

The Great Treehouse Mystery

Grade 3 math · Addition, Place value, Skip counting, Rounding, Division · Reading level grades 1-2

Detective: _____ Date: _____

Someone took the Golden Walkie Talkie from the secret treetop fort! The Treehouse Rangers need your help to find the culprit and bring back the camp prize.

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 Fort Raider is _____

Possible suspects

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

NAME	CLIMBING GEAR	POCKET GADGET	WRITING HAND	HELMET COLOR	FAVORITE SNACK
Ben	rope ladder	mini camera	right handed	blue helmet	cheese sticks
Jax	zipline pulley	mini camera	right handed	green helmet	cheese sticks
Leo	bungee cord	spy whistle	right handed	green helmet	apple slices
Mac	grappling hook	laser pointer	left handed	blue helmet	cheese sticks
Zoe	bungee cord	decoder ring	left handed	green helmet	apple slices
Joy	rope ladder	decoder ring	left handed	green helmet	cheese sticks
Luna	grappling hook	decoder ring	right handed	red helmet	apple slices
Hugo	zipline pulley	laser pointer	left handed	blue helmet	cheese sticks
Gigi	zipline pulley	flash light	left handed	blue helmet	juice boxes
Toby	suction boots	decoder ring	left handed	green helmet	apple slices
Kai	suction boots	laser pointer	left handed	green helmet	cheese sticks
Ava	grappling hook	flash light	left handed	blue helmet	cheese sticks
Otis	suction boots	mini camera	right handed	green helmet	cheese sticks
Nico	zipline pulley	mini camera	right handed	red helmet	cheese sticks
Eli	grappling hook	mini camera	left handed	green helmet	cheese sticks
Sam	rope ladder	mini camera	left handed	red helmet	juice boxes
Finn	zipline pulley	mini camera	right handed	blue helmet	apple slices
Sasha	zipline pulley	flash light	left handed	blue helmet	cheese sticks
Roy	rope ladder	spy whistle	left handed	green helmet	cheese sticks
Cody	zipline pulley	flash light	right handed	red helmet	juice boxes
Pip	zipline pulley	flash light	left handed	green helmet	cheese sticks

CLUE 1 Addition

We need to find the total number of muddy footprints left on the wooden bridge. Let us add the tracks from both sides of the river.

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

T																T
428	455	692	879	924	550	775	692	879	775	217	692	476	925	217	428	
													T			
455	924	368	692	924	476	479	268	411	455	550	476	428	934	692		

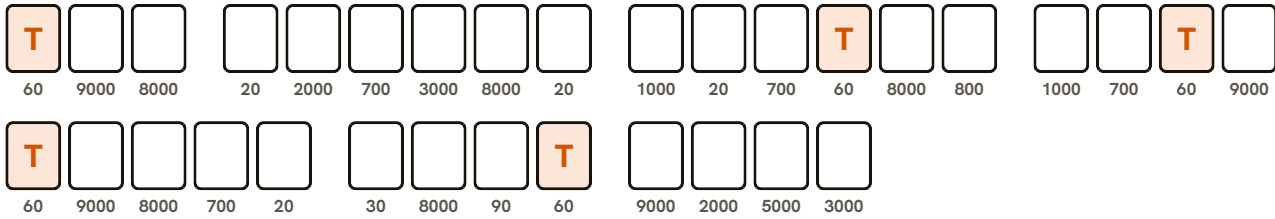
199 + 229 = → T	116 + 101 = → O	307 + 468 = → D
471 + 454 = → N	357 + 522 = → R	305 + 171 = → S
618 + 316 = → L	408 + 284 = → E	189 + 222 = → W
149 + 306 = → H	224 + 255 = → P	221 + 147 = → V
309 + 241 = → I	157 + 111 = → Y	329 + 595 = → A

Scratch space:

CLUE 2 Place value

The lock on the secret hollow tree uses base ten blocks to show the code. Let us look at the tens and ones to read the secret number.

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



What is the value of the 6 in 760? → **T**

What is the value of the 8 in 38,462? → **E**

What is the value of the 2 in 1,926? → **R**

What is the value of the 1 in 1,050? → **W**

What is the value of the 7 in 706? → **I**

What is the value of the 3 in 13,111? → **D**

What is the value of the 9 in 194? → **F**

What is the value of the 2 in 62,705? → **A**

What is the value of the 3 in 539? → **L**

What is the value of the 8 in 834? → **S**

What is the value of the 9 in 59,237? → **H**

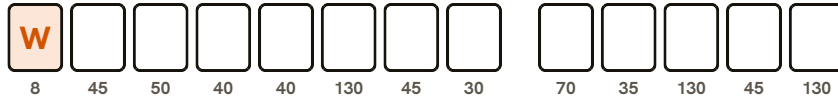
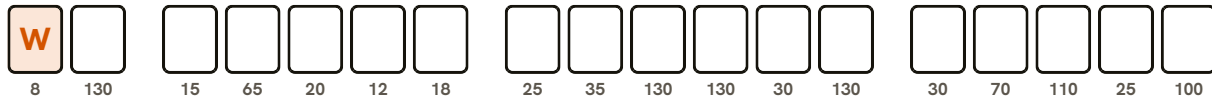
What is the value of the 5 in 5,821? → **N**

Scratch space:

CLUE 3 Skip counting

The escape path goes across giant leaves in the pond. Let us skip count by twos to hop safely to the other side.

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



Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 → **W**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, __, 33, 36 → **S**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, __, 55, 60 → **A**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 → **H**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 → **I**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 → **R**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 → **E**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, __, 21, 24 → **D**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 → **N**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 → **K**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 → **O**

Skip-count by 10s. Fill the blank: 10, 20, 30, __, 50, 60 → **P**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, __, 22, 24 → **U**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, __, 75, 80 → **T**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, __, 18, 21 → **F**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 → **C**

Scratch space:

CLUE 4 Rounding

We found a small tracker device but the screen is cracked. It only shows numbers rounded to the nearest ten.

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

A																			
50	60	300	8000	8000	2000	3000	8000	80	7000	8000	800	90	50	40	80	8000	900	800	

A									
50	800	800	3000	8000	40	5000	8000	2000	8000

Round 49 to the nearest ten → **A**

Round 262 to the nearest hundred → **R**

Round 62 to the nearest ten → **G**

Round 2,694 to the nearest thousand → **H**

Round 6,646 to the nearest thousand → **M**

Round 5,291 to the nearest thousand → **C**

Round 42 to the nearest ten → **S**

Round 94 to the nearest ten → **W**

Round 780 to the nearest hundred → **T**

Round 924 to the nearest hundred → **F**

Round 78 to the nearest ten → **L**

Round 2,380 to the nearest thousand → **N**

Round 7,958 to the nearest thousand → **E**

Scratch space:

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

We found a box of old trail maps left by the suspect. We must divide them into equal groups for our rescue team to inspect.

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:

$90 \div 10 = \boxed{}$

$2 \div 2 = \boxed{}$

$8 \div 4 = \boxed{}$

$48 \div 6 = \boxed{}$

$15 \div 5 = \boxed{}$

$77 \div 11 = \boxed{}$

$12 \div 3 = \boxed{}$

$72 \div 6 = \boxed{}$

$33 \div 3 = \boxed{}$

$60 \div 6 = \boxed{}$

$60 \div 12 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain climbed the rope ladder, then spun a decoder ring.
2. The villain threw the grappling hook, then snapped a mini camera.
3. The villain threw the grappling hook, then pointed a laser pointer.
4. The villain walked up with suction boots, then blew a spy whistle.
5. The villain climbed the rope ladder, then pointed a laser pointer.
6. The villain walked up with suction boots, then pointed a laser pointer.
7. The villain threw the grappling hook, then spun a decoder ring.
8. The villain walked up with suction boots, then shined a flash light.
9. The villain slid down the zipline pulley, then shined a flash light.
10. The villain slid down the zipline pulley, then spun a decoder ring.
11. The villain jumped with the bungee cord, then snapped a mini camera.
12. The villain climbed the rope ladder, then shined a flash light.

Answer Key

The Great Treehouse Mystery

Culprit: Kai

suction boots · laser pointer · left handed · green helmet · cheese sticks

Trail: Start 21 → Clue 1 19 → Clue 2 12 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE RAIDER DOES NOT HAVE A SPY WHISTLE"

$199 + 229 = 428$ (T) · $116 + 101 = 217$ (O) · $307 + 468 = 775$ (D) · $471 + 454 = 925$ (N) · $357 + 522 = 879$ (R) · $305 + 171 = 476$ (S) · $618 + 316 = 934$ (L) · $408 + 284 = 692$ (E) · $189 + 222 = 411$ (W) · $149 + 306 = 455$ (H) · $224 + 255 = 479$ (P) · $221 + 147 = 368$ (V) · $309 + 241 = 550$ (I) · $157 + 111 = 268$ (Y) · $329 + 595 = 924$ (A)

Clue 2 (Place value): "THE RAIDER WRITES WITH THEIR LEFT HAND"

What is the value of the 6 in 760? = 60 (T) · What is the value of the 8 in 38,462? = 8000 (E) · What is the value of the 2 in 1,926? = 20 (R) · What is the value of the 1 in 1,050? = 1000 (W) · What is the value of the 7 in 706? = 700 (I) · What is the value of the 3 in 13,111? = 3000 (D) · What is the value of the 9 in 194? = 90 (F) · What is the value of the 2 in 62,705? = 2000 (A) · What is the value of the 3 in 539? = 30 (L) · What is the value of the 8 in 834? = 800 (S) · What is the value of the 9 in 59,237? = 9000 (H) · What is the value of the 5 in 5,821? = 5000 (N)

Clue 3 (Skip counting): "WE FOUND CHEESE STICK WRAPPERS THERE"

Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 = 8 (W) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, __, 33, 36 = 30 (S) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, __, 55, 60 = 50 (A) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (H) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (I) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 = 45 (R) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 = 130 (E) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, __, 21, 24 = 18 (D) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 = 12 (N) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (K) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 = 65 (O) · Skip-count by 10s. Fill the blank: 10, 20, 30, __, 50, 60 = 40 (P) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, __, 22, 24 = 20 (U) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, __, 75, 80 = 70 (T) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, __, 18, 21 = 15 (F) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (C)

Clue 4 (Rounding): "A GREEN HELMET WAS LEFT AT THE SCENE"

Round 49 to the nearest ten = 50 (A) · Round 262 to the nearest hundred = 300 (R) · Round 62 to the nearest ten = 60 (G) · Round 2,694 to the nearest thousand = 3000 (H) · Round 6,646 to the nearest thousand = 7000 (M) · Round 5,291 to the nearest thousand = 5000 (C) · Round 42 to the nearest ten = 40 (S) · Round 94 to the nearest ten = 90 (W) · Round 780 to the nearest hundred = 800 (T) · Round 924 to the nearest hundred = 900 (F) · Round 78 to the nearest ten = 80 (L) · Round 2,380 to the nearest thousand = 2000 (N) · Round 7,958 to the nearest thousand = 8000 (E)

Clue 5 (Division facts (1-12)): surviving statement is box 6 → Kai

$90 \div 10 = 9$ · $2 \div 2 = 1$ · $8 \div 4 = 2$ · $48 \div 6 = 8$ · $15 \div 5 = 3$ · $77 \div 11 = 7$ · $12 \div 3 = 4$ · $72 \div 6 = 12$ · $33 \div 3 = 11$ · $60 \div 6 = 10$ · $60 \div 12 = 5$