The Temple Camp Mystery

Grade 6 math · Percentages, Multi-step word problems, Word problems, Exponents, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

Someone snuck into base camp and swiped the ancient sun stone! Work through the clues to unmask the culprit.

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 Shadow Scout is _____

Possible suspects

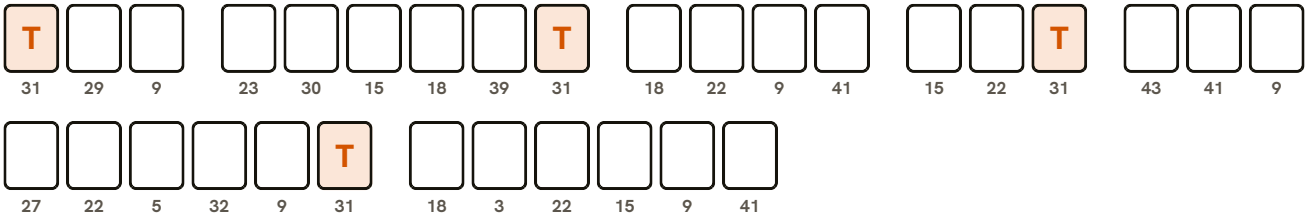
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	SPECIAL GEAR	GADGET	WATCH WRIST	CAP COLOR	DISTRACTION
Pilot Jax	Signal Flare	Pocket Drones	Right Wrist	Blue Cap	Shiny Mirror
Navigator Luke	Flashlight Glove	Tracker Tag	Right Wrist	Red Cap	Sweet Mango
Explorer Zoe	Grapple Hook	Laser Pointer	Right Wrist	Green Cap	Loud Bell
Trailhead Ben	Grapple Hook	Decoy Whistle	Right Wrist	Red Cap	Shiny Mirror
Pilot Ella	Grapple Hook	Tracker Tag	Left Wrist	Blue Cap	Sweet Mango
Rover Owen	Glider Cape	Laser Pointer	Left Wrist	Red Cap	Shiny Mirror
Agent Ruby	Grapple Hook	Map Scanner	Right Wrist	Red Cap	Sweet Mango
Tracker Max	Glider Cape	Map Scanner	Right Wrist	Red Cap	Sweet Mango
Navigator Ivy	Signal Flare	Tracker Tag	Left Wrist	Red Cap	Sweet Mango
Ranger Nia	Flashlight Glove	Decoy Whistle	Right Wrist	Blue Cap	Loud Bell
Agent Eli	Compass Ring	Pocket Drones	Right Wrist	Red Cap	Shiny Mirror
Rover Cleo	Compass Ring	Map Scanner	Right Wrist	Red Cap	Sweet Mango
Scout Finn	Flashlight Glove	Decoy Whistle	Right Wrist	Blue Cap	Sweet Mango
Captain Sam	Grapple Hook	Tracker Tag	Left Wrist	Green Cap	Shiny Mirror
Scout Parker	Flashlight Glove	Map Scanner	Left Wrist	Red Cap	Sweet Mango
Trailhead Toby	Grapple Hook	Pocket Drones	Right Wrist	Red Cap	Sweet Mango
Scout Nora	Grapple Hook	Pocket Drones	Right Wrist	Green Cap	Sweet Mango
Pathfinder Kai	Glider Cape	Map Scanner	Left Wrist	Red Cap	Shiny Mirror
Tracker Leo	Compass Ring	Tracker Tag	Right Wrist	Blue Cap	Loud Bell
Ranger Hugo	Compass Ring	Decoy Whistle	Right Wrist	Green Cap	Sweet Mango
Pathfinder Mia	Grapple Hook	Laser Pointer	Left Wrist	Red Cap	Shiny Mirror

CLUE 1 Percentages

You inspect the camp supply tent to calculate how many rations were looted during the night.

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



25% of 124 = ☐ → T

25% of 108 = ☐ → P

10% of 430 = ☐ → U

50% of 64 = ☐ → K

25% of 36 = ☐ → E

10% of 180 = ☐ → D

5% of 440 = ☐ → O

60% of 25 = ☐ → N

60% of 5 = ☐ → R

75% of 52 = ☐ → I

10% of 290 = ☐ → H

75% of 40 = ☐ → A

10% of 230 = ☐ → B

25% of 164 = ☐ → S

25% of 20 = ☐ → C

Scratch space:

CLUE 2 Multi-step word problems

Next, you tally up energy bars across multiple packs to see where the suspect stopped.

Solve each problem, then write its letter in the boxes to fill in the missing word.

A witness saw the villain was

R						R			
52	33	86	37	15	82	52	33	79	15

.

There were 360 trail maps in all. 4 Jungle Patrol used 38 trail maps each. The other 4 Jungle Patrol shared the rest equally. How many trail maps did each of the other Jungle Patrol get?

Answer: ☐ → **R**

Scout leader collected 72 climbing ropes in the morning and 18 climbing ropes in the afternoon, then split them equally among 6 Jungle Patrol. How many climbing ropes did each get?

Answer: ☐ → **T**

There were 88 trail maps in all. 1 Jungle Patrol used 22 trail maps each. The other 2 Jungle Patrol shared the rest equally. How many trail maps did each of the other Jungle Patrol get?

Answer: ☐ → **I**

There were 466 trail maps in all. 3 Jungle Patrol used 12 trail maps each. The other 5 Jungle Patrol shared the rest equally. How many trail maps did each of the other Jungle Patrol get?

Answer: ☐ → **G**

Scout leader filled 9 boxes with 4 climbing ropes each, then found 43 more climbing ropes. How many climbing ropes are there in all?

Answer: ☐ → **S**

Scout leader filled 5 boxes with 4 ration bars each, then found 62 more ration bars. How many ration bars are there in all?

Answer: ☐ → **W**

There were 229 climbing ropes in all. 2 Jungle Patrol used 22 climbing ropes each. The other 5 Jungle Patrol shared the rest equally. How many climbing ropes did each of the other Jungle Patrol get?

Answer: ☐ → **H**

Scratch space:

CLUE 3 Word problems

> A damaged expedition display shows only partial percentages of battery power left on the security trail cameras.

Solve each problem, then write its letter in the boxes to fill in the missing word.

Someone scared the villain off with

S								G	O
16	91	94	94	62	65	93	24		

.

Scout leader lined up 2 rows of 8 ration bars. How many ration bars in all?

Answer: ☐ → **S**

Scout leader found 11 ration bars yesterday and 83 more today. How many ration bars in all?

Answer: ☐ → **E**

Scout leader lined up 3 rows of 8 canteen packs. How many canteen packs in all?

Answer: ☐ → **N**

There were 81 climbing ropes. 16 were used up. How many climbing ropes are left?

Answer: ☐ → **M**

There were 88 canteen packs. 26 were used up. How many canteen packs are left?

Answer: ☐ → **T**

Scout leader found 42 climbing ropes yesterday and 51 more today. How many climbing ropes in all?

Answer: ☐ → **A**

Scout leader found 70 trail maps yesterday and 21 more today. How many trail maps in all?

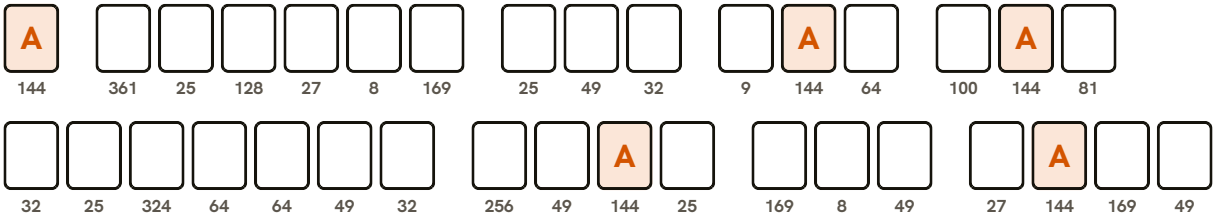
Answer: ☐ → **W**

Scratch space:

CLUE 4 Exponents

You crack a locked grid box where security codes grow exponentially at every level.

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



12^2 = ☐ → A

2^3 = ☐ → H

2^6 = ☐ → P

7^2 = ☐ → E

13^2 = ☐ → T

3^2 = ☐ → C

19^2 = ☐ → B

2^7 = ☐ → I

3^4 = ☐ → S

2^5 = ☐ → D

16^2 = ☐ → N

3^3 = ☐ → G

5^2 = ☐ → R

18^2 = ☐ → O

10^2 = ☐ → W

Scratch space:

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

> Finally, you divide the footprint evidence equally among search sectors to pin down the culprit.

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:

33 ÷ 11 = ☐ | 14 ÷ 2 = ☐ | 40 ÷ 10 = ☐ | 48 ÷ 4 = ☐ | 10 ÷ 2 = ☐

88 ÷ 11 = ☐ | 54 ÷ 6 = ☐ | 42 ÷ 7 = ☐ | 88 ÷ 8 = ☐ | 1 ÷ 1 = ☐

50 ÷ 5 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain navigated the dark ruin with a compass ring, then used a laser pointer to trick the guard.
2. The villain navigated the dark ruin with a compass ring, then scanned the ancient wall with a map scanner.
3. The villain soared over the canopy with a glider cape, then scanned the ancient wall with a map scanner.
4. The villain swung across the ravine with a grapple hook, then scanned the ancient wall with a map scanner.
5. The villain soared over the canopy with a glider cape, then slapped on a tracker tag to slip away.
6. The villain swung across the ravine with a grapple hook, then blew a decoy whistle to confuse the crew.
7. The villain lit up the hidden tunnel with a flashlight glove, then slapped on a tracker tag to slip away.
8. The villain swung across the ravine with a grapple hook, then deployed pocket drones to scout ahead.
9. The villain lit up the hidden tunnel with a flashlight glove, then blew a decoy whistle to confuse the crew.
10. The villain marked the secret trail with a signal flare, then used a laser pointer to trick the guard.
11. The villain lit up the hidden tunnel with a flashlight glove, then deployed pocket drones to scout ahead.
12. The villain soared over the canopy with a glider cape, then deployed pocket drones to scout ahead.

TEACHER / PARENT

Answer Key

The Temple Camp Mystery

Culprit: Rover Cleo

Compass Ring · Map Scanner · Right Wrist · Red Cap · Sweet Mango

Trail: Start 21 → Clue 1 17 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Percentages): "THE BANDIT DOES NOT USE POCKET DRONES"

25% of 124 = 31 (T) · 25% of 108 = 27 (P) · 10% of 430 = 43 (U) · 50% of 64 = 32 (K) · 25% of 36 = 9 (E) · 10% of 180 = 18 (D) · 5% of 440 = 22 (O) · 60% of 25 = 15 (N) · 60% of 5 = 3 (R) · 75% of 52 = 39 (I) · 10% of 290 = 29 (H) · 75% of 40 = 30 (A) · 10% of 230 = 23 (B) · 25% of 164 = 41 (S) · 25% of 20 = 5 (C)

Clue 2 (Multi-step word problems): "RIGHT WRIST"

There were 360 trail maps in all. 4 Jungle Patrol used 38 trail maps each. The other 4 Jungle Patrol shared the rest equally. How many trail maps did each of the other Jungle Patrol get? = 52 (R) · Scout leader collected 72 climbing ropes in the morning and 18 climbing ropes in the afternoon, then split them equally among 6 Jungle Patrol. How many climbing ropes did each get? = 15 (T) · There were 88 trail maps in all. 1 Jungle Patrol used 22 trail maps each. The other 2 Jungle Patrol shared the rest equally. How many trail maps did each of the other Jungle Patrol get? = 33 (I) · There were 466 trail maps in all. 3 Jungle Patrol used 12 trail maps each. The other 5 Jungle Patrol shared the rest equally. How many trail maps did each of the other Jungle Patrol get? = 86 (G) · Scout leader filled 9 boxes with 4 climbing ropes each, then found 43 more climbing ropes. How many climbing ropes are there in all? = 79 (S) · Scout leader filled 5 boxes with 4 ration bars each, then found 62 more ration bars. How many ration bars are there in all? = 82 (W) · There were 229 climbing ropes in all. 2 Jungle Patrol used 22 climbing ropes each. The other 5 Jungle Patrol shared the rest equally. How many climbing ropes did each of the other Jungle Patrol get? = 37 (H)

Clue 3 (Word problems): "SWEET MANGO"

Scout leader lined up 2 rows of 8 ration bars. How many ration bars in all? = 16 (S) · Scout leader found 11 ration bars yesterday and 83 more today. How many ration bars in all? = 94 (E) · Scout leader lined up 3 rows of 8 canteen packs. How many canteen packs in all? = 24 (N) · There were 81 climbing ropes. 16 were used up. How many climbing ropes are left? = 65 (M) · There were 88 canteen packs. 26 were used up. How many canteen packs are left? = 62 (T) · Scout leader found 42 climbing ropes yesterday and 51 more today. How many climbing ropes in all? = 93 (A) · Scout leader found 70 trail maps yesterday and 21 more today. How many trail maps in all? = 91 (W)

Clue 4 (Exponents): "A BRIGHT RED CAP WAS DROPPED NEAR THE GATE"

12^2 = 144 (A) · 2^3 = 8 (H) · 2^6 = 64 (P) · 7^2 = 49 (E) · 13^2 = 169 (T) · 3^2 = 9 (C) · 19^2 = 361 (B) · 2^7 = 128 (I) · 3^4 = 81 (S) · 2^5 = 32 (D) · 16^2 = 256 (N) · 3^3 = 27 (G) · 5^2 = 25 (R) · 18^2 = 324 (O) · 10^2 = 100 (W)

Clue 5 (Division facts (1-12)): surviving statement is box 2 → Rover Cleo

33 ÷ 11 = 3 · 14 ÷ 2 = 7 · 40 ÷ 10 = 4 · 48 ÷ 4 = 12 · 10 ÷ 2 = 5 · 88 ÷ 11 = 8 · 54 ÷ 6 = 9 · 42 ÷ 7 = 6 · 88 ÷ 8 = 11 · 1 ÷ 1 = 1 · 50 ÷ 5 = 10