

The Great Bake Sale Mystery

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

Detective: _____ Date: _____

The big school bake sale is today! But oh no, the sweet treats are vanishing from the kitchen. We must find the Cupcake Burglar before recess!

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 Burglar is _____

Possible suspects

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

NAME	CUPCAKE STEALING MOVE	SECRET SCHOOL SKILL	SNEAKER COLOR	MESSY CUPCAKE HAIR	BURGLAR WEAKNESS
Jimmy	super quick box stacking	silent shoe squeaking	wears red sneakers	rainbow sprinkles in spikes	stops to pet the class bunny
Nurse Nancy	mega sprinkle tossing	hall pass forging	wears red sneakers	pink frosting in curls	stops to pet the class bunny
Mr Higgins	mega sprinkle tossing	silent shoe squeaking	wears blue sneakers	yellow crumbs in bangs	afraid of loud school bells
Mrs Gable	giant tray balancing	locker lock picking	wears blue sneakers	rainbow sprinkles in spikes	stops to pet the class bunny
Susie	mega sprinkle tossing	backpack camouflage	wears blue sneakers	yellow crumbs in bangs	afraid of loud school bells
Principal Pete	giant tray balancing	hall pass forging	wears red sneakers	pink frosting in curls	allergic to glitter
Miss Patty	mega sprinkle tossing	eraser dust blowing	wears red sneakers	rainbow sprinkles in spikes	afraid of loud school bells
Sally	high speed frosting licking	silent shoe squeaking	wears red sneakers	rainbow sprinkles in spikes	afraid of loud school bells
Freddy	giant tray balancing	eraser dust blowing	wears blue sneakers	pink frosting in curls	stops to pet the class bunny
Billy	high speed frosting licking	eraser dust blowing	wears red sneakers	rainbow sprinkles in spikes	stops to pet the class bunny
Teddy	super silent tiptoeing	locker lock picking	wears red sneakers	rainbow sprinkles in spikes	stops to pet the class bunny
Bobby	super quick box stacking	backpack camouflage	wears red sneakers	rainbow sprinkles in spikes	stops to pet the class bunny
Lily	super silent tiptoeing	eraser dust blowing	wears blue sneakers	rainbow sprinkles in spikes	stops to pet the class bunny
Jenny	high speed frosting licking	backpack camouflage	wears blue sneakers	yellow crumbs in bangs	afraid of loud school bells
Ricky	super silent tiptoeing	locker lock picking	wears blue sneakers	pink frosting in curls	stops to pet the class bunny
Penny	high speed frosting licking	hall pass forging	wears blue sneakers	yellow crumbs in bangs	allergic to glitter
Wendy	high speed frosting licking	backpack camouflage	wears blue sneakers	yellow crumbs in bangs	stops to pet the class bunny
Vicky	super silent tiptoeing	backpack camouflage	wears red sneakers	rainbow sprinkles in spikes	stops to pet the class bunny
Coach Cal	super quick box stacking	backpack camouflage	wears blue sneakers	rainbow sprinkles in spikes	afraid of loud school bells
Cindy	high speed frosting licking	silent shoe squeaking	wears blue sneakers	rainbow sprinkles in spikes	afraid of loud school bells
Tommy	super quick box stacking	eraser dust blowing	wears red sneakers	yellow crumbs in bangs	stops to pet the class bunny

CLUE 1 **Addition**

The baker adds the chocolate chips to the vanilla cups. Count them all up to unlock the first clue.

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

T																		
12	15	13	6	10	13	17	5	20	4	13	6	10	4	12	14	19	4	9

13	11	17	6	13	11	20	16	6	12				

$6 + 6 = \square \rightarrow \text{T}$	$1 + 5 = \square \rightarrow \text{S}$	$7 + 13 = \square \rightarrow \text{D}$	$6 + 4 = \square \rightarrow \text{N}$
$5 + 11 = \square \rightarrow \text{U}$	$1 + 4 = \square \rightarrow \text{K}$	$7 + 8 = \square \rightarrow \text{H}$	
$11 + 6 = \square \rightarrow \text{A}$	$9 + 4 = \square \rightarrow \text{E}$	$3 + 1 = \square \rightarrow \text{O}$	$2 + 7 = \square \rightarrow \text{W}$
$6 + 5 = \square \rightarrow \text{R}$	$8 + 6 = \square \rightarrow \text{B}$	$8 + 11 = \square \rightarrow \text{L}$	

Scratch space:

CLUE 2

Subtraction

Someone took some cupcakes from the cooling tray. Subtract the eaten ones to see what is left.

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

T			T								T			
11	10	19	11	10	18	19	5	12	19	5	11	3	19	13

											T	
2	1	19	7	4	19	3	15	3	18	1	11	2

$17 - 6 = \square \rightarrow \boxed{\text{T}}$

$14 - 1 = \square \rightarrow \boxed{\text{D}}$

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

$16 - 1 = \square \rightarrow \boxed{\text{P}}$

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

$13 - 3 = \square \rightarrow \boxed{\text{H}}$

$5 - 3 = \square \rightarrow \boxed{\text{S}}$

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

$9 - 2 = \square \rightarrow \boxed{\text{A}}$

$13 - 9 = \square \rightarrow \boxed{\text{K}}$

$13 - 8 = \square \rightarrow \boxed{\text{F}}$

$7 - 4 = \square \rightarrow \boxed{\text{R}}$

$2 - 1 = \square \rightarrow \boxed{\text{N}}$

Scratch space:

CLUE 3

Word problems

A student writes a word puzzle about the missing sweets. Solve it to find a clue about their weakness.

Solve each problem, then write its letter in the boxes to fill in the missing word.

Someone scared the villain off with

S				S										L	A	S	S	B	U	N	N	Y
13	25	23	14	13	25	23	14	8	25	25	6	8	10			13	13					

Helper found 11 paper liners yesterday and 2 more today.
How many paper liners in all?

Answer: → **S**

There were 10 cupcakes. 4 were used up. How many
cupcakes are left?

Answer: → **H**

Helper found 3 cupcakes yesterday and 22 more today.
How many cupcakes in all?

Answer: → **T**

There were 12 cupcakes. 2 were used up. How many
cupcakes are left?

Answer: → **C**

Helper lined up 2 rows of 7 paper liners. How many paper
liners in all?

Answer: → **P**

Helper lined up 2 rows of 4 cupcakes. How many cupcakes
in all?

Answer: → **E**

There were 30 paper liners. 7 were used up. How many
paper liners are left?

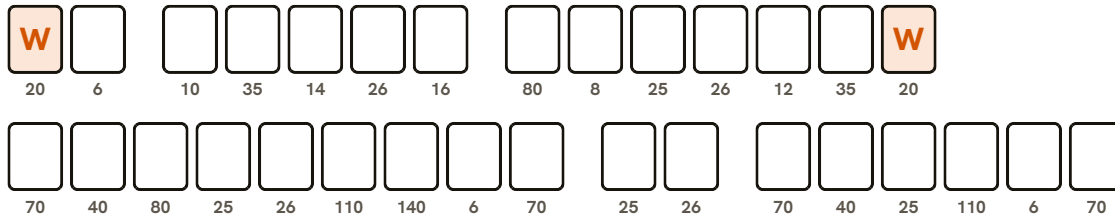
Answer: → **O**

Scratch space:

CLUE 4 Skip counting

Count the boxes of frosting by fives. Skip count to find the clue hidden on the hair chart.

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



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

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

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, __, 18, 20 → **D**

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

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

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

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

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

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

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

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

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

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

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

Scratch space:

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

We need twelve plates but only have eight. 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:

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

$7 + \underline{\quad} = 13$

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

$4 + \underline{\quad} = 5$

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

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

$3 + \underline{\quad} = 11$

$1 + \underline{\quad} = 4$

$3 + \underline{\quad} = 10$

$3 + \underline{\quad} = 15$

$1 + \underline{\quad} = 10$

Step 2 - cross out the sentence with each answer:

1. The villain tiptoes past the teacher desk, then stuffs frosting bags in a bag.
2. The villain creeps into the bakery kitchen, then swipes the cherry cupcakes.
3. The villain climbs the snack cupboard, then swipes the cherry cupcakes.
4. The villain creeps into the bakery kitchen, then eats all the strawberry tops.
5. The villain sneaks into the cafeteria, then stuffs frosting bags in a bag.
6. The villain climbs the snack cupboard, then eats all the strawberry tops.
7. The villain sneaks into the cafeteria, then swipes the cherry cupcakes.
8. The villain hides behind the lunch cart, then messes up the sprinkles.
9. The villain climbs the snack cupboard, then messes up the sprinkles.
10. The villain climbs the snack cupboard, then stuffs frosting bags in a bag.
11. The villain sneaks into the cafeteria, then gargles the vanilla frosting.
12. The villain tiptoes past the teacher desk, then swipes the cherry cupcakes.

Answer Key

The Great Bake Sale Mystery

Culprit: Vicky

super silent tiptoeing · backpack camouflage · wears red sneakers · rainbow sprinkles in spikes · stops to pet the class bunny

Trail: Start 21 → Clue 1 16 → Clue 2 7 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SNEAK DOES NOT BLOW ERASER DUST"

$6 + 6 = 12$ (T) · $1 + 5 = 6$ (S) · $7 + 13 = 20$ (D) · $6 + 4 = 10$ (N) · $5 + 11 = 16$ (U) · $1 + 4 = 5$ (K) · $7 + 8 = 15$ (H) · $11 + 6 = 17$ (A) · $9 + 4 = 13$ (E) · $3 + 1 = 4$ (O) · $2 + 7 = 9$ (W) · $6 + 5 = 11$ (R) · $8 + 6 = 14$ (B) · $8 + 11 = 19$ (L)

Clue 2 (Subtraction): "THE THIEF LEFT RED SNEAKER PRINTS"

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

Clue 3 (Word problems): "STOPS TO PET THE CLASS BUNNY"

Helper found 11 paper liners yesterday and 2 more today. How many paper liners in all? = 13 (S) · There were 10 cupcakes. 4 were used up. How many cupcakes are left? = 6 (H) · Helper found 3 cupcakes yesterday and 22 more today. How many cupcakes in all? = 25 (T) · There were 12 cupcakes. 2 were used up. How many cupcakes are left? = 10 (C) · Helper lined up 2 rows of 7 paper liners. How many paper liners in all? = 14 (P) · Helper lined up 2 rows of 4 cupcakes. How many cupcakes in all? = 8 (E) · There were 30 paper liners. 7 were used up. How many paper liners are left? = 23 (O)

Clue 4 (Skip counting): "WE FOUND RAINBOW SPRINKLES IN SPIKES"

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, __, 22, 24 = 20 (W) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 = 10 (F) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (K) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 = 16 (D) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 = 14 (U) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (O) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, __, 45, 50 = 40 (P) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (R) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 = 12 (B) · Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 = 6 (E) · Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 = 8 (A) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, __, 80, 90 = 70 (S) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (I) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (N) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 = 140 (L)

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

$8 + \underline{\quad} = 19 = 11$ · $7 + \underline{\quad} = 13 = 6$ · $6 + \underline{\quad} = 16 = 10$ · $4 + \underline{\quad} = 5 = 1$ · $5 + \underline{\quad} = 9 = 4$ · $1 + \underline{\quad} = 3 = 2$ · $3 + \underline{\quad} = 11 = 8$ · $1 + \underline{\quad} = 4 = 3$ · $3 + \underline{\quad} = 10 = 7$ · $3 + \underline{\quad} = 15 = 12$ · $1 + \underline{\quad} = 10 = 9$