T' marker. The top row has 18 boxes with numbers: 6654, 2465, 2184, 3385, 7649, 9641, 9641, 2703, 7649, 8327, 8327, 2703, 3385, 7649, 5466, 2703, 6654, 2184, 5917. The bottom row has 12 boxes with numbers: 2494, 7649, 6654, 2465, 2703, 8177, 7911, 2885, 5880, 2703, 5917, 5917. The 'T' marker is in the 17th box of the top row and the 3rd box of the bottom row.

$$3670 + 2984 = \boxed{} \rightarrow \boxed{\text{T}}$$

$1938 + 3528 = \boxed{} \rightarrow \boxed{\mathbf{G}}$

$$2315 + 3602 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$1096 + 1369 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$4030 + 4297 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$1042 + 1661 = \boxed{} \rightarrow \boxed{\mathbf{A}}$$

$$1701 + 1184 = \boxed{} \rightarrow \boxed{\text{M}}$$

$$938 + 1556 = \boxed{} \rightarrow \boxed{\text{W}}$$

$4230 + 3681 = \boxed{} \rightarrow \boxed{0}$

$$3058 + 4591 = \boxed{} \rightarrow \boxed{\text{I}}$$

$$666 + 1518 = \boxed{} \rightarrow \boxed{\text{E}}$$

$3234 + 4943 = \boxed{} \rightarrow \boxed{\text{C}}$

$$4818 + 4823 = \boxed{} \rightarrow \boxed{\text{L}}$$

$3391 + 2489 = \boxed{} \rightarrow \boxed{\text{P}}$

$$2114 + 1271 = \boxed{} \rightarrow \boxed{\mathbf{V}}$$

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.

T										T								T		
7805	8808	2768	8213	1255	7925	8427	6662	3382	7805	1248	8692	5281	3382	2110	2768	2110	7805	8808	2768	
								T												
7115	1255	2110	2110	1406	8427	1248	7805	8808												

$10638 - 2833 = \square \rightarrow \boxed{\text{T}}$

$5599 - 318 = \square \rightarrow \boxed{\text{O}}$

$2927 - 1672 = \square \rightarrow \boxed{\text{U}}$

$12412 - 3985 = \square \rightarrow \boxed{\text{P}}$

$4137 - 2731 = \square \rightarrow \boxed{\text{Y}}$

$11706 - 3014 = \square \rightarrow \boxed{\text{V}}$

$11464 - 3539 = \square \rightarrow \boxed{\text{L}}$

$6743 - 4633 = \square \rightarrow \boxed{\text{D}}$

$9097 - 2435 = \square \rightarrow \boxed{\text{R}}$

$4063 - 681 = \square \rightarrow \boxed{\text{I}}$

$12370 - 4157 = \square \rightarrow \boxed{\text{C}}$

$2580 - 1332 = \square \rightarrow \boxed{\text{A}}$

$10729 - 1921 = \square \rightarrow \boxed{\text{H}}$

$5094 - 2326 = \square \rightarrow \boxed{\text{E}}$

$7707 - 592 = \square \rightarrow \boxed{\text{M}}$

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.

T										T					
45	56	80	120	33	120	48	80	72	45	20	1	64	80	81	
44	64	80	80	32	120	81	90	81	64	54	72	81	48		

$9 \times 5 = \square \rightarrow$ T	$12 \times 10 = \square \rightarrow$ S	$7 \times 8 = \square \rightarrow$ H	
$10 \times 8 = \square \rightarrow$ E	$5 \times 4 = \square \rightarrow$ W	$8 \times 8 = \square \rightarrow$ R	$9 \times 9 = \square \rightarrow$ A
$10 \times 9 = \square \rightarrow$ F	$8 \times 4 = \square \rightarrow$ N	$11 \times 4 = \square \rightarrow$ G	
$9 \times 6 = \square \rightarrow$ I	$1 \times 1 = \square \rightarrow$ O	$12 \times 6 = \square \rightarrow$ C	$8 \times 6 = \square \rightarrow$ P
$3 \times 11 = \square \rightarrow$ 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:

$9 \div 3 = \boxed{}$

$63 \div 9 = \boxed{}$

$84 \div 7 = \boxed{}$

$36 \div 9 = \boxed{}$

$25 \div 5 = \boxed{}$

$10 \div 1 = \boxed{}$

$12 \div 2 = \boxed{}$

$22 \div 11 = \boxed{}$

$96 \div 12 = \boxed{}$

$99 \div 11 = \boxed{}$

$9 \div 9 = \boxed{}$

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.

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