



The Great Sky-Snatch Mystery

Grade 4 math · Addition, Subtraction, Rounding, Multiplication, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

The Golden Compass of Skylandia has been stolen right from the Chief Cartographer's cabin! A sneaky sky-snatcher slipped onto the Whisper-Wind airship during the great cloud storm. We must analyze the clues left behind to catch the thief and retrieve the legendary compass.

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	ESCAPE GEAR	SPY GADGET	DOMINANT HAND	HAIR STYLE	DISTRACTION
Skyler Storm	Wind blaster	Smoke bombs	Uses left hand	Curly green locks	Sweet maple candy
Zephyr Zack	Magnetic gloves	Codebreaker tool	Uses left hand	Bright red braid	Sweet maple candy
Sky-Scout Sammy	Magnetic gloves	Night goggles	Uses left hand	Curly green locks	Shiny gold coins
Wilbur Wing	Cloud glider	Codebreaker tool	Uses left hand	Bright red braid	Squeaky toy mice
Amelia Cloudhart	Magnetic gloves	Smoke bombs	Uses left hand	Bright red braid	Shiny gold coins
Sunny Soarer	Magnetic gloves	Signal flare	Uses right hand	Spiky blue hair	Sweet maple candy
Windy Wendy	Rocket boots	Signal flare	Uses right hand	Curly green locks	Sweet maple candy
Jetpack Jenna	Cloud glider	Night goggles	Uses left hand	Bright red braid	Sweet maple candy
Charles Highfly	Rocket boots	Night goggles	Uses right hand	Curly green locks	Shiny gold coins
Altimeter Al	Rocket boots	Spy camera	Uses left hand	Curly green locks	Shiny gold coins
Piper Propeller	Magnetic gloves	Codebreaker tool	Uses left hand	Spiky blue hair	Squeaky toy mice
Dash Drifter	Wind blaster	Signal flare	Uses left hand	Curly green locks	Shiny gold coins
Cloudy Clara	Magnetic gloves	Spy camera	Uses left hand	Curly green locks	Shiny gold coins
Bessie Coleman	Wind blaster	Smoke bombs	Uses left hand	Spiky blue hair	Shiny gold coins
Rusty Rotor	Cloud glider	Spy camera	Uses left hand	Curly green locks	Sweet maple candy
Captain Barnaby	Cloud glider	Night goggles	Uses left hand	Bright red braid	Shiny gold coins
Baron Blue	Grappling Hook	Codebreaker tool	Uses right hand	Bright red braid	Squeaky toy mice
Gale Force Gary	Cloud glider	Night goggles	Uses left hand	Curly green locks	Shiny gold coins
Navigator Ned	Grappling Hook	Signal flare	Uses left hand	Curly green locks	Sweet maple candy
Orville Wing	Grappling Hook	Signal flare	Uses left hand	Curly green locks	Shiny gold coins
Aero Arthur	Cloud glider	Smoke bombs	Uses left hand	Curly green locks	Sweet maple candy

CLUE 1 Addition

To open the locked cargo hold where the first clue is hidden, we need to tally up all the copper bolts and iron screws we found scattered on the deck.

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

T 8010	2959	5123	T 8010	2959	9231	5123	5955	7094	7669	5123	2010	2302	7669	T 8010	4932	2010	5123	9754	
2010	6924	4626	6432	9754	9328	5123	3138	9754											

$3540 + 4470 = \square \rightarrow \text{[T]}$	$645 + 1365 = \square \rightarrow \text{[S]}$	$2842 + 1784 = \square \rightarrow \text{[Y]}$
$2834 + 4090 = \square \rightarrow \text{[P]}$	$2991 + 4678 = \square \rightarrow \text{[O]}$	$4008 + 3086 = \square \rightarrow \text{[D]}$
$3009 + 1923 = \square \rightarrow \text{[U]}$	$6624 + 3130 = \square \rightarrow \text{[A]}$	$1424 + 1535 = \square \rightarrow \text{[H]}$
$1869 + 1269 = \square \rightarrow \text{[R]}$	$4852 + 4379 = \square \rightarrow \text{[I]}$	$4831 + 4497 = \square \rightarrow \text{[M]}$
$3230 + 3202 = \square \rightarrow \text{[C]}$	$3035 + 2088 = \square \rightarrow \text{[E]}$	$2437 + 3518 = \square \rightarrow \text{[F]}$
$1308 + 994 = \square \rightarrow \text{[N]}$		

Scratch space:

CLUE 2 Subtraction

The airship lost altitude fast when the thief dumped our reserve water barrels. Subtracting the lost weight gives us the exact coordinates of the next clue.

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

L												L			
4529	3545	6381	7851	8585	4530	3976	2594	3545	2594	2209	4529	4931	2625	3545	
4142	4173	8417	3976	7851	3893	5879	3545	4173	3545	6381	4931	1476	3976	2594	4530 7851
3893	3868	3545	3976	3545											

6065 - 1536 = → L	6656 - 2126 = → A	8154 - 4178 = → N
13278 - 4861 = → I	9643 - 4712 = → O	7842 - 3974 = → C
6789 - 4195 = → D	9703 - 3322 = → F	3376 - 1167 = → G
7160 - 1281 = → W	5280 - 3804 = → U	2772 - 147 = → V
9048 - 4906 = → P	6395 - 2222 = → R	8824 - 973 = → T
6754 - 2861 = → S	6897 - 3352 = → E	11446 - 2861 = → H

Scratch space:

CLUE 3 Rounding

Our cloud-density radar is acting up in the storm. It can only show rounded values for the distance to the suspicious getaway ship.

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

T			T						T						T	
2300	20	5000	2300	20	50	5000	300	7000	2300	430	900	900	5000	3700	2300	430
900	50	130	4300	90	900	290	430	3000	3700	130	430	50	500	7000		

Round 2,319 to the nearest hundred → **T**

Round 20 to the nearest ten → **H**

Round 427 to the nearest ten → **O**

Round 129 to the nearest ten → **C**

Round 293 to the nearest ten → **G**

Round 3,693 to the nearest hundred → **D**

Round 325 to the nearest hundred → **F**

Round 7,277 to the nearest thousand → **S**

Round 471 to the nearest hundred → **N**

Round 3,408 to the nearest thousand → **L**

Round 93 to the nearest ten → **U**

Round 904 to the nearest hundred → **P**

Round 48 to the nearest ten → **I**

Round 4,941 to the nearest thousand → **E**

Round 4,323 to the nearest hundred → **K**

Scratch space:

CLUE 4
Multiplication facts (1-12)

We found a secret map divided into equal rows and columns of grid squares. Multiplying the rows and columns unlocks the hidden drawer.

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

C																	
36	33	55	21	132	48	55	77	77	110	27	96	2	55	32	96	25	
25	110	96	48	48	77	80	15	110	96	110	96	2	21				

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

Scratch space:

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

To share the remaining fuel canisters equally among our five rescue drones, we must divide our supplies fairly to get them all airborne.

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:

$6 \div 3 = \boxed{}$

$3 \div 3 = \boxed{}$

$33 \div 3 = \boxed{}$

$55 \div 11 = \boxed{}$

$72 \div 6 = \boxed{}$

$12 \div 4 = \boxed{}$

$42 \div 7 = \boxed{}$

$30 \div 3 = \boxed{}$

$20 \div 5 = \boxed{}$

$70 \div 10 = \boxed{}$

$99 \div 11 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain soared down on a cloud glider, then sneaked through the dark wearing night goggles.
2. The villain scaled the hull using magnetic gloves, then sneaked through the dark wearing night goggles.
3. The villain swung in using a grappling hook, then escaped into the mist with smoke bombs.
4. The villain scaled the hull using magnetic gloves, then bypassed the safe lock with a codebreaker tool.
5. The villain cleared the path with a wind blaster, then escaped into the mist with smoke bombs.
6. The villain soared down on a cloud glider, then escaped into the mist with smoke bombs.
7. The villain scaled the hull using magnetic gloves, then escaped into the mist with smoke bombs.
8. The villain cleared the path with a wind blaster, then signaled their getaway ship with a flare.
9. The villain blasted off with rocket boots, then sneaked through the dark wearing night goggles.
10. The villain swung in using a grappling hook, then snapped photos using a spy camera.
11. The villain swung in using a grappling hook, then signaled their getaway ship with a flare.
12. The villain scaled the hull using magnetic gloves, then signaled their getaway ship with a flare.

Answer Key

The Great Sky-Snatch Mystery

Culprit: Dash Drifter

Wind blaster · Signal flare · Uses left hand · Curly green locks · Shiny gold coins

Trail: Start 21 → Clue 1 18 → Clue 2 14 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE THIEF DOES NOT USE A SPY CAMERA"

$3540 + 4470 = 8010$ (T) · $645 + 1365 = 2010$ (S) · $2842 + 1784 = 4626$ (Y) · $2834 + 4090 = 6924$ (P) · $2991 + 4678 = 7669$ (O) · $4008 + 3086 = 7094$ (D) · $3009 + 1923 = 4932$ (U) · $6624 + 3130 = 9754$ (A) · $1424 + 1535 = 2959$ (H) · $1869 + 1269 = 3138$ (R) · $4852 + 4379 = 9231$ (I) · $4831 + 4497 = 9328$ (M) · $3230 + 3202 = 6432$ (C) · $3035 + 2088 = 5123$ (E) · $2437 + 3518 = 5955$ (F) · $1308 + 994 = 2302$ (N)

Clue 2 (Subtraction): "LEFT HANDED GLOVE PRINTS WERE FOUND AT SCENE"

$6065 - 1536 = 4529$ (L) · $6656 - 2126 = 4530$ (A) · $8154 - 4178 = 3976$ (N) · $13278 - 4861 = 8417$ (I) · $9643 - 4712 = 4931$ (O) · $7842 - 3974 = 3868$ (C) · $6789 - 4195 = 2594$ (D) · $9703 - 3322 = 6381$ (F) · $3376 - 1167 = 2209$ (G) · $7160 - 1281 = 5879$ (W) · $5280 - 3804 = 1476$ (U) · $2772 - 147 = 2625$ (V) · $9048 - 4906 = 4142$ (P) · $6395 - 2222 = 4173$ (R) · $8824 - 973 = 7851$ (T) · $6754 - 2861 = 3893$ (S) · $6897 - 3352 = 3545$ (E) · $11446 - 2861 = 8585$ (H)

Clue 3 (Rounding): "THE THIEF STOPPED TO PICK UP GOLD COINS"

Round 2,319 to the nearest hundred = 2300 (T) · Round 20 to the nearest ten = 20 (H) · Round 427 to the nearest ten = 430 (O) · Round 129 to the nearest ten = 130 (C) · Round 293 to the nearest ten = 290 (G) · Round 3,693 to the nearest hundred = 3700 (D) · Round 325 to the nearest hundred = 300 (F) · Round 7,277 to the nearest thousand = 7000 (S) · Round 471 to the nearest hundred = 500 (N) · Round 3,408 to the nearest thousand = 3000 (L) · Round 93 to the nearest ten = 90 (U) · Round 904 to the nearest hundred = 900 (P) · Round 48 to the nearest ten = 50 (I) · Round 4,941 to the nearest thousand = 5000 (E) · Round 4,323 to the nearest hundred = 4300 (K)

Clue 4 (Multiplication facts (1-12)): "CURLY GREEN HAIR WAS SNAGGED ON A NAIL"

$3 \times 12 = 36$ (C) · $10 \times 8 = 80$ (D) · $11 \times 3 = 33$ (U) · $5 \times 5 = 25$ (S) · $11 \times 5 = 55$ (R) · $9 \times 3 = 27$ (H) · $8 \times 12 = 96$ (A) · $7 \times 3 = 21$ (L) · $11 \times 7 = 77$ (E) · $12 \times 4 = 48$ (G) · $11 \times 10 = 110$ (N) · $8 \times 4 = 32$ (W) · $12 \times 11 = 132$ (Y) · $1 \times 2 = 2$ (I) · $5 \times 3 = 15$ (O)

Clue 5 (Division facts (1-12)): surviving statement is box 8 → Dash Drifter

$6 \div 3 = 2$ · $3 \div 3 = 1$ · $33 \div 3 = 11$ · $55 \div 11 = 5$ · $72 \div 6 = 12$ · $12 \div 4 = 3$ · $42 \div 7 = 6$ · $30 \div 3 = 10$ · $20 \div 5 = 4$ · $70 \div 10 = 7$ · $99 \div 11 = 9$