



The Case of the Missing Golden Chalk

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

Detective: _____ Date: _____

Someone took the Head Coach's lucky Golden Chalk right before the big championship meet! We must use our math skills to track down the Vault Thief.

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 Vault Thief is _____

Possible suspects

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

NAME	BEST EVENT	WARMUP GEAR	CHALK BAG HAND	HAIR RIBBON	DISTRACTION
Konnor	Balance Beam	Neon Ankle Tape	Left Handed	Red Ribbon	Loud Music
Frederick	Uneven Bars	Sparkly Scrunchie	Right Handed	Blue Ribbon	Sticky Mats
Grace	Balance Beam	Striped Chalk Bag	Right Handed	Blue Ribbon	Sticky Mats
Leanne	Uneven Bars	Sparkly Scrunchie	Left Handed	Green Ribbon	Loud Music
Skye	Trampoline	Striped Chalk Bag	Left Handed	Blue Ribbon	Squeaky Shoes
Shannon	Balance Beam	Blue Wrist Wraps	Right Handed	Green Ribbon	Loud Music
Aly	Balance Beam	Neon Ankle Tape	Right Handed	Blue Ribbon	Squeaky Shoes
Shilese	Balance Beam	Sparkly Scrunchie	Left Handed	Blue Ribbon	Squeaky Shoes
Jordan	Vaulting Horse	Pink Grip Gloves	Right Handed	Blue Ribbon	Squeaky Shoes
Nastia	Vaulting Horse	Neon Ankle Tape	Left Handed	Blue Ribbon	Loud Music
Chellsie	Trampoline	Neon Ankle Tape	Left Handed	Blue Ribbon	Squeaky Shoes
Katelyn	Vaulting Horse	Blue Wrist Wraps	Left Handed	Blue Ribbon	Squeaky Shoes
Sunisa	Floor Routine	Neon Ankle Tape	Left Handed	Blue Ribbon	Loud Music
Dominique	Floor Routine	Striped Chalk Bag	Left Handed	Blue Ribbon	Squeaky Shoes
Brody	Trampoline	Neon Ankle Tape	Left Handed	Blue Ribbon	Loud Music
Laurie	Balance Beam	Sparkly Scrunchie	Right Handed	Blue Ribbon	Loud Music
Jade	Floor Routine	Blue Wrist Wraps	Right Handed	Blue Ribbon	Squeaky Shoes
Carly	Trampoline	Blue Wrist Wraps	Left Handed	Blue Ribbon	Loud Music
Shawn	Vaulting Horse	Neon Ankle Tape	Left Handed	Green Ribbon	Loud Music
Joscelyn	Floor Routine	Neon Ankle Tape	Right Handed	Green Ribbon	Loud Music
Trinity	Vaulting Horse	Pink Grip Gloves	Left Handed	Red Ribbon	Squeaky Shoes

CLUE 1 Addition

We find the score sheets. Let us add the beam scores together to find the first clue.

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

T			T											T				
15	17	4	15	17	5	4	10	3	19	4	9	8	19	15	2	4	7	12
7	9	20	7	12	11	18	16	9	6	12	13	8	6	17	5	4		

$4 + 11 = \square \rightarrow$ T	$9 + 11 = \square \rightarrow$ P	$3 + 8 = \square \rightarrow$ K	
$2 + 7 = \square \rightarrow$ S	$5 + 2 = \square \rightarrow$ A	$9 + 3 = \square \rightarrow$ R	$1 + 3 = \square \rightarrow$ E
$1 + 2 = \square \rightarrow$ D	$6 + 4 = \square \rightarrow$ F	$4 + 2 = \square \rightarrow$ C	$11 + 7 = \square \rightarrow$ L
$4 + 4 = \square \rightarrow$ N	$7 + 9 = \square \rightarrow$ Y	$3 + 2 = \square \rightarrow$ I	$3 + 10 = \square \rightarrow$ U
$1 + 1 = \square \rightarrow$ W	$11 + 6 = \square \rightarrow$ H	$6 + 13 = \square \rightarrow$ O	

Scratch space:

CLUE 2

Subtraction

Some practice cones are missing. Subtract the lost cones to see what is left behind.

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

T			T													T
9	17	4	9	17	14	4	13	10	19	4	19	18	12	4	13	9
17	18	15	16	6	17	18	12	8	7	18	1					

$10 - 1 = \square \rightarrow \boxed{\text{T}}$

$19 - 2 = \square \rightarrow \boxed{\text{H}}$

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

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

$14 - 8 = \square \rightarrow \boxed{\text{C}}$

$20 - 4 = \square \rightarrow \boxed{\text{D}}$

$19 - 5 = \square \rightarrow \boxed{\text{I}}$

$14 - 6 = \square \rightarrow \boxed{\text{K}}$

$20 - 8 = \square \rightarrow \boxed{\text{L}}$

$16 - 6 = \square \rightarrow \boxed{\text{U}}$

$20 - 5 = \square \rightarrow \boxed{\text{N}}$

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

$19 - 1 = \square \rightarrow \boxed{\text{A}}$

$15 - 2 = \square \rightarrow \boxed{\text{F}}$

$10 - 3 = \square \rightarrow \boxed{\text{B}}$

Scratch space:

CLUE 3

Skip counting

We count the gym mats in groups of five. This pattern leads us to a clue.

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

T			T																
30	33	9	30	33	130	9	35	33	22	30	9	120	120	90	70	9	22	110	55

120	33	42	9	120

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

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 → **I**

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

Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 → **E**

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

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 → **S**

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

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

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

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

Scratch space:

CLUE 4

Place value

Look at the locker numbers. They have tens and ones. One special number reveals a secret.

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

T			T												
76	54	90	76	54	81	90	82	13	60	93	56	56	90	13	91
94	41	45	90	54	91	81	60	60	81	94	94	93	28		

What number has 7 tens and 6 ones?

→ T

What number has 5 tens and 4 ones?

→ H

What number has 4 tens and 1 one?

→ L

What number has 9 tens and 0 ones?

→ E

What number has 8 tens and 2 ones?

→ F

What number has 9 tens and 3 ones?

→ O

What number has 8 tens and 1 one?

→ I

What number has 9 tens and 4 ones?

→ B

What number has 2 tens and 8 ones?

→ N

What number has 4 tens and 5 ones?

→ U

What number has 6 tens and 0 ones?

→ R

What number has 5 tens and 6 ones?

→ P

What number has 1 ten and 3 ones?

→ D

What number has 9 tens and 1 one?

→ A

Scratch space:

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

We need ten ribbon rolls. We only have six. Find the missing number to get the final 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:

$6 + \underline{\quad} = 12$

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

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

$2 + \underline{\quad} = 3$

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

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

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

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

$6 + \underline{\quad} = 16$

$9 + \underline{\quad} = 13$

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

Step 2 - cross out the sentence with each answer:

1. The villain vaults over the wooden horse, then tightens their pink grip gloves.
2. The villain vaults over the wooden horse, then taps their neon ankle tape.
3. The villain bounces off the giant trampoline, then wraps their blue wrist wraps.
4. The villain leaps off the balance beam, then tightens their pink grip gloves.
5. The villain bounces off the giant trampoline, then unzips their striped chalk bag.
6. The villain flips across the spring floor, then unzips their striped chalk bag.
7. The villain flips across the spring floor, then taps their neon ankle tape.
8. The villain bounces off the giant trampoline, then taps their neon ankle tape.
9. The villain leaps off the balance beam, then taps their neon ankle tape.
10. The villain flips across the spring floor, then tightens their pink grip gloves.
11. The villain vaults over the wooden horse, then adjusts their sparkly scrunchie.
12. The villain vaults over the wooden horse, then wraps their blue wrist wraps.

Answer Key

The Case of the Missing Golden Chalk

Culprit: Skye

Trampoline · Striped Chalk Bag · Left Handed · Blue Ribbon · Squeaky Shoes

Trail: Start 21 → Clue 1 17 → Clue 2 11 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE THIEF DOES NOT WEAR A SPARKLY SCRUNCHIE"

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

Clue 2 (Subtraction): "THE THIEF USES A LEFT HAND CHALK BAG"

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

Clue 3 (Skip counting): "THE THIEF HATES SQUEAKY SHOES"

Skip-count by 10s. Fill the blank: $10, 20, \underline{\quad}, 40, 50 = 30$ (T) · Skip-count by 5s. Fill the blank: $5, 10, 15, 20, 25, 30, 35, 40, 45, 50, \underline{\quad}, 60, 65 = 55$ (Y) · Skip-count by 10s. Fill the blank: $10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, \underline{\quad}, 140, 150 = 130$ (I) · Skip-count by 3s. Fill the blank: $3, 6, 9, 12, 15, 18, 21, 24, 27, 30, \underline{\quad}, 36, 39 = 33$ (H) · Skip-count by 3s. Fill the blank: $3, 6, \underline{\quad}, 12, 15 = 9$ (E) · Skip-count by 3s. Fill the blank: $3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, \underline{\quad}, 45, 48 = 42$ (O) · Skip-count by 10s. Fill the blank: $10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, \underline{\quad}, 130, 140 = 120$ (S) · Skip-count by 10s. Fill the blank: $10, 20, 30, 40, 50, 60, 70, 80, 90, 100, \underline{\quad}, 120, 130 = 110$ (K) · Skip-count by 2s. Fill the blank: $2, 4, 6, 8, 10, 12, 14, 16, 18, 20, \underline{\quad}, 24, 26 = 22$ (A) · Skip-count by 10s. Fill the blank: $10, 20, 30, 40, 50, 60, \underline{\quad}, 80, 90 = 70$ (U) · Skip-count by 5s. Fill the blank: $5, 10, 15, 20, 25, 30, \underline{\quad}, 40, 45 = 35$ (F)

Clue 4 (Place value): "THE THIEF DROPPED A BLUE HAIR RIBBON"

What number has 7 tens and 6 ones? = 76 (T) · What number has 5 tens and 4 ones? = 54 (H) · What number has 4 tens and 1 one? = 41 (L) · What number has 9 tens and 0 ones? = 90 (E) · What number has 8 tens and 2 ones? = 82 (F) · What number has 9 tens and 3 ones? = 93 (O) · What number has 8 tens and 1 one? = 81 (I) · What number has 9 tens and 4 ones? = 94 (B) · What number has 2 tens and 8 ones? = 28 (N) · What number has 4 tens and 5 ones? = 45 (U) · What number has 6 tens and 0 ones? = 60 (R) · What number has 5 tens and 6 ones? = 56 (P) · What number has 1 ten and 3 ones? = 13 (D) · What number has 9 tens and 1 one? = 91 (A)

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

$6 + \underline{\quad} = 12 = 6$ · $2 + \underline{\quad} = 14 = 12$ · $7 + \underline{\quad} = 15 = 8$ · $2 + \underline{\quad} = 3 = 1$ · $1 + \underline{\quad} = 12 = 11$ · $3 + \underline{\quad} = 12 = 9$ · $10 + \underline{\quad} = 17 = 7$ · $2 + \underline{\quad} = 5 = 3$ · $6 + \underline{\quad} = 16 = 10$ · $9 + \underline{\quad} = 13 = 4$ · $4 + \underline{\quad} = 6 = 2$