



The Lost Compass of Sun Valley

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

Detective: _____ Date: _____

Someone snuck into the camp tent and swapped the golden compass with a painted rock! The team needs your detective skills to inspect the clues and catch the culprit before sunset.

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	PRIMARY GEAR	TRICKY TOOL	DOMINANT HAND	HAIR STYLE	SECRET WEAKNESS
Rover Rex	Grappling Hook	Smoke Bomb	Left Handed	Neon Yellow Hair	Loud Bugle Horn
Finder Fred	Grappling Hook	Flash Powder	Left Handed	Dark Braided Hair	Itchy Jungle Ferns
Agent Maya	Compass Watch	Stun Whistle	Right Handed	Dark Braided Hair	Squirting Water Toy
Surveyor Sal	Compass Watch	Net Launcher	Left Handed	Neon Yellow Hair	Squirting Water Toy
Digger Dan	Grappling Hook	Decoy Map	Left Handed	Neon Yellow Hair	Squirting Water Toy
Tracker Tina	Pocket Torch	Flash Powder	Left Handed	Neon Yellow Hair	Itchy Jungle Ferns
Traverser Tom	Compass Watch	Flash Powder	Left Handed	Dark Braided Hair	Itchy Jungle Ferns
Trekker Tess	Grappling Hook	Net Launcher	Left Handed	Neon Yellow Hair	Loud Bugle Horn
Voyager Vera	Grappling Hook	Flash Powder	Left Handed	Bright Red Hair	Loud Bugle Horn
Ranger Rita	Pocket Torch	Stun Whistle	Right Handed	Dark Braided Hair	Squirting Water Toy
Climber Cliff	Grappling Hook	Decoy Map	Left Handed	Dark Braided Hair	Loud Bugle Horn
Captain Leo	Signal Mirror	Decoy Map	Right Handed	Dark Braided Hair	Itchy Jungle Ferns
Hiker Hank	Signal Mirror	Smoke Bomb	Left Handed	Bright Red Hair	Squirting Water Toy
Pioneer Pam	Rope Launcher	Stun Whistle	Right Handed	Bright Red Hair	Loud Bugle Horn
Jungle Jack	Rope Launcher	Flash Powder	Left Handed	Neon Yellow Hair	Itchy Jungle Ferns
Pathfinder Penny	Rope Launcher	Stun Whistle	Left Handed	Neon Yellow Hair	Itchy Jungle Ferns
Scouter Skyler	Grappling Hook	Flash Powder	Left Handed	Neon Yellow Hair	Itchy Jungle Ferns
Guide Grace	Rope Launcher	Net Launcher	Left Handed	Dark Braided Hair	Loud Bugle Horn
Scout Scott	Pocket Torch	Net Launcher	Left Handed	Neon Yellow Hair	Itchy Jungle Ferns
Outrider Owen	Pocket Torch	Flash Powder	Right Handed	Neon Yellow Hair	Loud Bugle Horn
Navigator Ned	Rope Launcher	Net Launcher	Right Handed	Neon Yellow Hair	Itchy Jungle Ferns

CLUE 1
Rounding

The camp radar screen rounded the thief distance to the nearest hundred meters to estimate their speed.

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

T																T
3000	130	1300	7000	1700	9000	9000	1100	1700	70	3700	900	1300	290	70	900	3000

				T						T				
2900	290	1300	1100	290	3000	2900	70	430	130	1700	290	3000	9000	1300

Round 3,244 to the nearest thousand → **T**

Round 434 to the nearest ten → **W**

Round 2,902 to the nearest hundred → **U**

Round 9,031 to the nearest thousand → **L**

Round 131 to the nearest ten → **H**

Round 1,264 to the nearest hundred → **E**

Round 1,723 to the nearest hundred → **I**

Round 290 to the nearest ten → **S**

Round 3,708 to the nearest hundred → **D**

Round 6,694 to the nearest thousand → **V**

Round 72 to the nearest ten → **N**

Round 931 to the nearest hundred → **O**

Round 1,065 to the nearest hundred → **A**

Scratch space:

CLUE 2 Addition

You tally up all the supplies found near the tent site to count how many items were moved.

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

W									W					
4411	6979	7428	3411	2662	8113	8113	8113	6042	4411	6042	3956	2662	7229	7428

9294	6042	3411	8118	2662	8118	7711	6042	6508	7711	6042	7015	2662	4568

$2930 + 1481 = \square \rightarrow \boxed{W}$

$1746 + 916 = \square \rightarrow \boxed{E}$

$5252 + 2866 = \square \rightarrow \boxed{D}$

$4037 + 3674 = \square \rightarrow \boxed{M}$

$2868 + 4111 = \square \rightarrow \boxed{I}$

$2079 + 3963 = \square \rightarrow \boxed{A}$

$4045 + 2463 = \square \rightarrow \boxed{P}$

$5174 + 2939 = \square \rightarrow \boxed{S}$

$3865 + 5429 = \square \rightarrow \boxed{H}$

$1760 + 2196 = \square \rightarrow \boxed{L}$

$1658 + 2910 = \square \rightarrow \boxed{R}$

$3790 + 3638 = \square \rightarrow \boxed{T}$

$4299 + 2930 = \square \rightarrow \boxed{F}$

$1655 + 1756 = \square \rightarrow \boxed{N}$

$4498 + 2517 = \square \rightarrow \boxed{K}$

Scratch space:

CLUE 3

Subtraction

You compare the total number of gold coins before and after the raid to see how many are missing.

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

I															
7367	6793	3013	6697	2962	5909	2262	8897	6367	1578	7598	7200	7598	6182	8897	5570

											I			
5570	6793	1073	5436	5436	7598	5302	6793	6697	7598	6793	6697	7367	7598	7200

$11269 - 3902 = \square \rightarrow \boxed{\text{I}}$

$11002 - 4820 = \square \rightarrow \boxed{\text{R}}$

$8288 - 2379 = \square \rightarrow \boxed{\text{J}}$

$8196 - 2626 = \square \rightarrow \boxed{\text{S}}$

$7733 - 2431 = \square \rightarrow \boxed{\text{D}}$

$2473 - 211 = \square \rightarrow \boxed{\text{U}}$

$5522 - 86 = \square \rightarrow \boxed{\text{P}}$

$9744 - 2544 = \square \rightarrow \boxed{\text{F}}$

$7754 - 4741 = \square \rightarrow \boxed{\text{C}}$

$9130 - 1532 = \square \rightarrow \boxed{\text{E}}$

$3453 - 491 = \square \rightarrow \boxed{\text{Y}}$

$7202 - 409 = \square \rightarrow \boxed{\text{T}}$

$13317 - 4420 = \square \rightarrow \boxed{\text{N}}$

$8057 - 1360 = \square \rightarrow \boxed{\text{H}}$

$9030 - 2663 = \square \rightarrow \boxed{\text{G}}$

$2643 - 1570 = \square \rightarrow \boxed{\text{O}}$

$4280 - 2702 = \square \rightarrow \boxed{\text{L}}$

Scratch space:

CLUE 4
Multiplication facts (1-12)

You examine identical supply boxes arranged in equal rows near the footprints.

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

N			N														
9	16	7	9	2	16	132	132	7	99	84	88	77	121	99	88	72	
								N									
72	66	7	10	10	16	25	7	9	88	132	16	88	8				

$9 \times 1 = \square \rightarrow$ N	$8 \times 1 = \square \rightarrow$ F	$12 \times 6 = \square \rightarrow$ S
$1 \times 10 = \square \rightarrow$ T	$4 \times 4 = \square \rightarrow$ E	$7 \times 1 = \square \rightarrow$ O
$12 \times 7 = \square \rightarrow$ H	$5 \times 5 = \square \rightarrow$ D	$11 \times 12 = \square \rightarrow$ L
$7 \times 11 = \square \rightarrow$ I	$11 \times 6 = \square \rightarrow$ P	$2 \times 1 = \square \rightarrow$ Y
$11 \times 8 = \square \rightarrow$ A	$11 \times 9 = \square \rightarrow$ W	$11 \times 11 = \square \rightarrow$ R

Scratch space:

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

You divide the clues evenly among the junior rangers so everyone gets a fair share to examine.

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:

$24 \div 4 = \boxed{}$

$40 \div 4 = \boxed{}$

$6 \div 2 = \boxed{}$

$24 \div 2 = \boxed{}$

$10 \div 5 = \boxed{}$

$8 \div 2 = \boxed{}$

$10 \div 2 = \boxed{}$

$88 \div 8 = \boxed{}$

$84 \div 12 = \boxed{}$

$48 \div 6 = \boxed{}$

$6 \div 6 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain lit up the trail with a pocket torch, then dropped a smoke bomb.
2. The villain checked timing on a compass watch, then fired a net launcher.
3. The villain lit up the trail with a pocket torch, then threw flash powder.
4. The villain flashed signals with a mirror, then dropped a smoke bomb.
5. The villain zipped through trees with a rope launcher, then blew a stun whistle.
6. The villain zipped through trees with a rope launcher, then threw flash powder.
7. The villain flashed signals with a mirror, then left a decoy map.
8. The villain zipped through trees with a rope launcher, then fired a net launcher.
9. The villain lit up the trail with a pocket torch, then fired a net launcher.
10. The villain swung across the camp with a grappling hook, then threw flash powder.
11. The villain checked timing on a compass watch, then left a decoy map.
12. The villain zipped through trees with a rope launcher, then dropped a smoke bomb.

Answer Key

The Lost Compass of Sun Valley

Culprit: Scout Scott

Pocket Torch · Net Launcher · Left Handed · Neon Yellow Hair · Itchy Jungle Ferns

Trail: Start 21 → Clue 1 17 → Clue 2 14 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN DOES NOT USE A STUN WHISTLE"

Round 3,244 to the nearest thousand = 3000 (T) · Round 434 to the nearest ten = 430 (W) · Round 2,902 to the nearest hundred = 2900 (U) · Round 9,031 to the nearest thousand = 9000 (L) · Round 131 to the nearest ten = 130 (H) · Round 1,264 to the nearest hundred = 1300 (E) · Round 1,723 to the nearest hundred = 1700 (I) · Round 290 to the nearest ten = 290 (S) · Round 3,708 to the nearest hundred = 3700 (D) · Round 6,694 to the nearest thousand = 7000 (V) · Round 72 to the nearest ten = 70 (N) · Round 931 to the nearest hundred = 900 (O) · Round 1,065 to the nearest hundred = 1100 (A)

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

$2930 + 1481 = 4411$ (W) · $1746 + 916 = 2662$ (E) · $5252 + 2866 = 8118$ (D) · $4037 + 3674 = 7711$ (M) · $2868 + 4111 = 6979$ (I) · $2079 + 3963 = 6042$ (A) · $4045 + 2463 = 6508$ (P) · $5174 + 2939 = 8113$ (S) · $3865 + 5429 = 9294$ (H) · $1760 + 2196 = 3956$ (L) · $1658 + 2910 = 4568$ (R) · $3790 + 3638 = 7428$ (T) · $4299 + 2930 = 7229$ (F) · $1655 + 1756 = 3411$ (N) · $4498 + 2517 = 7015$ (K)

Clue 3 (Subtraction): "ITCHY JUNGLE FERNS STOPPED THE THIEF"

$11269 - 3902 = 7367$ (I) · $11002 - 4820 = 6182$ (R) · $8288 - 2379 = 5909$ (J) · $8196 - 2626 = 5570$ (S) · $7733 - 2431 = 5302$ (D) · $2473 - 211 = 2262$ (U) · $5522 - 86 = 5436$ (P) · $9744 - 2544 = 7200$ (F) · $7754 - 4741 = 3013$ (C) · $9130 - 1532 = 7598$ (E) · $3453 - 491 = 2962$ (Y) · $7202 - 409 = 6793$ (T) · $13317 - 4420 = 8897$ (N) · $8057 - 1360 = 6697$ (H) · $9030 - 2663 = 6367$ (G) · $2643 - 1570 = 1073$ (O) · $4280 - 2702 = 1578$ (L)

Clue 4 (Multiplication facts (1-12)): "NEON YELLOW HAIR WAS SPOTTED ON A LEAF"

$9 \times 1 = 9$ (N) · $8 \times 1 = 8$ (F) · $12 \times 6 = 72$ (S) · $1 \times 10 = 10$ (T) · $4 \times 4 = 16$ (E) · $7 \times 1 = 7$ (O) · $12 \times 7 = 84$ (H) · $5 \times 5 = 25$ (D) · $11 \times 12 = 132$ (L) · $7 \times 11 = 77$ (I) · $11 \times 6 = 66$ (P) · $2 \times 1 = 2$ (Y) · $11 \times 8 = 88$ (A) · $11 \times 9 = 99$ (W) · $11 \times 11 = 121$ (R)

Clue 5 (Division facts (1-12)): surviving statement is box 9 → Scout Scott

$24 \div 4 = 6$ · $40 \div 4 = 10$ · $6 \div 2 = 3$ · $24 \div 2 = 12$ · $10 \div 5 = 2$ · $8 \div 2 = 4$ · $10 \div 2 = 5$ · $88 \div 8 = 11$ · $84 \div 12 = 7$ · $48 \div 6 = 8$ · $6 \div 6 = 1$