



The Mystery of Whispering Woods

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

Detective: _____ **Date:** _____

A wild howl woke up the campers at Whispering Woods! The legendary Moon-Claw Werewolf has swiped the Golden Camp Trophy. Use your math skills to track the pawprints, decode the secrets of the woods, and help the Howling Patrol find the culprit!

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 Werewolf is _____

Possible suspects

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

NAME	WEREWOLF POWER	GLOW GEAR	DOMINANT PAW	FUR COLOR	DISTRACTION
Copper	Night Vision	Mud Boots	Right Pawed	Black Fur	Peanut Butter
Shadow	Shadow Sneak	Moon Shield	Left Pawed	Black Fur	Bright Flashlight
Paws	Howling Blast	Mud Boots	Left Pawed	Black Fur	Peanut Butter
Daphne	Howling Blast	Mud Boots	Left Pawed	Black Fur	Squeaky Toys
Wulfie	Super Leap	Mud Boots	Left Pawed	Brown Fur	Squeaky Toys
Barkley	Forest Dash	Spiky Collar	Left Pawed	Black Fur	Squeaky Toys
Misty	Howling Blast	Spiky Collar	Right Pawed	Black Fur	Squeaky Toys
Vlad	Shadow Sneak	Mud Boots	Left Pawed	Black Fur	Squeaky Toys
Grizzly	Howling Blast	Moon Shield	Left Pawed	Brown Fur	Squeaky Toys
Luna	Super Leap	Silver Armor	Left Pawed	Black Fur	Squeaky Toys
Clawdia	Howling Blast	Moon Shield	Left Pawed	Silver Fur	Peanut Butter
Tracker	Forest Dash	Spiky Collar	Right Pawed	Black Fur	Squeaky Toys
Howler	Night Vision	Glow Necklace	Left Pawed	Silver Fur	Peanut Butter
Freddie	Shadow Sneak	Moon Shield	Right Pawed	Black Fur	Squeaky Toys
Shaggy	Night Vision	Moon Shield	Left Pawed	Silver Fur	Bright Flashlight
Bram	Shadow Sneak	Glow Necklace	Left Pawed	Black Fur	Squeaky Toys
Silas	Howling Blast	Silver Armor	Right Pawed	Brown Fur	Peanut Butter
Barnaby	Forest Dash	Moon Shield	Right Pawed	Brown Fur	Squeaky Toys
Velma	Shadow Sneak	Moon Shield	Left Pawed	Silver Fur	Bright Flashlight
Fang	Super Leap	Glow Necklace	Left Pawed	Brown Fur	Squeaky Toys
Rufus	Howling Blast	Moon Shield	Left Pawed	Brown Fur	Peanut Butter

CLUE 1 Addition

The junior rangers gather to count the ripped tents and broken fences. By adding up all the damage in each camp sector, they find a clue dropped in the leaves.

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

T																			
7885	6234	9068	2193	9068	4640	8935	7885	6869	3535	9068	8935	6732	3535	7885	3737	9068	4640	4796	
4640	4174	9630	3535	3737	6732	9068	2590	5883	9630	4640	2590	9068							

5491 + 2394 = → T	2363 + 1374 = → W	684 + 1509 = → B
1723 + 2451 = → G	1870 + 2770 = → A	2297 + 4435 = → N
2154 + 2642 = → R	5043 + 3892 = → S	3622 + 5446 = → E
1404 + 2131 = → O	5225 + 4405 = → L	955 + 1635 = → C
2036 + 3847 = → K	4330 + 1904 = → H	4774 + 2095 = → D

Scratch space:

CLUE 2

Subtraction

The camp cook notices that several silver spoons are missing from the kitchen. By subtracting the remaining spoons from the total, the rangers track where the thief went next.

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

T							T												
7113	8099	3705	4069	4467	2419	8094	7113	4467	8099	6836	8094	2419	6503	4069	1831	3705	2419	3705	

						T					T						
6836	8094	4112	3705	1831	6312	7113	8099	8094	7825	3705	4054	7113	3384	8094	1831		

$8356 - 1243 = \square \rightarrow \boxed{\text{T}}$

$9920 - 1821 = \square \rightarrow \boxed{\text{H}}$

$9367 - 1273 = \square \rightarrow \boxed{\text{A}}$

$4142 - 437 = \square \rightarrow \boxed{\text{E}}$

$4373 - 989 = \square \rightarrow \boxed{\text{P}}$

$8813 - 2501 = \square \rightarrow \boxed{\text{I}}$

$8663 - 4609 = \square \rightarrow \boxed{\text{F}}$

$5331 - 1262 = \square \rightarrow \boxed{\text{S}}$

$5035 - 2616 = \square \rightarrow \boxed{\text{R}}$

$8801 - 1965 = \square \rightarrow \boxed{\text{M}}$

$6437 - 1970 = \square \rightarrow \boxed{\text{C}}$

$9595 - 3092 = \square \rightarrow \boxed{\text{K}}$

$6430 - 2318 = \square \rightarrow \boxed{\text{D}}$

$8043 - 218 = \square \rightarrow \boxed{\text{L}}$

$5614 - 3783 = \square \rightarrow \boxed{\text{W}}$

Scratch space:

CLUE 3
Multiplication facts (1-12)

The rescue squad spots giant pawprints going deep into the forest. They see four rows of prints with several steps in each row, multiplying them to find a hidden scrap of paper.

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

T								T									
10	20	30	21	30	3	1	10	55	3	96	33	55	60	16			3
1	40	8	30	3	5	64	1	40	8	25	55	55	30	27			

$1 \times 10 = \square \rightarrow \boxed{\text{T}}$

$5 \times 1 = \square \rightarrow \boxed{\text{K}}$

$3 \times 9 = \square \rightarrow \boxed{\text{L}}$

$11 \times 5 = \square \rightarrow \boxed{\text{R}}$

$1 \times 1 = \square \rightarrow \boxed{\text{S}}$

$3 \times 10 = \square \rightarrow \boxed{\text{E}}$

$8 \times 5 = \square \rightarrow \boxed{\text{Q}}$

$6 \times 10 = \square \rightarrow \boxed{\text{O}}$

$7 \times 3 = \square \rightarrow \boxed{\text{B}}$

$8 \times 8 = \square \rightarrow \boxed{\text{Y}}$

$2 \times 10 = \square \rightarrow \boxed{\text{H}}$

$3 \times 1 = \square \rightarrow \boxed{\text{A}}$

$12 \times 8 = \square \rightarrow \boxed{\text{N}}$

$3 \times 11 = \square \rightarrow \boxed{\text{F}}$

$5 \times 5 = \square \rightarrow \boxed{\text{I}}$

$2 \times 4 = \square \rightarrow \boxed{\text{U}}$

$8 \times 2 = \square \rightarrow \boxed{\text{M}}$

Scratch space:

CLUE 4 Place value

A locked ranger cabin has a dusty three-digit keypad on the door. By looking at the place value of the muddy digits, the kids unlock the door and find a secret note.

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

D																	
500	300	600	700	200	5000	300	2000	10	2000	300	200	700	200	5000	300	60	
					D												
30	60	600	300	40	500	30	70	1000	600	1000	2000	1000	100	60			
					D												
10	1000	800	7000	40	500												

What is the value of the 5 in 527? → **D**

What is the value of the 7 in 1,673? → **W**

What is the value of the 2 in 2,537? → **L**

What is the value of the 7 in 67,550? → **I**

What is the value of the 1 in 312? → **B**

What is the value of the 3 in 5,319? → **A**

What is the value of the 1 in 3,193? → **F**

What is the value of the 8 in 810? → **H**

What is the value of the 5 in 45,731? → **O**

What is the value of the 6 in 1,671? → **R**

What is the value of the 6 in 264? → **T**

What is the value of the 1 in 51,696? → **E**

What is the value of the 7 in 4,753? → **K**

What is the value of the 2 in 295? → **C**

What is the value of the 4 in 846? → **N**

What is the value of the 3 in 7,431? → **S**

Scratch space:

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

The team finds a bag of wolf treats left on a trail. They split the treats equally among the five tracking dogs, and the division reveals a final hint tucked inside the bag.

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:

$32 \div 4 = \boxed{}$

$18 \div 9 = \boxed{}$

$70 \div 10 = \boxed{}$

$11 \div 11 = \boxed{}$

$30 \div 5 = \boxed{}$

$20 \div 2 = \boxed{}$

$110 \div 10 = \boxed{}$

$84 \div 7 = \boxed{}$

$60 \div 12 = \boxed{}$

$32 \div 8 = \boxed{}$

$27 \div 3 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain howled to scramble the forest walkie-talkies, then dropped a neon-glowing necklace.
2. The villain leaped over the tall pine trees, then clanked around in heavy silver armor.
3. The villain sneaked through the dark pine shadows, then left messy muddy boot prints.
4. The villain sneaked through the dark pine shadows, then shook loose a shiny spiky collar.
5. The villain spotted the target using glowing night vision, then dropped a neon-glowing necklace.
6. The villain dashed like a blur through the thick woods, then dropped a neon-glowing necklace.
7. The villain dashed like a blur through the thick woods, then shook loose a shiny spiky collar.
8. The villain howled to scramble the forest walkie-talkies, then left messy muddy boot prints.
9. The villain sneaked through the dark pine shadows, then clanked around in heavy silver armor.
10. The villain leaped over the tall pine trees, then blocked the security camera with a moon shield.
11. The villain dashed like a blur through the thick woods, then clanked around in heavy silver armor.
12. The villain leaped over the tall pine trees, then shook loose a shiny spiky collar.

Answer Key

The Mystery of Whispering Woods

Culprit: Vlad

Shadow Sneak · Mud Boots · Left Pawed · Black Fur · Squeaky Toys

Trail: Start 21 → Clue 1 18 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE BEAST DOES NOT WEAR A GLOW NECKLACE"

$5491 + 2394 = 7885$ (T) · $2363 + 1374 = 3737$ (W) · $684 + 1509 = 2193$ (B) · $1723 + 2451 = 4174$ (G) · $1870 + 2770 = 4640$ (A) · $2297 + 4435 = 6732$ (N) · $2154 + 2642 = 4796$ (R) · $5043 + 3892 = 8935$ (S) · $3622 + 5446 = 9068$ (E) · $1404 + 2131 = 3535$ (O) · $5225 + 4405 = 9630$ (L) · $955 + 1635 = 2590$ (C) · $2036 + 3847 = 5883$ (K) · $4330 + 1904 = 6234$ (H) · $4774 + 2095 = 6869$ (D)

Clue 2 (Subtraction): "THE SCRATCH MARKS WERE MADE WITH A LEFT PAW"

$8356 - 1243 = 7113$ (T) · $9920 - 1821 = 8099$ (H) · $9367 - 1273 = 8094$ (A) · $4142 - 437 = 3705$ (E) · $4373 - 989 = 3384$ (P) · $8813 - 2501 = 6312$ (I) · $8663 - 4609 = 4054$ (F) · $5331 - 1262 = 4069$ (S) · $5035 - 2616 = 2419$ (R) · $8801 - 1965 = 6836$ (M) · $6437 - 1970 = 4467$ (C) · $9595 - 3092 = 6503$ (K) · $6430 - 2318 = 4112$ (D) · $8043 - 218 = 7825$ (L) · $5614 - 3783 = 1831$ (W)

Clue 3 (Multiplication facts (1-12)): "THE BEAST RAN FROM A SQUEAKY SQUIRREL"

$1 \times 10 = 10$ (T) · $5 \times 1 = 5$ (K) · $3 \times 9 = 27$ (L) · $11 \times 5 = 55$ (R) · $1 \times 1 = 1$ (S) · $3 \times 10 = 30$ (E) · $8 \times 5 = 40$ (Q) · $6 \times 10 = 60$ (O) · $7 \times 3 = 21$ (B) · $8 \times 8 = 64$ (Y) · $2 \times 10 = 20$ (H) · $3 \times 1 = 3$ (A) · $12 \times 8 = 96$ (N) · $3 \times 11 = 33$ (F) · $5 \times 5 = 25$ (I) · $2 \times 4 = 8$ (U) · $8 \times 2 = 16$ (M)

Clue 4 (Place value): "DARK COAL BLACK COAT STRANDS WERE LEFT BEHIND"

What is the value of the 5 in 527? = 500 (D) · What is the value of the 7 in 1,673? = 70 (W) · What is the value of the 2 in 2,537? = 2000 (L) · What is the value of the 7 in 67,550? = 7000 (I) · What is the value of the 1 in 312? = 10 (B) · What is the value of the 3 in 5,319? = 300 (A) · What is the value of the 1 in 3,193? = 100 (F) · What is the value of the 8 in 810? = 800 (H) · What is the value of the 5 in 45,731? = 5000 (O) · What is the value of the 6 in 1,671? = 600 (R) · What is the value of the 6 in 264? = 60 (T) · What is the value of the 1 in 51,696? = 1000 (E) · What is the value of the 7 in 4,753? = 700 (K) · What is the value of the 2 in 295? = 200 (C) · What is the value of the 4 in 846? = 40 (N) · What is the value of the 3 in 7,431? = 30 (S)

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

$32 \div 4 = 8$ · $18 \div 9 = 2$ · $70 \div 10 = 7$ · $11 \div 11 = 1$ · $30 \div 5 = 6$ · $20 \div 2 = 10$ · $110 \div 10 = 11$ · $84 \div 7 = 12$ · $60 \div 12 = 5$ · $32 \div 8 = 4$ · $27 \div 3 = 9$