



The Case of the Missing Sun Stone

Grade 4 math · Rounding, Bar models, Word problems, Addition, Division · Reading level grades 3-4

Detective: _____ Date: _____

Someone snuck into the jungle camp and stole the ancient golden Sun Stone! Detective, solve the math clues to uncover 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 bandit leader is _____

Possible suspects

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

NAME	TOOL	GADGET	STANCE	HAT COLOR	FEAR
Scout Ben	torch	mini tracker	left handed	green beanie	fear of bats
Tracker Tina	magnifying glass	glider wings	left handed	green beanie	fear of heights
Officer Otto	scout whistle	flash beacon	left handed	brown fedora	fear of bats
Captain Barnaby	torch	mini tracker	left handed	green beanie	fear of heights
Guide Greta	grapple hook	flash beacon	right handed	red cap	fear of heights
Ranger Rosa	compass	mini tracker	left handed	brown fedora	fear of bats
Diver Duke	scout whistle	glider wings	right handed	red cap	fear of heights
Guide Gabe	torch	glider wings	left handed	brown fedora	fear of bats
Officer Owen	grapple hook	net launcher	right handed	brown fedora	fear of bats
Trekker Tara	scout whistle	flash beacon	left handed	red cap	fear of heights
Explorer Ed	grapple hook	smoke bomb	right handed	red cap	fear of heights
Pilot Paige	torch	mini tracker	left handed	brown fedora	fear of heights
Explorer Sam	compass	glider wings	left handed	brown fedora	fear of bats
Agent Alex	magnifying glass	flash beacon	left handed	brown fedora	fear of spiders
Scout Maya	magnifying glass	glider wings	right handed	green beanie	fear of heights
Professor Plum	compass	mini tracker	left handed	brown fedora	fear of heights
Diver Dan	magnifying glass	mini tracker	right handed	green beanie	fear of bats
Navigator Nora	grapple hook	glider wings	right handed	green beanie	fear of bats
Hiker Hank	compass	flash beacon	left handed	green beanie	fear of bats
Pilot Penny	magnifying glass	glider wings	left handed	brown fedora	fear of bats
Rover Rita	grapple hook	glider wings	right handed	green beanie	fear of heights

CLUE 1 Rounding

We found field notes with supply counts written in word problems.

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

T																T
3700	5000	30	900	130	3000	3000	370	130	1300	70	300	30	500	1300	300	3700

90	500	30	370	1100	3000	370	500	5000	20	30	370	7000	300	1300		

Round 3,718 to the nearest hundred → **T**

Round 1,117 to the nearest hundred → **F**

Round 94 to the nearest ten → **U**

Round 71 to the nearest ten → **D**

Round 19 to the nearest ten → **B**

Round 134 to the nearest ten → **I**

Round 465 to the nearest hundred → **S**

Round 5,326 to the nearest thousand → **H**

Round 291 to the nearest hundred → **O**

Round 1,319 to the nearest hundred → **N**

Round 31 to the nearest ten → **E**

Round 371 to the nearest ten → **A**

Round 6,775 to the nearest thousand → **C**

Round 858 to the nearest hundred → **V**

Round 2,561 to the nearest thousand → **L**

Scratch space:

CLUE 2

Bar model word problems

A sketch pad showed comparative bar models of path distances.

Draw a bar model to solve each word problem, then write its letter in the boxes to fill in the missing word.

A witness saw the villain was

L										
92	104	31	69	73	46	57	104			

 .

Lead scout shares 184 expedition canteens equally among 2 teams. How many expedition canteens does each team get?

draw a bar model

Answer: → **L**

Lead scout has 62 climbing carabiners, packed 2 to a bag. How many bags can be filled?

draw a bar model

Answer: → **F**

The red team has 80 expedition canteens and the blue team has 23 expedition canteens. How many more expedition canteens does the red team have?

draw a bar model

Answer: → **N**

There were 105 trail maps in all. 36 trail maps were used. How many trail maps are left?

draw a bar model

Answer: → **T**

Lead scout shares 184 trail maps equally among 4 teams. How many trail maps does each team get?

draw a bar model

Answer: → **A**

Lead scout has 208 expedition canteens, packed 2 to a bag. How many bags can be filled?

draw a bar model

Answer: → **E**

One group collected 56 jungle ropes and another group collected 17 jungle ropes. How many jungle ropes in all?

draw a bar model

Answer: → **H**

CLUE 3

Word problems

The digital radar readout only displays rounded distance values.

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

Someone scared the villain off with

F					F				S
48	22	8	63	13	48	72	8	12	

.

There were 60 climbing carabiners. 12 were used up. How many climbing carabiners are left?

Answer: →

F

There were 23 expedition canteens. 10 were used up. How many expedition canteens are left?

Answer: →

O

Lead scout lined up 9 rows of 7 ancient coins. How many ancient coins in all?

Answer: →

R

Lead scout found 2 climbing carabiners yesterday and 6 more today. How many climbing carabiners in all?

Answer: →

A

Lead scout lined up 9 rows of 8 trail maps. How many trail maps in all?

Answer: →

B

Lead scout found 4 jungle ropes yesterday and 18 more today. How many jungle ropes in all?

Answer: →

E

Lead scout found 4 jungle ropes yesterday and 8 more today. How many jungle ropes in all?

Answer: →

T

Scratch space:

CLUE 4

Addition

We tallied the total gear footprints left in the mud.

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

B										B									
3532	8820	6373	9466	5116	5756	4996	7121	6157	2629	3532	9743	8820	6714	9466	9743	8820	9743		
6157	6373	6641	5116	6461	4996	7121	7121	5756	9743	9786	4996	9319	4949						

$1520 + 2012 = \square \rightarrow \mathbf{B}$

$2578 + 4063 = \square \rightarrow \mathbf{U}$

$3267 + 3106 = \square \rightarrow \mathbf{O}$

$3236 + 1760 = \square \rightarrow \mathbf{A}$

$4785 + 4681 = \square \rightarrow \mathbf{W}$

$2309 + 2807 = \square \rightarrow \mathbf{N}$

$5834 + 3909 = \square \rightarrow \mathbf{E}$

$5532 + 3288 = \square \rightarrow \mathbf{R}$

$3269 + 6050 = \square \rightarrow \mathbf{M}$

$4760 + 5026 = \square \rightarrow \mathbf{C}$

$1796 + 833 = \square \rightarrow \mathbf{I}$

$3279 + 2878 = \square \rightarrow \mathbf{F}$

$4129 + 2332 = \square \rightarrow \mathbf{D}$

$2657 + 4464 = \square \rightarrow \mathbf{T}$

$3703 + 2053 = \square \rightarrow \mathbf{H}$

$3964 + 2750 = \square \rightarrow \mathbf{S}$

$2164 + 2785 = \square \rightarrow \mathbf{P}$

Scratch space:

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

The shared trail snacks were divided equally among suspects.

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:

$36 \div 9 = \boxed{}$

$35 \div 7 = \boxed{}$

$21 \div 3 = \boxed{}$

$12 \div 1 = \boxed{}$

$44 \div 4 = \boxed{}$

$30 \div 10 = \boxed{}$

$8 \div 1 = \boxed{}$

$90 \div 10 = \boxed{}$

$30 \div 5 = \boxed{}$

$100 \div 10 = \boxed{}$

$12 \div 6 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain navigated the maze with a compass, then tracked the patrol route with a mini tracker.
2. The villain examined the hidden clue with a magnifying glass, then trapped the camp guard with a net launcher.
3. The villain swung across the ravine with a grapple hook, then escaped over the trees using glider wings.
4. The villain navigated the maze with a compass, then escaped over the trees using glider wings.
5. The villain lit up the dark tunnel with a torch, then escaped over the trees using glider wings.
6. The villain lit up the dark tunnel with a torch, then trapped the camp guard with a net launcher.
7. The villain examined the hidden clue with a magnifying glass, then escaped over the trees using glider wings.
8. The villain examined the hidden clue with a magnifying glass, then blinded the guards with a flash beacon.
9. The villain signaled their partner with a scout whistle, then vanished into the night with a smoke bomb.
10. The villain lit up the dark tunnel with a torch, then tracked the patrol route with a mini tracker.
11. The villain signaled their partner with a scout whistle, then trapped the camp guard with a net launcher.
12. The villain examined the hidden clue with a magnifying glass, then tracked the patrol route with a mini tracker.

Answer Key

The Case of the Missing Sun Stone

Culprit: Ranger Rosa

compass · mini tracker · left handed · brown fedora · fear of bats

Trail: Start 21 → Clue 1 16 → Clue 2 9 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN DOES NOT USE A FLASH BEACON"

Round 3,718 to the nearest hundred = 3700 (T) · Round 1,117 to the nearest hundred = 1100 (F) · Round 94 to the nearest ten = 90 (U) · Round 71 to the nearest ten = 70 (D) · Round 19 to the nearest ten = 20 (B) · Round 134 to the nearest ten = 130 (I) · Round 465 to the nearest hundred = 500 (S) · Round 5,326 to the nearest thousand = 5000 (H) · Round 291 to the nearest hundred = 300 (O) · Round 1,319 to the nearest hundred = 1300 (N) · Round 31 to the nearest ten = 30 (E) · Round 371 to the nearest ten = 370 (A) · Round 6,775 to the nearest thousand = 7000 (C) · Round 858 to the nearest hundred = 900 (V) · Round 2,561 to the nearest thousand = 3000 (L)

Clue 2 (Bar model word problems): "LEFT HANDED"

Lead scout shares 184 expedition canteens equally among 2 teams. How many expedition canteens does each team get? = 92 (L) · Lead scout has 62 climbing carabiners, packed 2 to a bag. How many bags can be filled? = 31 (F) · The red team has 80 expedition canteens and the blue team has 23 expedition canteens. How many more expedition canteens does the red team have? = 57 (N) · There were 105 trail maps in all. 36 trail maps were used. How many trail maps are left? = 69 (T) · Lead scout shares 184 trail maps equally among 4 teams. How many trail maps does each team get? = 46 (A) · Lead scout has 208 expedition canteens, packed 2 to a bag. How many bags can be filled? = 104 (E) · One group collected 56 jungle ropes and another group collected 17 jungle ropes. How many jungle ropes in all? = 73 (H)

Clue 3 (Word problems): "FEAR OF BATS"

There were 60 climbing carabiners. 12 were used up. How many climbing carabiners are left? = 48 (F) · There were 23 expedition canteens. 10 were used up. How many expedition canteens are left? = 13 (O) · Lead scout lined up 9 rows of 7 ancient coins. How many ancient coins in all? = 63 (R) · Lead scout found 2 climbing carabiners yesterday and 6 more today. How many climbing carabiners in all? = 8 (A) · Lead scout lined up 9 rows of 8 trail maps. How many trail maps in all? = 72 (B) · Lead scout found 4 jungle ropes yesterday and 18 more today. How many jungle ropes in all? = 22 (E) · Lead scout found 4 jungle ropes yesterday and 8 more today. How many jungle ropes in all? = 12 (T)

Clue 4 (Addition): "BROWN HAT FIBERS WERE FOUND AT THE CAMP"

$1520 + 2012 = 3532$ (B) · $2578 + 4063 = 6641$ (U) · $3267 + 3106 = 6373$ (O) · $3236 + 1760 = 4996$ (A) · $4785 + 4681 = 9466$ (W) · $2309 + 2807 = 5116$ (N) · $5834 + 3909 = 9743$ (E) · $5532 + 3288 = 8820$ (R) · $3269 + 6050 = 9319$ (M) · $4760 + 5026 = 9786$ (C) · $1796 + 833 = 2629$ (I) · $3279 + 2878 = 6157$ (F) · $4129 + 2332 = 6461$ (D) · $2657 + 4464 = 7121$ (T) · $3703 + 2053 = 5756$ (H) · $3964 + 2750 = 6714$ (S) · $2164 + 2785 = 4949$ (P)

Clue 5 (Division facts (1-12)): surviving statement is box 1 → Ranger Rosa

$36 \div 9 = 4$ · $35 \div 7 = 5$ · $21 \div 3 = 7$ · $12 \div 1 = 12$ · $44 \div 4 = 11$ · $30 \div 10 = 3$ · $8 \div 1 = 8$ · $90 \div 10 = 9$ · $30 \div 5 = 6$ · $100 \div 10 = 10$ · $12 \div 6 = 2$