The Mystery of the Sunken Sun Stone

Grade 4 math · Addition, Subtraction, Word problems, Multi-step word problems, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

Someone snuck into the camp tent and swapped the golden Sun Stone with a worthless river rock! Use your clue map to narrow down the suspects.

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 Bandit is _____

Possible suspects

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

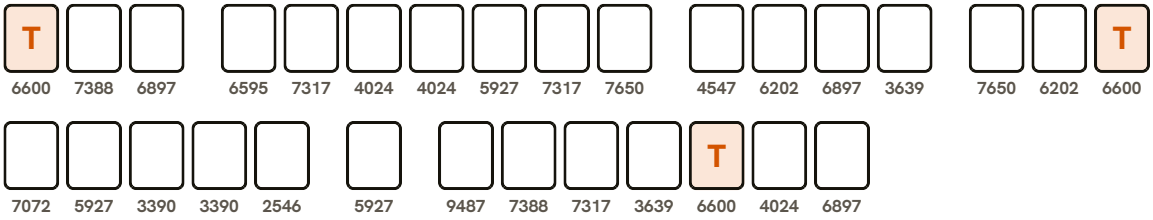
NAME	SPECIAL GEAR	SCOUT TOOL	WATCH HAND	BANDANA COLOR	TRICKED BY
Scout Zane	Grappling Hook	Whistle	Wears Watch Right	Red Bandana	Sneeze Powder
Explorer Tess	Smoke Pellets	Magnifier	Wears Watch Right	Blue Bandana	Sneeze Powder
Officer Blake	Grappling Hook	Compass	Wears Watch Left	Blue Bandana	Bright Flash
Hunter Ivy	Climbing Boots	Whistle	Wears Watch Left	Gold Bandana	Itchy Vines
Guide Frank	Smoke Pellets	Whistle	Wears Watch Left	Red Bandana	Bright Flash
Cadet Max	Smoke Pellets	Whistle	Wears Watch Right	Gold Bandana	Bright Flash
Pathfinder Eli	Torch Blaster	Magnifier	Wears Watch Left	Red Bandana	Sneeze Powder
Diver Nora	Smoke Pellets	Binoculars	Wears Watch Left	Gold Bandana	Itchy Vines
Ranger Leo	Glider Wings	Binoculars	Wears Watch Right	Red Bandana	Sneeze Powder
Captain Jax	Grappling Hook	Binoculars	Wears Watch Right	Gold Bandana	Itchy Vines
Rover Ruby	Grappling Hook	Whistle	Wears Watch Left	Gold Bandana	Itchy Vines
Tracker Sam	Climbing Boots	Binoculars	Wears Watch Left	Red Bandana	Itchy Vines
Captain Vera	Glider Wings	Magnifier	Wears Watch Left	Gold Bandana	Itchy Vines
Navigator Owen	Smoke Pellets	Magnifier	Wears Watch Left	Red Bandana	Itchy Vines
Scout Maya	Smoke Pellets	Whistle	Wears Watch Right	Blue Bandana	Itchy Vines
Professor Plum	Torch Blaster	Magnifier	Wears Watch Left	Gold Bandana	Sneeze Powder
Pilot Chloe	Smoke Pellets	Binoculars	Wears Watch Right	Gold Bandana	Bright Flash
Guide Luke	Climbing Boots	Binoculars	Wears Watch Left	Blue Bandana	Itchy Vines
Agent Hope	Smoke Pellets	Decodable Map	Wears Watch Left	Gold Bandana	Itchy Vines
Agent Cody	Torch Blaster	Binoculars	Wears Watch Right	Blue Bandana	Sneeze Powder
Cartographer Ella	Climbing Boots	Magnifier	Wears Watch Left	Gold Bandana	Itchy Vines

make your own at mathcrackers.com

CLUE 1 Addition

You combine the footprints found at the camp entry and the muddy riverbank to trace the suspect.

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



3514 + 3086 = ☐ → T	3687 + 3210 = ☐ → E	3122 + 3473 = ☐ → V
4486 + 5001 = ☐ → W	2377 + 3550 = ☐ → A	2107 + 1283 = ☐ → R
2547 + 4841 = ☐ → H	2861 + 4789 = ☐ → N	2453 + 1571 = ☐ → L
2126 + 2421 = ☐ → D	3616 + 3456 = ☐ → C	3454 + 3863 = ☐ → I
1679 + 1960 = ☐ → S	3506 + 2696 = ☐ → O	1674 + 872 = ☐ → Y

Scratch space:

CLUE 2 Subtraction

You calculate how many secret trail markers are left after the sneaky bandit covered their tracks.

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



9926 - 3927 = ☐ → T

3862 - 2185 = ☐ → F

9425 - 4999 = ☐ → A

4919 - 303 = ☐ → S

8172 - 2550 = ☐ → W

2398 - 80 = ☐ → E

5151 - 3189 = ☐ → O

5329 - 3091 = ☐ → I

4661 - 2359 = ☐ → N

5468 - 3599 = ☐ → L

12389 - 4036 = ☐ → C

5470 - 1444 = ☐ → H

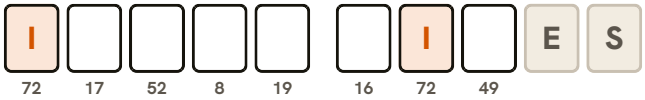
4439 - 2049 = ☐ → R

Scratch space:

CLUE 3 Word problems

You solve the supply chest riddle left behind in the ruined courtyard.

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

Someone scared the villain off with 

Scout Leader lined up 12 rows of 6 bronze keys. How many bronze keys in all?

Answer: ☐ → **I**

There were 29 ancient maps. 21 were used up. How many ancient maps are left?

Answer: ☐ → **H**

Scout Leader found 42 golden coins yesterday and 7 more today. How many golden coins in all?

Answer: ☐ → **N**

Scout Leader found 15 golden coins yesterday and 4 more today. How many golden coins in all?

Answer: ☐ → **Y**

Scout Leader found 39 bronze keys yesterday and 13 more today. How many bronze keys in all?

Answer: ☐ → **C**

Scout Leader found 14 ancient maps yesterday and 2 more today. How many ancient maps in all?

Answer: ☐ → **V**

There were 46 ancient maps. 29 were used up. How many ancient maps are left?

Answer: ☐ → **T**

Scratch space:

CLUE 4 Multi-step word problems

You figure out the total energy lost while swinging across the canyon and climbing up the temple steps.

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

A strand of

G										
79	31	54	72	69	67	39	72	67	39	67

hair turned up at the scene.

Scout Leader collected 28 bronze keys in the morning and 446 bronze keys in the afternoon, then split them equally among 6 Jungle Explorers. How many bronze keys did each get?

Answer: ☐ → G

Scout Leader filled 8 boxes with 5 crystal vials each, then found 27 more crystal vials. How many crystal vials are there in all?

Answer: ☐ → A

Scout Leader collected 40 ancient maps in the morning and 248 ancient maps in the afternoon, then split them equally among 4 Jungle Explorers. How many ancient maps did each get?

Answer: ☐ → D

Scout Leader collected 60 ancient maps in the morning and 33 ancient maps in the afternoon, then split them equally among 3 Jungle Explorers. How many ancient maps did each get?

Answer: ☐ → O

There were 252 bronze keys in all. 3 Jungle Explorers used 19 bronze keys each. The other 5 Jungle Explorers shared the rest equally. How many bronze keys did each of the other Jungle Explorers get?

Answer: ☐ → N

Scout Leader filled 4 boxes with 6 ruby gems each, then found 30 more ruby gems. How many ruby gems are there in all?

Answer: ☐ → L

Scout Leader collected 124 ancient maps in the morning and 14 ancient maps in the afternoon, then split them equally among 2 Jungle Explorers. How many ancient maps did each get?

Answer: ☐ → B

Scratch space:

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

> You split the recovered camp supplies evenly among the scout patrols to decode the final clue.

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:

35 ÷ 5 = ☐	88 ÷ 11 = ☐	63 ÷ 7 = ☐	18 ÷ 9 = ☐	50 ÷ 10 = ☐
18 ÷ 3 = ☐	12 ÷ 4 = ☐	36 ÷ 3 = ☐	33 ÷ 3 = ☐	8 ÷ 8 = ☐
36 ÷ 9 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain lit up the corridor with a torch blaster, then scouted ahead using binoculars.
2. The villain lit up the corridor with a torch blaster, then examined the lock with a magnifier.
3. The villain used a grappling hook to scale the wall, then checked the direction with a compass.
4. The villain soared down using glider wings, then traced the path on a decodable map.
5. The villain used a grappling hook to scale the wall, then traced the path on a decodable map.
6. The villain soared down using glider wings, then blew a sharp signal whistle.
7. The villain soared down using glider wings, then examined the lock with a magnifier.
8. The villain tossed a smoke pellet to obscure the path, then scouted ahead using binoculars.
9. The villain kicked through the brush with climbing boots, then examined the lock with a magnifier.
10. The villain tossed a smoke pellet to obscure the path, then traced the path on a decodable map.
11. The villain soared down using glider wings, then checked the direction with a compass.
12. The villain kicked through the brush with climbing boots, then traced the path on a decodable map.

TEACHER / PARENT

Answer Key

The Mystery of the Sunken Sun Stone

Culprit: Agent Hope

Smoke Pellets · Decodable Map · Wears Watch Left · Gold Bandana · Itchy Vines

Trail: Start 21 → Clue 1 15 → Clue 2 10 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT CARRY A WHISTLE"

3514 + 3086 = 6600 (T) · 3687 + 3210 = 6897 (E) · 3122 + 3473 = 6595 (V) · 4486 + 5001 = 9487 (W) · 2377 + 3550 = 5927 (A) · 2107 + 1283 = 3390 (R) · 2547 + 4841 = 7388 (H) · 2861 + 4789 = 7650 (N) · 2453 + 1571 = 4024 (L) · 2126 + 2421 = 4547 (D) · 3616 + 3456 = 7072 (C) · 3454 + 3863 = 7317 (I) · 1679 + 1960 = 3639 (S) · 3506 + 2696 = 6202 (O) · 1674 + 872 = 2546 (Y)

Clue 2 (Subtraction): "THE SNATCHER WORE A WATCH ON THE LEFT WRIST"

9926 - 3927 = 5999 (T) · 3862 - 2185 = 1677 (F) · 9425 - 4999 = 4426 (A) · 4919 - 303 = 4616 (S) · 8172 - 2550 = 5622 (W) · 2398 - 80 = 2318 (E) · 5151 - 3189 = 1962 (O) · 5329 - 3091 = 2238 (I) · 4661 - 2359 = 2302 (N) · 5468 - 3599 = 1869 (L) · 12389 - 4036 = 8353 (C) · 5470 - 1444 = 4026 (H) · 4439 - 2049 = 2390 (R)

Clue 3 (Word problems): "ITCHY VINES"

Scout Leader lined up 12 rows of 6 bronze keys. How many bronze keys in all? = 72 (I) · There were 29 ancient maps. 21 were used up. How many ancient maps are left? = 8 (H) · Scout Leader found 42 golden coins yesterday and 7 more today. How many golden coins in all? = 49 (N) · Scout Leader found 15 golden coins yesterday and 4 more today. How many golden coins in all? = 19 (Y) · Scout Leader found 39 bronze keys yesterday and 13 more today. How many bronze keys in all? = 52 (C) · Scout Leader found 14 ancient maps yesterday and 2 more today. How many ancient maps in all? = 16 (V) · There were 46 ancient maps. 29 were used up. How many ancient maps are left? = 17 (T)

Clue 4 (Multi-step word problems): "GOLD BANDANA"

Scout Leader collected 28 bronze keys in the morning and 446 bronze keys in the afternoon, then split them equally among 6 Jungle Explorers. How many bronze keys did each get? = 79 (G) · Scout Leader filled 8 boxes with 5 crystal vials each, then found 27 more crystal vials. How many crystal vials are there in all? = 67 (A) · Scout Leader collected 40 ancient maps in the morning and 248 ancient maps in the afternoon, then split them equally among 4 Jungle Explorers. How many ancient maps did each get? = 72 (D) · Scout Leader collected 60 ancient maps in the morning and 33 ancient maps in the afternoon, then split them equally among 3 Jungle Explorers. How many ancient maps did each get? = 31 (O) · There were 252 bronze keys in all. 3 Jungle Explorers used 19 bronze keys each. The other 5 Jungle Explorers shared the rest equally. How many bronze keys did each of the other Jungle Explorers get? = 39 (N) · Scout Leader filled 4 boxes with 6 ruby gems each, then found 30 more ruby gems. How many ruby gems are there in all? = 54 (L) · Scout Leader collected 124 ancient maps in the morning and 14 ancient maps in the afternoon, then split them equally among 2 Jungle Explorers. How many ancient maps did each get? = 69 (B)

Clue 5 (Division facts (1-12)): surviving statement is box 10 → Agent Hope

35 ÷ 5 = 7 · 88 ÷ 11 = 8 · 63 ÷ 7 = 9 · 18 ÷ 9 = 2 · 50 ÷ 10 = 5 · 18 ÷ 3 = 6 · 12 ÷ 4 = 3 · 36 ÷ 3 = 12 · 33 ÷ 3 = 11 · 8 ÷ 8 = 1 · 36 ÷ 9 = 4