



The Case of the Missing Golden Idol

Grade 2 math · Place value, Addition, Subtraction, Skip counting, Missing addends · Reading level grades 1-2

Detective: _____ Date: _____

Oh no! Someone took the golden tiki idol from the camp! You must help the junior explorers find the Sneaky Bandit before they sail away!

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 Sneaky Bandit is _____

Possible suspects

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

NAME	GEAR USED	SECRET ITEM	WRITING HAND	HAIR COLOR	BIG FEAR
Alex	climbing spikes	shiny gold medal	right handed writer	bright yellow hair	afraid of heights
Ben	pocket spyglass	secret decoder whistle	left handed writer	dark brown hair	afraid of the dark
Noah	glow in the dark map	secret decoder whistle	left handed writer	bright red hair	afraid of heights
Hope	glow in the dark map	magnifying glass	left handed writer	bright red hair	afraid of the dark
Kai	climbing spikes	magnifying glass	left handed writer	dark brown hair	afraid of the dark
Ruby	jungle canteen	sparkly blue gem	left handed writer	bright red hair	afraid of the dark
Dan	climbing spikes	dinosaur fossil	left handed writer	dark brown hair	afraid of spiders
Fay	pocket spyglass	dinosaur fossil	right handed writer	bright yellow hair	afraid of heights
Ian	glow in the dark map	secret decoder whistle	right handed writer	bright red hair	afraid of the dark
Owen	glow in the dark map	magnifying glass	left handed writer	bright red hair	afraid of heights
Sam	grappling hook	dinosaur fossil	left handed writer	dark brown hair	afraid of the dark
Will	glow in the dark map	magnifying glass	left handed writer	bright yellow hair	afraid of heights
Leo	grappling hook	magnifying glass	right handed writer	bright yellow hair	afraid of spiders
Toby	pocket spyglass	magnifying glass	left handed writer	bright red hair	afraid of the dark
Pip	grappling hook	shiny gold medal	left handed writer	bright red hair	afraid of the dark
Emma	climbing spikes	sparkly blue gem	right handed writer	dark brown hair	afraid of heights
Zoe	jungle canteen	secret decoder whistle	left handed writer	bright red hair	afraid of spiders
Mia	climbing spikes	dinosaur fossil	right handed writer	bright red hair	afraid of the dark
Val	glow in the dark map	dinosaur fossil	left handed writer	dark brown hair	afraid of spiders
Cole	pocket spyglass	secret decoder whistle	left handed writer	bright red hair	afraid of spiders
Uma	glow in the dark map	secret decoder whistle	left handed writer	bright red hair	afraid of the dark

CLUE 1 Place value

We found a locked treasure box. The code on the lock has two tens and four ones. Let us find the code to get our first clue.

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

T																T
98	24	88	34	45	46	46	39	45	55	85	97	88	89	55	97	98
				T												
24	39	34	88	98	24	88	89	65	39	81	12	46	11	99	46	78
57	88	42														

What number has 9 tens and 8 ones? → **T**

What number has 1 ten and 1 one? → **Y**

What number has 7 tens and 8 ones? → **U**

What number has 3 tens and 9 ones? → **A**

What number has 6 tens and 5 ones? → **P**

What number has 8 tens and 1 one? → **R**

What number has 2 tens and 4 ones? → **H**

What number has 1 ten and 2 ones? → **K**

What number has 8 tens and 5 ones? → **D**

What number has 9 tens and 9 ones? → **B**

What number has 5 tens and 5 ones? → **N**

What number has 4 tens and 2 ones? → **M**

What number has 8 tens and 9 ones? → **S**

What number has 9 tens and 7 ones? → **O**

What number has 3 tens and 4 ones? → **V**

What number has 4 tens and 5 ones? → **I**

What number has 8 tens and 8 ones? → **E**

What number has 4 tens and 6 ones? → **L**

What number has 5 tens and 7 ones? → **G**

Scratch space:

CLUE 2 **Addition**

There are five gold coins on the grass and six more by the tree. Add them up to count the path markers for our next clue.

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

$23 + 48 = \boxed{} \rightarrow \boxed{\text{T}}$

$34 + 24 = \boxed{} \rightarrow \boxed{\text{W}}$

$40 + 28 = \boxed{} \rightarrow \boxed{\text{L}}$

$43 + 48 = \boxed{} \rightarrow \boxed{\mathbf{F}}$

$38 + 59 = \boxed{} \rightarrow \boxed{\text{D}}$

$14 + 27 = \boxed{} \rightarrow \boxed{\mathbf{R}}$

$$46 + 33 = \boxed{} \rightarrow \boxed{\text{S}}$$

$30 + 37 = \boxed{} \rightarrow \boxed{\text{A}}$

$$37 + 35 = \boxed{} \rightarrow \boxed{}$$

$17 + 14 = \boxed{} \rightarrow \boxed{\text{M}}$

$23 + 40 = \boxed{} \rightarrow \boxed{\text{N}}$

$14 + 20 = \boxed{} \rightarrow \boxed{\text{E}}$

$35 + 30 = \boxed{} \rightarrow \boxed{\text{H}}$

$25 + 61 = \boxed{} \rightarrow \boxed{\text{U}}$

$20 + 22 = \boxed{} \rightarrow \boxed{\text{G}}$

Scratch space:

CLUE 3

We had twelve shiny rocks but three fell into the river. Subtract the lost rocks to see how many we have left for the next clue.

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

Diagram illustrating a sequence of numbers arranged in two rows of boxes. The top row contains 16 boxes, and the bottom row contains 12 boxes. The numbers are as follows:

Row	Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8	Box 9	Box 10	Box 11	Box 12	Box 13	Box 14	Box 15	Box 16			
Top Row	39	36	50	35	68	15	15	81	68	75	36	81	46	39	79	47	50	50	72
Bottom Row	81	38	15	81	25	36	15	68	87	36	39	79	75						

Note: The boxes containing the number 39 in the top row and the bottom row are highlighted with an orange background and a 'T' symbol, indicating a specific point of interest or a transition in the sequence.

74 - 35 = → **T**

$92 - 17 = \boxed{} \rightarrow \boxed{\text{N}}$

$113 - 34 = \square \rightarrow \boxed{\text{O}}$

$79 - 7 = \boxed{} \rightarrow \boxed{\text{P}}$

$115 - 34 = \boxed{} \rightarrow \boxed{\text{A}}$

43 - 8 = → ☒ V

92 - 24 = →

58 - 33 = → **S**

$115 - 28 = \square \rightarrow \boxed{\mathbf{G}}$

$52 - 6 = \square \rightarrow \boxed{\text{D}}$

$$66 - 16 = \boxed{} \rightarrow \boxed{\text{E}}$$

39 - 1 = → **F**

$86 - 39 = \boxed{} \rightarrow \boxed{\text{K}}$

$$47 - 32 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$68 - 32 = \boxed{} \rightarrow \boxed{\text{H}}$$

Scratch space:

CLUE 4 Skip counting

We must step on every second stone to cross the muddy swamp. Count by twos to find the safe path and get the next clue.

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

A											A					A	
30	8	100	40	6	27	24	100	26	45	27	30	40	100	36	30	42	
											A						
28	26	140	24	40	14	24	27	26	16	30	55	26					

Skip-count by 10s. Fill the blank: 10, 20, __, 40, 50 → **A**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 → **W**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 → **H**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 → **L**

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

Skip-count by 10s. Fill the blank: 10, 20, 30, __, 50, 60 → **I**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 → **F**

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 → **N**

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

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, __, 26, 28 → **T**

Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 → **G**

Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 → **B**

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

Scratch space:

CLUE 5**Missing addends - the last clue**

We need ten camp torches but we only have seven right now. Find how many more torches we need to light the cave for our last clue.

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:

$2 + \underline{\quad} = 14$

$1 + \underline{\quad} = 8$

$8 + \underline{\quad} = 17$

$6 + \underline{\quad} = 11$

$9 + \underline{\quad} = 11$

$9 + \underline{\quad} = 20$

$3 + \underline{\quad} = 4$

$2 + \underline{\quad} = 10$

$3 + \underline{\quad} = 13$

$2 + \underline{\quad} = 5$

$1 + \underline{\quad} = 7$

Step 2 - cross out the sentence with each answer:

1. The villain looked through a pocket spyglass at the temple, then blew a secret decoder whistle to open the door.
2. The villain clamped on climbing spikes to scale the cliff, then blew a secret decoder whistle to open the door.
3. The villain clamped on climbing spikes to scale the cliff, then dug up a dinosaur fossil near the river.
4. The villain used a grappling hook to scale the high stone wall, then dropped a shiny gold medal in the mud.
5. The villain used a grappling hook to scale the high stone wall, then polished a sparkly blue gem in the sunlight.
6. The villain looked through a pocket spyglass at the temple, then dug up a dinosaur fossil near the river.
7. The villain checked a glow in the dark map under the trees, then used a magnifying glass to read the ancient glyphs.
8. The villain looked through a pocket spyglass at the temple, then dropped a shiny gold medal in the mud.
9. The villain checked a glow in the dark map under the trees, then blew a secret decoder whistle to open the door.
10. The villain checked a glow in the dark map under the trees, then polished a sparkly blue gem in the sunlight.
11. The villain checked a glow in the dark map under the trees, then dug up a dinosaur fossil near the river.
12. The villain looked through a pocket spyglass at the temple, then used a magnifying glass to read the ancient glyphs.

Answer Key

The Case of the Missing Golden Idol

Culprit: Pip

grappling hook · shiny gold medal · left handed writer · bright red hair · afraid of the dark

Trail: Start 21 → Clue 1 19 → Clue 2 14 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT HAVE THE SPARKLY BLUE GEM"

What number has 9 tens and 8 ones? = 98 (T) · What number has 1 ten and 1 one? = 11 (Y) · What number has 7 tens and 8 ones? = 78 (U) · What number has 3 tens and 9 ones? = 39 (A) · What number has 6 tens and 5 ones? = 65 (P) · What number has 8 tens and 1 one? = 81 (R) · What number has 2 tens and 4 ones? = 24 (H) · What number has 1 ten and 2 ones? = 12 (K) · What number has 8 tens and 5 ones? = 85 (D) · What number has 9 tens and 9 ones? = 99 (B) · What number has 5 tens and 5 ones? = 55 (N) · What number has 4 tens and 2 ones? = 42 (M) · What number has 8 tens and 9 ones? = 89 (S) · What number has 9 tens and 7 ones? = 97 (O) · What number has 3 tens and 4 ones? = 34 (V) · What number has 4 tens and 5 ones? = 45 (I) · What number has 8 tens and 8 ones? = 88 (E) · What number has 4 tens and 6 ones? = 46 (L) · What number has 5 tens and 7 ones? = 57 (G)

Clue 2 (Addition): "THE LEFT HANDED WRITER LEFT A SMUDGE"

$23 + 48 = 71$ (T) · $34 + 24 = 58$ (W) · $40 + 28 = 68$ (L) · $43 + 48 = 91$ (F) · $38 + 59 = 97$ (D) · $14 + 27 = 41$ (R) · $46 + 33 = 79$ (S) · $30 + 37 = 67$ (A) · $37 + 35 = 72$ (I) · $17 + 14 = 31$ (M) · $23 + 40 = 63$ (N) · $14 + 20 = 34$ (E) · $35 + 30 = 65$ (H) · $25 + 61 = 86$ (U) · $20 + 22 = 42$ (G)

Clue 3 (Subtraction): "THE VILLAIN HAD TO KEEP A FLASHLIGHT ON"

$74 - 35 = 39$ (T) · $92 - 17 = 75$ (N) · $113 - 34 = 79$ (O) · $79 - 7 = 72$ (P) · $115 - 34 = 81$ (A) · $43 - 8 = 35$ (V) · $92 - 24 = 68$ (I) · $58 - 33 = 25$ (S) · $115 - 28 = 87$ (G) · $52 - 6 = 46$ (D) · $66 - 16 = 50$ (E) · $39 - 1 = 38$ (F) · $86 - 39 = 47$ (K) · $47 - 32 = 15$ (L) · $68 - 32 = 36$ (H)

Clue 4 (Skip counting): "A BRIGHT RED HAIR WAS LEFT IN THE CAVE"

Skip-count by 10s. Fill the blank: 10, 20, __, 40, 50 = 30 (A) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 = 36 (W) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 = 16 (C) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 = 27 (H) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 = 28 (L) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 = 55 (V) · Skip-count by 10s. Fill the blank: 10, 20, 30, __, 50, 60 = 40 (I) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 = 140 (F) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 = 45 (D) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 = 14 (N) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (S) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (E) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, __, 26, 28 = 24 (T) · Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 = 6 (G) · Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 = 8 (B) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (R)

Clue 5 (Missing addends): surviving statement is box 4 → Pip

$2 + \underline{\quad} = 14 = 12$ · $1 + \underline{\quad} = 8 = 7$ · $8 + \underline{\quad} = 17 = 9$ · $6 + \underline{\quad} = 11 = 5$ · $9 + \underline{\quad} = 11 = 2$ · $9 + \underline{\quad} = 20 = 11$ · $3 + \underline{\quad} = 4 = 1$ · $2 + \underline{\quad} = 10 = 8$ · $3 + \underline{\quad} = 13 = 10$ · $2 + \underline{\quad} = 5 = 3$ · $1 + \underline{\quad} = 7 = 6$