



Mystery of the Lost Sun Temple

Grade 4 math · Place value, Addition, Subtraction, Multiplication, Division · Reading level grades 7-9

Detective: _____ **Date:** _____

During an overnight excavation at the ancient Sun Temple, a stealthy intruder breached the perimeter camp and snatched the golden sun stone. The expedition team relies on your analytical skills to parse the field notes and pinpoint the culprit before they escape the canyon.

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 Raider is _____

Possible suspects

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

NAME	INFILTRATION TOOL	ESCAPE GEAR	DOMINANT HAND	HAIR STYLE	DEFENSE FLAW
Koa Takahashi	Camouflage Net	Decoder Ring	Right Handed	Shaved Black	Loud Whistles
Amelia Vance	Grappling Hook	Decoder Ring	Left Handed	Shaved Black	Loud Whistles
Elena Rostova	Smoke Bomb	Night Goggles	Right Handed	Shaved Black	Magnet Traps
Leo Sterling	Grappling Hook	Decoder Ring	Left Handed	Dusty Blonde	Bright Sunlight
Maya Lin	Smoke Bomb	Climbing Spikes	Left Handed	Shaved Black	Loud Whistles
Dante Reyes	Flash Beacon	Glider Wings	Left Handed	Shaved Black	Loud Whistles
Isaac Stone	Smoke Bomb	Night Goggles	Right Handed	Dusty Blonde	Magnet Traps
Mateo Cruz	Camouflage Net	Glider Wings	Left Handed	Braided Brown	Loud Whistles
Fiona Gallagher	Flash Beacon	Waterproof Pack	Left Handed	Shaved Black	Loud Whistles
Julian Drake	Sonic Signal	Waterproof Pack	Right Handed	Braided Brown	Loud Whistles
Sienna Brooks	Flash Beacon	Night Goggles	Right Handed	Braided Brown	Magnet Traps
Lila Montgomery	Flash Beacon	Waterproof Pack	Right Handed	Shaved Black	Loud Whistles
Jasmine Patel	Sonic Signal	Glider Wings	Left Handed	Shaved Black	Loud Whistles
Paolo Rossi	Camouflage Net	Waterproof Pack	Right Handed	Braided Brown	Magnet Traps
Gavin Knox	Smoke Bomb	Climbing Spikes	Left Handed	Dusty Blonde	Bright Sunlight
Olivia Mercer	Grappling Hook	Night Goggles	Right Handed	Shaved Black	Bright Sunlight
Nico Santos	Camouflage Net	Night Goggles	Left Handed	Shaved Black	Bright Sunlight
Zara Kincaid	Camouflage Net	Climbing Spikes	Left Handed	Braided Brown	Bright Sunlight
Marcus Brody	Flash Beacon	Climbing Spikes	Right Handed	Braided Brown	Loud Whistles
Tobias Holt	Grappling Hook	Decoder Ring	Right Handed	Dusty Blonde	Magnet Traps
Chloe Bennett	Camouflage Net	Night Goggles	Right Handed	Braided Brown	Bright Sunlight

CLUE 1

The temple vault digital display shows place values for the security override sequence.

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

8000 80 90 3000 400 700 7000 90 3000 7000 500 90 40 200 500 8000 1000 40 90

6000 100 700 4000 9000 700 200 2000 40 800 700 300 90 40

What is the value of the 8 in 18,624?



What is the value of the 4 in 4,810?

What is the value of the 4 in 439?

A diagram showing a box with an arrow pointing to a box containing the letter A.

What is the value of the 6 in 6,817?

What is the value of the 8 in 9,683?

A diagram illustrating a transformation. On the left is a simple rectangular box. An arrow points from this box to another rectangular box on the right. This second box contains the letter 'H' in a bold, black font.

What is the value of the 5 in 516?

What is the value of the 7 in 8,718?

A diagram showing a transition from an empty box to a box containing the letter 'I'. The first box is empty, and an arrow points to the second box, which contains the letter 'I'.

What is the value of the 3 in 7,311?

What is the value of the 1 in 1,533?

A diagram showing a transformation. On the left is a simple rectangular box. An arrow points from this box to another rectangular box on the right. This second box contains the letter 'U'.

What is the value of the 2 in 2,811?

A diagram showing a rectangular box on the left, followed by a right-pointing arrow, and then another rectangular box on the right containing the letter 'G'.

What is the value of the 9 in 4,892?

A diagram showing a box with an arrow pointing to a box labeled 'E'.

What is the value of the 9 in 19,071?

What is the value of the 8 in 4,891?

A diagram showing a box with an arrow pointing to a box labeled P.

What is the value of the 2 in 291?

A diagram showing a box with an arrow pointing to a box labeled 'N'.

What is the value of the 1 in 9,106?

A diagram showing a transition from an empty box to a box containing the letter L. The first box is empty, followed by a right-pointing arrow, and then a second box containing the letter 'L'.

What is the value of the 3 in 83,869?

What is the value of the 7 in 17,528?

? → **D**

What is the value of the 4 in 940?

A diagram showing a transformation. On the left is a simple rectangular box. An arrow points from this box to another rectangular box on the right. This second box contains the letter 'S' in a bold, sans-serif font.

Scratch space:

CLUE 2 **Addition**

To tally the total expedition gear recovered from camp combine the supply crates.

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

$1864 + 1753 = \boxed{} \rightarrow \boxed{\text{T}}$

$$4254 + 2612 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$4103 + 3303 = \boxed{} \rightarrow \boxed{\text{D}}$$

$1427 + 2734 = \boxed{} \rightarrow \boxed{\text{E}}$

$3474 + 2627 = \boxed{} \rightarrow \boxed{\text{A}}$

$$3327 + 1827 = \boxed{} \rightarrow \boxed{}$$

$$6280 + 3150 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$1354 + 1750 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$2183 + 5042 = \boxed{} \rightarrow \boxed{\text{N}}$$

$3646 + 5284 = \boxed{} \rightarrow \boxed{\text{F}}$

$1922 + 3804 = \boxed{} \rightarrow \boxed{\text{C}}$

$$3934 + 3784 = \boxed{} \rightarrow \boxed{\text{P}}$$

$$6371 + 2923 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$5511 + 3990 = \boxed{} \rightarrow \boxed{\text{L}}$$

Scratch space:

CLUE 3

Subtraction

Calculate how many rations remain after subtracting the stolen expedition stores.

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

R														
5501	6159	1170	6159	1087	1087	6159	6953	6980	7898	1087	2321	3474	6953	

1330	8742	4605	7595	6248	1087	6159	7595

$6591 - 1090 = \square \rightarrow \boxed{\text{R}}$

$10478 - 2580 = \square \rightarrow \boxed{\text{Y}}$

$7035 - 787 = \square \rightarrow \boxed{\text{T}}$

$7833 - 4359 = \square \rightarrow \boxed{\text{U}}$

$5539 - 3218 = \square \rightarrow \boxed{\text{O}}$

$8856 - 1261 = \square \rightarrow \boxed{\text{S}}$

$13245 - 4503 = \square \rightarrow \boxed{\text{H}}$

$1509 - 339 = \square \rightarrow \boxed{\text{P}}$

$10570 - 4411 = \square \rightarrow \boxed{\text{E}}$

$3775 - 2445 = \square \rightarrow \boxed{\text{W}}$

$9796 - 2816 = \square \rightarrow \boxed{\text{B}}$

$1531 - 444 = \square \rightarrow \boxed{\text{L}}$

$9005 - 2052 = \square \rightarrow \boxed{\text{D}}$

$6763 - 2158 = \square \rightarrow \boxed{\text{I}}$

Scratch space:

CLUE 4
Multiplication facts (1-12)

The storage tent holds equal rows of supply boxes that need to be counted.

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

L																			
42	14	84	72	48	72	8	121	22	28	48	60	84	48	30	121	64	14	28	

	L								
88	42	121	11	49	30	121	32	8	

$7 \times 6 = \square \rightarrow \text{L}$

$11 \times 1 = \square \rightarrow \text{C}$

$2 \times 11 = \square \rightarrow \text{N}$

$4 \times 2 = \square \rightarrow \text{R}$

$8 \times 11 = \square \rightarrow \text{B}$

$11 \times 11 = \square \rightarrow \text{A}$

$12 \times 7 = \square \rightarrow \text{F}$

$7 \times 2 = \square \rightarrow \text{E}$

$12 \times 6 = \square \rightarrow \text{T}$

$10 \times 6 = \square \rightarrow \text{O}$

$7 \times 7 = \square \rightarrow \text{K}$

$7 \times 4 = \square \rightarrow \text{D}$

$6 \times 8 = \square \rightarrow \text{S}$

$8 \times 8 = \square \rightarrow \text{V}$

$4 \times 8 = \square \rightarrow \text{I}$

$6 \times 5 = \square \rightarrow \text{H}$

Scratch space:

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

Divide the remaining survival lanterns equally among the research outposts.

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:

$36 \div 4 = \boxed{}$

$36 \div 6 = \boxed{}$

$8 \div 1 = \boxed{}$

$15 \div 5 = \boxed{}$

$84 \div 12 = \boxed{}$

$30 \div 6 = \boxed{}$

$60 \div 5 = \boxed{}$

$9 \div 9 = \boxed{}$

$110 \div 11 = \boxed{}$

$2 \div 1 = \boxed{}$

$110 \div 10 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain fired a grappling hook, then escaped using glider wings.
2. The villain fired a grappling hook, then put on night goggles.
3. The villain lit a flash beacon, then latched with climbing spikes.
4. The villain lit a flash beacon, then escaped using glider wings.
5. The villain sent a sonic signal, then put on night goggles.
6. The villain sent a sonic signal, then escaped using glider wings.
7. The villain dropped a camouflage net, then put on night goggles.
8. The villain fired a grappling hook, then scrambled a decoder ring.
9. The villain lit a flash beacon, then secured a waterproof pack.
10. The villain sent a sonic signal, then latched with climbing spikes.
11. The villain threw a smoke bomb, then escaped using glider wings.
12. The villain dropped a camouflage net, then escaped using glider wings.

Answer Key

Mystery of the Lost Sun Temple

Culprit: Dante Reyes

Flash Beacon · Glider Wings · Left Handed · Shaved Black · Loud Whistles

Trail: Start 21 → Clue 1 17 → Clue 2 7 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE RAIDER DOES NOT USE CLIMBING SPIKES"

What is the value of the 8 in 18,624? = 8000 (T) · What is the value of the 4 in 4,810? = 4000 (M) · What is the value of the 4 in 439? = 400 (A) · What is the value of the 6 in 6,817? = 6000 (C) · What is the value of the 8 in 9,683? = 80 (H) · What is the value of the 5 in 516? = 500 (O) · What is the value of the 7 in 8,718? = 700 (I) · What is the value of the 3 in 7,311? = 300 (K) · What is the value of the 1 in 1,533? = 1000 (U) · What is the value of the 2 in 2,811? = 2000 (G) · What is the value of the 9 in 4,892? = 90 (E) · What is the value of the 9 in 19,071? = 9000 (B) · What is the value of the 8 in 4,891? = 800 (P) · What is the value of the 2 in 291? = 200 (N) · What is the value of the 1 in 9,106? = 100 (L) · What is the value of the 3 in 83,869? = 3000 (R) · What is the value of the 7 in 17,528? = 7000 (D) · What is the value of the 4 in 940? = 40 (S)

Clue 2 (Addition): "THE CULPRIT IS LEFT HANDED"

1864 + 1753 = 3617 (T) · 4254 + 2612 = 6866 (S) · 4103 + 3303 = 7406 (D) · 1427 + 2734 = 4161 (E) · 3474 + 2627 = 6101 (A) · 3327 + 1827 = 5154 (I) · 6280 + 3150 = 9430 (R) · 1354 + 1750 = 3104 (H) · 2183 + 5042 = 7225 (N) · 3646 + 5284 = 8930 (F) · 1922 + 3804 = 5726 (C) · 3934 + 3784 = 7718 (P) · 6371 + 2923 = 9294 (U) · 5511 + 3990 = 9501 (L)

Clue 3 (Subtraction): "REPELLED BY LOUD WHISTLES"

6591 - 1090 = 5501 (R) · 10478 - 2580 = 7898 (Y) · 7035 - 787 = 6248 (T) · 7833 - 4359 = 3474 (U) · 5539 - 3218 = 2321 (O) · 8856 - 1261 = 7595 (S) · 13245 - 4503 = 8742 (H) · 1509 - 339 = 1170 (P) · 10570 - 4411 = 6159 (E) · 3775 - 2445 = 1330 (W) · 9796 - 2816 = 6980 (B) · 1531 - 444 = 1087 (L) · 9005 - 2052 = 6953 (D) · 6763 - 2158 = 4605 (I)

Clue 4 (Multiplication facts (1-12)): "LEFT STRANDS OF SHAVED BLACK HAIR"

$7 \times 6 = 42$ (L) · $11 \times 1 = 11$ (C) · $2 \times 11 = 22$ (N) · $4 \times 2 = 8$ (R) · $8 \times 11 = 88$ (B) · $11 \times 11 = 121$ (A) · $12 \times 7 = 84$ (F) · $7 \times 2 = 14$ (E) · $12 \times 6 = 72$ (T) · $10 \times 6 = 60$ (O) · $7 \times 7 = 49$ (K) · $7 \times 4 = 28$ (D) · $6 \times 8 = 48$ (S) · $8 \times 8 = 64$ (V) · $4 \times 8 = 32$ (I) · $6 \times 5 = 30$ (H)

Clue 5 (Division facts (1-12)): surviving statement is box 4 → Dante Reyes

$36 \div 4 = 9$ · $36 \div 6 = 6$ · $8 \div 1 = 8$ · $15 \div 5 = 3$ · $84 \div 12 = 7$ · $30 \div 6 = 5$ · $60 \div 5 = 12$ · $9 \div 9 = 1$ · $110 \div 11 = 10$ · $2 \div 1 = 2$ · $110 \div 10 = 11$