



The Great Treehouse Caper

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

Detective: _____ Date: _____

Someone took the Golden Banana Trophy from the Treehouse Club! The sneaky bandit left footprints in the mud. Help Explorer Toby find the bandit before the boat leaves 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 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	ESCAPE ROUTE	DROPPED ITEM	FIRST STEP	HAIR STYLE	SILLY WEAKNESS
Owen	Mud Slide	Shiny Compass	Right Foot First	Spiky Yellow Hair	Tickle Feather
Ryan	Mud Slide	Silver Whistle	Right Foot First	Straight Black Hair	Tickle Feather
Cole	Bridge Dash	Shiny Compass	Right Foot First	Straight Black Hair	Banana Peel
Noah	Zip Line	Silver Whistle	Right Foot First	Straight Black Hair	Water Splash
Ella	Rope Swing	Silver Whistle	Left Foot First	Straight Black Hair	Tickle Feather
Finn	Vine Climb	Shiny Compass	Right Foot First	Straight Black Hair	Water Splash
Emma	Bridge Dash	Spy Glass	Right Foot First	Curly Brown Hair	Water Splash
Ben	Bridge Dash	Golden Map	Left Foot First	Curly Brown Hair	Banana Peel
Cody	Rope Swing	Silver Whistle	Left Foot First	Spiky Yellow Hair	Tickle Feather
Toby	Vine Climb	Spy Glass	Right Foot First	Straight Black Hair	Banana Peel
Abby	Zip Line	Golden Map	Left Foot First	Straight Black Hair	Water Splash
Ava	Bridge Dash	Shiny Compass	Left Foot First	Straight Black Hair	Banana Peel
Jake	Vine Climb	Golden Map	Right Foot First	Straight Black Hair	Water Splash
Luke	Rope Swing	Shiny Compass	Left Foot First	Straight Black Hair	Water Splash
Sam	Mud Slide	Pocket Flashlight	Left Foot First	Spiky Yellow Hair	Tickle Feather
Jack	Zip Line	Shiny Compass	Right Foot First	Straight Black Hair	Banana Peel
Leo	Vine Climb	Silver Whistle	Left Foot First	Straight Black Hair	Tickle Feather
Max	Rope Swing	Shiny Compass	Right Foot First	Straight Black Hair	Water Splash
Lily	Rope Swing	Shiny Compass	Left Foot First	Curly Brown Hair	Tickle Feather
Kai	Bridge Dash	Pocket Flashlight	Right Foot First	Straight Black Hair	Tickle Feather
Zoe	Rope Swing	Spy Glass	Right Foot First	Straight Black Hair	Water Splash

CLUE 1

Addition

Toby counts the backpacks in the treehouse. We add the blue bags and red bags to find the total.

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

T									T								T
2	6	3	13	5	20	11	14	2	11	10	3	19	20	10	2		

															T		
6	5	4	3	5	19	14	9	4	3	7	12	6	14	19	2	9	3

$1 + 1 = \square \rightarrow \boxed{\text{T}}$

$3 + 1 = \square \rightarrow \boxed{\text{V}}$

$3 + 7 = \square \rightarrow \boxed{\text{O}}$

$6 + 14 = \square \rightarrow \boxed{\text{N}}$

$5 + 6 = \square \rightarrow \boxed{\text{D}}$

$5 + 8 = \square \rightarrow \boxed{\text{B}}$

$5 + 4 = \square \rightarrow \boxed{\text{L}}$

$2 + 4 = \square \rightarrow \boxed{\text{H}}$

$3 + 2 = \square \rightarrow \boxed{\text{A}}$

$5 + 9 = \square \rightarrow \boxed{\text{I}}$

$7 + 12 = \square \rightarrow \boxed{\text{S}}$

$5 + 2 = \square \rightarrow \boxed{\text{R}}$

$8 + 4 = \square \rightarrow \boxed{\text{W}}$

$1 + 2 = \square \rightarrow \boxed{\text{E}}$

Scratch space:

CLUE 2

Subtraction

A monkey takes some bananas from our pile! Subtract the stolen bananas to see what is left.

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

R																			
5	10	15	8	7	12	3	3	7	16	5	10	9	7	12	3	4	9	13	
17	7	7	8	14	18	11	14	9	14										

$14 - 9 = \square \rightarrow \text{R}$

$18 - 2 = \square \rightarrow \text{P}$

$19 - 1 = \square \rightarrow \text{S}$

$14 - 7 = \square \rightarrow \text{T}$

$14 - 6 = \square \rightarrow \text{H}$

$19 - 7 = \square \rightarrow \text{F}$

$11 - 8 = \square \rightarrow \text{O}$

$16 - 7 = \square \rightarrow \text{N}$

$16 - 6 = \square \rightarrow \text{I}$

$18 - 4 = \square \rightarrow \text{E}$

$14 - 3 = \square \rightarrow \text{C}$

$19 - 2 = \square \rightarrow \text{A}$

$20 - 5 = \square \rightarrow \text{G}$

$19 - 6 = \square \rightarrow \text{D}$

$13 - 9 = \square \rightarrow \text{U}$

Scratch space:

CLUE 3 Skip counting

We see footprints on the beach in groups of two. Let us count by twos to find the last step.

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

T									T							
12	27	45	65	14	8	6	22	12	100	14	8	14	20	14	42	
								T								
90	100	80	40	14	20	14	12	45	100	15	70	35	14	15	27	

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

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

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

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

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

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 → **B**

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, __, 10, 12 → **N**

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

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

Skip-count by 5s. Fill the blank: 5, 10, __, 20, 25 → **S**

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

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

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

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

Scratch space:

CLUE 4
Place value

Toby finds a secret map with gold coins. Count the tens and ones to read the gold number.

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

W																			
32	72	23	51	48	97	83	40	41	68	80	45	90	29	41	66	57	80	12	11
29	80	45	68	51	97	41	29	72	66	68	80	97	12	29					

What number has 3 tens and 2 ones?

→ **W**

What number has 5 tens and 7 ones?

→ **L**

What number has 4 tens and 8 ones?

→ **U**

What number has 9 tens and 0 ones?

→ **G**

What number has 6 tens and 6 ones?

→ **B**

What number has 5 tens and 1 one?

→ **O**

What number has 2 tens and 9 ones?

→ **H**

What number has 9 tens and 7 ones?

→ **N**

What number has 2 tens and 3 ones?

→ **F**

What number has 4 tens and 0 ones?

→ **S**

What number has 4 tens and 1 one?

→ **T**

What number has 7 tens and 2 ones?

→ **E**

What number has 1 ten and 2 ones?

→ **C**

What number has 4 tens and 5 ones?

→ **I**

What number has 8 tens and 0 ones?

→ **A**

What number has 8 tens and 3 ones?

→ **D**

What number has 6 tens and 8 ones?

→ **R**

What number has 1 ten and 1 one?

→ **K**

Scratch space:

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

We need ten ropes to cross the swamp. We only have six. How many more do we need to make ten?

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:

$8 + \underline{\quad} = 11$

$8 + \underline{\quad} = 14$

$1 + \underline{\quad} = 12$

$10 + \underline{\quad} = 15$

$9 + \underline{\quad} = 18$

$7 + \underline{\quad} = 15$

$10 + \underline{\quad} = 17$

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

$4 + \underline{\quad} = 6$

$5 + \underline{\quad} = 9$

$10 + \underline{\quad} = 20$

Step 2 - cross out the sentence with each answer:

1. The villain swung on the rope, then lost a shiny compass.
2. The villain slid down the mud, then left a spy glass behind.
3. The villain swung on the rope, then left a spy glass behind.
4. The villain zipped down the line, then left a spy glass behind.
5. The villain dashed across the bridge, then dropped a golden map.
6. The villain climbed up the vine, then dropped a golden map.
7. The villain zipped down the line, then blew a silver whistle.
8. The villain slid down the mud, then dropped a pocket flashlight.
9. The villain dashed across the bridge, then dropped a pocket flashlight.
10. The villain slid down the mud, then lost a shiny compass.
11. The villain climbed up the vine, then lost a shiny compass.
12. The villain slid down the mud, then blew a silver whistle.

Answer Key

The Great Treehouse Caper

Culprit: Max

Rope Swing · Shiny Compass · Right Foot First · Straight Black Hair · Water Splash

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

Clue 1 (Addition): "THE BANDIT DOES NOT HAVE A SILVER WHISTLE"

$1 + 1 = 2$ (T) · $3 + 1 = 4$ (V) · $3 + 7 = 10$ (O) · $6 + 14 = 20$ (N) · $5 + 6 = 11$ (D) · $5 + 8 = 13$ (B) · $5 + 4 = 9$ (L) · $2 + 4 = 6$ (H) · $3 + 2 = 5$ (A) · $5 + 9 = 14$ (I) · $7 + 12 = 19$ (S) · $5 + 2 = 7$ (R) · $8 + 4 = 12$ (W) · $1 + 2 = 3$ (E)

Clue 2 (Subtraction): "RIGHT FOOTPRINT FOUND AT THE SCENE"

$14 - 9 = 5$ (R) · $18 - 2 = 16$ (P) · $19 - 1 = 18$ (S) · $14 - 7 = 7$ (T) · $14 - 6 = 8$ (H) · $19 - 7 = 12$ (F) · $11 - 8 = 3$ (O) · $16 - 7 = 9$ (N) · $16 - 6 = 10$ (I) · $18 - 4 = 14$ (E) · $14 - 3 = 11$ (C) · $19 - 2 = 17$ (A) · $20 - 5 = 15$ (G) · $19 - 6 = 13$ (D) · $13 - 9 = 4$ (U)

Clue 3 (Skip counting): "THE BANDIT RAN AWAY FROM A WATER SPLASH"

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

Clue 4 (Place value): "WE FOUND STRAIGHT BLACK HAIR ON THE BRANCH"

What number has 3 tens and 2 ones? = 32 (W) · What number has 5 tens and 7 ones? = 57 (L) · What number has 4 tens and 8 ones? = 48 (U) · What number has 9 tens and 0 ones? = 90 (G) · What number has 6 tens and 6 ones? = 66 (B) · What number has 5 tens and 1 one? = 51 (O) · What number has 2 tens and 9 ones? = 29 (H) · What number has 9 tens and 7 ones? = 97 (N) · What number has 2 tens and 3 ones? = 23 (F) · What number has 4 tens and 0 ones? = 40 (S) · What number has 4 tens and 1 one? = 41 (T) · What number has 7 tens and 2 ones? = 72 (E) · What number has 1 ten and 2 ones? = 12 (C) · What number has 4 tens and 5 ones? = 45 (I) · What number has 8 tens and 0 ones? = 80 (A) · What number has 8 tens and 3 ones? = 83 (D) · What number has 6 tens and 8 ones? = 68 (R) · What number has 1 ten and 1 one? = 11 (K)

Clue 5 (Missing addends): surviving statement is box 1 → Max

$8 + \underline{\quad} = 11 = 3$ · $8 + \underline{\quad} = 14 = 6$ · $1 + \underline{\quad} = 12 = 11$ · $10 + \underline{\quad} = 15 = 5$ · $9 + \underline{\quad} = 18 = 9$ · $7 + \underline{\quad} = 15 = 8$ · $10 + \underline{\quad} = 17 = 7$ · $2 + \underline{\quad} = 14 = 12$ · $4 + \underline{\quad} = 6 = 2$ · $5 + \underline{\quad} = 9 = 4$ · $10 + \underline{\quad} = 20 = 10$