



The Temple of Sunstones Mystery

Grade 4 math · Place value, Addition, Subtraction, Multiplication, Division · Reading level grades 3-4

Detective: _____ Date: _____

Oh no! A rogue explorer has sneaked into the Temple of Sunstones and taken the Golden Sun Compass! Professor Penny needs the Jungle Patrol to track down the thief before they escape the valley. Use your math skills and search for clues to solve the mystery!

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 Rogue Explorer is _____

Possible suspects

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

NAME	JUNGLE GEAR	PET COMPANION	DOMINANT HAND	HAIR STYLE	SECRET FEAR
Harry Potter	Compass	Python	Right-handed	Curly hair	Afraid of spiders
Charles Darwin	Flashlight	Parrot	Left-handed	Spiky hair	Allergic to flowers
Jack Wilderness	Binoculars	Monkey	Left-handed	Curly hair	Allergic to flowers
Jane Goodall	Flashlight	Chameleon	Right-handed	Braided hair	Allergic to flowers
Marco Polo	Machete	Chameleon	Right-handed	Curly hair	Afraid of spiders
Leo Ranger	Flashlight	Python	Left-handed	Spiky hair	Allergic to flowers
Diego Rescue	Grappling Hook	Parrot	Left-handed	Spiky hair	Hates mud
Sherlock Holmes	Grappling Hook	Chameleon	Right-handed	Spiky hair	Allergic to flowers
Amelia Earhart	Machete	Monkey	Left-handed	Spiky hair	Allergic to flowers
Dora Map	Machete	Parrot	Left-handed	Curly hair	Allergic to flowers
Zorro	Binoculars	Monkey	Left-handed	Spiky hair	Allergic to flowers
Peter Parker	Grappling Hook	Chameleon	Left-handed	Braided hair	Afraid of spiders
Ellie Sattler	Binoculars	Monkey	Left-handed	Spiky hair	Afraid of spiders
Alan Grant	Binoculars	Python	Left-handed	Braided hair	Allergic to flowers
Ruby Roundhouse	Flashlight	Python	Right-handed	Curly hair	Afraid of spiders
Lara Croft	Compass	Parrot	Right-handed	Braided hair	Allergic to flowers
Katniss Everdeen	Binoculars	Python	Right-handed	Braided hair	Allergic to flowers
Hardy Boy	Compass	Monkey	Left-handed	Spiky hair	Allergic to flowers
Indiana Smith	Grappling Hook	Monkey	Right-handed	Curly hair	Hates mud
Percy Jackson	Flashlight	Chameleon	Left-handed	Spiky hair	Hates mud
Robin Hood	Flashlight	Chameleon	Right-handed	Braided hair	Afraid of spiders

CLUE 1 Place value

A digital lock on the temple door requires a code. The screen shows a number with four in the tens place. This code unlocks the first clue!

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

T			T											T				
30	5000	40	30	5000	50	40	60	100	400	40	80	90	400	30	5000	3000	8000	40
3000	800	600	30	5000	400	90												

What is the value of the 3 in 4,935? → **T**

What is the value of the 1 in 7,146? → **D**

What is the value of the 5 in 1,651? → **I**

What is the value of the 5 in 35,370? → **H**

What is the value of the 8 in 4,840? → **P**

What is the value of the 8 in 8,000? → **V**

What is the value of the 8 in 987? → **S**

What is the value of the 3 in 93,875? → **A**

What is the value of the 9 in 598? → **N**

What is the value of the 4 in 433? → **O**

What is the value of the 6 in 630? → **Y**

What is the value of the 6 in 360? → **F**

What is the value of the 4 in 148? → **E**

Scratch space:

CLUE 2 Addition

The team counts the fresh footprints left in the dirt. By adding the footprints on the left path to the footprints on the right path, we find the second clue!

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

T								T									T	
7933	9303	2417	5174	9303	2417	3542	2314	7933	9303	2417	2966	5713	5853	3841	4728	7933	9303	

T								T				
7933	9303	2417	4728	6699	3542	2417	2212	7933	9303	5713	4556	2314

$3077 + 4856 = \square \rightarrow \boxed{\text{T}}$	$1512 + 802 = \square \rightarrow \boxed{\text{D}}$	$1472 + 740 = \square \rightarrow \boxed{\text{F}}$
$934 + 1483 = \square \rightarrow \boxed{\text{E}}$	$2282 + 2274 = \square \rightarrow \boxed{\text{N}}$	$3066 + 2647 = \square \rightarrow \boxed{\text{A}}$
$3320 + 1854 = \square \rightarrow \boxed{\text{Y}}$	$1943 + 1898 = \square \rightarrow \boxed{\text{W}}$	$1656 + 3072 = \square \rightarrow \boxed{\text{I}}$
$2290 + 1252 = \square \rightarrow \boxed{\text{L}}$	$6112 + 3191 = \square \rightarrow \boxed{\text{H}}$	$1475 + 1491 = \square \rightarrow \boxed{\text{M}}$
$1764 + 4089 = \square \rightarrow \boxed{\text{P}}$	$2353 + 4346 = \square \rightarrow \boxed{\text{R}}$	

Scratch space:

CLUE 3
Subtraction

We check the canteen crate to see how much water the thief took. By subtracting the remaining canteens from the starting amount, we discover the third clue!

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

T																
1095	8918	7729	7896	4419	8572	7729	7729	4038	7729	8859	2104	2665	3704	8859	2104	7896

				T						
8572	7729	4797	6969	1095	8918	7729	6969	2665	4419	7729

$2717 - 1622 = \square \rightarrow \boxed{\text{T}}$

$12382 - 3523 = \square \rightarrow \boxed{\text{D}}$

$11685 - 3789 = \square \rightarrow \boxed{\text{Y}}$

$3145 - 1041 = \square \rightarrow \boxed{\text{L}}$

$9159 - 4362 = \square \rightarrow \boxed{\text{A}}$

$11804 - 2886 = \square \rightarrow \boxed{\text{H}}$

$12596 - 4867 = \square \rightarrow \boxed{\text{E}}$

$4645 - 1980 = \square \rightarrow \boxed{\text{O}}$

$10542 - 3573 = \square \rightarrow \boxed{\text{R}}$

$6090 - 2386 = \square \rightarrow \boxed{\text{U}}$

$13068 - 4496 = \square \rightarrow \boxed{\text{N}}$

$7056 - 3018 = \square \rightarrow \boxed{\text{Z}}$

$5256 - 837 = \square \rightarrow \boxed{\text{S}}$

Scratch space:

CLUE 4
Multiplication facts (1-12)

There is a grid of stone tiles on the floor. Multiplying the rows of tiles by the columns of tiles reveals a secret compartment with the fourth clue!

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

W																		
11	36	7	42	8	9	40	80	49	56	24	72	45	30	80	24	110	42	9
32	30	36	54	110	80	9	25	30										

$11 \times 1 = \square \rightarrow$ W	$5 \times 9 = \square \rightarrow$ Y	$4 \times 2 = \square \rightarrow$ U	$5 \times 5 = \square \rightarrow$ C
$7 \times 8 = \square \rightarrow$ P	$5 \times 8 = \square \rightarrow$ D	$4 \times 6 = \square \rightarrow$ I	$7 \times 6 = \square \rightarrow$ O
$9 \times 6 = \square \rightarrow$ B	$12 \times 6 = \square \rightarrow$ K	$7 \times 7 = \square \rightarrow$ S	$8 \times 4 = \square \rightarrow$ T
$3 \times 3 = \square \rightarrow$ N	$7 \times 1 = \square \rightarrow$ F	$5 \times 6 = \square \rightarrow$ H	$4 \times 9 = \square \rightarrow$ E
$10 \times 11 = \square \rightarrow$ R	$10 \times 8 = \square \rightarrow$ A		

Scratch space:

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

We find a bag of trail mix dropped by the thief. If we divide the peanuts equally among the team members, the leftover amount tells us where the final clue is hidden!

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:

$16 \div 8 = \boxed{}$

$8 \div 1 = \boxed{}$

$7 \div 7 = \boxed{}$

$33 \div 3 = \boxed{}$

$60 \div 5 = \boxed{}$

$12 \div 4 = \boxed{}$

$66 \div 11 = \boxed{}$

$15 \div 3 = \boxed{}$

$50 \div 5 = \boxed{}$

$20 \div 5 = \boxed{}$

$99 \div 11 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain checked the trail with a compass, then shared a banana with their monkey.
2. The villain cleared the dense vines with a machete, then shared a banana with their monkey.
3. The villain swung across the canyon with a grappling hook, then patted their loyal jaguar cub.
4. The villain scouted the path with binoculars, then fed some fruit to their parrot.
5. The villain swung across the canyon with a grappling hook, then watched their chameleon blend into the leaves.
6. The villain checked the trail with a compass, then watched their chameleon blend into the leaves.
7. The villain scouted the path with binoculars, then shared a banana with their monkey.
8. The villain lit up the dark tunnel with a flashlight, then fed some fruit to their parrot.
9. The villain checked the trail with a compass, then patted their loyal jaguar cub.
10. The villain swung across the canyon with a grappling hook, then shared a banana with their monkey.
11. The villain checked the trail with a compass, then fed some fruit to their parrot.
12. The villain scouted the path with binoculars, then carried their sleeping python in a sack.

Answer Key

The Temple of Sunstones Mystery

Culprit: Zorro

Binoculars · Monkey · Left-handed · Spiky hair · Allergic to flowers

Trail: Start 21 → Clue 1 16 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE THIEF DOES NOT HAVE A PYTHON"

What is the value of the 3 in 4,935? = 30 (T) · What is the value of the 1 in 7,146? = 100 (D) · What is the value of the 5 in 1,651? = 50 (I) · What is the value of the 5 in 35,370? = 5000 (H) · What is the value of the 8 in 4,840? = 800 (P) · What is the value of the 8 in 8,000? = 8000 (V) · What is the value of the 8 in 987? = 80 (S) · What is the value of the 3 in 93,875? = 3000 (A) · What is the value of the 9 in 598? = 90 (N) · What is the value of the 4 in 433? = 400 (O) · What is the value of the 6 in 630? = 600 (Y) · What is the value of the 6 in 360? = 60 (F) · What is the value of the 4 in 148? = 40 (E)

Clue 2 (Addition): "THEY HELD THE MAP WITH THEIR LEFT HAND"

$3077 + 4856 = 7933$ (T) · $1512 + 802 = 2314$ (D) · $1472 + 740 = 2212$ (F) · $934 + 1483 = 2417$ (E) · $2282 + 2274 = 4556$ (N) · $3066 + 2647 = 5713$ (A) · $3320 + 1854 = 5174$ (Y) · $1943 + 1898 = 3841$ (W) · $1656 + 3072 = 4728$ (I) · $2290 + 1252 = 3542$ (L) · $6112 + 3191 = 9303$ (H) · $1475 + 1491 = 2966$ (M) · $1764 + 4089 = 5853$ (P) · $2353 + 4346 = 6699$ (R)

Clue 3 (Subtraction): "THEY SNEEZED LOUDLY NEAR THE ROSES"

$2717 - 1622 = 1095$ (T) · $12382 - 3523 = 8859$ (D) · $11685 - 3789 = 7896$ (Y) · $3145 - 1041 = 2104$ (L) · $9159 - 4362 = 4797$ (A) · $11804 - 2886 = 8918$ (H) · $12596 - 4867 = 7729$ (E) · $4645 - 1980 = 2665$ (O) · $10542 - 3573 = 6969$ (R) · $6090 - 2386 = 3704$ (U) · $13068 - 4496 = 8572$ (N) · $7056 - 3018 = 4038$ (Z) · $5256 - 837 = 4419$ (S)

Clue 4 (Multiplication facts (1-12)): "WE FOUND A SPIKY HAIR ON THE BRANCH"

$11 \times 1 = 11$ (W) · $5 \times 9 = 45$ (Y) · $4 \times 2 = 8$ (U) · $5 \times 5 = 25$ (C) · $7 \times 8 = 56$ (P) · $5 \times 8 = 40$ (D) · $4 \times 6 = 24$ (I) · $7 \times 6 = 42$ (O) · $9 \times 6 = 54$ (B) · $12 \times 6 = 72$ (K) · $7 \times 7 = 49$ (S) · $8 \times 4 = 32$ (T) · $3 \times 3 = 9$ (N) · $7 \times 1 = 7$ (F) · $5 \times 6 = 30$ (H) · $4 \times 9 = 36$ (E) · $10 \times 11 = 110$ (R) · $10 \times 8 = 80$ (A)

Clue 5 (Division facts (1-12)): surviving statement is box 7 → Zorro

$16 \div 8 = 2$ · $8 \div 1 = 8$ · $7 \div 7 = 1$ · $33 \div 3 = 11$ · $60 \div 5 = 12$ · $12 \div 4 = 3$ · $66 \div 11 = 6$ · $15 \div 3 = 5$ · $50 \div 5 = 10$ · $20 \div 5 = 4$ · $99 \div 11 = 9$