# The Mystery of the Sunken Idol

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

**Detective:** _____ **Date:** _____

Someone swiped the Ancient Sun Crystal from the camp tent! The Chief Explorer needs your detective skills to clear the innocent scouts and catch the shadow bandit.

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 bandit is** _____

## Possible suspects

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

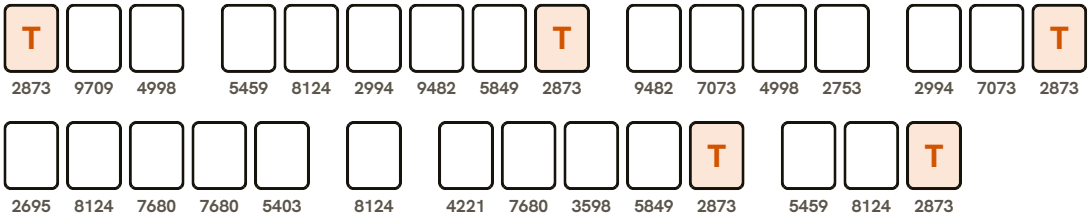
| NAME | ADVENTURE GEAR | PET COMPANION | DOMINANT HAND | HEADGEAR STYLE | CAMP DEFENSE |
|---|---|---|---|---|---|
| **Luke Pine** | GRAPPLING HOOK | PARROT | RIGHT HANDED | EXPLORER CAP | SNAKE CHARM |
| **Zoe Carter** | POCKET COMPASS | LIZARD | LEFT HANDED | EXPLORER CAP | LOUD BELL |
| **Sam Brooks** | GRAPPLING HOOK | CAPUCHIN MONKEY | RIGHT HANDED | EXPLORER CAP | LOUD BELL |
| **Cleo Vale** | POCKET COMPASS | TREE FROG | RIGHT HANDED | EXPLORER CAP | BUG SPRAY |
| **Cole Flint** | CLIMBING PICK | CAPUCHIN MONKEY | RIGHT HANDED | EXPLORER CAP | LOUD BELL |
| **Hugo Cliff** | MAP SCROLL | CAPUCHIN MONKEY | RIGHT HANDED | BANDANA | SNAKE CHARM |
| **Nora Hayes** | MAP SCROLL | CAPUCHIN MONKEY | LEFT HANDED | PITH HELMET | LOUD BELL |
| **Siena Coast** | MAP SCROLL | CAPUCHIN MONKEY | RIGHT HANDED | EXPLORER CAP | LOUD BELL |
| **Jack Wilder** | CLIMBING PICK | CAPUCHIN MONKEY | RIGHT HANDED | PITH HELMET | LOUD BELL |
| **Iris Glen** | POCKET COMPASS | PARROT | RIGHT HANDED | EXPLORER CAP | LOUD BELL |
| **Ivy West** | MAP SCROLL | TREE FROG | RIGHT HANDED | PITH HELMET | BUG SPRAY |
| **Finn Drake** | CLIMBING PICK | PARROT | RIGHT HANDED | EXPLORER CAP | SNAKE CHARM |
| **Maya Stone** | MAP SCROLL | LIZARD | RIGHT HANDED | BANDANA | LOUD BELL |
| **Eli Vance** | POCKET COMPASS | TREE FROG | RIGHT HANDED | PITH HELMET | SNAKE CHARM |
| **Toby Ridge** | CLIMBING PICK | LIZARD | LEFT HANDED | PITH HELMET | BUG SPRAY |
| **Milo Marsh** | MAP SCROLL | FRUIT BAT | LEFT HANDED | BANDANA | LOUD BELL |
| **Ella Frost** | MAP SCROLL | CAPUCHIN MONKEY | LEFT HANDED | PITH HELMET | SNAKE CHARM |
| **Liam Sterling** | POCKET COMPASS | CAPUCHIN MONKEY | LEFT HANDED | EXPLORER CAP | BUG SPRAY |
| **Tara Ford** | CLIMBING PICK | TREE FROG | RIGHT HANDED | EXPLORER CAP | BUG SPRAY |
| **Aria Woods** | GRAPPLING HOOK | TREE FROG | LEFT HANDED | PITH HELMET | SNAKE CHARM |
| **Leo Rivers** | MAP SCROLL | FRUIT BAT | RIGHT HANDED | EXPLORER CAP | LOUD BELL |

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## CLUE 1 Addition

We tallied all the rescued campsite supplies to find our first big clue.

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



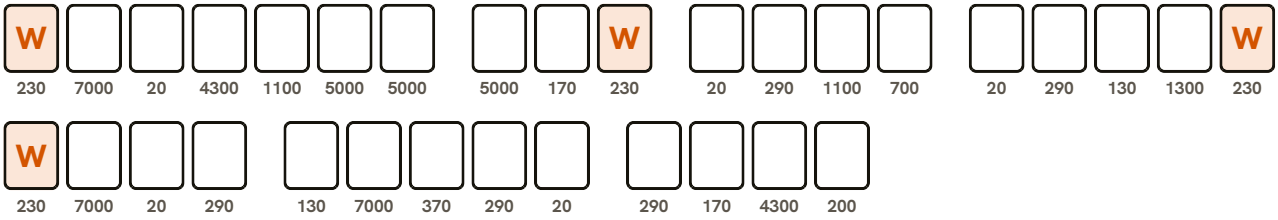

| | | |
|---|---|---|
| 1445 + 1428 = ☐ → T | 1593 + 1401 = ☐ → N | 2157 + 2064 = ☐ → F |
| 1106 + 1589 = ☐ → C | 4729 + 2951 = ☐ → R | 5339 + 2785 = ☐ → A |
| 3059 + 6423 = ☐ → D | 2153 + 2845 = ☐ → E | 2803 + 4270 = ☐ → O |
| 2314 + 3089 = ☐ → Y | 3853 + 1996 = ☐ → I | 5545 + 4164 = ☐ → H |
| 2497 + 1101 = ☐ → U | 3465 + 1994 = ☐ → B | 1780 + 973 = ☐ → S |

Scratch space:

## CLUE 2 Rounding

> The temple map scanner only displays distances rounded to the nearest ten.

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




Round 232 to the nearest ten ☐ → **W**

Round 685 to the nearest hundred ☐ → **M**

Round 174 to the nearest ten ☐ → **A**

Round 4,676 to the nearest thousand ☐ → **S**

Round 129 to the nearest ten ☐ → **R**

Round 20 to the nearest ten ☐ → **T**

Round 4,342 to the nearest hundred ☐ → **N**

Round 247 to the nearest hundred ☐ → **D**

Round 371 to the nearest ten ☐ → **G**

Round 6,657 to the nearest thousand ☐ → **I**

Round 1,310 to the nearest hundred ☐ → **O**

Round 1,080 to the nearest hundred ☐ → **E**

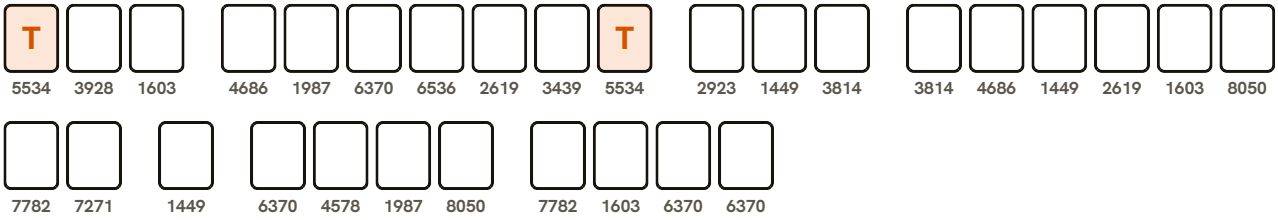
Round 286 to the nearest ten ☐ → **H**

Scratch space:

## CLUE 3 Subtraction

> We compared the original trail food weight to what was left behind.

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




6608 - 1074 = ☐ → T

6564 - 3641 = ☐ → W

9661 - 1879 = ☐ → B

10135 - 3765 = ☐ → L

7198 - 3759 = ☐ → I

7543 - 272 = ☐ → Y

7469 - 3655 = ☐ → S

3006 - 1557 = ☐ → A

4572 - 2585 = ☐ → U

8692 - 4006 = ☐ → C

3172 - 1569 = ☐ → E

5417 - 1489 = ☐ → H

11065 - 3015 = ☐ → D

5877 - 1299 = ☐ → O

3431 - 812 = ☐ → R

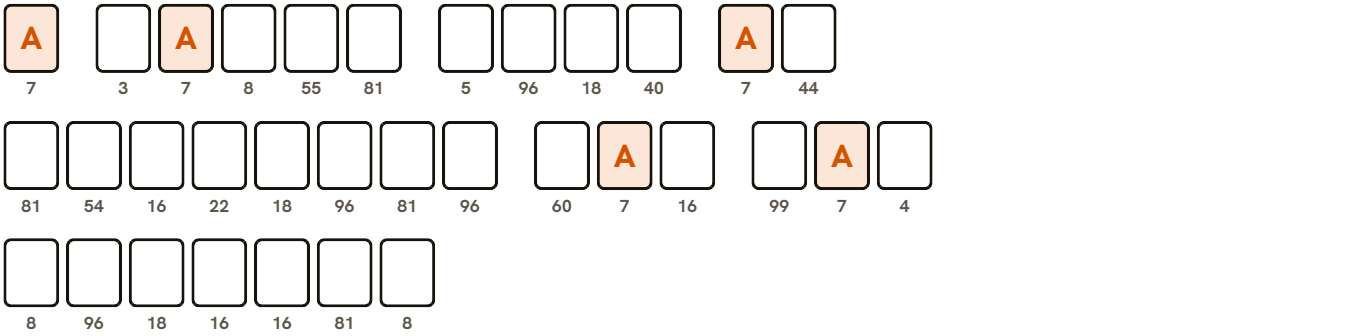
8340 - 1804 = ☐ → P

Scratch space:

## CLUE 4 Multiplication facts (1-12)

> The scouts arranged their rescue gear in equal rows along the tent wall.

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




| | | | |
|---|---|---|---|
| 7 × 1 = ☐ → A | 3 × 1 = ☐ → B | 2 × 8 = ☐ → P | 3 × 6 = ☐ → O |
| 1 × 5 = ☐ → F | 12 × 8 = ☐ → R | 11 × 4 = ☐ → N | |
| 9 × 6 = ☐ → X | 4 × 1 = ☐ → S | 10 × 4 = ☐ → M | |
| 10 × 6 = ☐ → C | 1 × 8 = ☐ → D | 9 × 9 = ☐ → E | |
| 11 × 5 = ☐ → G | 11 × 9 = ☐ → W | 11 × 2 = ☐ → L | |

Scratch space:

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

> We divided the ancient coin collection equally among the search teams.

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:**

| | | | | |
|---|---|---|---|---|
| 8 ÷ 2 = ☐ | 81 ÷ 9 = ☐ | 84 ÷ 12 = ☐ | 33 ÷ 3 = ☐ | 14 ÷ 7 = ☐ |
| 120 ÷ 10 = ☐ | 21 ÷ 7 = ☐ | 80 ÷ 10 = ☐ | 9 ÷ 9 = ☐ | 80 ÷ 8 = ☐ |
| 24 ÷ 4 = ☐ | | | | |

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

1. The villain consulted the ancient map, then released a green lizard.
2. The villain lit up the dark cavern, then fed a cheeky monkey.
3. The villain swung across the ravine, then whistled for a parrot.
4. The villain scaled the mossy cliff, then fed a cheeky monkey.
5. The villain consulted the ancient map, then whistled for a parrot.
6. The villain swung across the ravine, then checked a glowing frog.
7. The villain swung across the ravine, then fed a cheeky monkey.
8. The villain scouted the ruin walls, then checked a glowing frog.
9. The villain scouted the ruin walls, then fed a cheeky monkey.
10. The villain scaled the mossy cliff, then frightened a roosting bat.
11. The villain consulted the ancient map, then fed a cheeky monkey.
12. The villain scouted the ruin walls, then frightened a roosting bat.

TEACHER / PARENT

# Answer Key

The Mystery of the Sunken Idol

## Culprit: Iris Glen

POCKET COMPASS · PARROT · RIGHT HANDED · EXPLORER CAP · LOUD BELL

Trail: Start 21 → Clue 1 19 → Clue 2 13 → Clue 3 6 → Clue 4 4 → Clue 5 1

### Clue 1 (Addition): "THE BANDIT DOES NOT CARRY A FRUIT BAT"

1445 + 1428 = 2873 (T) · 1593 + 1401 = 2994 (N) · 2157 + 2064 = 4221 (F) · 1106 + 1589 = 2695 (C) · 4729 + 2951 = 7680 (R) · 5339 + 2785 = 8124 (A) · 3059 + 6423 = 9482 (D) · 2153 + 2845 = 4998 (E) · 2803 + 4270 = 7073 (O) · 2314 + 3089 = 5403 (Y) · 3853 + 1996 = 5849 (I) · 5545 + 4164 = 9709 (H) · 2497 + 1101 = 3598 (U) · 3465 + 1994 = 5459 (B) · 1780 + 973 = 2753 (S)

### Clue 2 (Rounding): "WITNESS SAW THEM THROW WITH RIGHT HAND"

Round 232 to the nearest ten = 230 (W) · Round 685 to the nearest hundred = 700 (M) · Round 174 to the nearest ten = 170 (A) · Round 4,676 to the nearest thousand = 5000 (S) · Round 129 to the nearest ten = 130 (R) · Round 20 to the nearest ten = 20 (T) · Round 4,342 to the nearest hundred = 4300 (N) · Round 247 to the nearest hundred = 200 (D) · Round 371 to the nearest ten = 370 (G) · Round 6,657 to the nearest thousand = 7000 (I) · Round 1,310 to the nearest hundred = 1300 (O) · Round 1,080 to the nearest hundred = 1100 (E) · Round 286 to the nearest ten = 290 (H)

### Clue 3 (Subtraction): "THE CULPRIT WAS SCARED BY A LOUD BELL"

6608 - 1074 = 5534 (T) · 6564 - 3641 = 2923 (W) · 9661 - 1879 = 7782 (B) · 10135 - 3765 = 6370 (L) · 7198 - 3759 = 3439 (I) · 7543 - 272 = 7271 (Y) · 7469 - 3655 = 3814 (S) · 3006 - 1557 = 1449 (A) · 4572 - 2585 = 1987 (U) · 8692 - 4006 = 4686 (C) · 3172 - 1569 = 1603 (E) · 5417 - 1489 = 3928 (H) · 11065 - 3015 = 8050 (D) · 5877 - 1299 = 4578 (O) · 3431 - 812 = 2619 (R) · 8340 - 1804 = 6536 (P)

### Clue 4 (Multiplication facts (1-12)): "A BADGE FROM AN EXPLORER CAP WAS DROPPED"

7 × 1 = 7 (A) · 3 × 1 = 3 (B) · 2 × 8 = 16 (P) · 3 × 6 = 18 (O) · 1 × 5 = 5 (F) · 12 × 8 = 96 (R) · 11 × 4 = 44 (N) · 9 × 6 = 54 (X) · 4 × 1 = 4 (S) · 10 × 4 = 40 (M) · 10 × 6 = 60 (C) · 1 × 8 = 8 (D) · 9 × 9 = 81 (E) · 11 × 5 = 55 (G) · 11 × 9 = 99 (W) · 11 × 2 = 22 (L)

### Clue 5 (Division facts (1-12)): surviving statement is box 5 → Iris Glen

8 ÷ 2 = 4 · 81 ÷ 9 = 9 · 84 ÷ 12 = 7 · 33 ÷ 3 = 11 · 14 ÷ 7 = 2 · 120 ÷ 10 = 12 · 21 ÷ 7 = 3 · 80 ÷ 10 = 8 · 9 ÷ 9 = 1 · 80 ÷ 8 = 10 · 24 ÷ 4 = 6