



The Great Baking Swindle

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

Detective: _____ Date: _____

The Grand Bakery Championship is in total chaos! Someone broke into the pantry and swapped the sugar with salt right before the final bake-off. The Golden Rolling Pin has been hidden! We must help Detective Croissant solve the clues and find the messy baker who did this.

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 messy baker is _____

Possible suspects

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

NAME	SIGNATURE BAKE	SECRET INGREDIENT	OVEN MITT HAND	FLOUR DUSTING	BAKING BLUNDER
Rachel Ray	Glazed donut	Sweet vanilla	Left handed scooper	Cocoa powdered hair	Soggy bottom
Prue Leith	Frosted cupcake	Zesty lemon	Left handed scooper	Flour dusted hair	Soggy bottom
Mary Berry	Glazed donut	Matcha powder	Right handed scooper	Sugar frosted hair	Burnt crust
Paul Hollywood	Blueberry tart	Zesty lemon	Left handed scooper	Flour dusted hair	Burnt crust
Marco Pierre White	Glazed donut	Salted caramel	Right handed scooper	Sugar frosted hair	Too much salt
Guy Fieri	Glazed donut	Matcha powder	Right handed scooper	Cocoa powdered hair	Soggy bottom
Jamie Oliver	Blueberry tart	Sweet vanilla	Right handed scooper	Cocoa powdered hair	Soggy bottom
Wolfgang Puck	Triple chocolate cake	Salted caramel	Right handed scooper	Flour dusted hair	Burnt crust
Ina Garten	Triple chocolate cake	Spicy cinnamon	Left handed scooper	Cocoa powdered hair	Burnt crust
Duff Goldman	Glazed donut	Matcha powder	Right handed scooper	Cocoa powdered hair	Too much salt
Giada De Laurentiis	Glazed donut	Salted caramel	Right handed scooper	Sugar frosted hair	Soggy bottom
Alton Brown	Frosted cupcake	Salted caramel	Left handed scooper	Sugar frosted hair	Soggy bottom
Buddy Valastro	Strawberry scone	Zesty lemon	Right handed scooper	Sugar frosted hair	Burnt crust
Emeril Lagasse	Triple chocolate cake	Salted caramel	Right handed scooper	Cocoa powdered hair	Soggy bottom
Alice Waters	Triple chocolate cake	Matcha powder	Right handed scooper	Sugar frosted hair	Soggy bottom
Roy Choi	Triple chocolate cake	Sweet vanilla	Right handed scooper	Sugar frosted hair	Burnt crust
Nigella Lawson	Strawberry scone	Matcha powder	Right handed scooper	Sugar frosted hair	Burnt crust
Christina Tosi	Glazed donut	Matcha powder	Left handed scooper	Flour dusted hair	Burnt crust
Jacques Pepin	Strawberry scone	Zesty lemon	Right handed scooper	Cocoa powdered hair	Soggy bottom
Bobby Flay	Blueberry tart	Zesty lemon	Right handed scooper	Sugar frosted hair	Soggy bottom
Gordon Ramsay	Frosted cupcake	Sweet vanilla	Right handed scooper	Cocoa powdered hair	Soggy bottom

CLUE 1

The pantry scale only shows weights rounded to the nearest ten. We need to round the flour weight to unlock the first clue!

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

9000 2300 900 200 430 90 90 4300 430 1700 2000 30 900 700 1700 30 9000

5000 700 900 500 900 700 9000 1100 90 900 2900 30 1700

Round 9,120 to the nearest thousand $\rightarrow$ **T**

Round 2,019 to the nearest thousand $\rightarrow$ **D**

Round 903 to the nearest hundred $\rightarrow$ **E**

Round 94 to the nearest ten $\rightarrow$ **L**

Round 30 to the nearest ten $\rightarrow$

Round 4,336 to the nearest hundred $\rightarrow$ **A**

Round 167 to the nearest hundred $\rightarrow$ **V**

Round 5,215 to the nearest thousand $\rightarrow$ **U**

Round 2,877 to the nearest hundred → **M**

Round 703 to the nearest hundred $\rightarrow$ **S**

Round 2,313 to the nearest hundred $\rightarrow$ **H**

Round 432 to the nearest ten $\rightarrow$

Round 1,707 to the nearest hundred → **N**

Round 501 to the nearest hundred $\rightarrow$ **500**

Round 1,084 to the nearest hundred → **Y**

Scratch space:

CLUE 2

We found two piles of spilled sprinkles. Adding them together reveals the second clue.

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

Diagram illustrating a sequence of numbers and transitions (T) across two rows of boxes.

Top Row:

- Box 1: 6670 (Transition T)
- Box 2: 9422
- Box 3: 3679
- Box 4: 8539
- Box 5: 5277
- Box 6: 9721
- Box 7: 9721
- Box 8: 9325
- Box 9: 5277
- Box 10: 2361
- Box 11: 3971
- Box 12: 2815
- Box 13: 2991
- Box 14: 2991
- Box 15: 6525
- Box 16: 3971
- Box 17: 9124
- Box 18: 5277
- Box 19: 6670 (Transition T)
- Box 20: 9422

Bottom Row:

- Box 1: 6670 (Transition T)
- Box 2: 9422
- Box 3: 3679
- Box 4: 5785
- Box 5: 5277
- Box 6: 4359
- Box 7: 9422
- Box 8: 6670 (Transition T)
- Box 9: 9422
- Box 10: 9325
- Box 11: 2361
- Box 12: 3962

$$2706 + 3964 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$1172 + 1819 = \boxed{} \rightarrow \boxed{0}$$

$$3291 + 1986 = \boxed{} \rightarrow \boxed{}$$

$$5435 + 3987 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$2722 + 3063 = \boxed{} \rightarrow \boxed{\text{R}}$$

$1859 + 2500 = \boxed{} \rightarrow \boxed{\text{G}}$

$$4156 + 4383 = \boxed{} \rightarrow \boxed{\mathbf{V}}$$

$1321 + 2358 = \boxed{} \rightarrow \boxed{\text{E}}$

$1648 + 713 = \boxed{} \rightarrow \boxed{\text{N}}$

$1931 + 884 = \boxed{} \rightarrow \boxed{\text{C}}$

$$3013 + 6111 = \boxed{} \rightarrow \boxed{\text{W}}$$

$$6541 + 3180 = \boxed{} \rightarrow \boxed{\text{L}}$$

$2359 + 1603 = \boxed{} \rightarrow \boxed{\text{D}}$

$$2042 + 1929 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$4483 + 2042 = \boxed{} \rightarrow \boxed{\text{P}}$$

$$6101 + 3224 = \boxed{} \rightarrow \boxed{\text{A}}$$

Scratch space:

CLUE 3

Subtraction

The thief stole some chocolate chips from a giant bag. Subtracting the leftover chips gives us our third clue.

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

T																	
6163	5621	6107	1100	5259	4952	4952	2543	5259	6751	5621	2543	2593	2593	4509	5233	5233	6729

		T	T			
8428	4509	6163	6163	4509	8424	2593

$7080 - 917 = \square \rightarrow \boxed{\text{T}}$

$7294 - 2785 = \square \rightarrow \boxed{\text{O}}$

$6373 - 3830 = \square \rightarrow \boxed{\text{A}}$

$11227 - 2803 = \square \rightarrow \boxed{\text{M}}$

$6867 - 1634 = \square \rightarrow \boxed{\text{G}}$

$4566 - 1973 = \square \rightarrow \boxed{\text{S}}$

$5618 - 359 = \square \rightarrow \boxed{\text{I}}$

$7142 - 413 = \square \rightarrow \boxed{\text{Y}}$

$13175 - 4747 = \square \rightarrow \boxed{\text{B}}$

$7142 - 2190 = \square \rightarrow \boxed{\text{L}}$

$8709 - 3088 = \square \rightarrow \boxed{\text{H}}$

$11716 - 4965 = \square \rightarrow \boxed{\text{N}}$

$7716 - 1609 = \square \rightarrow \boxed{\text{E}}$

$2115 - 1015 = \square \rightarrow \boxed{\text{V}}$

Scratch space:

CLUE 4
Multiplication facts (1-12)

The cookie trays are lined up in equal rows. Multiplying the rows tells us how many cookies are missing and unlocks the fourth clue.

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

T																	
80	24	30	77	66	14	14	6	66	18	24	6	44	22	25	22	25	6

121	25	36	4	30	64	30	4	24	6	66	64

$10 \times 8 = \square \rightarrow \boxed{\text{T}}$

$11 \times 4 = \square \rightarrow \boxed{\text{S}}$

$5 \times 6 = \square \rightarrow \boxed{\text{E}}$

$6 \times 3 = \square \rightarrow \boxed{\text{N}}$

$6 \times 4 = \square \rightarrow \boxed{\text{H}}$

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

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

$6 \times 6 = \square \rightarrow \boxed{\text{W}}$

$3 \times 2 = \square \rightarrow \boxed{\text{A}}$

$8 \times 8 = \square \rightarrow \boxed{\text{R}}$

$6 \times 11 = \square \rightarrow \boxed{\text{I}}$

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

$11 \times 7 = \square \rightarrow \boxed{\text{V}}$

$11 \times 2 = \square \rightarrow \boxed{\text{C}}$

$7 \times 2 = \square \rightarrow \boxed{\text{L}}$

Scratch space:

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

We have a pile of donuts to share equally among the judges. Dividing them up gives us 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:

$6 \div 2 = \boxed{}$

$10 \div 2 = \boxed{}$

$96 \div 12 = \boxed{}$

$4 \div 4 = \boxed{}$

$27 \div 3 = \boxed{}$

$30 \div 5 = \boxed{}$

$40 \div 4 = \boxed{}$

$44 \div 4 = \boxed{}$

$49 \div 7 = \boxed{}$

$108 \div 9 = \boxed{}$

$44 \div 11 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain crafted a huge blueberry tart, then drizzled salted caramel over it.
2. The villain baked a giant triple chocolate cake, then drizzled salted caramel over it.
3. The villain crafted a huge blueberry tart, then stirred in sweet vanilla.
4. The villain baked a giant triple chocolate cake, then stirred in sweet vanilla.
5. The villain fried a golden glazed donut, then folded in matcha powder.
6. The villain fried a golden glazed donut, then sprinkled spicy cinnamon everywhere.
7. The villain crafted a huge blueberry tart, then grated zesty lemon peels.
8. The villain decorated a frosted cupcake, then stirred in sweet vanilla.
9. The villain decorated a frosted cupcake, then drizzled salted caramel over it.
10. The villain baked a giant triple chocolate cake, then folded in matcha powder.
11. The villain crafted a huge blueberry tart, then sprinkled spicy cinnamon everywhere.
12. The villain crafted a huge blueberry tart, then folded in matcha powder.

Answer Key

The Great Baking Swindle

Culprit: Emeril Lagasse

Triple chocolate cake · Salted caramel · Right handed scooper · Cocoa powdered hair · Soggy bottom

Trail: Start 21 → Clue 1 16 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN DOES NOT USE ZESTY LEMON"

Round 9,120 to the nearest thousand = 9000 (T) · Round 2,019 to the nearest thousand = 2000 (D) · Round 903 to the nearest hundred = 900 (E) · Round 94 to the nearest ten = 90 (L) · Round 30 to the nearest ten = 30 (O) · Round 4,336 to the nearest hundred = 4300 (A) · Round 167 to the nearest hundred = 200 (V) · Round 5,215 to the nearest thousand = 5000 (U) · Round 2,877 to the nearest hundred = 2900 (M) · Round 703 to the nearest hundred = 700 (S) · Round 2,313 to the nearest hundred = 2300 (H) · Round 432 to the nearest ten = 430 (I) · Round 1,707 to the nearest hundred = 1700 (N) · Round 501 to the nearest hundred = 500 (Z) · Round 1,084 to the nearest hundred = 1100 (Y)

Clue 2 (Addition): "THE VILLAIN SCOOPS WITH THE RIGHT HAND"

$2706 + 3964 = 6670$ (T) · $1172 + 1819 = 2991$ (O) · $3291 + 1986 = 5277$ (I) · $5435 + 3987 = 9422$ (H) · $2722 + 3063 = 5785$ (R) · $1859 + 2500 = 4359$ (G) · $4156 + 4383 = 8539$ (V) · $1321 + 2358 = 3679$ (E) · $1648 + 713 = 2361$ (N) · $1931 + 884 = 2815$ (C) · $3013 + 6111 = 9124$ (W) · $6541 + 3180 = 9721$ (L) · $2359 + 1603 = 3962$ (D) · $2042 + 1929 = 3971$ (S) · $4483 + 2042 = 6525$ (P) · $6101 + 3224 = 9325$ (A)

Clue 3 (Subtraction): "THE VILLAIN HAS SOGGY BOTTOMS"

$7080 - 917 = 6163$ (T) · $7294 - 2785 = 4509$ (O) · $6373 - 3830 = 2543$ (A) · $11227 - 2803 = 8424$ (M) · $6867 - 1634 = 5233$ (G) · $4566 - 1973 = 2593$ (S) · $5618 - 359 = 5259$ (I) · $7142 - 413 = 6729$ (Y) · $13175 - 4747 = 8428$ (B) · $7142 - 2190 = 4952$ (L) · $8709 - 3088 = 5621$ (H) · $11716 - 4965 = 6751$ (N) · $7716 - 1609 = 6107$ (E) · $2115 - 1015 = 1100$ (V)

Clue 4 (Multiplication facts (1-12)): "THE VILLAIN HAS COCOA POWDERED HAIR"

$10 \times 8 = 80$ (T) · $11 \times 4 = 44$ (S) · $5 \times 6 = 30$ (E) · $6 \times 3 = 18$ (N) · $6 \times 4 = 24$ (H) · $11 \times 11 = 121$ (P) · $1 \times 4 = 4$ (D) · $6 \times 6 = 36$ (W) · $3 \times 2 = 6$ (A) · $8 \times 8 = 64$ (R) · $6 \times 11 = 66$ (I) · $5 \times 5 = 25$ (O) · $11 \times 7 = 77$ (V) · $11 \times 2 = 22$ (C) · $7 \times 2 = 14$ (L)

Clue 5 (Division facts (1-12)): surviving statement is box 2 → Emeril Lagasse

$6 \div 2 = 3$ · $10 \div 2 = 5$ · $96 \div 12 = 8$ · $4 \div 4 = 1$ · $27 \div 3 = 9$ · $30 \div 5 = 6$ · $40 \div 4 = 10$ · $44 \div 4 = 11$ · $49 \div 7 = 7$ · $108 \div 9 = 12$ · $44 \div 11 = 4$