The Mystery of the Missing Map

Grade 4 math · Place value, Addition, Subtraction, Rounding, Division · Reading level grades 1-2

Detective: _____ **Date:** _____

Someone snuck into the Sunken Cove Treehouse and took the golden compass! Follow 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.

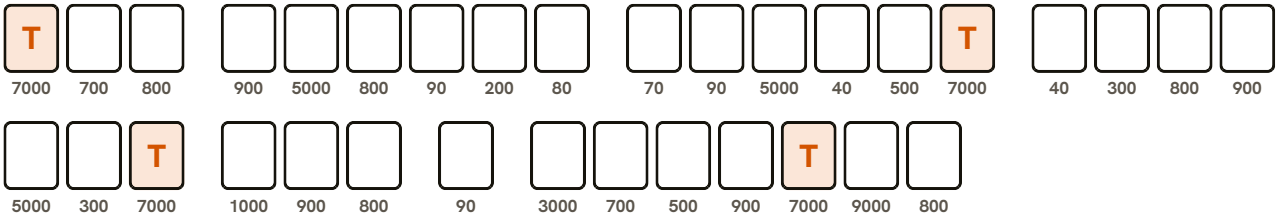
NAME	GEAR	GADGET	STANCE	HAT COLOR	FEAR
Hugo Hill	Rope Launcher	Decoder Ring	Right Handed	Red Cap	Cold Water
Jax Jet	Rope Launcher	Flashlight	Right Handed	Blue Cap	Cold Water
Luna Leaf	Pocket Torch	Whistle	Right Handed	Blue Cap	Bright Light
Eli Echo	Spyglass	Compass	Left Handed	Red Cap	Loud Sounds
Finn Fern	Pocket Torch	Smoke Bomb	Left Handed	Green Cap	Loud Sounds
Maya Map	Grappling Hook	Smoke Bomb	Right Handed	Red Cap	Bright Light
Cole Cave	Pocket Torch	Smoke Bomb	Right Handed	Blue Cap	Bright Light
Wren Wood	Grappling Hook	Smoke Bomb	Right Handed	Green Cap	Bright Light
Pip Parker	Grappling Hook	Decoder Ring	Right Handed	Blue Cap	Bright Light
Kira Kite	Glider Wings	Flashlight	Right Handed	Blue Cap	Cold Water
Gage Glen	Glider Wings	Smoke Bomb	Right Handed	Green Cap	Bright Light
Ivy Island	Pocket Torch	Compass	Right Handed	Blue Cap	Loud Sounds
Ella Edge	Pocket Torch	Compass	Left Handed	Red Cap	Cold Water
Milo Mist	Spyglass	Whistle	Left Handed	Green Cap	Bright Light
Suri Sky	Grappling Hook	Smoke Bomb	Left Handed	Blue Cap	Loud Sounds
Ruby River	Grappling Hook	Decoder Ring	Left Handed	Blue Cap	Bright Light
Tess Tide	Glider Wings	Whistle	Right Handed	Green Cap	Cold Water
Leo Log	Glider Wings	Compass	Right Handed	Blue Cap	Bright Light
Zoe Zip	Pocket Torch	Decoder Ring	Left Handed	Green Cap	Cold Water
Toby Trail	Glider Wings	Smoke Bomb	Right Handed	Blue Cap	Bright Light
Nora Net	Glider Wings	Whistle	Right Handed	Blue Cap	Loud Sounds

make your own at mathcrackers.com

CLUE 1 Place value

You check the lock code digit by digit to see what gear was dropped.

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



What is the value of the 7 in 47,066? ☐ → T

What is the value of the 9 in 793? ☐ → A

What is the value of the 8 in 6,870? ☐ → E

What is the value of the 7 in 4,678? ☐ → B

What is the value of the 3 in 1,309? ☐ → O

What is the value of the 3 in 73,678? ☐ → W

What is the value of the 7 in 3,763? ☐ → H

What is the value of the 1 in 1,886? ☐ → U

What is the value of the 9 in 970? ☐ → S

What is the value of the 2 in 8,263? ☐ → K

What is the value of the 5 in 95,928? ☐ → N

What is the value of the 9 in 79,570? ☐ → L

What is the value of the 8 in 985? ☐ → Y

What is the value of the 4 in 9,949? ☐ → D

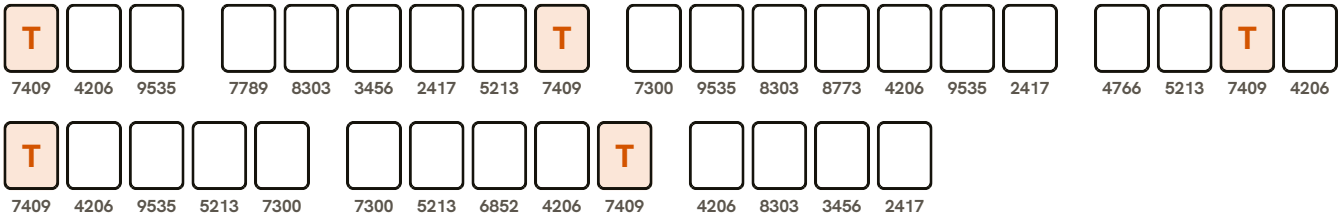
What is the value of the 5 in 596? ☐ → I

Scratch space:

CLUE 2 Addition

You add up all the lost trail snacks to trace the thief.

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



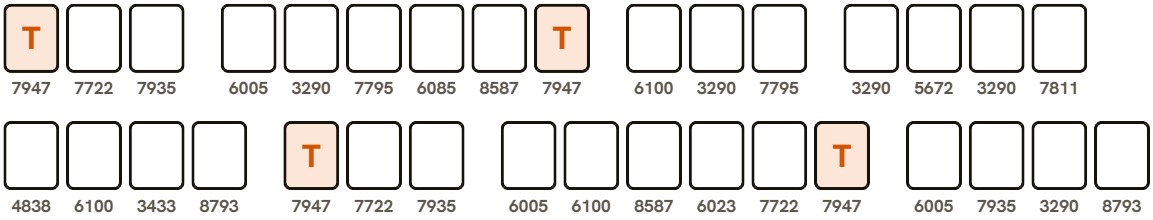
4594 + 2815 = ☐ → T	3771 + 5002 = ☐ → C	4085 + 4218 = ☐ → A
5299 + 2490 = ☐ → B	1216 + 2240 = ☐ → N	1446 + 3320 = ☐ → W
4803 + 2497 = ☐ → R	2132 + 2074 = ☐ → H	980 + 1437 = ☐ → D
6588 + 2947 = ☐ → E	2418 + 2795 = ☐ → I	2959 + 3893 = ☐ → G

Scratch space:

CLUE 3 Subtraction

You subtract the footprints on the path to see what is left.

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



12263 - 4316 = ☐ → T

6382 - 359 = ☐ → G

5104 - 266 = ☐ → F

12514 - 4719 = ☐ → N

7751 - 4461 = ☐ → A

8999 - 3327 = ☐ → W

9480 - 3380 = ☐ → R

11961 - 4150 = ☐ → Y

12197 - 4475 = ☐ → H

3586 - 153 = ☐ → O

9128 - 3123 = ☐ → B

9418 - 3333 = ☐ → D

13115 - 4528 = ☐ → I

9755 - 962 = ☐ → M

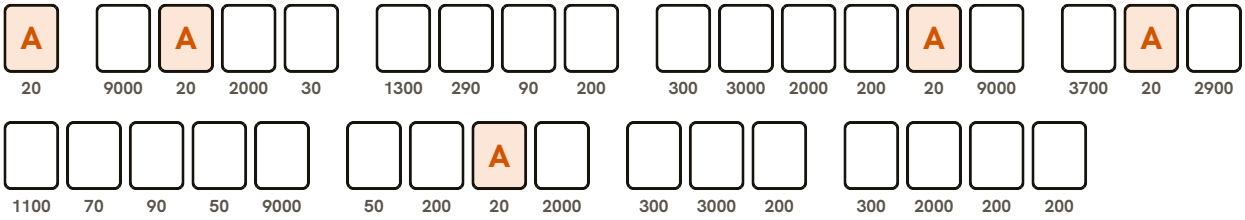
11153 - 3218 = ☐ → E

Scratch space:

CLUE 4 Rounding

> The treehouse radar only gives rounded numbers for speed.

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



Round 19 to the nearest ten ☐ → **A**

Round 27 to the nearest ten ☐ → **K**

Round 52 to the nearest ten ☐ → **N**

Round 2,756 to the nearest thousand ☐ → **H**

Round 289 to the nearest ten ☐ → **L**

Round 1,329 to the nearest hundred ☐ → **B**

Round 2,909 to the nearest hundred ☐ → **S**

Round 1,848 to the nearest thousand ☐ → **R**

Round 90 to the nearest ten ☐ → **U**

Round 3,712 to the nearest hundred ☐ → **W**

Round 296 to the nearest hundred ☐ → **T**

Round 1,070 to the nearest hundred ☐ → **F**

Round 66 to the nearest ten ☐ → **O**

Round 199 to the nearest hundred ☐ → **E**

Round 9,307 to the nearest thousand ☐ → **D**

Scratch space:

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

> You divide the shiny gold coins equally among four clue bags.

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:

7 ÷ 7 = ☐	77 ÷ 7 = ☐	32 ÷ 4 = ☐	20 ÷ 2 = ☐	30 ÷ 5 = ☐
27 ÷ 9 = ☐	21 ÷ 3 = ☐	96 ÷ 8 = ☐	22 ÷ 11 = ☐	54 ÷ 6 = ☐
28 ÷ 7 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain swings fast with a grappling hook, then spins a secret decoder ring.
2. The villain swings fast with a grappling hook, then clicks a bright flashlight on.
3. The villain scouts ahead using a spyglass, then signals with a noisy whistle.
4. The villain scouts ahead using a spyglass, then spins a secret decoder ring.
5. The villain soars down with glider wings, then vanishes behind a smoke bomb.
6. The villain scouts ahead using a spyglass, then clicks a bright flashlight on.
7. The villain swings fast with a grappling hook, then signals with a noisy whistle.
8. The villain soars down with glider wings, then checks the shiny compass face.
9. The villain flashes a small pocket torch, then spins a secret decoder ring.
10. The villain scouts ahead using a spyglass, then vanishes behind a smoke bomb.
11. The villain flashes a small pocket torch, then vanishes behind a smoke bomb.
12. The villain swings fast with a grappling hook, then checks the shiny compass face.

TEACHER / PARENT

Answer Key

The Mystery of the Missing Map

Culprit: Toby Trail

Glider Wings · Smoke Bomb · Right Handed · Blue Cap · Bright Light

Trail: Start 21 → Clue 1 17 → Clue 2 11 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE SNEAKY BANDIT DOES NOT USE A WHISTLE"

What is the value of the 7 in 47,066? = 7000 (T) · What is the value of the 9 in 793? = 90 (A) · What is the value of the 8 in 6,870? = 800 (E) · What is the value of the 7 in 4,678? = 70 (B) · What is the value of the 3 in 1,309? = 300 (O) · What is the value of the 3 in 73,678? = 3000 (W) · What is the value of the 7 in 3,763? = 700 (H) · What is the value of the 1 in 1,886? = 1000 (U) · What is the value of the 9 in 970? = 900 (S) · What is the value of the 2 in 8,263? = 200 (K) · What is the value of the 5 in 95,928? = 5000 (N) · What is the value of the 9 in 79,570? = 9000 (L) · What is the value of the 8 in 985? = 80 (Y) · What is the value of the 4 in 9,949? = 40 (D) · What is the value of the 5 in 596? = 500 (I)

Clue 2 (Addition): "THE BANDIT REACHED WITH THEIR RIGHT HAND"

4594 + 2815 = 7409 (T) · 3771 + 5002 = 8773 (C) · 4085 + 4218 = 8303 (A) · 5299 + 2490 = 7789 (B) · 1216 + 2240 = 3456 (N) · 1446 + 3320 = 4766 (W) · 4803 + 2497 = 7300 (R) · 2132 + 2074 = 4206 (H) · 980 + 1437 = 2417 (D) · 6588 + 2947 = 9535 (E) · 2418 + 2795 = 5213 (I) · 2959 + 3893 = 6852 (G)

Clue 3 (Subtraction): "THE BANDIT RAN AWAY FROM THE BRIGHT BEAM"

12263 - 4316 = 7947 (T) · 6382 - 359 = 6023 (G) · 5104 - 266 = 4838 (F) · 12514 - 4719 = 7795 (N) · 7751 - 4461 = 3290 (A) · 8999 - 3327 = 5672 (W) · 9480 - 3380 = 6100 (R) · 11961 - 4150 = 7811 (Y) · 12197 - 4475 = 7722 (H) · 3586 - 153 = 3433 (O) · 9128 - 3123 = 6005 (B) · 9418 - 3333 = 6085 (D) · 13115 - 4528 = 8587 (I) · 9755 - 962 = 8793 (M) · 11153 - 3218 = 7935 (E)

Clue 4 (Rounding): "A DARK BLUE THREAD WAS FOUND NEAR THE TREE"

Round 19 to the nearest ten = 20 (A) · Round 27 to the nearest ten = 30 (K) · Round 52 to the nearest ten = 50 (N) · Round 2,756 to the nearest thousand = 3000 (H) · Round 289 to the nearest ten = 290 (L) · Round 1,329 to the nearest hundred = 1300 (B) · Round 2,909 to the nearest hundred = 2900 (S) · Round 1,848 to the nearest thousand = 2000 (R) · Round 90 to the nearest ten = 90 (U) · Round 3,712 to the nearest hundred = 3700 (W) · Round 296 to the nearest hundred = 300 (T) · Round 1,070 to the nearest hundred = 1100 (F) · Round 66 to the nearest ten = 70 (O) · Round 199 to the nearest hundred = 200 (E) · Round 9,307 to the nearest thousand = 9000 (D)

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

7 ÷ 7 = 1 · 77 ÷ 7 = 11 · 32 ÷ 4 = 8 · 20 ÷ 2 = 10 · 30 ÷ 5 = 6 · 27 ÷ 9 = 3 · 21 ÷ 3 = 7 · 96 ÷ 8 = 12 · 22 ÷ 11 = 2 · 54 ÷ 6 = 9 · 28 ÷ 7 = 4