



The Canopy Cove Mystery

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

Detective: _____ Date: _____

The golden trophy has vanished from the highest treehouse branch! We must help the scouts search the sky-bridges, follow the tracks, and spot the glider who took it.

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 Glider is _____

Possible suspects

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

NAME	SCOUT TOOL	GLIDER SUIT UPGRADE	GLOVE STYLE	HELMET PLUME	FAVORITE SNACK
Zoe	Signal Whistle	Glow Stripes	Full Leather Mitts	Green Leaf Ribbon	Fizzy Berry Juice
Wyatt	Signal Whistle	Solar Charger	Full Leather Mitts	Green Leaf Ribbon	Toasted Pumpkin Seeds
Liam	Grappling Hook	Glow Stripes	Full Leather Mitts	Bright Red Feather	Maple Sugar Drops
Owen	Pocket Compass	Glow Stripes	Full Leather Mitts	Green Leaf Ribbon	Toasted Pumpkin Seeds
Sophia	Grappling Hook	Wind Booster	Full Leather Mitts	Bright Red Feather	Maple Sugar Drops
Toby	Grappling Hook	Wind Booster	Fingerless Gloves	Green Leaf Ribbon	Toasted Pumpkin Seeds
Luke	Flashlight Map	Wind Booster	Full Leather Mitts	Green Leaf Ribbon	Toasted Pumpkin Seeds
Jack	Pocket Compass	Glow Stripes	Fingerless Gloves	Bright Red Feather	Fizzy Berry Juice
Max	Pocket Compass	Wind Booster	Fingerless Gloves	Green Leaf Ribbon	Maple Sugar Drops
Ben	Flashlight Map	Turbo Thrusters	Full Leather Mitts	Blue Neon Tassel	Toasted Pumpkin Seeds
Mason	Grappling Hook	Turbo Thrusters	Full Leather Mitts	Blue Neon Tassel	Maple Sugar Drops
Leo	Pocket Compass	Solar Charger	Full Leather Mitts	Green Leaf Ribbon	Toasted Pumpkin Seeds
Chloe	Signal Whistle	Silent Wings	Full Leather Mitts	Green Leaf Ribbon	Toasted Pumpkin Seeds
Finn	Rope Ladder	Glow Stripes	Full Leather Mitts	Bright Red Feather	Fizzy Berry Juice
Ava	Flashlight Map	Wind Booster	Fingerless Gloves	Blue Neon Tassel	Maple Sugar Drops
Noah	Signal Whistle	Wind Booster	Fingerless Gloves	Bright Red Feather	Toasted Pumpkin Seeds
Mia	Rope Ladder	Silent Wings	Fingerless Gloves	Green Leaf Ribbon	Maple Sugar Drops
Sam	Flashlight Map	Turbo Thrusters	Full Leather Mitts	Green Leaf Ribbon	Toasted Pumpkin Seeds
Emma	Signal Whistle	Silent Wings	Fingerless Gloves	Bright Red Feather	Toasted Pumpkin Seeds
Grace	Signal Whistle	Silent Wings	Fingerless Gloves	Green Leaf Ribbon	Toasted Pumpkin Seeds
Ella	Flashlight Map	Wind Booster	Fingerless Gloves	Bright Red Feather	Fizzy Berry Juice

CLUE 1 Place value

To unlock the first lock box, we need to read the code on the giant dial. It has digits for hundreds, tens, and ones.

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

T			T											T				
600	500	50	600	500	70	50	30	4000	800	50	10	6000	800	600	5000	10	50	200
10	800	9000	200	90	2000	500	200	90	40	50	90							

What is the value of the 6 in 675? → **T**

What is the value of the 5 in 651? → **E**

What is the value of the 2 in 8,297? → **A**

What is the value of the 3 in 7,432? → **F**

What is the value of the 9 in 495? → **R**

What is the value of the 8 in 895? → **O**

What is the value of the 2 in 2,845? → **C**

What is the value of the 9 in 79,238? → **L**

What is the value of the 4 in 64,511? → **D**

What is the value of the 4 in 8,243? → **G**

What is the value of the 5 in 572? → **H**

What is the value of the 7 in 271? → **I**

What is the value of the 6 in 26,177? → **N**

What is the value of the 5 in 5,680? → **U**

What is the value of the 1 in 813? → **S**

Scratch space:

CLUE 2 Addition

We found a pile of lost badges under the big bridge. Let us count them up to see how many scouts passed by today.

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

T																	
699	950	736	342	811	342	685	736	253	699	356	736	826	862	736	342	664	470

760	204	664	584	736	829	685	829	204	664	699	342	

$$343 + 356 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$100 + 104 = \boxed{} \rightarrow \boxed{\text{I}}$$

$$328 + 336 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$184 + 158 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$299 + 563 = \boxed{} \rightarrow \boxed{\text{V}}$$

$$475 + 285 = \boxed{} \rightarrow \boxed{\text{F}}$$

$$406 + 405 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$498 + 238 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$193 + 277 = \boxed{} \rightarrow \boxed{\text{O}}$$

$$279 + 406 = \boxed{} \rightarrow \boxed{\text{P}}$$

$$186 + 170 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$454 + 375 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$107 + 146 = \boxed{} \rightarrow \boxed{\text{C}}$$

$$413 + 413 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$379 + 205 = \boxed{} \rightarrow \boxed{\text{G}}$$

$$329 + 621 = \boxed{} \rightarrow \boxed{\text{H}}$$

Scratch space:

CLUE 3
Subtraction

The camp cook had a bag of trail mix. Some was taken by the thief, and we must find out how many pieces are left.

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

T			T								T							
221	891	327	221	891	733	327	759	196	327	759	221	617	892	171	309	617	891	347

642	327	327	793	642	891	327	196

$224 - 3 = \square \rightarrow \text{[T]}$

$272 - 76 = \square \rightarrow \text{[L]}$

$803 - 161 = \square \rightarrow \text{[S]}$

$1007 - 248 = \square \rightarrow \text{[F]}$

$899 - 106 = \square \rightarrow \text{[D]}$

$921 - 304 = \square \rightarrow \text{[C]}$

$1074 - 182 = \square \rightarrow \text{[R]}$

$430 - 121 = \square \rightarrow \text{[N]}$

$1045 - 312 = \square \rightarrow \text{[I]}$

$574 - 247 = \square \rightarrow \text{[E]}$

$197 - 26 = \square \rightarrow \text{[U]}$

$1072 - 181 = \square \rightarrow \text{[H]}$

$566 - 219 = \square \rightarrow \text{[Y]}$

Scratch space:

CLUE 4

Multiplication facts (1-12)

Look at the rows of sleeping bags in the cabins. If each row has the same number of bags, we can find the total quickly.

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

A																			
42	44	120	14	70	12	14	60	60	70	14	24	100	100	120	70	10	A	18	
						A													
120	70	44	35	60	2	42	44	35											

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

$1 \times 2 = \square \rightarrow \text{P}$

$2 \times 7 = \square \rightarrow \text{R}$

$5 \times 12 = \square \rightarrow \text{E}$

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

$7 \times 5 = \square \rightarrow \text{H}$

$2 \times 6 = \square \rightarrow \text{G}$

$2 \times 12 = \square \rightarrow \text{I}$

$1 \times 10 = \square \rightarrow \text{W}$

$10 \times 7 = \square \rightarrow \text{N}$

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

$10 \times 12 = \square \rightarrow \text{O}$

$4 \times 11 = \square \rightarrow \text{T}$

Scratch space:

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

We need to share these rescue ropes equally among our team members so everyone has the exact same amount.

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:

$72 \div 12 = \boxed{}$

$3 \div 3 = \boxed{}$

$90 \div 10 = \boxed{}$

$55 \div 11 = \boxed{}$

$96 \div 8 = \boxed{}$

$24 \div 6 = \boxed{}$

$15 \div 5 = \boxed{}$

$70 \div 10 = \boxed{}$

$88 \div 8 = \boxed{}$

$10 \div 5 = \boxed{}$

$88 \div 11 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain checks a brass compass, then flashes bright glow stripes.
2. The villain drops a knotted rope ladder, then speeds up with a wind booster.
3. The villain shines a map light, then glides away with silent wings.
4. The villain checks a brass compass, then speeds up with a wind booster.
5. The villain swings from the high rope, then speeds up with a wind booster.
6. The villain shines a map light, then speeds up with a wind booster.
7. The villain drops a knotted rope ladder, then zooms off using turbo thrusters.
8. The villain checks a brass compass, then glides away with silent wings.
9. The villain shines a map light, then zooms off using turbo thrusters.
10. The villain blows a loud warning signal, then glides away with silent wings.
11. The villain checks a brass compass, then stops to charge in the sun.
12. The villain checks a brass compass, then zooms off using turbo thrusters.

Answer Key

The Canopy Cove Mystery

Culprit: Chloe

Signal Whistle · Silent Wings · Full Leather Mitts · Green Leaf Ribbon · Toasted Pumpkin Seeds

Trail: Start 21 → Clue 1 19 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE THIEF DOES NOT USE A SOLAR CHARGER"

What is the value of the 6 in 675? = 600 (T) · What is the value of the 5 in 651? = 50 (E) · What is the value of the 2 in 8,297? = 200 (A) · What is the value of the 3 in 7,432? = 30 (F) · What is the value of the 9 in 495? = 90 (R) · What is the value of the 8 in 895? = 800 (O) · What is the value of the 2 in 2,845? = 2000 (C) · What is the value of the 9 in 79,238? = 9000 (L) · What is the value of the 4 in 64,511? = 4000 (D) · What is the value of the 4 in 8,243? = 40 (G) · What is the value of the 5 in 572? = 500 (H) · What is the value of the 7 in 271? = 70 (I) · What is the value of the 6 in 26,177? = 6000 (N) · What is the value of the 5 in 5,680? = 5000 (U) · What is the value of the 1 in 813? = 10 (S)

Clue 2 (Addition): "THE SUSPECT LEAVES NO FINGERPRINTS"

$343 + 356 = 699$ (T) · $100 + 104 = 204$ (I) · $328 + 336 = 664$ (N) · $184 + 158 = 342$ (S) · $299 + 563 = 862$ (V) · $475 + 285 = 760$ (F) · $406 + 405 = 811$ (U) · $498 + 238 = 736$ (E) · $193 + 277 = 470$ (O) · $279 + 406 = 685$ (P) · $186 + 170 = 356$ (L) · $454 + 375 = 829$ (R) · $107 + 146 = 253$ (C) · $413 + 413 = 826$ (A) · $379 + 205 = 584$ (G) · $329 + 621 = 950$ (H)

Clue 3 (Subtraction): "THE THIEF LEFT CRUNCHY SEED SHELLS"

$224 - 3 = 221$ (T) · $272 - 76 = 196$ (L) · $803 - 161 = 642$ (S) · $1007 - 248 = 759$ (F) · $899 - 106 = 793$ (D) · $921 - 304 = 617$ (C) · $1074 - 182 = 892$ (R) · $430 - 121 = 309$ (N) · $1045 - 312 = 733$ (I) · $574 - 247 = 327$ (E) · $197 - 26 = 171$ (U) · $1072 - 181 = 891$ (H) · $566 - 219 = 347$ (Y)

Clue 4 (Multiplication facts (1-12)): "A TORN GREEN RIBBON WAS ON THE PATH"

$6 \times 7 = 42$ (A) · $1 \times 2 = 2$ (P) · $2 \times 7 = 14$ (R) · $5 \times 12 = 60$ (E) · $2 \times 9 = 18$ (S) · $7 \times 5 = 35$ (H) · $2 \times 6 = 12$ (G) · $2 \times 12 = 24$ (I) · $1 \times 10 = 10$ (W) · $10 \times 7 = 70$ (N) · $10 \times 10 = 100$ (B) · $10 \times 12 = 120$ (O) · $4 \times 11 = 44$ (T)

Clue 5 (Division facts (1-12)): surviving statement is box 10 → Chloe

$72 \div 12 = 6$ · $3 \div 3 = 1$ · $90 \div 10 = 9$ · $55 \div 11 = 5$ · $96 \div 8 = 12$ · $24 \div 6 = 4$ · $15 \div 5 = 3$ · $70 \div 10 = 7$ · $88 \div 8 = 11$ · $10 \div 5 = 2$ · $88 \div 11 = 8$