



The Cloud Island Mystery

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

Detective: _____ Date: _____

The golden compass is gone! It was stolen right from the steering wheel of the sky ship. We must help the Sky Patrol find the thief before the clouds roll in.

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 thief is _____

Possible suspects

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

NAME	SKY GEAR	COMPANION PET	MAP STYLE	GOGGLE STRAP	FEAR
Marlo Mapmaker	grappling hook	flying squirrel	right handed writer	gold ribbon	bright lights
Zephyr Zoom	cloud boots	mini blimp	right handed writer	gold ribbon	bright lights
Wendy Wing	brass jetpack	mechanical owl	right handed writer	striped rope	tickly feathers
Breezy Bob	grappling hook	flying squirrel	right handed writer	striped rope	bright lights
Max Altitude	brass jetpack	cloud ferret	right handed writer	gold ribbon	squeaky toys
Leo Lookout	cloud boots	cloud ferret	right handed writer	blue leather	bright lights
Daisy Dare	brass jetpack	mini blimp	right handed writer	blue leather	bright lights
Captain Barnaby	brass jetpack	flying squirrel	right handed writer	gold ribbon	tickly feathers
Gale Windward	brass jetpack	mechanical owl	left handed writer	gold ribbon	tickly feathers
Toby Turbo	brass jetpack	mini blimp	left handed writer	striped rope	tickly feathers
Dash Horizon	wind glider	mini blimp	right handed writer	gold ribbon	squeaky toys
Skip Skipper	brass jetpack	parakeet	right handed writer	striped rope	tickly feathers
Skyler Storm	grappling hook	flying squirrel	right handed writer	striped rope	squeaky toys
Oliver Owl	brass jetpack	flying squirrel	left handed writer	gold ribbon	bright lights
Rusty Rivets	turbo propeller	mini blimp	left handed writer	blue leather	bright lights
Finn Feather	turbo propeller	cloud ferret	left handed writer	gold ribbon	bright lights
Bella Balloon	turbo propeller	mechanical owl	right handed writer	gold ribbon	bright lights
Cody Compass	brass jetpack	flying squirrel	right handed writer	gold ribbon	bright lights
Piper Propeller	brass jetpack	mechanical owl	right handed writer	striped rope	bright lights
Sammy Sky	brass jetpack	parakeet	left handed writer	gold ribbon	tickly feathers
Gemma Gear	grappling hook	mini blimp	right handed writer	gold ribbon	bright lights

CLUE 1 Place value

The ship computer asks for the value of the digit in the tens place to unlock the first clue file.

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

T			T											T				
100	20	8000	100	20	400	8000	5000	9000	3000	8000	7000	200	3000	100	20	4000	80	8000
4000	50	8000	90	20	4000	200	400	90	4000	900		3000	60	900				

What is the value of the 1 in 129? → T

What is the value of the 5 in 9,856? → M

What is the value of the 6 in 4,465? → W

What is the value of the 8 in 281? → V

What is the value of the 4 in 421? → I

What is the value of the 9 in 793? → C

What is the value of the 3 in 63,865? → O

What is the value of the 2 in 8,218? → N

What is the value of the 7 in 7,944? → S

What is the value of the 9 in 9,408? → D

What is the value of the 8 in 98,513? → E

What is the value of the 2 in 124? → H

What is the value of the 4 in 4,507? → A

What is the value of the 5 in 5,101? → F

What is the value of the 9 in 6,974? → L

Scratch space:

CLUE 2 Addition

To track the thief we must add all the heavy gear crates loaded onto the deck this morning.

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

L																
682	628	237	233	628	628	728	684	747	628	476	684	535	240	237	747	829

747	596	519	643	476	535	240	829	240	519	237

$445 + 237 = \square \rightarrow \boxed{\text{L}}$

$425 + 218 = \square \rightarrow \boxed{\text{D}}$

$107 + 126 = \square \rightarrow \boxed{\text{B}}$

$178 + 298 = \square \rightarrow \boxed{\text{W}}$

$233 + 514 = \square \rightarrow \boxed{\text{H}}$

$463 + 265 = \square \rightarrow \boxed{\text{K}}$

$133 + 104 = \square \rightarrow \boxed{\text{G}}$

$363 + 233 = \square \rightarrow \boxed{\text{A}}$

$332 + 187 = \square \rightarrow \boxed{\text{N}}$

$125 + 115 = \square \rightarrow \boxed{\text{I}}$

$263 + 365 = \square \rightarrow \boxed{\text{O}}$

$567 + 262 = \square \rightarrow \boxed{\text{T}}$

$202 + 333 = \square \rightarrow \boxed{\text{R}}$

$326 + 358 = \square \rightarrow \boxed{\text{S}}$

Scratch space:

CLUE 3

Subtraction

We find a scrap of paper under the seat after we subtract the torn pages from the logbook.

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

T																	T
893	174	239	386	533	293	239	554	533	121	864	658	322	121	492	154	174	893

									T	
533	293	544	754	174	293	492	154	174	893	754

$1160 - 267 = \boxed{} \rightarrow \boxed{\text{T}}$

$166 - 45 = \boxed{} \rightarrow \boxed{\text{R}}$

$945 - 287 = \boxed{} \rightarrow \boxed{\text{M}}$

$936 - 382 = \boxed{} \rightarrow \boxed{\text{D}}$

$561 - 322 = \boxed{} \rightarrow \boxed{\text{E}}$

$475 - 182 = \boxed{} \rightarrow \boxed{\text{L}}$

$854 - 321 = \boxed{} \rightarrow \boxed{\text{F}}$

$301 - 147 = \boxed{} \rightarrow \boxed{\text{G}}$

$773 - 387 = \boxed{} \rightarrow \boxed{\text{Y}}$

$655 - 163 = \boxed{} \rightarrow \boxed{\text{I}}$

$468 - 294 = \boxed{} \rightarrow \boxed{\text{H}}$

$581 - 37 = \boxed{} \rightarrow \boxed{\text{A}}$

$922 - 58 = \boxed{} \rightarrow \boxed{\text{O}}$

$437 - 115 = \boxed{} \rightarrow \boxed{\text{B}}$

$831 - 77 = \boxed{} \rightarrow \boxed{\text{S}}$

Scratch space:

CLUE 4 Rounding

The radar screen only shows rounded miles so we must estimate the distance to get the next clue.

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

W																
2000	900	20	500	30	3000	60	600	9000	80	8000	3000	4000	400	500	50	60

7000	8000	5000	5000	500	3000	600	300	300	80	900	60	500	40	700

Round 2,060 to the nearest thousand → **W**

Round 8,203 to the nearest thousand → **I**

Round 81 to the nearest ten → **H**

Round 6,636 to the nearest thousand → **R**

Round 48 to the nearest ten → **L**

Round 481 to the nearest hundred → **O**

Round 36 to the nearest ten → **C**

Round 17 to the nearest ten → **F**

Round 294 to the nearest hundred → **T**

Round 5,456 to the nearest thousand → **B**

Round 358 to the nearest hundred → **G**

Round 64 to the nearest ten → **D**

Round 2,527 to the nearest thousand → **N**

Round 678 to the nearest hundred → **K**

Round 887 to the nearest hundred → **E**

Round 3,938 to the nearest thousand → **Y**

Round 642 to the nearest hundred → **A**

Round 30 to the nearest ten → **U**

Round 8,863 to the nearest thousand → **S**

Scratch space:

CLUE 5**Missing addends - the last clue**

We need to find how many fuel cans are missing from the rack to crack the final safe lock.

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:

$3 + \underline{\quad} = 10$

$3 + \underline{\quad} = 7$

$8 + \underline{\quad} = 13$

$2 + \underline{\quad} = 14$

$2 + \underline{\quad} = 11$

$7 + \underline{\quad} = 15$

$4 + \underline{\quad} = 6$

$8 + \underline{\quad} = 19$

$7 + \underline{\quad} = 17$

$9 + \underline{\quad} = 15$

$3 + \underline{\quad} = 6$

Step 2 - cross out the sentence with each answer:

1. The villain swings from a grappling hook, then launches a mini blimp to block the view.
2. The villain flies up using a turbo propeller, then hides a cloud ferret in the captain cabin.
3. The villain bounces high in cloud boots, then lets a flying squirrel glide away with the map.
4. The villain bounces high in cloud boots, then launches a mini blimp to block the view.
5. The villain zooms past on a brass jetpack, then lets a flying squirrel glide away with the map.
6. The villain zooms past on a brass jetpack, then hides a cloud ferret in the captain cabin.
7. The villain swings from a grappling hook, then lets a flying squirrel glide away with the map.
8. The villain swings from a grappling hook, then hides a cloud ferret in the captain cabin.
9. The villain sails through the air on a wind glider, then commands their pet parakeet to snatch the compass.
10. The villain flies up using a turbo propeller, then launches a mini blimp to block the view.
11. The villain flies up using a turbo propeller, then lets a flying squirrel glide away with the map.
12. The villain sails through the air on a wind glider, then hides a cloud ferret in the captain cabin.

Answer Key

The Cloud Island Mystery

Culprit: Gemma Gear

grappling hook · mini blimp · right handed writer · gold ribbon · bright lights

Trail: Start 21 → Clue 1 17 → Clue 2 12 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE THIEF DOES NOT HAVE A MECHANICAL OWL"

What is the value of the 1 in 129? = 100 (T) · What is the value of the 5 in 9,856? = 50 (M) · What is the value of the 6 in 4,465? = 60 (W) · What is the value of the 8 in 281? = 80 (V) · What is the value of the 4 in 421? = 400 (I) · What is the value of the 9 in 793? = 90 (C) · What is the value of the 3 in 63,865? = 3000 (O) · What is the value of the 2 in 8,218? = 200 (N) · What is the value of the 7 in 7,944? = 7000 (S) · What is the value of the 9 in 9,408? = 9000 (D) · What is the value of the 8 in 98,513? = 8000 (E) · What is the value of the 2 in 124? = 20 (H) · What is the value of the 4 in 4,507? = 4000 (A) · What is the value of the 5 in 5,101? = 5000 (F) · What is the value of the 9 in 6,974? = 900 (L)

Clue 2 (Addition): "LOG BOOK SHOWS RIGHT HAND WRITING"

$445 + 237 = 682$ (L) · $425 + 218 = 643$ (D) · $107 + 126 = 233$ (B) · $178 + 298 = 476$ (W) · $233 + 514 = 747$ (H) · $463 + 265 = 728$ (K) · $133 + 104 = 237$ (G) · $363 + 233 = 596$ (A) · $332 + 187 = 519$ (N) · $125 + 115 = 240$ (I) · $263 + 365 = 628$ (O) · $567 + 262 = 829$ (T) · $202 + 333 = 535$ (R) · $326 + 358 = 684$ (S)

Clue 3 (Subtraction): "THEY FLED FROM BRIGHT FLASHLIGHTS"

$1160 - 267 = 893$ (T) · $166 - 45 = 121$ (R) · $945 - 287 = 658$ (M) · $936 - 382 = 554$ (D) · $561 - 322 = 239$ (E) · $475 - 182 = 293$ (L) · $854 - 321 = 533$ (F) · $301 - 147 = 154$ (G) · $773 - 387 = 386$ (Y) · $655 - 163 = 492$ (I) · $468 - 294 = 174$ (H) · $581 - 37 = 544$ (A) · $922 - 58 = 864$ (O) · $437 - 115 = 322$ (B) · $831 - 77 = 754$ (S)

Clue 4 (Rounding): "WE FOUND A SHINY GOLD RIBBON AT THE DOCK"

Round 2,060 to the nearest thousand = 2000 (W) · Round 8,203 to the nearest thousand = 8000 (I) · Round 81 to the nearest ten = 80 (H) · Round 6,636 to the nearest thousand = 7000 (R) · Round 48 to the nearest ten = 50 (L) · Round 481 to the nearest hundred = 500 (O) · Round 36 to the nearest ten = 40 (C) · Round 17 to the nearest ten = 20 (F) · Round 294 to the nearest hundred = 300 (T) · Round 5,456 to the nearest thousand = 5000 (B) · Round 358 to the nearest hundred = 400 (G) · Round 64 to the nearest ten = 60 (D) · Round 2,527 to the nearest thousand = 3000 (N) · Round 678 to the nearest hundred = 700 (K) · Round 887 to the nearest hundred = 900 (E) · Round 3,938 to the nearest thousand = 4000 (Y) · Round 642 to the nearest hundred = 600 (A) · Round 30 to the nearest ten = 30 (U) · Round 8,863 to the nearest thousand = 9000 (S)

Clue 5 (Missing addends): surviving statement is box 1 → Gemma Gear

$3 + \underline{\quad} = 10 = 7$ · $3 + \underline{\quad} = 7 = 4$ · $8 + \underline{\quad} = 13 = 5$ · $2 + \underline{\quad} = 14 = 12$ · $2 + \underline{\quad} = 11 = 9$ · $7 + \underline{\quad} = 15 = 8$ · $4 + \underline{\quad} = 6 = 2$ · $8 + \underline{\quad} = 19 = 11$ · $7 + \underline{\quad} = 17 = 10$ · $9 + \underline{\quad} = 15 = 6$ · $3 + \underline{\quad} = 6 = 3$