



The Case of the Missing Ruby Idol

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

Detective: _____ **Date:** _____

The golden monkey temple was quiet until the famous Ruby Idol vanished from its stone pedestal! Deep jungle tracks lead in every direction. Our detective team must track down the Temple Thief before they escape the island.

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 Temple Thief is _____

Possible suspects

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

NAME	TEMPLE GEAR	SECRET GADGET	COMPASS WRIST	BANDANA COLOR	JUNGLE TRAP
Lily Trail	Torch	Stun Net	Right Wrist	Green Bandana	Snare Loop
Leo Ranger	Grappling Hook	Night Goggles	Left Wrist	Red Bandana	Banana Peel
Noah North	Binoculars	Stun Net	Right Wrist	Blue Bandana	Banana Peel
Cole Cave	Grappling Hook	Stun Net	Left Wrist	Red Bandana	Mud Pit
Mia Moss	Binoculars	Decoy Whistle	Left Wrist	Red Bandana	Mud Pit
Max Map	Map Scroll	Stun Net	Right Wrist	Red Bandana	Snare Loop
Clara Cruz	Map Scroll	Decoy Whistle	Left Wrist	Red Bandana	Mud Pit
Felix Vine	Map Scroll	Flashlight	Left Wrist	Blue Bandana	Snare Loop
Luke Leaf	Binoculars	Stun Net	Left Wrist	Blue Bandana	Snare Loop
Zoe Zen	Binoculars	Night Goggles	Left Wrist	Blue Bandana	Mud Pit
Ruby Ridge	Binoculars	Night Goggles	Right Wrist	Blue Bandana	Banana Peel
Ben Boots	Machete	Flashlight	Left Wrist	Red Bandana	Mud Pit
Ethan Explorer	Machete	Night Goggles	Right Wrist	Red Bandana	Mud Pit
Chloe Camp	Machete	Stun Net	Left Wrist	Green Bandana	Snare Loop
Nora River	Binoculars	Flashlight	Left Wrist	Red Bandana	Banana Peel
Ivy Isle	Torch	Night Goggles	Right Wrist	Green Bandana	Banana Peel
Ella Echo	Machete	Flashlight	Right Wrist	Green Bandana	Mud Pit
Maya Woods	Grappling Hook	Decoy Whistle	Left Wrist	Red Bandana	Mud Pit
Sam Tracker	Grappling Hook	Decoy Whistle	Right Wrist	Red Bandana	Banana Peel
Indy Scout	Torch	Stun Net	Right Wrist	Red Bandana	Mud Pit
Owen Outpost	Map Scroll	Stun Net	Left Wrist	Red Bandana	Banana Peel

CLUE 1 Addition

We counted all the coconut canteens collected from both base camps to find our first clue.

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

T			T										T				
6359	4174	5809	6359	4174	8268	5809	7705	9705	8268	9705	2482	5985	6359	6624	6160	5809	7292

									T
7705	2715	7292	6160	4174	2715	8268	9444	4174	6359

$3648 + 2711 = \square \rightarrow \text{T}$	$2344 + 4948 = \square \rightarrow \text{A}$	$4450 + 2174 = \square \rightarrow \text{U}$
$5286 + 2419 = \square \rightarrow \text{F}$	$3170 + 2639 = \square \rightarrow \text{E}$	$6422 + 3022 = \square \rightarrow \text{G}$
$847 + 1868 = \square \rightarrow \text{L}$	$4231 + 1929 = \square \rightarrow \text{S}$	$757 + 1725 = \square \rightarrow \text{N}$
$2236 + 1938 = \square \rightarrow \text{H}$	$3171 + 6534 = \square \rightarrow \text{D}$	$2928 + 5340 = \square \rightarrow \text{I}$
$3968 + 2017 = \square \rightarrow \text{O}$		

Scratch space:

CLUE 2 Rounding

The ancient temple door scanner rounded our total step count to the nearest hundred.

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

W									W								
170	130	2000	370	430	2300	2300	2300	30	170	30	3000	4300	1300	3700	30	2300	2300

								W					
4300	370	2000	2900	430	9000	430	500	2000	170	20	130	2300	2000

Round 171 to the nearest ten → **W**

Round 16 to the nearest ten → **R**

Round 496 to the nearest hundred → **F**

Round 374 to the nearest ten → **N**

Round 29 to the nearest ten → **A**

Round 426 to the nearest ten → **E**

Round 130 to the nearest ten → **I**

Round 2,681 to the nearest thousand → **C**

Round 1,601 to the nearest thousand → **T**

Round 2,293 to the nearest hundred → **S**

Round 4,291 to the nearest hundred → **O**

Round 1,290 to the nearest hundred → **M**

Round 3,722 to the nearest hundred → **P**

Round 2,889 to the nearest hundred → **H**

Round 8,529 to the nearest thousand → **L**

Scratch space:

CLUE 3
Subtraction

We subtracted the used torch logs from the total pile to see what was stolen.

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

T																			
6402	3123	6009	7922	6713	7922	1202	6009	3163	6402	8715	7085	6402	7922	6402	6713	3163	7083		
2328	3608	7779	1116	6713	1237	1202	2328	6402	6402	7943	7779	1202							

$8780 - 2378 = \square \rightarrow \text{T}$

$5121 - 4005 = \square \rightarrow \text{M}$

$10277 - 2334 = \square \rightarrow \text{R}$

$8053 - 4445 = \square \rightarrow \text{N}$

$9133 - 418 = \square \rightarrow \text{G}$

$6604 - 4276 = \square \rightarrow \text{I}$

$11142 - 4059 = \square \rightarrow \text{K}$

$10694 - 2915 = \square \rightarrow \text{A}$

$7052 - 339 = \square \rightarrow \text{U}$

$3882 - 2680 = \square \rightarrow \text{P}$

$7762 - 4639 = \square \rightarrow \text{H}$

$10732 - 4723 = \square \rightarrow \text{E}$

$11651 - 3729 = \square \rightarrow \text{S}$

$11830 - 4745 = \square \rightarrow \text{O}$

$6304 - 3141 = \square \rightarrow \text{C}$

$1910 - 673 = \square \rightarrow \text{D}$

Scratch space:

CLUE 4

Multiplication facts (1-12)

We checked four wooden crates that each held six brass coins to read the note inside.

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

R						R												
11	12	99	16	108	72	11	80	66	33	108	100	18	108	60	45	1	12	99

80	60	18	42	12	72	25	100	42	12	100	

$11 \times 1 = \square \rightarrow \text{R}$

$8 \times 2 = \square \rightarrow \text{F}$

$1 \times 1 = \square \rightarrow \text{L}$

$11 \times 9 = \square \rightarrow \text{D}$

$5 \times 5 = \square \rightarrow \text{U}$

$8 \times 10 = \square \rightarrow \text{I}$

$6 \times 10 = \square \rightarrow \text{N}$

$4 \times 3 = \square \rightarrow \text{E}$

$9 \times 8 = \square \rightarrow \text{B}$

$11 \times 6 = \square \rightarrow \text{C}$

$6 \times 7 = \square \rightarrow \text{H}$

$5 \times 9 = \square \rightarrow \text{G}$

$12 \times 9 = \square \rightarrow \text{A}$

$3 \times 11 = \square \rightarrow \text{W}$

$9 \times 2 = \square \rightarrow \text{T}$

$10 \times 10 = \square \rightarrow \text{S}$

Scratch space:

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

We shared twenty trail bars equally among five scout teams to unlock the secret code.

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:

$18 \div 9 = \square$

$12 \div 1 = \square$

$90 \div 9 = \square$

$49 \div 7 = \square$

$24 \div 6 = \square$

$72 \div 8 = \square$

$11 \div 1 = \square$

$8 \div 8 = \square$

$45 \div 9 = \square$

$18 \div 3 = \square$

$48 \div 6 = \square$

Step 2 - cross out the sentence with each answer:

1. The villain lit up the dark cave with a torch, then escaped into thick fog with a smoke bomb.
2. The villain spied on the camp with binoculars, then tricked the guards using a decoy whistle.
3. The villain swung across the pit with a grappling hook, then tricked the guards using a decoy whistle.
4. The villain swung across the pit with a grappling hook, then guided the way using a flashlight.
5. The villain marked the path using a map scroll, then trapped the guard dog with a stun net.
6. The villain hacked through vines with a machete, then escaped into thick fog with a smoke bomb.
7. The villain swung across the pit with a grappling hook, then escaped into thick fog with a smoke bomb.
8. The villain spied on the camp with binoculars, then crept past bats with night goggles.
9. The villain marked the path using a map scroll, then crept past bats with night goggles.
10. The villain swung across the pit with a grappling hook, then trapped the guard dog with a stun net.
11. The villain marked the path using a map scroll, then escaped into thick fog with a smoke bomb.
12. The villain marked the path using a map scroll, then tricked the guards using a decoy whistle.

Answer Key

The Case of the Missing Ruby Idol

Culprit: Maya Woods

Grappling Hook · Decoy Whistle · Left Wrist · Red Bandana · Mud Pit

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

Clue 1 (Addition): "THE THIEF DID NOT USE A FLASHLIGHT"

$3648 + 2711 = 6359$ (T) · $2344 + 4948 = 7292$ (A) · $4450 + 2174 = 6624$ (U) · $5286 + 2419 = 7705$ (F) · $3170 + 2639 = 5809$ (E) · $6422 + 3022 = 9444$ (G) · $847 + 1868 = 2715$ (L) · $4231 + 1929 = 6160$ (S) · $757 + 1725 = 2482$ (N) · $2236 + 1938 = 4174$ (H) · $3171 + 6534 = 9705$ (D) · $2928 + 5340 = 8268$ (I) · $3968 + 2017 = 5985$ (O)

Clue 2 (Rounding): "WITNESS SAW A COMPASS ON THE LEFT WRIST"

Round 171 to the nearest ten = 170 (W) · Round 16 to the nearest ten = 20 (R) · Round 496 to the nearest hundred = 500 (F) · Round 374 to the nearest ten = 370 (N) · Round 29 to the nearest ten = 30 (A) · Round 426 to the nearest ten = 430 (E) · Round 130 to the nearest ten = 130 (I) · Round 2,681 to the nearest thousand = 3000 (C) · Round 1,601 to the nearest thousand = 2000 (T) · Round 2,293 to the nearest hundred = 2300 (S) · Round 4,291 to the nearest hundred = 4300 (O) · Round 1,290 to the nearest hundred = 1300 (M) · Round 3,722 to the nearest hundred = 3700 (P) · Round 2,889 to the nearest hundred = 2900 (H) · Round 8,529 to the nearest thousand = 9000 (L)

Clue 3 (Subtraction): "THE SUSPECT GOT STUCK IN A MUD PIT TRAP"

$8780 - 2378 = 6402$ (T) · $5121 - 4005 = 1116$ (M) · $10277 - 2334 = 7943$ (R) · $8053 - 4445 = 3608$ (N) · $9133 - 418 = 8715$ (G) · $6604 - 4276 = 2328$ (I) · $11142 - 4059 = 7083$ (K) · $10694 - 2915 = 7779$ (A) · $7052 - 339 = 6713$ (U) · $3882 - 2680 = 1202$ (P) · $7762 - 4639 = 3123$ (H) · $10732 - 4723 = 6009$ (E) · $11651 - 3729 = 7922$ (S) · $11830 - 4745 = 7085$ (O) · $6304 - 3141 = 3163$ (C) · $1910 - 673 = 1237$ (D)

Clue 4 (Multiplication facts (1-12)): "RED FABRIC WAS TANGLED IN THE BUSHES"

$11 \times 1 = 11$ (R) · $8 \times 2 = 16$ (F) · $1 \times 1 = 1$ (L) · $11 \times 9 = 99$ (D) · $5 \times 5 = 25$ (U) · $8 \times 10 = 80$ (I) · $6 \times 10 = 60$ (N) · $4 \times 3 = 12$ (E) · $9 \times 8 = 72$ (B) · $11 \times 6 = 66$ (C) · $6 \times 7 = 42$ (H) · $5 \times 9 = 45$ (G) · $12 \times 9 = 108$ (A) · $3 \times 11 = 33$ (W) · $9 \times 2 = 18$ (T) · $10 \times 10 = 100$ (S)

Clue 5 (Division facts (1-12)): surviving statement is box 3 → Maya Woods

$18 \div 9 = 2$ · $12 \div 1 = 12$ · $90 \div 9 = 10$ · $49 \div 7 = 7$ · $24 \div 6 = 4$ · $72 \div 8 = 9$ · $11 \div 1 = 11$ · $8 \div 8 = 1$ · $45 \div 9 = 5$ · $18 \div 3 = 6$ · $48 \div 6 = 8$