



The Lost Temple Sabotage

Grade 8 math · Addition, Multiplication, Rounding, Word problems, Division · Reading level grades 7-9

Detective: _____ Date: _____

During an expedition into the Mist Valley Jungle Ruins, someone sabotaged the main camp supply vault and escaped with the golden idol. Examine the evidence to uncover the suspect.

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 Saboteur 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	SPECIAL GEAR	DOMINANT HAND	HEADWEAR	VULNERABILITY
Leo Vance	Machete	Decoder Ring	Right Handed	Bronze Helmet	Bright Lights
Lucas Cruz	Grappling Hook	Parachute	Right Handed	Bronze Helmet	Loud Whistles
Maya Lin	Pocket Compass	Leather Gloves	Left Handed	Leather Cap	Loud Whistles
Chloe Dubois	Machete	Decoder Ring	Left Handed	Bronze Helmet	Loud Whistles
Jack Snyder	Smoke Bomb	Leather Gloves	Right Handed	Bronze Helmet	Citrus Juice
Sofia Reyes	Grappling Hook	Decoder Ring	Right Handed	Leather Cap	Citrus Juice
Ava Patel	Pocket Compass	Parachute	Left Handed	Red Bandana	Loud Whistles
Hannah Park	Smoke Bomb	Decoder Ring	Left Handed	Bronze Helmet	Loud Whistles
Mia Kowalski	Pocket Compass	Leather Gloves	Left Handed	Bronze Helmet	Bright Lights
Kai Tanaka	Grappling Hook	Decoder Ring	Left Handed	Bronze Helmet	Bright Lights
Ruby Hayes	Signal Flare	Climbing Spikes	Right Handed	Bronze Helmet	Bright Lights
Caleb Diaz	Signal Flare	Parachute	Right Handed	Bronze Helmet	Bright Lights
Nora Chen	Grappling Hook	Climbing Spikes	Left Handed	Red Bandana	Bright Lights
Eli Thorne	Pocket Compass	Climbing Spikes	Right Handed	Red Bandana	Bright Lights
Liam OConnor	Smoke Bomb	Parachute	Right Handed	Leather Cap	Bright Lights
Sam Mercer	Grappling Hook	Leather Gloves	Right Handed	Bronze Helmet	Bright Lights
Lily Bennett	Machete	Decoder Ring	Right Handed	Leather Cap	Loud Whistles
Max Sterling	Grappling Hook	Parachute	Right Handed	Bronze Helmet	Bright Lights
Isla Vance	Grappling Hook	Leather Gloves	Left Handed	Bronze Helmet	Loud Whistles
Noah Finch	Pocket Compass	Decoder Ring	Right Handed	Leather Cap	Loud Whistles
Ethan Cole	Grappling Hook	Decoder Ring	Left Handed	Leather Cap	Citrus Juice

CLUE 1 Addition

We gathered all the supply crates recovered from the jungle trail to total up our remaining expedition gear.

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

T						T										T	
7374	9374	6092	5100	2807	6356	4641	7374	6092	4888	3851	5993	4641	6092	5100	7994	4641	7374

4888	5100	6092	2807	5993	6092	6982	4641	5993	6092	3851	3851	7210	7994	6379		

$3375 + 3999 = \boxed{} \rightarrow \boxed{\text{T}}$

$4167 + 2189 = \boxed{} \rightarrow \boxed{\text{B}}$

$1655 + 2196 = \boxed{} \rightarrow \boxed{\text{R}}$

$2247 + 2853 = \boxed{} \rightarrow \boxed{\text{S}}$

$2564 + 3429 = \boxed{} \rightarrow \boxed{\text{D}}$

$3097 + 1791 = \boxed{} \rightarrow \boxed{\text{U}}$

$6397 + 2977 = \boxed{} \rightarrow \boxed{\text{H}}$

$1962 + 4130 = \boxed{} \rightarrow \boxed{\text{E}}$

$2769 + 5225 = \boxed{} \rightarrow \boxed{\text{N}}$

$1716 + 1091 = \boxed{} \rightarrow \boxed{\text{A}}$

$2877 + 4105 = \boxed{} \rightarrow \boxed{\text{C}}$

$1952 + 2689 = \boxed{} \rightarrow \boxed{\text{O}}$

$2016 + 4363 = \boxed{} \rightarrow \boxed{\text{G}}$

$4653 + 2557 = \boxed{} \rightarrow \boxed{\text{I}}$

Scratch space:

Multiplication facts (1-12)

To calculate the grid area around the ancient temple, we multiplied the survey rows by the sector lengths.

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

Diagram showing two rows of boxes with numbers and a 'T' marker. The top row has 12 boxes with numbers 60, 25, 63, 42, 45, 21, 15, 30, 30, 25, 35, 50, 60, 25, 63. The bottom row has 15 boxes with numbers 54, 21, 35, 35, 15, 50, 45, 30, 21, 49, 48, 25, 60, 25, 45, 5, 56, 63, 56. The 'T' marker is in the 13th box of the top row and the 13th box of the bottom row.

$10 \times 6 = \boxed{} \rightarrow \boxed{\text{T}}$

$6 \times 7 = \square \rightarrow \boxed{\mathbf{M}}$

$9 \times 5 = \square \rightarrow \mathbf{A}$

$7 \times 9 = \square \rightarrow \mathbf{E}$

$$5 \times 3 = \boxed{} \rightarrow \boxed{\text{K}}$$

$$3 \times 7 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$6 \times 5 = \boxed{} \rightarrow \boxed{\mathbf{S}}$$

$8 \times 7 = \boxed{} \rightarrow \boxed{\mathbf{D}}$

$1 \times 5 = \boxed{} \rightarrow \boxed{\mathbf{N}}$

$$5 \times 10 = \boxed{} \rightarrow \boxed{\mathbf{W}}$$

$4 \times 12 = \boxed{} \rightarrow \boxed{\mathbf{G}}$

$$5 \times 5 = \boxed{} \rightarrow \boxed{\text{H}}$$

$7 \times 7 = \square \rightarrow \boxed{1}$

$6 \times 9 = \boxed{} \rightarrow \boxed{\text{C}}$

$$7 \times 5 = \boxed{} \rightarrow \boxed{0}$$

Scratch space:

CLUE 3
Rounding

The expedition's altimeter readout only displays values rounded to the nearest hundred meters.

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

T																			
430	1700	230	7000	300	9000	50	230	7000	70	300	290	290	430	1100	30	30	230	50	

							T												
370	700	370	7000	9000	3000	1700	430	170	9000	3000	1700	430	290						

Round 433 to the nearest ten → **T**

Round 695 to the nearest hundred → **Y**

Round 229 to the nearest ten → **E**

Round 173 to the nearest ten → **L**

Round 53 to the nearest ten → **D**

Round 1,051 to the nearest hundred → **O**

Round 2,618 to the nearest thousand → **G**

Round 1,707 to the nearest hundred → **H**

Round 6,776 to the nearest thousand → **R**

Round 9,276 to the nearest thousand → **I**

Round 29 to the nearest ten → **P**

Round 291 to the nearest ten → **S**

Round 322 to the nearest hundred → **A**

Round 66 to the nearest ten → **W**

Round 373 to the nearest ten → **B**

Scratch space:

CLUE 4

Word problems

We analyzed the field notes to solve word problems about travel times and resource consumption across camps.

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

A strand of B L M T hair turned up at the scene.

62 61 44 27 82 58 35 58 58

Expedition Leader found 57 expedition journals yesterday and 5 more today. How many expedition journals in all?

Answer: → B

There were 88 climbing ropes. 27 were used up. How many climbing ropes are left?

Answer: → R

Expedition Leader lined up 5 rows of 7 climbing ropes. How many climbing ropes in all?

Answer: → H

Expedition Leader lined up 9 rows of 3 climbing ropes. How many climbing ropes in all?

Answer: → N

Expedition Leader found 10 compasses yesterday and 34 more today. How many compasses in all?

Answer: → O

Expedition Leader found 16 field lanterns yesterday and 42 more today. How many field lanterns in all?

Answer: → E

There were 102 field lanterns. 20 were used up. How many field lanterns are left?

Answer: → Z

Scratch space:

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

To divide the recovered idol fragments equally among the research teams, we calculated exact distribution ratios.

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:

$56 \div 7 = \boxed{}$

$24 \div 6 = \boxed{}$

$33 \div 3 = \boxed{}$

$48 \div 8 = \boxed{}$

$70 \div 7 = \boxed{}$

$12 \div 4 = \boxed{}$

$49 \div 7 = \boxed{}$

$24 \div 12 = \boxed{}$

$8 \div 8 = \boxed{}$

$55 \div 11 = \boxed{}$

$132 \div 11 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain vanished into the jungle using a smoke bomb, then cracked the ancient stone locks with a decoder ring.
2. The villain swung across the chasm with a grappling hook, then scaled the slippery temple wall with climbing spikes.
3. The villain cleared a hidden path with a machete, then snuck through the ruined vaults with night vision.
4. The villain swung across the chasm with a grappling hook, then escaped off the cliff using a parachute.
5. The villain navigated the dense brush with a pocket compass, then cracked the ancient stone locks with a decoder ring.
6. The villain signaled accomplices with a signal flare, then snuck through the ruined vaults with night vision.
7. The villain signaled accomplices with a signal flare, then cracked the ancient stone locks with a decoder ring.
8. The villain signaled accomplices with a signal flare, then scaled the slippery temple wall with climbing spikes.
9. The villain swung across the chasm with a grappling hook, then stole the golden idol while wearing leather gloves.
10. The villain vanished into the jungle using a smoke bomb, then stole the golden idol while wearing leather gloves.
11. The villain signaled accomplices with a signal flare, then escaped off the cliff using a parachute.
12. The villain vanished into the jungle using a smoke bomb, then escaped off the cliff using a parachute.

Answer Key

The Lost Temple Sabotage

Culprit: Sam Mercer

Grappling Hook · Leather Gloves · Right Handed · Bronze Helmet · Bright Lights

Trail: Start 21 → Clue 1 13 → Clue 2 8 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SABOTEUR DOES NOT USE A DECODER RING"

$3375 + 3999 = 7374$ (T) · $4167 + 2189 = 6356$ (B) · $1655 + 2196 = 3851$ (R) · $2247 + 2853 = 5100$ (S) · $2564 + 3429 = 5993$ (D) · $3097 + 1791 = 4888$ (U) · $6397 + 2977 = 9374$ (H) · $1962 + 4130 = 6092$ (E) · $2769 + 5225 = 7994$ (N) · $1716 + 1091 = 2807$ (A) · $2877 + 4105 = 6982$ (C) · $1952 + 2689 = 4641$ (O) · $2016 + 4363 = 6379$ (G) · $4653 + 2557 = 7210$ (I)

Clue 2 (Multiplication facts (1-12)): "THE MARKS SHOW THE CROOK WAS RIGHT HANDED"

$10 \times 6 = 60$ (T) · $6 \times 7 = 42$ (M) · $9 \times 5 = 45$ (A) · $7 \times 9 = 63$ (E) · $5 \times 3 = 15$ (K) · $3 \times 7 = 21$ (R) · $6 \times 5 = 30$ (S) · $8 \times 7 = 56$ (D) · $1 \times 5 = 5$ (N) · $5 \times 10 = 50$ (W) · $4 \times 12 = 48$ (G) · $5 \times 5 = 25$ (H) · $7 \times 7 = 49$ (I) · $6 \times 9 = 54$ (C) · $7 \times 5 = 35$ (O)

Clue 3 (Rounding): "THE RAIDER WAS STOPPED BY BRIGHT LIGHTS"

Round 433 to the nearest ten = 430 (T) · Round 695 to the nearest hundred = 700 (Y) · Round 229 to the nearest ten = 230 (E) · Round 173 to the nearest ten = 170 (L) · Round 53 to the nearest ten = 50 (D) · Round 1,051 to the nearest hundred = 1100 (O) · Round 2,618 to the nearest thousand = 3000 (G) · Round 1,707 to the nearest hundred = 1700 (H) · Round 6,776 to the nearest thousand = 7000 (R) · Round 9,276 to the nearest thousand = 9000 (I) · Round 29 to the nearest ten = 30 (P) · Round 291 to the nearest ten = 290 (S) · Round 322 to the nearest hundred = 300 (A) · Round 66 to the nearest ten = 70 (W) · Round 373 to the nearest ten = 370 (B)

Clue 4 (Word problems): "BRONZE HELMET"

Expedition Leader found 57 expedition journals yesterday and 5 more today. How many expedition journals in all? = 62 (B) · There were 88 climbing ropes. 27 were used up. How many climbing ropes are left? = 61 (R) · Expedition Leader lined up 5 rows of 7 climbing ropes. How many climbing ropes in all? = 35 (H) · Expedition Leader lined up 9 rows of 3 climbing ropes. How many climbing ropes in all? = 27 (N) · Expedition Leader found 10 compasses yesterday and 34 more today. How many compasses in all? = 44 (O) · Expedition Leader found 16 field lanterns yesterday and 42 more today. How many field lanterns in all? = 58 (E) · There were 102 field lanterns. 20 were used up. How many field lanterns are left? = 82 (Z)

Clue 5 (Division facts (1-12)): surviving statement is box 9 → Sam Mercer

$56 \div 7 = 8$ · $24 \div 6 = 4$ · $33 \div 3 = 11$ · $48 \div 8 = 6$ · $70 \div 7 = 10$ · $12 \div 4 = 3$ · $49 \div 7 = 7$ · $24 \div 12 = 2$ · $8 \div 8 = 1$ · $55 \div 11 = 5$ · $132 \div 11 = 12$