



The Canopy Kingdom Heist

Grade 6 math · Place value, Addition, Subtraction, Multiplication, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

Someone has stolen the legendary Golden Acorn from the treetop museum vault! The culprit used high-tech exploration gear to escape through the whispering pines. It is up to you to crack the codes, track the clues, and find out which explorer went rogue.

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	ESCAPE GEAR	INFILTRATION TOOL	DOMINANT HAND	HAIR COLOR	COUNTERMEASURE
Lara Croft	zipline glider	net launcher	left handed	neon green streak	loud whistles
Leif Erikson	rocket boots	decoy drone	right handed	neon green streak	loud whistles
John Muir	rocket boots	laser compass	right handed	neon pink streak	loud whistles
Dora Marquez	hover board	decoy drone	left handed	neon green streak	shiny magnets
Jacques Cousteau	grapple slingshot	laser compass	left handed	neon blue streak	loud whistles
Nathan Drake	spring shoes	decoy drone	left handed	neon pink streak	bright flashlights
Neil Armstrong	grapple slingshot	net launcher	left handed	neon green streak	loud whistles
Percy Fawcett	spring shoes	smoke bomb	right handed	neon blue streak	loud whistles
Sally Ride	spring shoes	decoy drone	left handed	neon blue streak	loud whistles
Bear Grylls	spring shoes	plasma flashlight	right handed	neon pink streak	bright flashlights
Marco Polo	grapple slingshot	smoke bomb	right handed	neon blue streak	shiny magnets
Steve Irwin	zipline glider	laser compass	right handed	neon blue streak	loud whistles
Indiana Jones	spring shoes	plasma flashlight	right handed	neon pink streak	loud whistles
Amelia Earhart	rocket boots	net launcher	right handed	neon blue streak	loud whistles
Jane Goodall	zipline glider	plasma flashlight	left handed	neon green streak	bright flashlights
Nellie Bly	rocket boots	laser compass	right handed	neon green streak	bright flashlights
Annie Londonderry	hover board	plasma flashlight	right handed	neon blue streak	loud whistles
James Cook	grapple slingshot	laser compass	left handed	neon green streak	shiny magnets
Alex Honnold	grapple slingshot	plasma flashlight	left handed	neon green streak	bright flashlights
Daniel Boone	hover board	smoke bomb	right handed	neon pink streak	loud whistles
Kit Carson	zipline glider	net launcher	right handed	neon blue streak	loud whistles

CLUE 1 Place value

A motion sensor on the canopy bridge recorded a digital code. Read the place value of the flashing digit on the screen to unlock the first security camera feed.

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

T			T											T					
100	20	6000	100	20	600	6000	400	8000	1000	6000	900	2000	1000	100	30	900	6000	9000	
																		T	
40	200	9000	900	90	9000	400	200	9000	900	20	200	600	500	20	100				

What is the value of the 1 in 554,137? → **T**

What is the value of the 2 in 669,237? → **L**

What is the value of the 3 in 575,834? → **U**

What is the value of the 8 in 18,124? → **D**

What is the value of the 9 in 14,693? → **M**

What is the value of the 4 in 16,418? → **F**

What is the value of the 2 in 77,023? → **H**

What is the value of the 6 in 53,638? → **I**

What is the value of the 6 in 786,117? → **E**

What is the value of the 9 in 35,974? → **S**

What is the value of the 4 in 972,848? → **P**

What is the value of the 9 in 29,653? → **A**

What is the value of the 2 in 152,439? → **N**

What is the value of the 5 in 289,519? → **G**

What is the value of the 1 in 941,372? → **O**

Scratch space:

CLUE 2

Our scout tallied all the dropped gear found on the forest floor. Add the supply counts together to figure out how many items the thief lost during their escape.

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

8808 4210 6348 7237 4646 6168 4210 8808 4210 4947 9539 4069 6348 4069 6168 7497 5942 3995 6348

7497 6348 5519 8808 4947 7610 7237 4646 9539 8808

$$4401 + 4407 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$2710 + 1359 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$1952 + 2995 = \boxed{} \rightarrow \boxed{\mathbf{A}}$$

$$4967 + 4572 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$5250 + 2360 = \boxed{} \rightarrow \boxed{\text{P}}$$

$$2759 + 3183 = \boxed{} \rightarrow \boxed{\text{O}}$$

$$4702 + 2535 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$3378 + 2141 = \boxed{} \rightarrow \boxed{\text{F}}$$

$$2413 + 3935 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$3099 + 1547 = \boxed{} \rightarrow \boxed{\text{I}}$$

$$1417 + 2793 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$4003 + 3494 = \boxed{} \rightarrow \boxed{\text{L}}$$

$2164 + 4004 = \boxed{} \rightarrow \boxed{\text{G}}$

$1407 + 2588 = \boxed{} \rightarrow \boxed{\text{V}}$

Scratch space:

CLUE 3

Subtraction

The base's power grid shows a sudden drop in energy cells. Subtract the remaining power from the starting total to find out how much energy the thief's escape gear drained.

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

Diagram illustrating the distribution of L and R nodes across 16 nodes in a 4x4 grid. The nodes are labeled with their IDs, and the L/R status is indicated by the color of the node (orange for L, white for R).

Node ID	Node ID	Node ID	Node ID	Node ID	Node ID	Node ID	Node ID	Node ID	Node ID	Node ID	Node ID	Node ID	Node ID	Node ID	Node ID
1258 (L)	7270 (R)	3156 (R)	5846 (R)	8123 (R)	6507 (R)	3242 (R)	4008 (R)	8356 (R)	1258 (L)	5185 (R)	4008 (R)	8123 (R)	3242 (R)	1258 (L)	1259 (L)
8986 (R)	7270 (R)	4814 (R)	4169 (R)	3156 (R)	4008 (R)	5185 (R)	8356 (R)	6507 (R)	5185 (R)	6763 (R)					

$$4072 - 2814 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$8721 - 3907 = \boxed{} \rightarrow \boxed{\text{N}}$$

$7731 - 968 = \boxed{} \rightarrow \boxed{\text{M}}$

$$11506 - 4236 = \boxed{} \rightarrow \boxed{0}$$

$$11299 - 3176 = \boxed{} \rightarrow \mathbf{W}$$

$11385 - 2399 = \boxed{} \rightarrow \mathbf{C}$

$11061 - 4554 = \boxed{} \rightarrow \boxed{\text{H}}$

$$8525 - 4517 = \boxed{} \rightarrow \boxed{\text{S}}$$

$6172 - 987 = \boxed{} \rightarrow \mathbf{E}$

$9018 - 3172 = \boxed{} \rightarrow \boxed{\text{D}}$

$$5220 - 1978 = \boxed{} \rightarrow \boxed{}$$

$$4172 - 1016 = \boxed{} \rightarrow \boxed{\text{U}}$$

$13041 - 4685 = \boxed{} \rightarrow \boxed{\text{T}}$

$7728 - 3559 = \boxed{} \rightarrow \boxed{\text{F}}$

Scratch space:

CLUE 4
Multiplication facts (1-12)

We found a grid of locked supply crates left behind near the zipline. Multiply the rows of crates by the columns to calculate the total weight of the evidence.

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

W															
1	64	36	3	48	20	50	2	20	64	3	20	14	110	48	64
99	2	70	132	3	20	77	99	64	14	132	2	20	8	99	

$1 \times 1 = \square \rightarrow$ W	$10 \times 11 = \square \rightarrow$ L	$4 \times 2 = \square \rightarrow$ C
$7 \times 10 = \square \rightarrow$ I	$8 \times 8 = \square \rightarrow$ E	$4 \times 5 = \square \rightarrow$ N
$12 \times 4 = \square \rightarrow$ U	$3 \times 1 = \square \rightarrow$ O	$11 \times 12 = \square \rightarrow$ R
$2 \times 1 = \square \rightarrow$ A	$5 \times 10 = \square \rightarrow$ D	$11 \times 9 = \square \rightarrow$ H
$2 \times 7 = \square \rightarrow$ B	$11 \times 7 = \square \rightarrow$ T	$12 \times 3 = \square \rightarrow$ F

Scratch space:

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

Our team needs to divide the recovered walkie-talkies equally among the rescue squads. Solve this division problem to distribute the radios and hear the final witness report.

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:

$22 \div 11 = \boxed{}$

$6 \div 2 = \boxed{}$

$35 \div 7 = \boxed{}$

$81 \div 9 = \boxed{}$

$24 \div 2 = \boxed{}$

$50 \div 5 = \boxed{}$

$49 \div 7 = \boxed{}$

$96 \div 12 = \boxed{}$

$11 \div 11 = \boxed{}$

$44 \div 11 = \boxed{}$

$88 \div 8 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain bounced off the giant mushrooms, then unlocked the vault with a laser.
2. The villain blasted over the canopy, then trapped the chasers in a heavy net.
3. The villain slid down the longest zipline, then unlocked the vault with a laser.
4. The villain slid down the longest zipline, then distracted the guards with a drone.
5. The villain slid down the longest zipline, then trapped the chasers in a heavy net.
6. The villain bounced off the giant mushrooms, then escaped in a cloud of thick smoke.
7. The villain swung through the high branches, then searched the dark hollow with a light.
8. The villain blasted over the canopy, then escaped in a cloud of thick smoke.
9. The villain swung through the high branches, then distracted the guards with a drone.
10. The villain bounced off the giant mushrooms, then searched the dark hollow with a light.
11. The villain zoomed past the watchtower, then escaped in a cloud of thick smoke.
12. The villain swung through the high branches, then trapped the chasers in a heavy net.

Answer Key

The Canopy Kingdom Heist

Culprit: Percy Fawcett

spring shoes · smoke bomb · right handed · neon blue streak · loud whistles

Trail: Start 21 → Clue 1 16 → Clue 2 9 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE THIEF DOES NOT USE A PLASMA FLASHLIGHT"

What is the value of the 1 in 554,137? = 100 (T) · What is the value of the 2 in 669,237? = 200 (L) · What is the value of the 3 in 575,834? = 30 (U) · What is the value of the 8 in 18,124? = 8000 (D) · What is the value of the 9 in 14,693? = 90 (M) · What is the value of the 4 in 16,418? = 400 (F) · What is the value of the 2 in 77,023? = 20 (H) · What is the value of the 6 in 53,638? = 600 (I) · What is the value of the 6 in 786,117? = 6000 (E) · What is the value of the 9 in 35,974? = 900 (S) · What is the value of the 4 in 972,848? = 40 (P) · What is the value of the 9 in 29,653? = 9000 (A) · What is the value of the 2 in 152,439? = 2000 (N) · What is the value of the 5 in 289,519? = 500 (G) · What is the value of the 1 in 941,372? = 1000 (O)

Clue 2 (Addition): "THE RIGHT HANDED GLOVE LEFT A PRINT"

4401 + 4407 = 8808 (T) · 2710 + 1359 = 4069 (D) · 1952 + 2995 = 4947 (A) · 4967 + 4572 = 9539 (N) · 5250 + 2360 = 7610 (P) · 2759 + 3183 = 5942 (O) · 4702 + 2535 = 7237 (R) · 3378 + 2141 = 5519 (F) · 2413 + 3935 = 6348 (E) · 3099 + 1547 = 4646 (I) · 1417 + 2793 = 4210 (H) · 4003 + 3494 = 7497 (L) · 2164 + 4004 = 6168 (G) · 1407 + 2588 = 3995 (V)

Clue 3 (Subtraction): "LOUD WHISTLES WILL CONFUSE THEM"

4072 - 2814 = 1258 (L) · 8721 - 3907 = 4814 (N) · 7731 - 968 = 6763 (M) · 11506 - 4236 = 7270 (O) · 11299 - 3176 = 8123 (W) · 11385 - 2399 = 8986 (C) · 11061 - 4554 = 6507 (H) · 8525 - 4517 = 4008 (S) · 6172 - 987 = 5185 (E) · 9018 - 3172 = 5846 (D) · 5220 - 1978 = 3242 (I) · 4172 - 1016 = 3156 (U) · 13041 - 4685 = 8356 (T) · 7728 - 3559 = 4169 (F)

Clue 4 (Multiplication facts (1-12)): "WE FOUND A NEON BLUE HAIR ON THE BRANCH"

1 × 1 = 1 (W) · 10 × 11 = 110 (L) · 4 × 2 = 8 (C) · 7 × 10 = 70 (I) · 8 × 8 = 64 (E) · 4 × 5 = 20 (N) · 12 × 4 = 48 (U) · 3 × 1 = 3 (O) · 11 × 12 = 132 (R) · 2 × 1 = 2 (A) · 5 × 10 = 50 (D) · 11 × 9 = 99 (H) · 2 × 7 = 14 (B) · 11 × 7 = 77 (T) · 12 × 3 = 36 (F)

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

22 ÷ 11 = 2 · 6 ÷ 2 = 3 · 35 ÷ 7 = 5 · 81 ÷ 9 = 9 · 24 ÷ 2 = 12 · 50 ÷ 5 = 10 · 49 ÷ 7 = 7 · 96 ÷ 12 = 8 · 11 ÷ 11 = 1 · 44 ÷ 11 = 4 · 88 ÷ 8 = 11