The Mystery of the Golden Compass

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

Detective: _____ **Date:** _____

Someone snatched the golden compass from the camp director's tent on Adventure Island! Decode the clues to find out who did 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 Sneaky Bandit is _____

Possible suspects

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

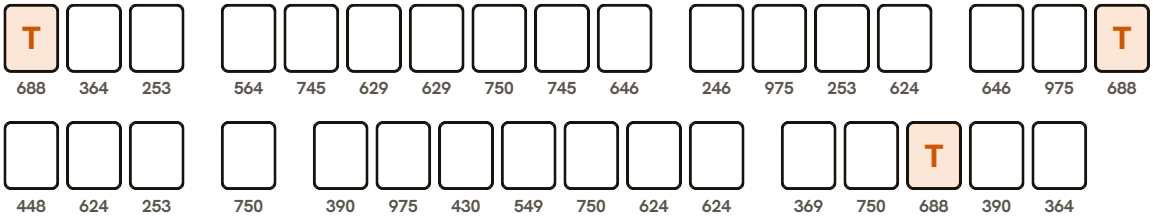
NAME	MAIN GADGET	SIDE TOOL	WATCH WRIST	CAP COLOR	AFRAID OF
Wyatt	Smoke Bomb	Decodable Whistle	Right Wrist	Red Cap	Loud Whistles
Ethan	Grappling Hook	Mini Spyglass	Right Wrist	Red Cap	Bright Lights
Noah	Zipline Pulley	Decodable Whistle	Left Wrist	Blue Cap	Bright Lights
Mason	Grappling Hook	Compass Watch	Right Wrist	Red Cap	Bright Lights
Lucas	Zipline Pulley	Signal Mirror	Right Wrist	Green Cap	Loud Whistles
Ava	Zipline Pulley	Decodable Whistle	Right Wrist	Blue Cap	Bright Lights
Leo	Zipline Pulley	Decodable Whistle	Left Wrist	Green Cap	Bright Lights
Finn	Flashlight Glove	Trail Marker	Left Wrist	Blue Cap	Snap Traps
Eli	Smoke Bomb	Trail Marker	Left Wrist	Green Cap	Bright Lights
Sam	Grappling Hook	Decodable Whistle	Right Wrist	Red Cap	Snap Traps
Owen	Smoke Bomb	Signal Mirror	Left Wrist	Red Cap	Bright Lights
Zoe	Smoke Bomb	Decodable Whistle	Left Wrist	Red Cap	Loud Whistles
Isla	Glider Wings	Decodable Whistle	Left Wrist	Blue Cap	Bright Lights
Hazel	Zipline Pulley	Mini Spyglass	Left Wrist	Blue Cap	Bright Lights
Mia	Glider Wings	Trail Marker	Left Wrist	Green Cap	Loud Whistles
Nora	Zipline Pulley	Compass Watch	Left Wrist	Green Cap	Snap Traps
Caleb	Flashlight Glove	Signal Mirror	Left Wrist	Blue Cap	Loud Whistles
Maya	Flashlight Glove	Mini Spyglass	Left Wrist	Blue Cap	Bright Lights
Chloe	Grappling Hook	Compass Watch	Left Wrist	Blue Cap	Bright Lights
Jack	Glider Wings	Mini Spyglass	Right Wrist	Blue Cap	Bright Lights
Lily	Smoke Bomb	Decodable Whistle	Left Wrist	Green Cap	Snap Traps

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CLUE 1 Addition

We tallied up all the lost supply crates found along the river trail to get our first secret clue.

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



462 + 226 = ☐ → T

134 + 119 = ☐ → E

284 + 280 = ☐ → V

123 + 123 = ☐ → D

293 + 137 = ☐ → M

174 + 375 = ☐ → P

317 + 329 = ☐ → N

241 + 207 = ☐ → U

384 + 361 = ☐ → I

199 + 430 = ☐ → L

239 + 511 = ☐ → A

178 + 186 = ☐ → H

193 + 176 = ☐ → W

184 + 206 = ☐ → C

677 + 298 = ☐ → O

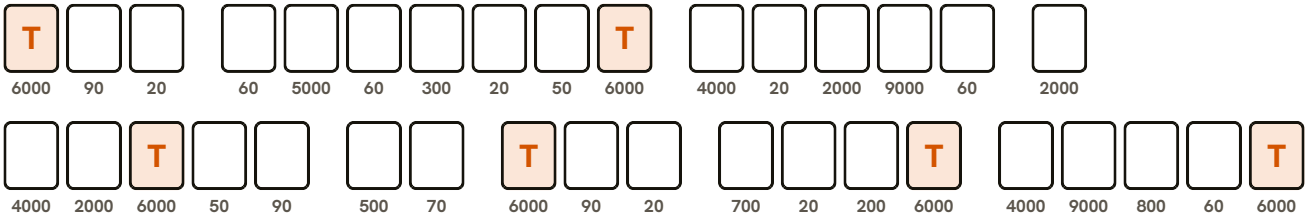
254 + 370 = ☐ → S

Scratch space:

CLUE 2 Rounding

The island radar scanner rounds every distance to the nearest ten yards to track movement.

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



Round 6,270 to the nearest thousand ☐ → T

Round 49 to the nearest ten ☐ → C

Round 4,338 to the nearest thousand ☐ → W

Round 2,086 to the nearest thousand ☐ → A

Round 251 to the nearest hundred ☐ → P

Round 56 to the nearest ten ☐ → S

Round 16 to the nearest ten ☐ → E

Round 9,445 to the nearest thousand ☐ → R

Round 832 to the nearest hundred ☐ → I

Round 494 to the nearest hundred ☐ → O

Round 74 to the nearest ten ☐ → N

Round 87 to the nearest ten ☐ → H

Round 721 to the nearest hundred ☐ → L

Round 5,338 to the nearest thousand ☐ → U

Round 166 to the nearest hundred ☐ → F

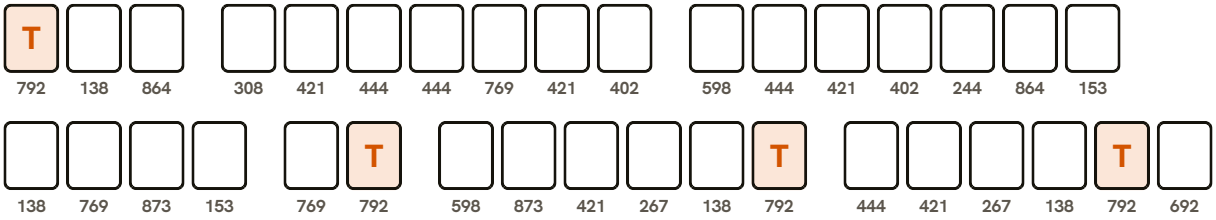
Scratch space:

CLUE 3

Subtraction

We measured the missing fruit snacks from the canteen pantry to find out what was taken.

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



1082 - 290 = ☐ → T

631 - 323 = ☐ → V

477 - 75 = ☐ → N

562 - 118 = ☐ → L

774 - 82 = ☐ → S

1101 - 237 = ☐ → E

559 - 138 = ☐ → I

472 - 334 = ☐ → H

845 - 76 = ☐ → A

515 - 362 = ☐ → D

518 - 274 = ☐ → K

780 - 182 = ☐ → B

460 - 193 = ☐ → G

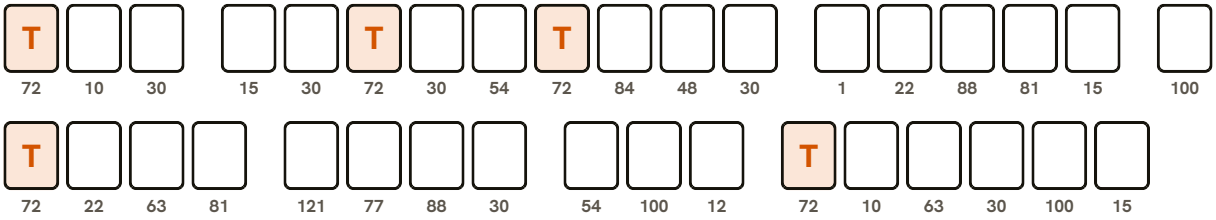
1175 - 302 = ☐ → R

Scratch space:

CLUE 4 Multiplication facts (1-12)

> The scouts arranged four equal rows of tents to organize the jungle search team.

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



6 × 12 = ☐ → T	7 × 12 = ☐ → I	9 × 9 = ☐ → N
2 × 11 = ☐ → O	6 × 2 = ☐ → P	7 × 11 = ☐ → L
9 × 6 = ☐ → C	1 × 1 = ☐ → F	11 × 11 = ☐ → B
11 × 8 = ☐ → U	10 × 3 = ☐ → E	4 × 12 = ☐ → V
1 × 10 = ☐ → H	10 × 10 = ☐ → A	3 × 5 = ☐ → D
7 × 9 = ☐ → R		

Scratch space:

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

> We shared the clue cards equally among the three patrol teams to solve the final puzzle.

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 ÷ 6 = ☐	1 ÷ 1 = ☐	27 ÷ 9 = ☐	20 ÷ 4 = ☐	12 ÷ 1 = ☐
21 ÷ 3 = ☐	16 ÷ 4 = ☐	36 ÷ 4 = ☐	8 ÷ 1 = ☐	90 ÷ 9 = ☐
33 ÷ 3 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain soared over the treetops on glider wings, then blew a signal using a decodable whistle.
2. The villain zipped down the high cable with a zipline pulley, then spied ahead with a mini spyglass.
3. The villain zipped down the high cable with a zipline pulley, then blew a signal using a decodable whistle.
4. The villain lit up the dark trail with a flashlight glove, then flashed a secret beam with a signal mirror.
5. The villain swung across the ravine with a grappling hook, then spied ahead with a mini spyglass.
6. The villain lit up the dark trail with a flashlight glove, then spied ahead with a mini spyglass.
7. The villain zipped down the high cable with a zipline pulley, then marked the dirt using a trail marker.
8. The villain swung across the ravine with a grappling hook, then checked the route with a compass watch.
9. The villain soared over the treetops on glider wings, then spied ahead with a mini spyglass.
10. The villain lit up the dark trail with a flashlight glove, then marked the dirt using a trail marker.
11. The villain swung across the ravine with a grappling hook, then blew a signal using a decodable whistle.
12. The villain zipped down the high cable with a zipline pulley, then flashed a secret beam with a signal mirror.

TEACHER / PARENT

Answer Key

The Mystery of the Golden Compass

Culprit: Maya

Flashlight Glove · Mini Spyglass · Left Wrist · Blue Cap · Bright Lights

Trail: Start 21 → Clue 1 18 → Clue 2 12 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT USE A COMPASS WATCH"

462 + 226 = 688 (T) · 134 + 119 = 253 (E) · 284 + 280 = 564 (V) · 123 + 123 = 246 (D) · 293 + 137 = 430 (M) · 174 + 375 = 549 (P) · 317 + 329 = 646 (N) · 241 + 207 = 448 (U) · 384 + 361 = 745 (I) · 199 + 430 = 629 (L) · 239 + 511 = 750 (A) · 178 + 186 = 364 (H) · 193 + 176 = 369 (W) · 184 + 206 = 390 (C) · 677 + 298 = 975 (O) · 254 + 370 = 624 (S)

Clue 2 (Rounding): "THE SUSPECT WEARS A WATCH ON THE LEFT WRIST"

Round 6,270 to the nearest thousand = 6000 (T) · Round 49 to the nearest ten = 50 (C) · Round 4,338 to the nearest thousand = 4000 (W) · Round 2,086 to the nearest thousand = 2000 (A) · Round 251 to the nearest hundred = 300 (P) · Round 56 to the nearest ten = 60 (S) · Round 16 to the nearest ten = 20 (E) · Round 9,445 to the nearest thousand = 9000 (R) · Round 832 to the nearest hundred = 800 (I) · Round 494 to the nearest hundred = 500 (O) · Round 74 to the nearest ten = 70 (N) · Round 87 to the nearest ten = 90 (H) · Round 721 to the nearest hundred = 700 (L) · Round 5,338 to the nearest thousand = 5000 (U) · Round 166 to the nearest hundred = 200 (F)

Clue 3 (Subtraction): "THE VILLAIN BLINKED HARD AT BRIGHT LIGHTS"

1082 - 290 = 792 (T) · 631 - 323 = 308 (V) · 477 - 75 = 402 (N) · 562 - 118 = 444 (L) · 774 - 82 = 692 (S) · 1101 - 237 = 864 (E) · 559 - 138 = 421 (I) · 472 - 334 = 138 (H) · 845 - 76 = 769 (A) · 515 - 362 = 153 (D) · 518 - 274 = 244 (K) · 780 - 182 = 598 (B) · 460 - 193 = 267 (G) · 1175 - 302 = 873 (R)

Clue 4 (Multiplication facts (1-12)): "THE DETECTIVE FOUND A TORN BLUE CAP THREAD"

6 × 12 = 72 (T) · 7 × 12 = 84 (I) · 9 × 9 = 81 (N) · 2 × 11 = 22 (O) · 6 × 2 = 12 (P) · 7 × 11 = 77 (L) · 9 × 6 = 54 (C) · 1 × 1 = 1 (F) · 11 × 11 = 121 (B) · 11 × 8 = 88 (U) · 10 × 3 = 30 (E) · 4 × 12 = 48 (V) · 1 × 10 = 10 (H) · 10 × 10 = 100 (A) · 3 × 5 = 15 (D) · 7 × 9 = 63 (R)

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

12 ÷ 6 = 2 · 1 ÷ 1 = 1 · 27 ÷ 9 = 3 · 20 ÷ 4 = 5 · 12 ÷ 1 = 12 · 21 ÷ 3 = 7 · 16 ÷ 4 = 4 · 36 ÷ 4 = 9 · 8 ÷ 1 = 8 · 90 ÷ 9 = 10 · 33 ÷ 3 = 11