



The Treehouse Club Caper

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

Detective: _____ **Date:** _____

Oh no! Someone took the Golden Megaphone from the Fort Captain! The Treehouse Club must find out who did it so we can start our camp adventure. Let us search for clues together!

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 Secret Bandit is _____

Possible suspects

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

NAME	CLUB SKILL	SPECIAL GEAR	SCOUT BADGE	HAIR STYLE	SILLY WEAKNESS
Abby	tree sliding	walkie talkie	wears a green badge	braided hair	scared of frogs
Toby	secret decoding	spy glass	wears a blue badge	spiky hair	tickled by feathers
Luke	secret decoding	spy glass	wears a blue badge	wavy hair	dislikes itchy grass
Jake	tree sliding	walkie talkie	wears a blue badge	braided hair	dislikes itchy grass
Leo	bridge building	walkie talkie	wears a blue badge	spiky hair	dislikes itchy grass
Ben	bridge building	spy glass	wears a green badge	braided hair	scared of frogs
Finn	secret decoding	glow stick	wears a blue badge	braided hair	scared of frogs
Emma	bridge building	spy glass	wears a green badge	wavy hair	tickled by feathers
Nora	map reading	walkie talkie	wears a blue badge	wavy hair	scared of frogs
Kira	map reading	walkie talkie	wears a blue badge	wavy hair	tickled by feathers
Sam	secret decoding	laser pointer	wears a green badge	wavy hair	dislikes itchy grass
Noah	tree sliding	laser pointer	wears a blue badge	spiky hair	scared of frogs
Owen	tree sliding	water balloon	wears a blue badge	wavy hair	scared of frogs
Mia	bridge building	glow stick	wears a green badge	wavy hair	tickled by feathers
Ryan	secret decoding	glow stick	wears a blue badge	wavy hair	dislikes itchy grass
Zoey	map reading	walkie talkie	wears a blue badge	wavy hair	dislikes itchy grass
Lily	rope climbing	spy glass	wears a green badge	wavy hair	scared of frogs
Ella	bridge building	walkie talkie	wears a green badge	wavy hair	dislikes itchy grass
Ruby	rope climbing	walkie talkie	wears a green badge	wavy hair	dislikes itchy grass
Eli	tree sliding	water balloon	wears a blue badge	wavy hair	dislikes itchy grass
Jack	secret decoding	laser pointer	wears a blue badge	wavy hair	dislikes itchy grass

CLUE 1 Addition

We need to add up the footprints on the path. Count the old boots and the new sneakers to find the total.

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

T																		
5	6	12	16	2	12	20	11	15	10	20	2	14	9	5	14	4	12	16
2	4	5	18	16	12	20	16	8	15	13	17	20	16	16				

$3 + 2 = \square \rightarrow \text{D}$	$10 + 7 = \square \rightarrow \text{L}$	$5 + 8 = \square \rightarrow \text{G}$	
$4 + 10 = \square \rightarrow \text{D}$	$8 + 8 = \square \rightarrow \text{S}$	$9 + 6 = \square \rightarrow \text{Y}$	$5 + 1 = \square \rightarrow \text{H}$
$9 + 11 = \square \rightarrow \text{A}$	$6 + 4 = \square \rightarrow \text{B}$	$6 + 2 = \square \rightarrow \text{P}$	
$11 + 7 = \square \rightarrow \text{U}$	$7 + 5 = \square \rightarrow \text{E}$	$8 + 3 = \square \rightarrow \text{K}$	$3 + 1 = \square \rightarrow \text{O}$
$4 + 5 = \square \rightarrow \text{I}$	$1 + 1 = \square \rightarrow \text{N}$		

Scratch space:

CLUE 2

Subtraction

Some shiny gold coins fell out of our pocket. We had ten but now we have less. Subtract to see what is missing.

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

T															
6	5	17	1	18	2	2	8	18	19	15	17	8	12	16	8

14	2	4	17	14	8	11	10

$11 - 5 = \square \rightarrow \boxed{\text{T}}$

$20 - 2 = \square \rightarrow \boxed{\text{I}}$

$13 - 2 = \square \rightarrow \boxed{\text{D}}$

$12 - 7 = \square \rightarrow \boxed{\text{H}}$

$18 - 1 = \square \rightarrow \boxed{\text{E}}$

$18 - 3 = \square \rightarrow \boxed{\text{W}}$

$12 - 8 = \square \rightarrow \boxed{\text{U}}$

$19 - 3 = \square \rightarrow \boxed{\text{S}}$

$10 - 2 = \square \rightarrow \boxed{\text{A}}$

$4 - 2 = \square \rightarrow \boxed{\text{L}}$

$14 - 4 = \square \rightarrow \boxed{\text{G}}$

$20 - 1 = \square \rightarrow \boxed{\text{N}}$

$15 - 1 = \square \rightarrow \boxed{\text{B}}$

$17 - 5 = \square \rightarrow \boxed{\text{R}}$

$8 - 7 = \square \rightarrow \boxed{\text{V}}$

Scratch space:

CLUE 3 Skip counting

The treehouse club counts secret maps by twos. Let us skip count to get the total number of maps.

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

T																	
100	35	36	55	80	10	10	26	80	8	14	80	12	10	80	6	36	12
	T																
80	100	21	35	27	70	28	36	36	8	70	28	26	12	12			

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

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

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

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

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

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

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, 40, 50, 60, 70, __, 90, 100 → **I**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 → **C**

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

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

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

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

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

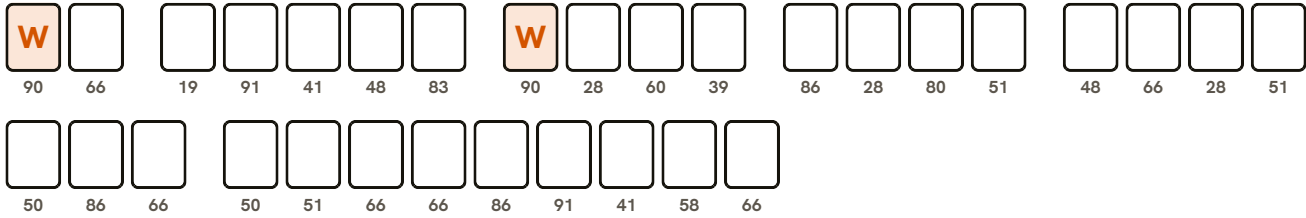
Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 → **K**

Scratch space:

CLUE 4
Place value

Our wooden blocks are in neat stacks of ten. Count the tens and the single blocks left over to read the map.

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



What number has 9 tens and 0 ones?

→ **W**

What number has 6 tens and 6 ones?

→ **E**

What number has 6 tens and 0 ones?

→ **V**

What number has 2 tens and 8 ones?

→ **A**

What number has 5 tens and 0 ones?

→ **T**

What number has 4 tens and 1 one?

→ **U**

What number has 3 tens and 9 ones?

→ **Y**

What number has 5 tens and 8 ones?

→ **S**

What number has 4 tens and 8 ones?

→ **N**

What number has 9 tens and 1 one?

→ **O**

What number has 8 tens and 3 ones?

→ **D**

What number has 8 tens and 0 ones?

→ **I**

What number has 1 ten and 9 ones?

→ **F**

What number has 5 tens and 1 one?

→ **R**

What number has 8 tens and 6 ones?

→ **H**

Scratch space:

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

We want nine juice boxes for the whole team. We only have six. How many more juice boxes do we need to find?

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:

$6 + \underline{\quad} = 18$

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

$3 + \underline{\quad} = 12$

$10 + \underline{\quad} = 12$

$8 + \underline{\quad} = 19$

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

$10 + \underline{\quad} = 11$

$5 + \underline{\quad} = 10$

$1 + \underline{\quad} = 9$

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

$4 + \underline{\quad} = 7$

Step 2 - cross out the sentence with each answer:

1. The villain climbed up the thick rope, then dropped a green glow stick.
2. The villain slid down the tall tree, then called a friend on a walkie talkie.
3. The villain built a quick wooden bridge, then looked through a tiny spy glass.
4. The villain read the old treasure map, then called a friend on a walkie talkie.
5. The villain read the old treasure map, then dropped a green glow stick.
6. The villain read the old treasure map, then looked through a tiny spy glass.
7. The villain decoded the secret note, then dropped a green glow stick.
8. The villain slid down the tall tree, then looked through a tiny spy glass.
9. The villain slid down the tall tree, then splashed a wet water balloon.
10. The villain decoded the secret note, then called a friend on a walkie talkie.
11. The villain decoded the secret note, then looked through a tiny spy glass.
12. The villain decoded the secret note, then shined a bright laser pointer.

Answer Key

The Treehouse Club Caper

Culprit: Zoey

map reading · walkie talkie · wears a blue badge · wavy hair · dislikes itchy grass

Trail: Start 21 → Clue 1 16 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SNEAKY BANDIT DOES NOT USE A SPY GLASS"

$3 + 2 = 5$ (T) · $10 + 7 = 17$ (L) · $5 + 8 = 13$ (G) · $4 + 10 = 14$ (D) · $8 + 8 = 16$ (S) · $9 + 6 = 15$ (Y) · $5 + 1 = 6$ (H) · $9 + 11 = 20$ (A) · $6 + 4 = 10$ (B) · $6 + 2 = 8$ (P) · $11 + 7 = 18$ (U) · $7 + 5 = 12$ (E) · $8 + 3 = 11$ (K) · $3 + 1 = 4$ (O) · $4 + 5 = 9$ (I) · $1 + 1 = 2$ (N)

Clue 2 (Subtraction): "THE VILLAIN WEARS A BLUE BADGE"

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

Clue 3 (Skip counting): "THE VILLAIN DISLIKES ITCHY GREEN GRASS"

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

Clue 4 (Place value): "WE FOUND WAVY HAIR NEAR THE TREEHOUSE"

What number has 9 tens and 0 ones? = 90 (W) · What number has 6 tens and 6 ones? = 66 (E) · What number has 6 tens and 0 ones? = 60 (V) · What number has 2 tens and 8 ones? = 28 (A) · What number has 5 tens and 0 ones? = 50 (T) · What number has 4 tens and 1 one? = 41 (U) · What number has 3 tens and 9 ones? = 39 (Y) · What number has 5 tens and 8 ones? = 58 (S) · What number has 4 tens and 8 ones? = 48 (N) · What number has 9 tens and 1 one? = 91 (O) · What number has 8 tens and 3 ones? = 83 (D) · What number has 8 tens and 0 ones? = 80 (I) · What number has 1 ten and 9 ones? = 19 (F) · What number has 5 tens and 1 one? = 51 (R) · What number has 8 tens and 6 ones? = 86 (H)

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

$6 + \underline{\quad} = 18 = 12$ · $10 + \underline{\quad} = 17 = 7$ · $3 + \underline{\quad} = 12 = 9$ · $10 + \underline{\quad} = 12 = 2$ · $8 + \underline{\quad} = 19 = 11$ · $3 + \underline{\quad} = 13 = 10$ · $10 + \underline{\quad} = 11 = 1$ · $5 + \underline{\quad} = 10 = 5$ · $1 + \underline{\quad} = 9 = 8$ · $1 + \underline{\quad} = 7 = 6$ · $4 + \underline{\quad} = 7 = 3$