



The Great Cookie Crumble

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

Detective: _____ Date: _____

Oh no! The grand prize Golden Cookie is missing from the display case. There are crumbs everywhere! The Head Baker needs your help to find out who took it before the big bakery show 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 Cookie Thief is _____

Possible suspects

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

NAME	FAVORITE FLAVOR	SECRET BAKING TOOL	SPRINKLE HAND	FLOUR DUST COLOR	COOKIE FEAR
Jack Frosting	Oatmeal Raisin	Wooden Spoon	Right Handed	White Flour	Loud Crunch
Kiki Cocoa	Lemon Drop	Red Timer	Right Handed	Brown Cocoa	Cold Milk
Rosie Raisin	Minty Melt	Red Timer	Right Handed	Brown Cocoa	Loud Crunch
Quinn Quince	Oatmeal Raisin	Silver Whisk	Left Handed	Brown Cocoa	Sticky Jam
Penny Peanut	Lemon Drop	Gold Spatula	Left Handed	Yellow Cornmeal	Cold Milk
Izzy Icing	Lemon Drop	Wooden Spoon	Left Handed	Brown Cocoa	Sticky Jam
Hazel Nut	Minty Melt	Silver Whisk	Right Handed	Brown Cocoa	Sticky Jam
Wally Wafer	Minty Melt	Red Timer	Left Handed	Brown Cocoa	Loud Crunch
Sammy Sweet	Minty Melt	Silver Whisk	Right Handed	White Flour	Sticky Jam
Ginger Snap	Minty Melt	Red Timer	Right Handed	Brown Cocoa	Sticky Jam
Ella Sugar	Oatmeal Raisin	Silver Whisk	Right Handed	Brown Cocoa	Sticky Jam
Zack Zest	Lemon Drop	Silver Whisk	Right Handed	Yellow Cornmeal	Loud Crunch
Baker Billy	Choco Chip	Blue Rolling Pin	Left Handed	Brown Cocoa	Loud Crunch
Yara Yeast	Oatmeal Raisin	Wooden Spoon	Right Handed	Brown Cocoa	Sticky Jam
Upton Ube	Oatmeal Raisin	Blue Rolling Pin	Left Handed	Yellow Cornmeal	Loud Crunch
Ned Nutmeg	Sugar Frost	Blue Rolling Pin	Right Handed	Brown Cocoa	Sticky Jam
Mimi Mint	Lemon Drop	Gold Spatula	Right Handed	Brown Cocoa	Loud Crunch
Cookie Carla	Choco Chip	Silver Whisk	Right Handed	White Flour	Cold Milk
Tilly Tart	Sugar Frost	Gold Spatula	Left Handed	White Flour	Cold Milk
Ollie Oat	Lemon Drop	Blue Rolling Pin	Right Handed	White Flour	Sticky Jam
Frankie Flour	Sugar Frost	Silver Whisk	Left Handed	Yellow Cornmeal	Sticky Jam

CLUE 1 Place value

The baker looks at the recipe code. It has tens and ones. Can you read the numbers to find the first clue?

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

T			T											T				
40	28	11	40	28	73	11	16	77	48	11	87	97	48	40	17	87	11	65
46	48	48	77	11	97	87	58	48	48	97								

What number has 4 tens and 0 ones? → **T**

What number has 1 ten and 7 ones? → **U**

What number has 6 tens and 5 ones? → **A**

What number has 1 ten and 6 ones? → **F**

What number has 5 tens and 8 ones? → **P**

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

What number has 1 ten and 1 one? → **E**

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

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

What number has 4 tens and 6 ones? → **W**

What number has 9 tens and 7 ones? → **N**

What number has 7 tens and 7 ones? → **D**

What number has 8 tens and 7 ones? → **S**

Scratch space:

CLUE 2

Addition

We need to add the chocolate chips in both bowls. Help us find the sum to get the next clue.

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

T			T												T
35	49	87	35	49	77	87	79	77	30	21	77	81	49	35	

49	72	61	39	87	39

$16 + 19 = \square \rightarrow \boxed{\text{T}}$

$16 + 14 = \square \rightarrow \boxed{\text{S}}$

$44 + 28 = \square \rightarrow \boxed{\text{A}}$

$50 + 31 = \square \rightarrow \boxed{\text{G}}$

$33 + 54 = \square \rightarrow \boxed{\text{E}}$

$54 + 25 = \square \rightarrow \boxed{\text{F}}$

$24 + 15 = \square \rightarrow \boxed{\text{D}}$

$15 + 6 = \square \rightarrow \boxed{\text{R}}$

$15 + 34 = \square \rightarrow \boxed{\text{H}}$

$42 + 19 = \square \rightarrow \boxed{\text{N}}$

$47 + 30 = \square \rightarrow \boxed{\text{I}}$

Scratch space:

CLUE 3

Subtraction

Someone ate some cookies from the tray! Subtract the crumbs to see what is left and find a clue.

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

T			T														
85	13	15	85	13	66	15	11	66	79	79	48	74	50	15	89	76	11
	T																
79	85	66	48	51	59	17	74	32									

$119 - 34 = \square \rightarrow \boxed{\text{T}}$

$71 - 21 = \square \rightarrow \boxed{\text{R}}$

$81 - 15 = \square \rightarrow \boxed{\text{I}}$

$61 - 2 = \square \rightarrow \boxed{\text{Y}}$

$38 - 6 = \square \rightarrow \boxed{\text{M}}$

$87 - 11 = \square \rightarrow \boxed{\text{O}}$

$30 - 17 = \square \rightarrow \boxed{\text{H}}$

$105 - 26 = \square \rightarrow \boxed{\text{S}}$

$98 - 9 = \square \rightarrow \boxed{\text{D}}$

$77 - 26 = \square \rightarrow \boxed{\text{K}}$

$86 - 38 = \square \rightarrow \boxed{\text{C}}$

$29 - 12 = \square \rightarrow \boxed{\text{J}}$

$32 - 17 = \square \rightarrow \boxed{\text{E}}$

$29 - 18 = \square \rightarrow \boxed{\text{F}}$

$102 - 28 = \square \rightarrow \boxed{\text{A}}$

Scratch space:

CLUE 4 Skip counting

The cookie stacks are lined up by twos and fives. Count them quickly to unlock this clue!

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

W									W							
120	55	39	35	80	9	25	22	42	35	120	9	110	35	110	35	60

25	80	40	36

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

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

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

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

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

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

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

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

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

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

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

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 → **F**

Scratch space:

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

We have six cookies but we need ten. Find how many are missing to get 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:

$10 + \underline{\quad} = 21$

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

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

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

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

$8 + \underline{\quad} = 20$

$3 + \underline{\quad} = 7$

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

$7 + \underline{\quad} = 8$

$4 + \underline{\quad} = 9$

$4 + \underline{\quad} = 10$

Step 2 - cross out the sentence with each answer:

1. The villain frosts a huge sugar cookie, then taps a giant wooden spoon.
2. The villain stirs a bowl of oatmeal raisin, then clinks a shiny silver whisk.
3. The villain squeezes fresh yellow lemon drops, then flips dough with a gold spatula.
4. The villain mixes some cool minty dough, then flips dough with a gold spatula.
5. The villain stirs a bowl of oatmeal raisin, then taps a giant wooden spoon.
6. The villain frosts a huge sugar cookie, then sets a loud red timer.
7. The villain bakes a tray of choco chip cookies, then flips dough with a gold spatula.
8. The villain mixes some cool minty dough, then clinks a shiny silver whisk.
9. The villain bakes a tray of choco chip cookies, then rolls pastry with a blue rolling pin.
10. The villain mixes some cool minty dough, then sets a loud red timer.
11. The villain frosts a huge sugar cookie, then rolls pastry with a blue rolling pin.
12. The villain mixes some cool minty dough, then rolls pastry with a blue rolling pin.

Answer Key

The Great Cookie Crumble

Culprit: Ella Sugar

Oatmeal Raisin · Silver Whisk · Right Handed · Brown Cocoa · Sticky Jam

Trail: Start 21 → Clue 1 18 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE THIEF DOES NOT USE A WOODEN SPOON"

What number has 4 tens and 0 ones? = 40 (T) · What number has 1 ten and 7 ones? = 17 (U) · What number has 6 tens and 5 ones? = 65 (A) · What number has 1 ten and 6 ones? = 16 (F) · What number has 5 tens and 8 ones? = 58 (P) · What number has 7 tens and 3 ones? = 73 (I) · What number has 1 ten and 1 one? = 11 (E) · What number has 2 tens and 8 ones? = 28 (H) · What number has 4 tens and 8 ones? = 48 (O) · What number has 4 tens and 6 ones? = 46 (W) · What number has 9 tens and 7 ones? = 97 (N) · What number has 7 tens and 7 ones? = 77 (D) · What number has 8 tens and 7 ones? = 87 (S)

Clue 2 (Addition): "THE THIEF IS RIGHT HANDED"

$16 + 19 = 35$ (T) · $16 + 14 = 30$ (S) · $44 + 28 = 72$ (A) · $50 + 31 = 81$ (G) · $33 + 54 = 87$ (E) · $54 + 25 = 79$ (F) · $24 + 15 = 39$ (D) · $15 + 6 = 21$ (R) · $15 + 34 = 49$ (H) · $42 + 19 = 61$ (N) · $47 + 30 = 77$ (I)

Clue 3 (Subtraction): "THE THIEF IS SCARED OF STICKY JAM"

$119 - 34 = 85$ (T) · $71 - 21 = 50$ (R) · $81 - 15 = 66$ (I) · $61 - 2 = 59$ (Y) · $38 - 6 = 32$ (M) · $87 - 11 = 76$ (O) · $30 - 17 = 13$ (H) · $105 - 26 = 79$ (S) · $98 - 9 = 89$ (D) · $77 - 26 = 51$ (K) · $86 - 38 = 48$ (C) · $29 - 12 = 17$ (J) · $32 - 17 = 15$ (E) · $29 - 18 = 11$ (F) · $102 - 28 = 74$ (A)

Clue 4 (Skip counting): "WE FOUND BROWN COCOA DUST"

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 = 120 (W) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (R) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, __, 45, 50 = 40 (S) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (C) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 = 22 (B) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, __, 70, 80 = 60 (A) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (D) · Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 = 9 (N) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (U) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 = 55 (E) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 = 36 (T) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (O) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (F)

Clue 5 (Missing addends): surviving statement is box 2 → Ella Sugar

$10 + \underline{\quad} = 21 = 11$ · $6 + \underline{\quad} = 16 = 10$ · $1 + \underline{\quad} = 9 = 8$ · $10 + \underline{\quad} = 17 = 7$ · $9 + \underline{\quad} = 18 = 9$ · $8 + \underline{\quad} = 20 = 12$ · $3 + \underline{\quad} = 7 = 4$ · $8 + \underline{\quad} = 11 = 3$ · $7 + \underline{\quad} = 8 = 1$ · $4 + \underline{\quad} = 9 = 5$ · $4 + \underline{\quad} = 10 = 6$