

The Whispering Woods Balloon Mystery

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

Detective: _____ Date: _____

The Golden Propeller has been swiped from the Great Airship! The sky docks are in an uproar. We need to find the sneaky Sky-snatcher before they float away forever.

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 Sky-snatcher is _____

Possible suspects

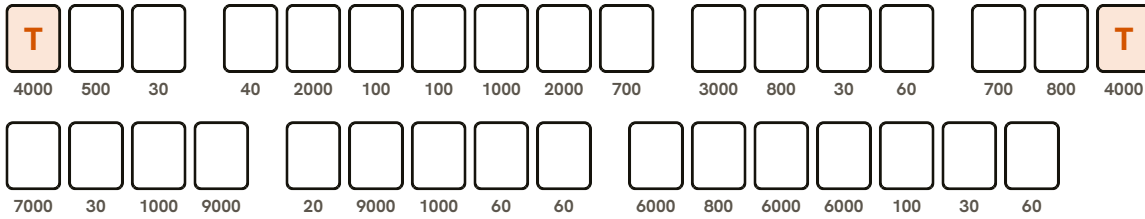
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	AIR ABILITY	EXPLORER TOOL	DOMINANT HAND	HAIR FEATURE	SECRET FEAR
Ella	cloud-weaving	brass goggles	left-handed	blue streak	bright flashes
Mia	mist-melting	pocket compass	left-handed	blue streak	itchy feathers
Leo	sun-catching	glider wings	right-handed	silver tips	itchy feathers
Cleo	sun-catching	grappling hook	left-handed	blue streak	bright flashes
Maya	sun-catching	glider wings	left-handed	silver tips	bubble soap
Rose	mist-melting	pocket compass	right-handed	blue streak	bright flashes
Ivy	cloud-weaving	pocket compass	left-handed	blue streak	bright flashes
Finn	cloud-weaving	magnet boots	right-handed	neon orange	bubble soap
Ruby	wind-whistling	brass goggles	right-handed	blue streak	bubble soap
Max	cloud-weaving	pocket compass	left-handed	neon orange	bubble soap
Zack	cloud-weaving	grappling hook	right-handed	blue streak	bright flashes
Cole	wind-whistling	pocket compass	right-handed	silver tips	bright flashes
Nora	storm-chasing	brass goggles	left-handed	neon orange	bubble soap
Lily	sun-catching	glider wings	left-handed	silver tips	itchy feathers
Otis	wind-whistling	glider wings	left-handed	neon orange	bright flashes
Hugo	storm-chasing	pocket compass	left-handed	neon orange	bright flashes
Milo	mist-melting	magnet boots	left-handed	blue streak	itchy feathers
Luke	mist-melting	pocket compass	left-handed	blue streak	bright flashes
Zoe	mist-melting	glider wings	right-handed	neon orange	bright flashes
Jack	cloud-weaving	brass goggles	left-handed	blue streak	itchy feathers
Sam	storm-chasing	magnet boots	left-handed	blue streak	bright flashes

CLUE 1 Place value

We examine the digital dial on the airship door. Looking closely at the hundreds place gives us our first clue about the thief's gear.

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



What is the value of the 4 in 4,121? → **T**

What is the value of the 1 in 103? → **L**

What is the value of the 9 in 29,687? → **R**

What is the value of the 2 in 52,445? → **I**

What is the value of the 8 in 5,859? → **O**

What is the value of the 6 in 967? → **S**

What is the value of the 6 in 86,524? → **G**

What is the value of the 3 in 5,231? → **E**

What is the value of the 2 in 4,921? → **B**

What is the value of the 4 in 540? → **V**

What is the value of the 3 in 13,726? → **D**

What is the value of the 5 in 2,531? → **H**

What is the value of the 1 in 1,893? → **A**

What is the value of the 7 in 7,360? → **W**

What is the value of the 7 in 5,760? → **N**

Scratch space:

CLUE 2 Addition

We count the dropped gear bolts found on the floor. Adding these piles together shows us which glove the runner dropped.

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

T																	
523	880	623	210	784	210	602	623	450	523	882	698	386	602	602	623	882	439

			T											
269	623	632	523	880	439	952	882	623	882	522	269	386	219	623

$$210 + 313 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$420 + 278 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$69 + 141 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$241 + 145 = \boxed{} \rightarrow \boxed{\text{O}}$$

$$270 + 353 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$240 + 210 = \boxed{} \rightarrow \boxed{\text{C}}$$

$$398 + 482 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$404 + 228 = \boxed{} \rightarrow \boxed{\text{F}}$$

$$221 + 301 = \boxed{} \rightarrow \boxed{\text{G}}$$

$$166 + 103 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$180 + 259 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$647 + 305 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$113 + 106 = \boxed{} \rightarrow \boxed{\text{V}}$$

$$406 + 378 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$460 + 422 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$261 + 341 = \boxed{} \rightarrow \boxed{\text{P}}$$

Scratch space:

CLUE 3 Subtraction

A fuel canister is leaking slowly. Subtracting the leaked oil from the start amount reveals the villain's secret weakness.

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

T																	
224	533	360	455	401	625	625	361	401	323	467	533	401	360	625	310	360	310

360	866	360	467	823	456	603	550	823	625	361	467	533	360	467	

$513 - 289 = \square \rightarrow \boxed{\text{T}}$	$693 - 292 = \square \rightarrow \boxed{\text{I}}$	$984 - 118 = \square \rightarrow \boxed{\text{Y}}$
$461 - 101 = \square \rightarrow \boxed{\text{E}}$	$761 - 306 = \square \rightarrow \boxed{\text{V}}$	$745 - 142 = \square \rightarrow \boxed{\text{O}}$
$1221 - 398 = \square \rightarrow \boxed{\text{F}}$	$547 - 186 = \square \rightarrow \boxed{\text{A}}$	$703 - 380 = \square \rightarrow \boxed{\text{N}}$
$785 - 318 = \square \rightarrow \boxed{\text{S}}$	$721 - 188 = \square \rightarrow \boxed{\text{H}}$	$362 - 52 = \square \rightarrow \boxed{\text{D}}$
$698 - 73 = \square \rightarrow \boxed{\text{L}}$	$882 - 332 = \square \rightarrow \boxed{\text{M}}$	$680 - 224 = \square \rightarrow \boxed{\text{R}}$

Scratch space:

CLUE 4 Rounding

The wind speed radar shows a fuzzy number. Rounding it to the nearest ten reveals the color of the hair left on the escape ladder.

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

T													T						
5000	300	90	200	9000	600	7000	70	300	2000	70	2000	60	5000	4000	2000	30	700	90	
					T								T						
500	9000	7000	90	60	5000	4000	90	2000	40	80	30	80	5000						

Round 5,334 to the nearest thousand → **T**

Round 63 to the nearest ten → **S**

Round 8,534 to the nearest thousand → **L**

Round 27 to the nearest ten → **N**

Round 210 to the nearest hundred → **C**

Round 2,127 to the nearest thousand → **A**

Round 714 to the nearest hundred → **G**

Round 83 to the nearest ten → **I**

Round 67 to the nearest ten → **D**

Round 3,863 to the nearest thousand → **R**

Round 36 to the nearest ten → **K**

Round 7,441 to the nearest thousand → **U**

Round 579 to the nearest hundred → **O**

Round 89 to the nearest ten → **E**

Round 515 to the nearest hundred → **B**

Round 303 to the nearest hundred → **H**

Scratch space:

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

The scout team has a bag of snack bars. Sharing them equally among the crew gives us the final detail we need to catch the suspect.

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:

$12 \div 3 = \boxed{}$

$11 \div 11 = \boxed{}$

$90 \div 9 = \boxed{}$

$72 \div 12 = \boxed{}$

$55 \div 5 = \boxed{}$

$77 \div 11 = \boxed{}$

$18 \div 6 = \boxed{}$

$27 \div 3 = \boxed{}$

$24 \div 12 = \boxed{}$

$48 \div 6 = \boxed{}$

$36 \div 3 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain scrambles up the rigging, then plucks the pilot badge.
2. The villain scrambles up the rigging, then swipes the compass.
3. The villain slips through the clouds, then steals the silver wrench.
4. The villain slips through the clouds, then plucks the pilot badge.
5. The villain leaps across the rope bridge, then grabs the shiny golden propeller.
6. The villain zooms past the guard towers, then pockets the secret map.
7. The villain sneaks aboard the airship, then steals the silver wrench.
8. The villain sneaks aboard the airship, then pockets the secret map.
9. The villain slips through the clouds, then pockets the secret map.
10. The villain sneaks aboard the airship, then swipes the compass.
11. The villain scrambles up the rigging, then grabs the shiny golden propeller.
12. The villain zooms past the guard towers, then grabs the shiny golden propeller.

Answer Key

The Whispering Woods Balloon Mystery

Culprit: Cleo

sun-catching · grappling hook · left-handed · blue streak · bright flashes

Trail: Start 21 → Clue 1 17 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT WEAR BRASS GOGGLES"

What is the value of the 4 in 4,121? = 4000 (T) · What is the value of the 1 in 103? = 100 (L) · What is the value of the 9 in 29,687? = 9000 (R) · What is the value of the 2 in 52,445? = 2000 (I) · What is the value of the 8 in 5,859? = 800 (O) · What is the value of the 6 in 967? = 60 (S) · What is the value of the 6 in 86,524? = 6000 (G) · What is the value of the 3 in 5,231? = 30 (E) · What is the value of the 2 in 4,921? = 20 (B) · What is the value of the 4 in 540? = 40 (V) · What is the value of the 3 in 13,726? = 3000 (D) · What is the value of the 5 in 2,531? = 500 (H) · What is the value of the 1 in 1,893? = 1000 (A) · What is the value of the 7 in 7,360? = 7000 (W) · What is the value of the 7 in 5,760? = 700 (N)

Clue 2 (Addition): "THE SUSPECT DROPPED A LEFT HANDED GLOVE"

$210 + 313 = 523$ (T) · $420 + 278 = 698$ (R) · $69 + 141 = 210$ (S) · $241 + 145 = 386$ (O) · $270 + 353 = 623$ (E) · $240 + 210 = 450$ (C) · $398 + 482 = 880$ (H) · $404 + 228 = 632$ (F) · $221 + 301 = 522$ (G) · $166 + 103 = 269$ (L) · $180 + 259 = 439$ (A) · $647 + 305 = 952$ (N) · $113 + 106 = 219$ (V) · $406 + 378 = 784$ (U) · $460 + 422 = 882$ (D) · $261 + 341 = 602$ (P)

Clue 3 (Subtraction): "THE VILLAIN SHIELDED EYES FROM FLASHES"

$513 - 289 = 224$ (T) · $693 - 292 = 401$ (I) · $984 - 118 = 866$ (Y) · $461 - 101 = 360$ (E) · $761 - 306 = 455$ (V) · $745 - 142 = 603$ (O) · $1221 - 398 = 823$ (F) · $547 - 186 = 361$ (A) · $703 - 380 = 323$ (N) · $785 - 318 = 467$ (S) · $721 - 188 = 533$ (H) · $362 - 52 = 310$ (D) · $698 - 73 = 625$ (L) · $882 - 332 = 550$ (M) · $680 - 224 = 456$ (R)

Clue 4 (Rounding): "THE CLOUD HAD A STRANGE BLUE STREAK IN IT"

Round 5,334 to the nearest thousand = 5000 (T) · Round 63 to the nearest ten = 60 (S) · Round 8,534 to the nearest thousand = 9000 (L) · Round 27 to the nearest ten = 30 (N) · Round 210 to the nearest hundred = 200 (C) · Round 2,127 to the nearest thousand = 2000 (A) · Round 714 to the nearest hundred = 700 (G) · Round 83 to the nearest ten = 80 (I) · Round 67 to the nearest ten = 70 (D) · Round 3,863 to the nearest thousand = 4000 (R) · Round 36 to the nearest ten = 40 (K) · Round 7,441 to the nearest thousand = 7000 (U) · Round 579 to the nearest hundred = 600 (O) · Round 89 to the nearest ten = 90 (E) · Round 515 to the nearest hundred = 500 (B) · Round 303 to the nearest hundred = 300 (H)

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

$12 \div 3 = 4$ · $11 \div 11 = 1$ · $90 \div 9 = 10$ · $72 \div 12 = 6$ · $55 \div 5 = 11$ · $77 \div 11 = 7$ · $18 \div 6 = 3$ · $27 \div 3 = 9$ · $24 \div 12 = 2$ · $48 \div 6 = 8$ · $36 \div 3 = 12$