



The Great Cupcake Caper

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

Detective: _____ Date: _____

The school display case is empty! The beautiful giant prize cupcake has vanished. Only a tiny trail of sweet crumbs is left on the floor. We must find the Cupcake Snatcher before the lunchtime party starts!

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 Cupcake Snatcher is _____

Possible suspects

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

NAME	BAKING SPECIALTY	BAKING TOOL	UNIFORM CLUE	HAIR POWDER SMUDGE	SECRET WEAKNESS
Baker Bonnie	strawberry glaze	red timer	wears apron	brown sugar	cold milk
Chef Cara	lemon zest	blue spatula	wears apron	pink glitter	loud bells
Chef Craig	lemon zest	silver whisk	wears chef hat	pink glitter	cold milk
Chef Charles	vanilla frosting	green rolling pin	wears chef hat	brown sugar	cold milk
Baker Becky	strawberry glaze	red timer	wears apron	white powder	loud bells
Baker Billy	vanilla frosting	silver whisk	wears apron	white powder	loud bells
Sweets Sandy	blueberry whip	blue spatula	wears apron	pink glitter	cold milk
Sweets Sally	lemon zest	blue spatula	wears apron	brown sugar	cold milk
Baker Brenda	strawberry glaze	red timer	wears chef hat	white powder	cold milk
Baker Barney	lemon zest	silver whisk	wears apron	pink glitter	bright light
Cookie Clara	strawberry glaze	green rolling pin	wears apron	pink glitter	bright light
Baker Brady	strawberry glaze	red timer	wears chef hat	brown sugar	cold milk
Sweets Susie	vanilla frosting	silver whisk	wears apron	pink glitter	bright light
Chef Chloe	lemon zest	silver whisk	wears apron	white powder	loud bells
Chef Colin	lemon zest	red timer	wears chef hat	brown sugar	cold milk
Sweets Sam	chocolate sprinkles	red timer	wears chef hat	white powder	loud bells
Pastry Pam	vanilla frosting	yellow piping bag	wears chef hat	brown sugar	cold milk
Baker Ben	strawberry glaze	green rolling pin	wears chef hat	brown sugar	loud bells
Sweets Stella	lemon zest	blue spatula	wears apron	white powder	loud bells
Chef Chris	chocolate sprinkles	green rolling pin	wears chef hat	brown sugar	cold milk
Baker Bobby	chocolate sprinkles	silver whisk	wears apron	brown sugar	cold milk

CLUE 1 Addition

We count the cupcakes left on the tray. We add the vanilla ones and the chocolate ones together. This math helps us find the first baking tool clue!

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

T						T												T
14	10	7	13	9	6	14	12	10	7	8	15	18	7	13	9	18	14	
16	13	7	6	3	7	19	19	18	11	2	17	2	17	9	5	4	6	5

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

Scratch space:

CLUE 2

Subtraction

Some baking mitts are missing from the kitchen wall. We subtract the ones that are left to find how many were taken. This points us to a hair clue!

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

T							T										
19	5	8	18	16	14	19	4	5	8	13	15	8	14	13	18	14	

T							T									T
19	14	1	1	15	5	7	19	8	4	5	8	9	5	14	19	

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

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

$16 - 3 = \square \rightarrow \boxed{\text{R}}$

$16 - 2 = \square \rightarrow \boxed{\text{A}}$

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

$9 - 1 = \square \rightarrow \boxed{\text{E}}$

$10 - 6 = \square \rightarrow \boxed{\text{C}}$

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

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

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

$17 - 8 = \square \rightarrow \boxed{\text{F}}$

$9 - 4 = \square \rightarrow \boxed{\text{H}}$

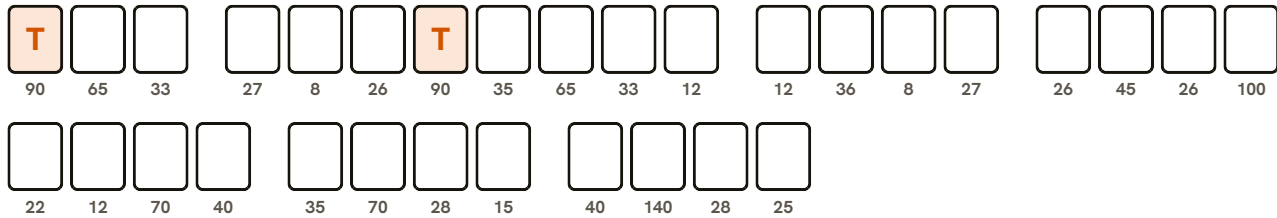
Scratch space:

CLUE 3

Skip counting

We see lines of sweet star cookies on the table. Let us skip count them by twos to see what the snatcher wore!

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



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

Skip-count by 3s. Fill the blank: 3, 6, 9, __, 15, 18 → **R**

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

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

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 → **K**

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

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

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

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

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

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

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, __, 40, 45 → **C**

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

Scratch space:

CLUE 4 Place value

We find a big box of ten shiny sprinkles and some single ones. Grouping them by tens helps us find how to scare the snatcher away!

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

T			T											
74	37	91	74	42	20	82	37	20	96	34	42	36	70	21
44	61	75	20	42	39	48	19	91	44					

What number has 7 tens and 4 ones? → **T**

What number has 4 tens and 4 ones? → **S**

What number has 9 tens and 1 one? → **E**

What number has 2 tens and 0 ones? → **A**

What number has 4 tens and 8 ones? → **I**

What number has 7 tens and 0 ones? → **W**

What number has 3 tens and 6 ones? → **O**

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

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

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

What number has 8 tens and 2 ones? → **Y**

What number has 3 tens and 7 ones? → **H**

What number has 2 tens and 1 one? → **N**

What number has 1 ten and 9 ones? → **L**

What number has 9 tens and 6 ones? → **D**

What number has 6 tens and 1 one? → **U**

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

Scratch space:

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

The chef needs twelve sweet cupcakes but only has nine. How many more do we need to bake? Solving this missing number gives us the 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:

$8 + \underline{\quad} = 13$

$6 + \underline{\quad} = 10$

$1 + \underline{\quad} = 3$

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

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

$5 + \underline{\quad} = 6$

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

$3 + \underline{\quad} = 14$

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

$9 + \underline{\quad} = 12$

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

Step 2 - cross out the sentence with each answer:

1. The villain snatches the cherry on top, then hides in the pantry.
2. The villain licks the spoon clean, then sneaks behind the oven.
3. The villain eats the frosting first, then giggles in the kitchen.
4. The villain steals the sprinkles, then sneaks behind the oven.
5. The villain eats the frosting first, then jumps out the window.
6. The villain snatches the cherry on top, then jumps out the window.
7. The villain scoops up the glaze, then sneaks behind the oven.
8. The villain steals the sprinkles, then jumps out the window.
9. The villain scoops up the glaze, then jumps out the window.
10. The villain licks the spoon clean, then giggles in the kitchen.
11. The villain licks the spoon clean, then jumps out the window.
12. The villain snatches the cherry on top, then giggles in the kitchen.

Answer Key

The Great Cupcake Caper

Culprit: Chef Chris

chocolate sprinkles · green rolling pin · wears chef hat · brown sugar · cold milk

Trail: Start 21 → Clue 1 20 → Clue 2 8 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SNATCHER DOES NOT USE A YELLOW PIPING BAG"

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

Clue 2 (Subtraction): "THE SNATCHER WEARS A TALL WHITE CHEF HAT"

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

Clue 3 (Skip counting): "THE SNATCHER RUNS AWAY FROM COLD MILK"

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (T) · Skip-count by 3s. Fill the blank: 3, 6, 9, __, 15, 18 = 12 (R) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 = 45 (W) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, __, 45, 50 = 40 (M) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 = 33 (E) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 = 27 (S) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (K) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (Y) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 = 36 (U) · Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 = 8 (N) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 = 65 (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, __, 20, 25 = 15 (D) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 = 22 (F) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, __, 80, 90 = 70 (O) · 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, __, 40, 45 = 35 (C) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 = 140 (I)

Clue 4 (Place value): "THE TRAY HAD BROWN SUGAR PILES"

What number has 7 tens and 4 ones? = 74 (T) · What number has 4 tens and 4 ones? = 44 (S) · What number has 9 tens and 1 one? = 91 (E) · What number has 2 tens and 0 ones? = 20 (A) · What number has 4 tens and 8 ones? = 48 (I) · What number has 7 tens and 0 ones? = 70 (W) · What number has 3 tens and 6 ones? = 36 (O) · What number has 3 tens and 9 ones? = 39 (P) · What number has 7 tens and 5 ones? = 75 (G) · What number has 3 tens and 4 ones? = 34 (B) · What number has 8 tens and 2 ones? = 82 (Y) · What number has 3 tens and 7 ones? = 37 (H) · What number has 2 tens and 1 one? = 21 (N) · What number has 1 ten and 9 ones? = 19 (L) · What number has 9 tens and 6 ones? = 96 (D) · What number has 6 tens and 1 one? = 61 (U) · What number has 4 tens and 2 ones? = 42 (R)

Clue 5 (Missing addends): surviving statement is box 6 → Chef Chris

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