The Case of the Sunken Temple Compass

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

Detective: _____ **Date:** _____

A secret golden compass was snatched from the camp tent right before sunset! Detective, examine the tracks left behind, decode the notes, and catch the sneaky rival explorer.

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 Rival Explorer is _____

Possible suspects

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

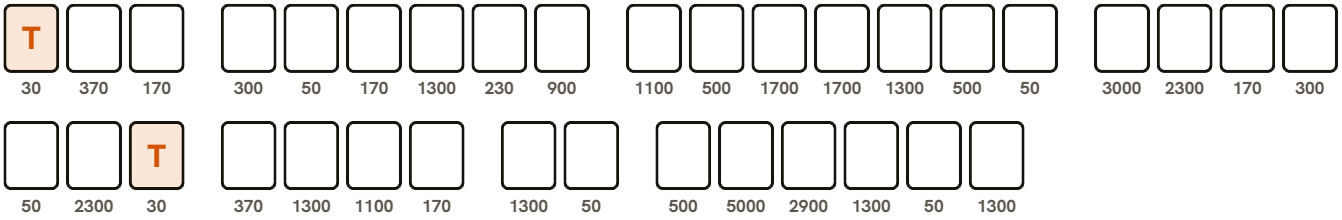
NAME	PRIMARY TOOL	COMPANION ANIMAL	STANCE	HAT COLOR	FEAR
Ivy Finch	Smoke Bomb	Tree Frog	LEFT HANDED	GREEN HAT	SQUEAKY TOYS
Toby Ridge	Grappling Hook	Tree Frog	LEFT HANDED	GREEN HAT	LOUD WHISTLES
Milo Marsh	Grappling Hook	Tree Frog	RIGHT HANDED	RED HAT	SQUEAKY TOYS
Wyatt Woods	Grappling Hook	Iguana	LEFT HANDED	GREEN HAT	LOUD WHISTLES
Maya Rivers	Glider Wings	Capuchin	RIGHT HANDED	BROWN HAT	LOUD WHISTLES
Kira Peak	Flash Cannon	Iguana	RIGHT HANDED	GREEN HAT	BRIGHT FLASHES
Felix Flint	Flash Cannon	Tree Frog	LEFT HANDED	BROWN HAT	SQUEAKY TOYS
Gavin Grove	Vine Lasso	Iguana	RIGHT HANDED	BROWN HAT	SQUEAKY TOYS
Captain Cora	Smoke Bomb	Capuchin	RIGHT HANDED	GREEN HAT	LOUD WHISTLES
Clara Fern	Glider Wings	Parrot	LEFT HANDED	GREEN HAT	LOUD WHISTLES
Zoe Carter	Grappling Hook	Parrot	LEFT HANDED	GREEN HAT	LOUD WHISTLES
Paige Lake	Flash Cannon	Iguana	LEFT HANDED	BROWN HAT	BRIGHT FLASHES
Tessa Vale	Glider Wings	Iguana	RIGHT HANDED	GREEN HAT	SQUEAKY TOYS
Sammy Swift	Grappling Hook	Fruit Bat	LEFT HANDED	BROWN HAT	LOUD WHISTLES
Leo Compass	Vine Lasso	Capuchin	RIGHT HANDED	GREEN HAT	SQUEAKY TOYS
Finn Boulder	Smoke Bomb	Tree Frog	LEFT HANDED	BROWN HAT	LOUD WHISTLES
Jax Tracker	Flash Cannon	Tree Frog	RIGHT HANDED	GREEN HAT	LOUD WHISTLES
Sienna Stone	Vine Lasso	Iguana	LEFT HANDED	RED HAT	SQUEAKY TOYS
Prof Oliver	Flash Cannon	Capuchin	RIGHT HANDED	GREEN HAT	LOUD WHISTLES
Ruby Spark	Smoke Bomb	Fruit Bat	LEFT HANDED	BROWN HAT	BRIGHT FLASHES
Barnaby Blythe	Glider Wings	Tree Frog	LEFT HANDED	GREEN HAT	LOUD WHISTLES

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CLUE 1 Rounding

The fuzzy radar readout rounded the footstep distance to the nearest hundred.

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



Round 27 to the nearest ten ☐ → T

Round 50 to the nearest ten ☐ → N

Round 366 to the nearest ten ☐ → H

Round 232 to the nearest ten ☐ → K

Round 2,323 to the nearest hundred ☐ → O

Round 263 to the nearest hundred ☐ → S

Round 899 to the nearest hundred ☐ → Y

Round 2,903 to the nearest thousand ☐ → D

Round 1,062 to the nearest hundred ☐ → V

Round 1,324 to the nearest hundred ☐ → A

Round 1,660 to the nearest hundred ☐ → L

Round 2,883 to the nearest hundred ☐ → U

Round 172 to the nearest ten ☐ → E

Round 544 to the nearest hundred ☐ → I

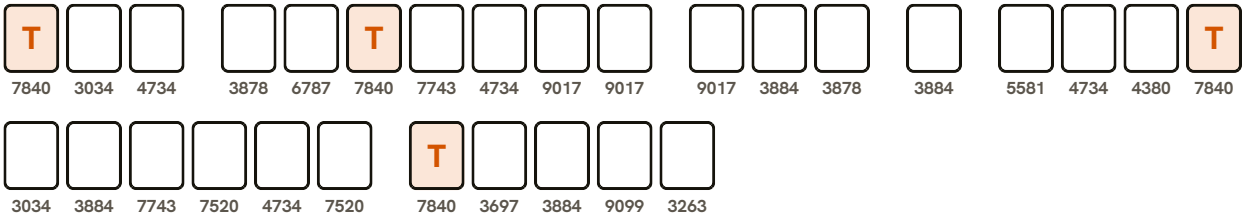
Round 4,527 to the nearest thousand ☐ → G

Scratch space:

CLUE 2 Addition

We tallied all the brass gears collected from the camp supply crate.

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



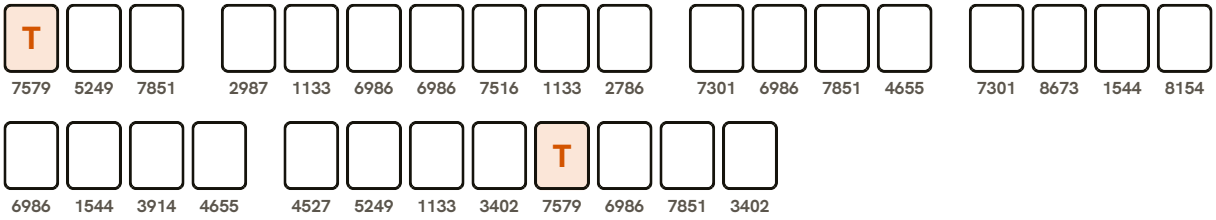
5135 + 2705 = ☐ → T	1958 + 2422 = ☐ → F	2387 + 5356 = ☐ → N
3570 + 3217 = ☐ → I	2991 + 1743 = ☐ → E	1168 + 2716 = ☐ → A
5538 + 3479 = ☐ → S	4662 + 2858 = ☐ → D	1507 + 2371 = ☐ → W
3271 + 2310 = ☐ → L	3586 + 5513 = ☐ → C	1574 + 1689 = ☐ → K
1833 + 1201 = ☐ → H	1273 + 2424 = ☐ → R	

Scratch space:

CLUE 3 Subtraction

We subtracted the missing trail markers from the master map count.

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



8560 - 981 = ☐ → T

1847 - 303 = ☐ → O

4986 - 3853 = ☐ → I

9143 - 1627 = ☐ → A

2997 - 211 = ☐ → N

8490 - 336 = ☐ → M

10047 - 1374 = ☐ → R

11386 - 3535 = ☐ → E

6835 - 3848 = ☐ → V

7365 - 3963 = ☐ → S

5334 - 85 = ☐ → H

8206 - 3551 = ☐ → D

6669 - 2142 = ☐ → W

7955 - 4041 = ☐ → U

10418 - 3117 = ☐ → F

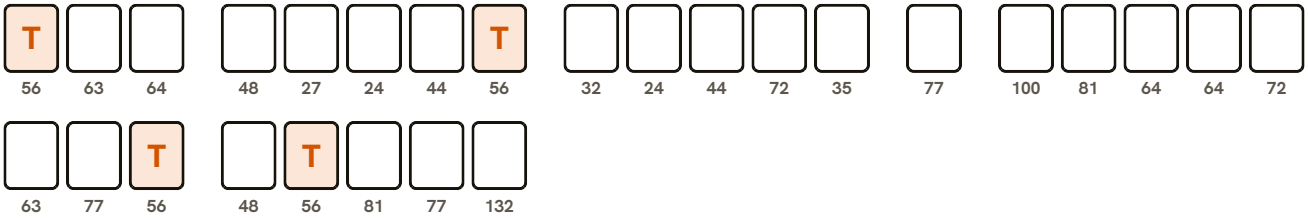
7210 - 224 = ☐ → L

Scratch space:

CLUE 4 Multiplication facts (1-12)

> The footprints formed neat equal rows along the muddy riverbank.

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



- 7 × 8 = ☐ → T
- 6 × 4 = ☐ → O
- 4 × 8 = ☐ → F
- 9 × 7 = ☐ → H
- 9 × 8 = ☐ → N
- 9 × 9 = ☐ → R
- 7 × 11 = ☐ → A
- 12 × 4 = ☐ → S
- 10 × 10 = ☐ → G
- 8 × 8 = ☐ → E
- 3 × 9 = ☐ → C
- 12 × 11 = ☐ → P
- 7 × 5 = ☐ → D
- 11 × 4 = ☐ → U

Scratch space:

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

> We divided the found clue cards equally among the search teams.

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:

9 ÷ 3 = ☐	20 ÷ 10 = ☐	24 ÷ 6 = ☐	120 ÷ 12 = ☐	5 ÷ 5 = ☐
63 ÷ 7 = ☐	42 ÷ 6 = ☐	72 ÷ 6 = ☐	16 ÷ 2 = ☐	10 ÷ 2 = ☐
121 ÷ 11 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain fires a flash cannon, then launches a fruit bat.
2. The villain soars with glider wings, then nudges a tree frog.
3. The villain soars with glider wings, then signals a parrot.
4. The villain swings on a grappling hook, then signals a parrot.
5. The villain swings on a grappling hook, then whistles to a capuchin.
6. The villain swings on a grappling hook, then nudges a tree frog.
7. The villain snares the chest with a vine lasso, then nudges a tree frog.
8. The villain throws a smoke bomb, then nudges a tree frog.
9. The villain snares the chest with a vine lasso, then launches a fruit bat.
10. The villain soars with glider wings, then launches a fruit bat.
11. The villain throws a smoke bomb, then signals a parrot.
12. The villain snares the chest with a vine lasso, then carries an iguana.

TEACHER / PARENT

Answer Key

The Case of the Sunken Temple Compass

Culprit: Toby Ridge

Grappling Hook · Tree Frog · LEFT HANDED · GREEN HAT · LOUD WHISTLES

Trail: Start 21 → Clue 1 15 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE SNEAKY VILLAIN DOES NOT HAVE AN IGUANA"

Round 27 to the nearest ten = 30 (T) · Round 50 to the nearest ten = 50 (N) · Round 366 to the nearest ten = 370 (H) · Round 232 to the nearest ten = 230 (K) · Round 2,323 to the nearest hundred = 2300 (O) · Round 263 to the nearest hundred = 300 (S) · Round 899 to the nearest hundred = 900 (Y) · Round 2,903 to the nearest thousand = 3000 (D) · Round 1,062 to the nearest hundred = 1100 (V) · Round 1,324 to the nearest hundred = 1300 (A) · Round 1,660 to the nearest hundred = 1700 (L) · Round 2,883 to the nearest hundred = 2900 (U) · Round 172 to the nearest ten = 170 (E) · Round 544 to the nearest hundred = 500 (I) · Round 4,527 to the nearest thousand = 5000 (G)

Clue 2 (Addition): "THE WITNESS SAW A LEFT HANDED TRACK"

5135 + 2705 = 7840 (T) · 1958 + 2422 = 4380 (F) · 2387 + 5356 = 7743 (N) · 3570 + 3217 = 6787 (I) · 2991 + 1743 = 4734 (E) · 1168 + 2716 = 3884 (A) · 5538 + 3479 = 9017 (S) · 4662 + 2858 = 7520 (D) · 1507 + 2371 = 3878 (W) · 3271 + 2310 = 5581 (L) · 3586 + 5513 = 9099 (C) · 1574 + 1689 = 3263 (K) · 1833 + 1201 = 3034 (H) · 1273 + 2424 = 3697 (R)

Clue 3 (Subtraction): "THE VILLAIN FLED FROM LOUD WHISTLES"

8560 - 981 = 7579 (T) · 1847 - 303 = 1544 (O) · 4986 - 3853 = 1133 (I) · 9143 - 1627 = 7516 (A) · 2997 - 211 = 2786 (N) · 8490 - 336 = 8154 (M) · 10047 - 1374 = 8673 (R) · 11386 - 3535 = 7851 (E) · 6835 - 3848 = 2987 (V) · 7365 - 3963 = 3402 (S) · 5334 - 85 = 5249 (H) · 8206 - 3551 = 4655 (D) · 6669 - 2142 = 4527 (W) · 7955 - 4041 = 3914 (U) · 10418 - 3117 = 7301 (F) · 7210 - 224 = 6986 (L)

Clue 4 (Multiplication facts (1-12)): "THE SCOUT FOUND A GREEN HAT STRAP"

7 × 8 = 56 (T) · 6 × 4 = 24 (O) · 4 × 8 = 32 (F) · 9 × 7 = 63 (H) · 9 × 8 = 72 (N) · 9 × 9 = 81 (R) · 7 × 11 = 77 (A) · 12 × 4 = 48 (S) · 10 × 10 = 100 (G) · 8 × 8 = 64 (E) · 3 × 9 = 27 (C) · 12 × 11 = 132 (P) · 7 × 5 = 35 (D) · 11 × 4 = 44 (U)

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

9 ÷ 3 = 3 · 20 ÷ 10 = 2 · 24 ÷ 6 = 4 · 120 ÷ 12 = 10 · 5 ÷ 5 = 1 · 63 ÷ 7 = 9 · 42 ÷ 6 = 7 · 72 ÷ 6 = 12 · 16 ÷ 2 = 8 · 10 ÷ 2 = 5 · 121 ÷ 11 = 11