



# The Lost Idol of Mist Valley

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

Detective: \_\_\_\_\_ Date: \_\_\_\_\_

Someone snuck into the temple campsite and swapped the golden idol with a fake rock! Use math to crack the clues and find out who did it.

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           | PRIMARY TOOL  | SPECIAL GEAR     | GLOVE HAND         | HAT FEATHER   | DISTRACTION    |
|----------------|---------------|------------------|--------------------|---------------|----------------|
| Officer Owen   | Torch         | Glider Wings     | Right Yellow Glove | Green Feather | Bright Lantern |
| Explorer Eli   | Climbing Rope | Glider Wings     | Left Yellow Glove  | Green Feather | Loud Whistle   |
| Captain Carlos | Binoculars    | Decoy Horn       | Right Yellow Glove | Blue Feather  | Squeaky Parrot |
| Sailor Sam     | Binoculars    | Smoke Bombs      | Right Yellow Glove | Blue Feather  | Squeaky Parrot |
| Deputy Daisy   | Torch         | Decoy Horn       | Right Yellow Glove | Blue Feather  | Loud Whistle   |
| Scout Maya     | Binoculars    | Smoke Bombs      | Right Yellow Glove | Green Feather | Squeaky Parrot |
| Guide Gabe     | Map Scroll    | Glider Wings     | Right Yellow Glove | Red Feather   | Squeaky Parrot |
| Warden Will    | Binoculars    | Decoy Horn       | Right Yellow Glove | Blue Feather  | Loud Whistle   |
| Racer Rita     | Torch         | Smoke Bombs      | Left Yellow Glove  | Blue Feather  | Bright Lantern |
| Scout Samira   | Machete       | Grappling Hook   | Right Yellow Glove | Red Feather   | Loud Whistle   |
| Cadet Chloe    | Map Scroll    | Glider Wings     | Right Yellow Glove | Blue Feather  | Loud Whistle   |
| Pilot Penny    | Torch         | Tracking Compass | Right Yellow Glove | Red Feather   | Loud Whistle   |
| Ranger Rick    | Binoculars    | Grappling Hook   | Right Yellow Glove | Blue Feather  | Loud Whistle   |
| Doc Dan        | Torch         | Tracking Compass | Right Yellow Glove | Blue Feather  | Loud Whistle   |
| Detective Nora | Climbing Rope | Grappling Hook   | Left Yellow Glove  | Blue Feather  | Loud Whistle   |
| Marshal Mark   | Climbing Rope | Glider Wings     | Right Yellow Glove | Red Feather   | Squeaky Parrot |
| Navigator Ned  | Machete       | Tracking Compass | Left Yellow Glove  | Green Feather | Loud Whistle   |
| Explorer Elena | Binoculars    | Tracking Compass | Right Yellow Glove | Green Feather | Loud Whistle   |
| Agent Amy      | Torch         | Decoy Horn       | Right Yellow Glove | Red Feather   | Loud Whistle   |
| Tracker Tess   | Map Scroll    | Smoke Bombs      | Right Yellow Glove | Green Feather | Bright Lantern |
| Guard Ben      | Binoculars    | Smoke Bombs      | Right Yellow Glove | Red Feather   | Loud Whistle   |

## CLUE 1 Rounding

The ancient temple scanner only displays rounded numbers on the stone screen.

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

|      |    |     |     |      |     |      |     |      |      |     |      |    |      |      |    |      |
|------|----|-----|-----|------|-----|------|-----|------|------|-----|------|----|------|------|----|------|
| T    |    |     |     |      |     |      |     |      |      |     |      |    |      |      |    | T    |
| 4000 | 70 | 40  | 600 | 2000 | 400 | 400  | 30  | 2000 | 60   | 800 | 90   | 40 | 5000 | 60   | 90 | 4000 |
|      |    |     |     |      |     |      |     |      |      |     |      |    |      |      |    |      |
| 70   | 30 | 600 | 40  | 9000 | 400 | 2000 | 800 | 40   | 3000 | 20  | 2000 | 60 | 9000 | 5000 |    |      |

Round 4,314 to the nearest thousand  → **T**

Round 1,767 to the nearest thousand  → **I**

Round 3,235 to the nearest thousand  → **R**

Round 42 to the nearest ten  → **E**

Round 93 to the nearest ten  → **O**

Round 16 to the nearest ten  → **W**

Round 407 to the nearest hundred  → **L**

Round 58 to the nearest ten  → **N**

Round 765 to the nearest hundred  → **D**

Round 8,936 to the nearest thousand  → **G**

Round 595 to the nearest hundred  → **V**

Round 5,168 to the nearest thousand  → **S**

Round 27 to the nearest ten  → **A**

Round 71 to the nearest ten  → **H**

Scratch space:

## CLUE 2 Addition

The camp leader tallying all the extra supplies found another clue written on a crate.

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

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| A   |     |     |     |     |     |     |     |     | A   |     | A   |     |     |     |     |     |     |     |
| 809 | 509 | 900 | 410 | 506 | 949 | 929 | 929 | 929 | 809 | 509 | 809 | 350 | 949 | 754 | 754 | 542 | 509 |     |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | A   |     |     |
| 370 | 754 | 542 | 852 | 949 | 542 | 506 | 410 | 536 | 949 | 254 | 900 | 370 | 536 | 410 | 536 | 809 | 506 | 414 |

$$547 + 262 = \boxed{\phantom{00}} \rightarrow \boxed{\text{A}}$$

$$147 + 223 = \boxed{\phantom{00}} \rightarrow \boxed{\text{G}}$$

$$294 + 212 = \boxed{\phantom{00}} \rightarrow \boxed{\text{N}}$$

$$258 + 156 = \boxed{\phantom{00}} \rightarrow \boxed{\text{D}}$$

$$198 + 311 = \boxed{\phantom{00}} \rightarrow \boxed{\text{W}}$$

$$167 + 369 = \boxed{\phantom{00}} \rightarrow \boxed{\text{H}}$$

$$389 + 511 = \boxed{\phantom{00}} \rightarrow \boxed{\text{I}}$$

$$486 + 268 = \boxed{\phantom{00}} \rightarrow \boxed{\text{L}}$$

$$145 + 109 = \boxed{\phantom{00}} \rightarrow \boxed{\text{R}}$$

$$210 + 140 = \boxed{\phantom{00}} \rightarrow \boxed{\text{Y}}$$

$$450 + 499 = \boxed{\phantom{00}} \rightarrow \boxed{\text{E}}$$

$$342 + 587 = \boxed{\phantom{00}} \rightarrow \boxed{\text{S}}$$

$$149 + 261 = \boxed{\phantom{00}} \rightarrow \boxed{\text{T}}$$

$$294 + 248 = \boxed{\phantom{00}} \rightarrow \boxed{\text{O}}$$

$$478 + 374 = \boxed{\phantom{00}} \rightarrow \boxed{\text{V}}$$

Scratch space:

## CLUE 3

## Subtraction

After subtracting the damaged coins from the chest a secret message appeared.

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

|              |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| <div>T</div> |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
| 749          | 233 | 597 | 656 | 421 | 467 | 293 | 749 | 590 | 597 | 146 | 328 | 597 | 328 | 749 | 233 | 597 | 444 |     |  |
|              |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
| 467          | 590 | 590 | 436 | 322 | 749 | 233 | 426 | 292 | 467 | 293 | 328 | 436 | 233 | 322 | 656 | 749 | 292 | 597 |  |

$780 - 31 = \square \rightarrow \text{T}$

$573 - 340 = \square \rightarrow \text{H}$

$487 - 51 = \square \rightarrow \text{W}$

$625 - 35 = \square \rightarrow \text{F}$

$666 - 344 = \square \rightarrow \text{I}$

$613 - 285 = \square \rightarrow \text{D}$

$682 - 389 = \square \rightarrow \text{U}$

$510 - 43 = \square \rightarrow \text{O}$

$526 - 82 = \square \rightarrow \text{M}$

$602 - 176 = \square \rightarrow \text{A}$

$879 - 223 = \square \rightarrow \text{S}$

$635 - 214 = \square \rightarrow \text{C}$

$582 - 290 = \square \rightarrow \text{L}$

$899 - 302 = \square \rightarrow \text{E}$

$369 - 223 = \square \rightarrow \text{N}$

Scratch space:

**CLUE 4**
**Multiplication facts (1-12)**

A grid of carved tiles on the altar revealed a pattern in equal rows.

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

|    |     |    |    |    |    |    |    |    |    |     |    |    |    |    |     |    |   |    |     |
|----|-----|----|----|----|----|----|----|----|----|-----|----|----|----|----|-----|----|---|----|-----|
| E  |     |    |    | E  |    |    | E  |    |    |     |    | E  |    | E  |     |    |   |    |     |
| 36 | 100 | 77 | 28 | 36 | 49 | 7  | 36 | 84 | 15 | 144 | 7  | 36 | 49 | 36 | 144 | 44 | 5 | 20 | 144 |
|    |     |    |    | E  |    | E  |    |    |    | E   |    |    |    |    |     |    |   |    |     |
| 84 | 80  | 90 | 1  | 36 | 99 | 36 | 84 | 15 | 44 | 36  | 30 |    |    |    |     |    |   |    |     |

|                                              |                                               |                                               |
|----------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| $9 \times 4 = \square \rightarrow$ <b>E</b>  | $7 \times 4 = \square \rightarrow$ <b>D</b>   | $3 \times 10 = \square \rightarrow$ <b>R</b>  |
| $8 \times 10 = \square \rightarrow$ <b>B</b> | $12 \times 12 = \square \rightarrow$ <b>S</b> | $5 \times 1 = \square \rightarrow$ <b>O</b>   |
| $11 \times 7 = \square \rightarrow$ <b>I</b> | $9 \times 11 = \square \rightarrow$ <b>F</b>  | $10 \times 10 = \square \rightarrow$ <b>V</b> |
| $7 \times 12 = \square \rightarrow$ <b>A</b> | $7 \times 7 = \square \rightarrow$ <b>N</b>   | $1 \times 7 = \square \rightarrow$ <b>C</b>   |
| $4 \times 11 = \square \rightarrow$ <b>H</b> | $10 \times 9 = \square \rightarrow$ <b>L</b>  | $1 \times 1 = \square \rightarrow$ <b>U</b>   |
| $2 \times 10 = \square \rightarrow$ <b>W</b> | $3 \times 5 = \square \rightarrow$ <b>T</b>   |                                               |

Scratch space:

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

Sharing the food rations evenly among the scouts uncovered the final secret note.

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:**

$54 \div 9 = \boxed{\phantom{00}}$

$64 \div 8 = \boxed{\phantom{00}}$

$120 \div 10 = \boxed{\phantom{00}}$

$14 \div 7 = \boxed{\phantom{00}}$

$56 \div 8 = \boxed{\phantom{00}}$

$44 \div 4 = \boxed{\phantom{00}}$

$45 \div 9 = \boxed{\phantom{00}}$

$100 \div 10 = \boxed{\phantom{00}}$

$20 \div 5 = \boxed{\phantom{00}}$

$4 \div 4 = \boxed{\phantom{00}}$

$54 \div 6 = \boxed{\phantom{00}}$

**Step 2 - cross out the sentence with each answer:**

1. The villain lit up the dark cavern with a bright torch, then zipped across the canyon with a grappling hook.
2. The villain cleared thick vines with a machete, then confused the guard dogs with a decoy horn.
3. The villain spied on the camp with binoculars, then confused the guard dogs with a decoy horn.
4. The villain checked the hidden paths on a map scroll, then escaped into the mist using smoke bombs.
5. The villain scaled the stone temple wall with a climbing rope, then navigated the maze with a tracking compass.
6. The villain lit up the dark cavern with a bright torch, then navigated the maze with a tracking compass.
7. The villain spied on the camp with binoculars, then escaped into the mist using smoke bombs.
8. The villain spied on the camp with binoculars, then zipped across the canyon with a grappling hook.
9. The villain cleared thick vines with a machete, then soared over the treetops with glider wings.
10. The villain scaled the stone temple wall with a climbing rope, then escaped into the mist using smoke bombs.
11. The villain checked the hidden paths on a map scroll, then navigated the maze with a tracking compass.
12. The villain lit up the dark cavern with a bright torch, then confused the guard dogs with a decoy horn.

# Answer Key

## The Lost Idol of Mist Valley

### Culprit: Warden Will

Binoculars · Decoy Horn · Right Yellow Glove · Blue Feather · Loud Whistle

Trail: Start 21 → Clue 1 16 → Clue 2 13 → Clue 3 9 → Clue 4 4 → Clue 5 1

#### Clue 1 (Rounding): "THE VILLAIN DOES NOT HAVE GLIDER WINGS"

Round 4,314 to the nearest thousand = 4000 (T) · Round 1,767 to the nearest thousand = 2000 (I) · Round 3,235 to the nearest thousand = 3000 (R) · Round 42 to the nearest ten = 40 (E) · Round 93 to the nearest ten = 90 (O) · Round 16 to the nearest ten = 20 (W) · Round 407 to the nearest hundred = 400 (L) · Round 58 to the nearest ten = 60 (N) · Round 765 to the nearest hundred = 800 (D) · Round 8,936 to the nearest thousand = 9000 (G) · Round 595 to the nearest hundred = 600 (V) · Round 5,168 to the nearest thousand = 5000 (S) · Round 27 to the nearest ten = 30 (A) · Round 71 to the nearest ten = 70 (H)

#### Clue 2 (Addition): "A WITNESS SAW A YELLOW GLOVE ON THE RIGHT HAND"

$547 + 262 = 809$  (A) ·  $147 + 223 = 370$  (G) ·  $294 + 212 = 506$  (N) ·  $258 + 156 = 414$  (D) ·  $198 + 311 = 509$  (W) ·  $167 + 369 = 536$  (H) ·  $389 + 511 = 900$  (I) ·  $486 + 268 = 754$  (L) ·  $145 + 109 = 254$  (R) ·  $210 + 140 = 350$  (Y) ·  $450 + 499 = 949$  (E) ·  $342 + 587 = 929$  (S) ·  $149 + 261 = 410$  (T) ·  $294 + 248 = 542$  (O) ·  $478 + 374 = 852$  (V)

#### Clue 3 (Subtraction): "THE SCOUT FENDED THEM OFF WITH A LOUD WHISTLE"

$780 - 31 = 749$  (T) ·  $573 - 340 = 233$  (H) ·  $487 - 51 = 436$  (W) ·  $625 - 35 = 590$  (F) ·  $666 - 344 = 322$  (I) ·  $613 - 285 = 328$  (D) ·  $682 - 389 = 293$  (U) ·  $510 - 43 = 467$  (O) ·  $526 - 82 = 444$  (M) ·  $602 - 176 = 426$  (A) ·  $879 - 223 = 656$  (S) ·  $635 - 214 = 421$  (C) ·  $582 - 290 = 292$  (L) ·  $899 - 302 = 597$  (E) ·  $369 - 223 = 146$  (N)

#### Clue 4 (Multiplication facts (1-12)): "EVIDENCE AT SCENE SHOWS A BLUE FEATHER"

$9 \times 4 = 36$  (E) ·  $7 \times 4 = 28$  (D) ·  $3 \times 10 = 30$  (R) ·  $8 \times 10 = 80$  (B) ·  $12 \times 12 = 144$  (S) ·  $5 \times 1 = 5$  (O) ·  $11 \times 7 = 77$  (I) ·  $9 \times 11 = 99$  (F) ·  $10 \times 10 = 100$  (V) ·  $7 \times 12 = 84$  (A) ·  $7 \times 7 = 49$  (N) ·  $1 \times 7 = 7$  (C) ·  $4 \times 11 = 44$  (H) ·  $10 \times 9 = 90$  (L) ·  $1 \times 1 = 1$  (U) ·  $2 \times 10 = 20$  (W) ·  $3 \times 5 = 15$  (T)

#### Clue 5 (Division facts (1-12)): surviving statement is box 3 → Warden Will

$54 \div 9 = 6$  ·  $64 \div 8 = 8$  ·  $120 \div 10 = 12$  ·  $14 \div 7 = 2$  ·  $56 \div 8 = 7$  ·  $44 \div 4 = 11$  ·  $45 \div 9 = 5$  ·  $100 \div 10 = 10$  ·  $20 \div 5 = 4$  ·  $4 \div 4 = 1$  ·  $54 \div 6 = 9$