



The Great Cookie Kingdom Mystery

Grade 3 math · Rounding, Addition, Subtraction, Multiplication, Division · Reading level grades 3-4

Detective: _____ Date: _____

Someone snuck into the royal pantry and swiped the legendary Golden Cookie Recipe! The floor is covered in crumbs and frosting. Can you help the baking squad find the culprit before the grand baking festival begins?

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	BAKING STYLE	SECRET INGREDIENT	SCOOP HAND	CRUMB DUSTING	FAVORITE DRINK
Mac Macaroon	double-baked	rainbow sprinkles	left-handed scoop	sugar crystals	warm tea
Barnaby Baker	crunchy baking	chocolate chips	right-handed scoop	cocoa powder	apple juice
Fiona Fudge	frosted style	peppermint swirl	left-handed scoop	cocoa powder	apple juice
Bessie Biscotti	chewy baking	peanut butter	left-handed scoop	sugar crystals	apple juice
Sally Shortbread	no-bake style	chocolate chips	left-handed scoop	sugar crystals	apple juice
Peter Pizzelle	no-bake style	sea salt	left-handed scoop	sugar crystals	apple juice
Mimi Molasses	crunchy baking	peppermint swirl	right-handed scoop	cinnamon crumbs	warm tea
Danny Dough	crunchy baking	sea salt	left-handed scoop	cinnamon crumbs	apple juice
Otis Oatmeal	frosted style	peppermint swirl	right-handed scoop	sugar crystals	cold milk
Abby Alfajor	chewy baking	peanut butter	right-handed scoop	sugar crystals	apple juice
Penny Peanut	chewy baking	rainbow sprinkles	left-handed scoop	cocoa powder	apple juice
Gus Graham	double-baked	chocolate chips	left-handed scoop	sugar crystals	apple juice
Rudy Raisin	frosted style	peppermint swirl	left-handed scoop	cinnamon crumbs	warm tea
Toby Tart	frosted style	sea salt	left-handed scoop	cinnamon crumbs	apple juice
Wendy Whipped	crunchy baking	peanut butter	right-handed scoop	cocoa powder	cold milk
Oliver Oreo	double-baked	peppermint swirl	left-handed scoop	sugar crystals	cold milk
Zack Zweiback	frosted style	chocolate chips	left-handed scoop	cinnamon crumbs	warm tea
Wally Wafer	crunchy baking	chocolate chips	left-handed scoop	cinnamon crumbs	apple juice
Sprinkles Sam	chewy baking	rainbow sprinkles	left-handed scoop	sugar crystals	apple juice
Chippy Charlie	crunchy baking	sea salt	right-handed scoop	cocoa powder	apple juice
Betty Butter	frosted style	rainbow sprinkles	right-handed scoop	sugar crystals	apple juice

CLUE 1

The flour scale in the bakery is old and only shows the weight rounded to the nearest ten pounds. We weighed the giant sack of sugar to unlock this first hint.

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

The diagram shows the distribution of 10000 items across 10 categories. The categories are represented by boxes, some of which are highlighted in orange and labeled 'T'.

Category	Value	Highlighted
1	40	Yes
2	8000	No
3	3000	No
4	80	No
5	30	No
6	80	No
7	300	No
8	3000	No
9	60	No
10	40	Yes
11	9000	No
12	7000	No
13	3000	No
14	80	No
15	600	No
16	7000	No
17	40	Yes
18	30	No
19	80	No
20	3000	No
21	80	No
22	3000	No
23	50	No
24	80	No
25	50	No
26	20	No
27	40	Yes

Round 39 to the nearest ten $\rightarrow$ **T**

Round 6,844 to the nearest thousand $\rightarrow$

Round 264 to the nearest hundred $\rightarrow$ **P**

Round 79 to the nearest ten $\rightarrow$ **S**

Round 2,549 to the nearest thousand → **E**

Round 592 to the nearest hundred $\rightarrow$ **N**

Round 58 to the nearest ten $\rightarrow$ **C**

Round 8,871 to the nearest thousand $\rightarrow$ **D**

Round 26 to the nearest ten $\rightarrow$ **U**

Round 24 to the nearest ten $\rightarrow$ **L**

Round 49 to the nearest ten $\rightarrow$ **A**

Round 7,980 to the nearest thousand → **H**

Scratch space:

CLUE 2 **Addition**

We found three different boxes of stolen baking supplies hidden in the pantry. Adding them all together revealed a secret note from the thief.

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

T 698 279 421	543 421 233	T 698	279 957 784 564 421 564	413 671 776 776 206
775 957 413	634 413 421 564			

$456 + 242 = \square \rightarrow \boxed{\text{T}}$

$322 + 462 = \square \rightarrow \boxed{\text{N}}$

$280 + 141 = \square \rightarrow \boxed{\text{E}}$

$122 + 111 = \square \rightarrow \boxed{\text{F}}$

$205 + 429 = \square \rightarrow \boxed{\text{U}}$

$187 + 92 = \square \rightarrow \boxed{\text{H}}$

$257 + 307 = \square \rightarrow \boxed{\text{D}}$

$89 + 117 = \square \rightarrow \boxed{\text{P}}$

$345 + 198 = \square \rightarrow \boxed{\text{L}}$

$295 + 481 = \square \rightarrow \boxed{\text{O}}$

$247 + 424 = \square \rightarrow \boxed{\text{C}}$

$480 + 477 = \square \rightarrow \boxed{\text{A}}$

$534 + 241 = \square \rightarrow \boxed{\text{W}}$

$272 + 141 = \square \rightarrow \boxed{\text{S}}$

Scratch space:

CLUE 3

Subtraction

The baker made a big tray of sugar cookies, but the thief took quite a few of them. Subtracting the left-over cookies from the starting amount gives us our next lead.

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

A											A								
269	534	534	211	464	149	607	116	527	464	106	269	653	464	624	166	894	464	106	
624	636	464	464	234	464														

$298 - 29 = \square \rightarrow \boxed{\text{A}}$

$923 - 29 = \square \rightarrow \boxed{\text{H}}$

$228 - 17 = \square \rightarrow \boxed{\text{L}}$

$554 - 20 = \square \rightarrow \boxed{\text{P}}$

$984 - 377 = \square \rightarrow \boxed{\text{U}}$

$922 - 269 = \square \rightarrow \boxed{\text{K}}$

$404 - 288 = \square \rightarrow \boxed{\text{I}}$

$420 - 314 = \square \rightarrow \boxed{\text{M}}$

$356 - 190 = \square \rightarrow \boxed{\text{T}}$

$834 - 198 = \square \rightarrow \boxed{\text{N}}$

$207 - 58 = \square \rightarrow \boxed{\text{J}}$

$727 - 200 = \square \rightarrow \boxed{\text{C}}$

$644 - 20 = \square \rightarrow \boxed{\text{S}}$

$405 - 171 = \square \rightarrow \boxed{\text{Z}}$

$779 - 315 = \square \rightarrow \boxed{\text{E}}$

Scratch space:

CLUE 4

Multiplication facts (1-12)

The cookie trays are arranged in perfect rows and columns on the cooling racks. Multiplying the rows by the columns helps us calculate the thief's next move.

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

S								S				S						
36	132	63	5	55	60	55	121	36	18	5	10	36	72	50	4	30	3	4
18	72	30	10	3	63	72	18											

$12 \times 3 = \square \rightarrow \boxed{\text{S}}$

$5 \times 2 = \square \rightarrow \boxed{\text{L}}$

$11 \times 11 = \square \rightarrow \boxed{\text{Y}}$

$5 \times 10 = \square \rightarrow \boxed{\text{O}}$

$1 \times 5 = \square \rightarrow \boxed{\text{A}}$

$7 \times 9 = \square \rightarrow \boxed{\text{G}}$

$12 \times 5 = \square \rightarrow \boxed{\text{C}}$

$4 \times 1 = \square \rightarrow \boxed{\text{N}}$

$3 \times 10 = \square \rightarrow \boxed{\text{E}}$

$11 \times 12 = \square \rightarrow \boxed{\text{U}}$

$2 \times 9 = \square \rightarrow \boxed{\text{T}}$

$11 \times 5 = \square \rightarrow \boxed{\text{R}}$

$1 \times 3 = \square \rightarrow \boxed{\text{I}}$

$9 \times 8 = \square \rightarrow \boxed{\text{H}}$

Scratch space:

CLUE 5**Division facts (1-12) - the last clue**

We have a box of crumbs to split evenly among the detective team. Sharing them equally tells us exactly where the thief ran off to.

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:

$12 \div 4 = \boxed{}$

$48 \div 4 = \boxed{}$

$108 \div 12 = \boxed{}$

$55 \div 11 = \boxed{}$

$5 \div 5 = \boxed{}$

$60 \div 6 = \boxed{}$

$88 \div 11 = \boxed{}$

$36 \div 9 = \boxed{}$

$56 \div 8 = \boxed{}$

$6 \div 3 = \boxed{}$

$22 \div 2 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain eats all the raw dough, then scatters chocolate chips behind.
2. The villain hides the golden rolling pin, then leaves a trail of frosting.
3. The villain mixes up the secret flour, then leaves a trail of frosting.
4. The villain hides the golden rolling pin, then sprinkles flour everywhere.
5. The villain steals the chocolate chips, then sprinkles flour everywhere.
6. The villain turns off the royal ovens, then escapes through the bakery window.
7. The villain eats all the raw dough, then laughs with a mouth full of cookies.
8. The villain hides the golden rolling pin, then escapes through the bakery window.
9. The villain mixes up the secret flour, then sprinkles flour everywhere.
10. The villain turns off the royal ovens, then sprinkles flour everywhere.
11. The villain eats all the raw dough, then sprinkles flour everywhere.
12. The villain eats all the raw dough, then escapes through the bakery window.

Answer Key

The Great Cookie Kingdom Mystery

Culprit: Gus Graham

double-baked · chocolate chips · left-handed scoop · sugar crystals · apple juice

Trail: Start 21 → Clue 1 17 → Clue 2 11 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE SUSPECT DOES NOT USE SEA SALT"

Round 39 to the nearest ten = 40 (T) · Round 6,844 to the nearest thousand = 7000 (O) · Round 264 to the nearest hundred = 300 (P) · Round 79 to the nearest ten = 80 (S) · Round 2,549 to the nearest thousand = 3000 (E) · Round 592 to the nearest hundred = 600 (N) · Round 58 to the nearest ten = 60 (C) · Round 8,871 to the nearest thousand = 9000 (D) · Round 26 to the nearest ten = 30 (U) · Round 24 to the nearest ten = 20 (L) · Round 49 to the nearest ten = 50 (A) · Round 7,980 to the nearest thousand = 8000 (H)

Clue 2 (Addition): "THE LEFT HANDED SCOOP WAS USED"

$456 + 242 = 698$ (T) · $322 + 462 = 784$ (N) · $280 + 141 = 421$ (E) · $122 + 111 = 233$ (F) · $205 + 429 = 634$ (U) · $187 + 92 = 279$ (H) · $257 + 307 = 564$ (D) · $89 + 117 = 206$ (P) · $345 + 198 = 543$ (L) · $295 + 481 = 776$ (O) · $247 + 424 = 671$ (C) · $480 + 477 = 957$ (A) · $534 + 241 = 775$ (W) · $272 + 141 = 413$ (S)

Clue 3 (Subtraction): "APPLE JUICE MAKES THEM SNEEZE"

$298 - 29 = 269$ (A) · $923 - 29 = 894$ (H) · $228 - 17 = 211$ (L) · $554 - 20 = 534$ (P) · $984 - 377 = 607$ (U) · $922 - 269 = 653$ (K) · $404 - 288 = 116$ (I) · $420 - 314 = 106$ (M) · $356 - 190 = 166$ (T) · $834 - 198 = 636$ (N) · $207 - 58 = 149$ (J) · $727 - 200 = 527$ (C) · $644 - 20 = 624$ (S) · $405 - 171 = 234$ (Z) · $779 - 315 = 464$ (E)

Clue 4 (Multiplication facts (1-12)): "SUGAR CRYSTALS SHONE IN THE LIGHT"

$12 \times 3 = 36$ (S) · $5 \times 2 = 10$ (L) · $11 \times 11 = 121$ (Y) · $5 \times 10 = 50$ (O) · $1 \times 5 = 5$ (A) · $7 \times 9 = 63$ (G) · $12 \times 5 = 60$ (C) · $4 \times 1 = 4$ (N) · $3 \times 10 = 30$ (E) · $11 \times 12 = 132$ (U) · $2 \times 9 = 18$ (T) · $11 \times 5 = 55$ (R) · $1 \times 3 = 3$ (I) · $9 \times 8 = 72$ (H)

Clue 5 (Division facts (1-12)): surviving statement is box 6 → Gus Graham

$12 \div 4 = 3$ · $48 \div 4 = 12$ · $108 \div 12 = 9$ · $55 \div 11 = 5$ · $5 \div 5 = 1$ · $60 \div 6 = 10$ · $88 \div 11 = 8$ · $36 \div 9 = 4$ · $56 \div 8 = 7$ · $6 \div 3 = 2$ · $22 \div 2 = 11$