



The Mystery of the Sunken Idol

Grade 4 math · Multiplication, Rounding, Skip counting, Subtraction, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

Someone snuck into the Map Island ruins and snatched the sacred Golden Idol! Head Excavator Dr. Santos needs your detective team to solve the clue math, analyze the jungle evidence, and identify the culprit before they escape the island.

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 temple intruder is _____

Possible suspects

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

NAME	EXPLORER SKILL	SPECIAL GEAR	EYEWEAR	HAIR STYLE	JUNGLE FEAR
Liam Connor	lock picking	boomerang throw	wears brass goggles	spiky red hair	scared of spiders
Nora Chen	rope swinging	compass spin	wears brass goggles	curly black hair	afraid of bats
Diego Cruz	vine climbing	grapple hook launch	wears brass goggles	curly black hair	allergic to orchids
Maya Santos	lock picking	spyglass glare	wears leather visor	spiky red hair	afraid of bats
Zoe Bell	torch lighting	smoke bomb drop	wears brass goggles	curly black hair	scared of spiders
Mason Reed	lock picking	boomerang throw	wears brass goggles	spiky red hair	allergic to orchids
Sam Rivera	map making	boomerang throw	wears leather visor	slick blonde hair	scared of spiders
Lucas Drake	rope swinging	grapple hook launch	wears leather visor	curly black hair	afraid of bats
Siena Fox	lock picking	grapple hook launch	wears brass goggles	curly black hair	scared of spiders
Ava Martinez	map making	grapple hook launch	wears leather visor	curly black hair	scared of spiders
Ruby Stone	vine climbing	smoke bomb drop	wears brass goggles	slick blonde hair	allergic to orchids
Elena Frost	rope swinging	grapple hook launch	wears brass goggles	slick blonde hair	afraid of bats
Leo Sterling	rope swinging	boomerang throw	wears brass goggles	curly black hair	scared of spiders
Grace Kim	rope swinging	spyglass glare	wears leather visor	curly black hair	scared of spiders
Ethan Hunt	map making	boomerang throw	wears brass goggles	slick blonde hair	scared of spiders
Ella Thorne	torch lighting	grapple hook launch	wears brass goggles	slick blonde hair	allergic to orchids
Chloe Brooks	lock picking	spyglass glare	wears brass goggles	curly black hair	scared of spiders
Priya Patel	vine climbing	compass spin	wears brass goggles	curly black hair	scared of spiders
Cole Hunter	lock picking	compass spin	wears brass goggles	spiky red hair	allergic to orchids
Jax Miller	lock picking	boomerang throw	wears brass goggles	spiky red hair	afraid of bats
Indy Vance	lock picking	spyglass glare	wears leather visor	curly black hair	afraid of bats

Multiplication facts (1-12)

We found rows of supply crates stacked neatly outside the temple. Calculate the total supplies to open the crate containing the first clue.

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

A 2x10 grid of boxes. The top row contains the following values from left to right: 20 (with an orange 'T'), 48, 56, 45, 4, 56, 84, 72, 44, 100, 28, 18, 18, 84, 28, 4, 120, 33, 56, 45. The bottom row contains the following values from left to right: 4, 33, 20 (with an orange 'T'), 45, 81, 28, 4, 88, 33, 80, 81, 84, 45, 45, 56, 45.

$5 \times 4 = \boxed{} \rightarrow \boxed{\text{T}}$

$11 \times 8 = \boxed{} \rightarrow \boxed{\text{C}}$

$$3 \times 11 = \boxed{} \rightarrow \boxed{0}$$

$12 \times 10 = \boxed{} \rightarrow \boxed{\text{D}}$

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

$12 \times 4 = \boxed{} \rightarrow \boxed{\text{H}}$

$$10 \times 10 = \boxed{} \rightarrow \boxed{\mathbf{v}}$$

$8 \times 7 = \boxed{} \rightarrow \boxed{\text{E}}$

$$4 \times 1 = \boxed{} \rightarrow \boxed{\text{N}}$$

$2 \times 9 = \square \rightarrow \boxed{\text{L}}$

$7 \times 4 = \boxed{} \rightarrow \boxed{\text{I}}$

$12 \times 7 = \boxed{} \rightarrow \boxed{\text{A}}$

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

$10 \times 8 = \square \rightarrow \boxed{\mathbf{M}}$

$9 \times 9 =$ $\rightarrow$ **P**

$4 \times 11 = \boxed{} \rightarrow \boxed{\text{Y}}$

Scratch space:

CLUE 2

The ancient golden radar screen shows an estimated distance rounded to the nearest hundred. Solve this to lock in our search grid.

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

Diagram illustrating the multiplication of 900 by 9000, showing the partial products and their alignment:

900	9000	430		2000	500	2000	130	430	200	900		20	430	30	7000	2000		170	7000	30	2000	2000
700	3000	700		700	1700	430	2000		230	3700	900		9000	430		1700	230	700	9000	900		

Round 946 to the nearest hundred $\rightarrow$ **T**

Round 1,652 to the nearest hundred → **L**

Round 233 to the nearest ten $\rightarrow$

Round 724 to the nearest hundred $\rightarrow$ **G**

Round 1,841 to the nearest thousand → **S**

Round 30 to the nearest ten $\rightarrow$ **A**

Round 7,132 to the nearest thousand $\rightarrow$ **R**

Round 233 to the nearest hundred $\rightarrow$ **C**

Round 173 to the nearest ten $\rightarrow$ **B**

Round 430 to the nearest ten → **E**

Round 3,695 to the nearest hundred $\rightarrow$ **N**

Round 2,582 to the nearest thousand $\rightarrow$ ☒ 0

Round 19 to the nearest ten $\rightarrow$ **W**

Round 129 to the nearest ten $\rightarrow$ **P**

Round 525 to the nearest hundred → **U**

Round 8,972 to the nearest thousand → **H**

Scratch space:

CLUE 3 Skip counting

Tracks lead down the stone path in equal steps. Skip count along the trail to discover which ancient archway the culprit took.

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

T																			T
25	70	110	35	22	130	130	80	22	15	10	70	22	35	110	42	110	16	80	25
12	42	110	110	26	60	10	26	22	16	110	42	10							

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 → **T**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 → **R**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 → **A**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 → **P**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 → **S**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 → **V**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 → **I**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 → **D**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 → **E**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 → **L**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, __, 75, 80 → **H**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 → **C**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, __, 18, 21 → **N**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, __, 65, 70 → **Y**

Scratch space:

CLUE 4

Subtraction

We compared the original camp gear count to what remains after the raid. Subtract to find out how many flashlight batteries were taken.

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

B																		
4509	8012	7564	8705	1739	8705	4993	5238	8012	7505	6863	7564	2534	5238	3942	7564	7636	3475	2550
2470	6863	4989	2470	4989	4430	4226	8012	4989	3417	3475	3475	5238						

$6975 - 2466 = \square \rightarrow \text{B}$

$7469 - 3994 = \square \rightarrow \text{O}$

$7609 - 2620 = \square \rightarrow \text{E}$

$4811 - 2261 = \square \rightarrow \text{N}$

$9107 - 1602 = \square \rightarrow \text{Y}$

$3672 - 255 = \square \rightarrow \text{D}$

$6305 - 2079 = \square \rightarrow \text{P}$

$6338 - 1908 = \square \rightarrow \text{M}$

$9267 - 562 = \square \rightarrow \text{C}$

$2896 - 426 = \square \rightarrow \text{T}$

$5057 - 3318 = \square \rightarrow \text{K}$

$7596 - 32 = \square \rightarrow \text{A}$

$12700 - 4688 = \square \rightarrow \text{L}$

$4022 - 1488 = \square \rightarrow \text{I}$

$6601 - 2659 = \square \rightarrow \text{W}$

$8000 - 364 = \square \rightarrow \text{S}$

$10136 - 3273 = \square \rightarrow \text{H}$

$5836 - 598 = \square \rightarrow \text{R}$

$7848 - 2855 = \square \rightarrow \text{U}$

Scratch space:

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

To trek deeper into the jungle, our rescue party must split all water canteens equally among the teams. Divide to pack the bags.

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:

$2 \div 1 = \boxed{}$

$40 \div 5 = \boxed{}$

$70 \div 7 = \boxed{}$

$11 \div 1 = \boxed{}$

$12 \div 12 = \boxed{}$

$54 \div 9 = \boxed{}$

$15 \div 3 = \boxed{}$

$21 \div 3 = \boxed{}$

$24 \div 6 = \boxed{}$

$3 \div 1 = \boxed{}$

$48 \div 4 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain climbed the temple wall, then spun a golden compass.
2. The villain swung on a jungle vine, then threw a wooden boomerang.
3. The villain climbed the temple wall, then stared through a spyglass.
4. The villain picked the ancient lock, then spun a golden compass.
5. The villain picked the ancient lock, then dropped a thick smoke bomb.
6. The villain swung on a jungle vine, then launched a grapple hook.
7. The villain swung on a jungle vine, then spun a golden compass.
8. The villain picked the ancient lock, then stared through a spyglass.
9. The villain lit a bright torch, then dropped a thick smoke bomb.
10. The villain picked the ancient lock, then launched a grapple hook.
11. The villain swung on a jungle vine, then stared through a spyglass.
12. The villain swung on a jungle vine, then dropped a thick smoke bomb.

Answer Key

The Mystery of the Sunken Idol

Culprit: Zoe Bell

torch lighting · smoke bomb drop · wears brass goggles · curly black hair · scared of spiders

Trail: Start 21 → Clue 1 18 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE SNEAKY VILLAIN DOES NOT SPIN COMPASSES"

$5 \times 4 = 20$ (T) · $11 \times 8 = 88$ (C) · $3 \times 11 = 33$ (O) · $12 \times 10 = 120$ (D) · $9 \times 5 = 45$ (S) · $12 \times 4 = 48$ (H) · $10 \times 10 = 100$ (V) · $8 \times 7 = 56$ (E) · $4 \times 1 = 4$ (N) · $2 \times 9 = 18$ (L) · $7 \times 4 = 28$ (I) · $12 \times 7 = 84$ (A) · $12 \times 6 = 72$ (K) · $10 \times 8 = 80$ (M) · $9 \times 9 = 81$ (P) · $4 \times 11 = 44$ (Y)

Clue 2 (Rounding): "THE SUSPECT WEARS BRASS GOGGLES IN THE LIGHT"

Round 946 to the nearest hundred = 900 (T) · Round 1,652 to the nearest hundred = 1700 (L) · Round 233 to the nearest ten = 230 (I) · Round 724 to the nearest hundred = 700 (G) · Round 1,841 to the nearest thousand = 2000 (S) · Round 30 to the nearest ten = 30 (A) · Round 7,132 to the nearest thousand = 7000 (R) · Round 233 to the nearest hundred = 200 (C) · Round 173 to the nearest ten = 170 (B) · Round 430 to the nearest ten = 430 (E) · Round 3,695 to the nearest hundred = 3700 (N) · Round 2,582 to the nearest thousand = 3000 (O) · Round 19 to the nearest ten = 20 (W) · Round 129 to the nearest ten = 130 (P) · Round 525 to the nearest hundred = 500 (U) · Round 8,972 to the nearest thousand = 9000 (H)

Clue 3 (Skip counting): "THE VILLAIN SHIVERED AT CREEPY SPIDERS"

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (T) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (R) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (A) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (P) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 = 10 (S) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (V) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 = 22 (I) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 = 16 (D) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (E) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 = 130 (L) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, __, 75, 80 = 70 (H) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 = 12 (C) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, __, 18, 21 = 15 (N) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, __, 65, 70 = 60 (Y)

Clue 4 (Subtraction): "BLACK CURLY HAIR WAS ON THE TEMPLE DOOR"

$6975 - 2466 = 4509$ (B) · $7469 - 3994 = 3475$ (O) · $7609 - 2620 = 4989$ (E) · $4811 - 2261 = 2550$ (N) · $9107 - 1602 = 7505$ (Y) · $3672 - 255 = 3417$ (D) · $6305 - 2079 = 4226$ (P) · $6338 - 1908 = 4430$ (M) · $9267 - 562 = 8705$ (C) · $2896 - 426 = 2470$ (T) · $5057 - 3318 = 1739$ (K) · $7596 - 32 = 7564$ (A) · $12700 - 4688 = 8012$ (L) · $4022 - 1488 = 2534$ (I) · $6601 - 2659 = 3942$ (W) · $8000 - 364 = 7636$ (S) · $10136 - 3273 = 6863$ (H) · $5836 - 598 = 5238$ (R) · $7848 - 2855 = 4993$ (U)

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

$2 \div 1 = 2$ · $40 \div 5 = 8$ · $70 \div 7 = 10$ · $11 \div 1 = 11$ · $12 \div 12 = 1$ · $54 \div 9 = 6$ · $15 \div 3 = 5$ · $21 \div 3 = 7$ · $24 \div 6 = 4$ · $3 \div 1 = 3$ · $48 \div 4 = 12$