The Case of the Missing Golden Gravy Boat

Grade 6 math · Addition, Multiplication, Subtraction, Word problems, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

Just hours before the annual Harvest Parade, the legendary Golden Gravy Boat disappeared from the feast hall! Without it, the grand dinner cannot begin. Detective clues were left behind around the kitchen and pantry. Solve the clues to identify the culprit before the feast gets cold!

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 Gravy Bandit is _____

Possible suspects

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

NAME	SPECIALTY DISH	KITCHEN TOOL	WRITING HAND	APRON COLOR	DISLIKED DISH
Stuffing Sam	Mashed Potatoes	Rolling Pin	Right Handed	Burgundy Apron	Pumpkin Pudding
Maize Mason	Roasted Turkey	Silver Whisk	Right Handed	Sage Apron	Cranberry Relish
Chef Pilgrim Pete	Cornbread Dressing	Rolling Pin	Right Handed	Amber Apron	Candied Yams
Governor William Bradford	Cornbread Dressing	Rolling Pin	Right Handed	Sage Apron	Candied Yams
Pie Penelope	Roasted Turkey	Roasting Pan	Right Handed	Burgundy Apron	Candied Yams
Gravy Gareth	Cornbread Dressing	Roasting Pan	Left Handed	Burgundy Apron	Cranberry Relish
Mayflower Mary	Pumpkin Pie	Carving Knife	Right Handed	Sage Apron	Cranberry Relish
Acorn Abigail	Roasted Turkey	Roasting Pan	Left Handed	Sage Apron	Cranberry Relish
Harvest Hank	Cornbread Dressing	Carving Knife	Right Handed	Amber Apron	Cranberry Relish
Cranberry Clara	Cornbread Dressing	Carving Knife	Right Handed	Sage Apron	Cranberry Relish
Squantum Scott	Cornbread Dressing	Silver Whisk	Left Handed	Sage Apron	Pumpkin Pudding
Farmer John Alden	Cranberry Sauce	Silver Whisk	Right Handed	Amber Apron	Cranberry Relish
Autumn Audrey	Cranberry Sauce	Silver Whisk	Left Handed	Amber Apron	Candied Yams
Gourd Gordon	Roasted Turkey	Rolling Pin	Left Handed	Sage Apron	Candied Yams
Pecan Paul	Roasted Turkey	Roasting Pan	Right Handed	Amber Apron	Candied Yams
Turkey Tina	Mashed Potatoes	Carving Knife	Left Handed	Burgundy Apron	Pumpkin Pudding
Feast Fiona	Cornbread Dressing	Roasting Pan	Right Handed	Amber Apron	Pumpkin Pudding
Gobbler Gabe	Mashed Potatoes	Carving Knife	Right Handed	Sage Apron	Pumpkin Pudding
Cider Cedric	Pumpkin Pie	Roasting Pan	Right Handed	Sage Apron	Candied Yams
Baker Priscilla Mullens	Mashed Potatoes	Silver Whisk	Right Handed	Sage Apron	Cranberry Relish
Yam Yvette	Cranberry Sauce	Gravy Ladle	Right Handed	Sage Apron	Cranberry Relish

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CLUE 1 Addition

> To discover who had access to the kitchen pantry, the assistant chef tallied the total number of ingredient crates delivered this morning.

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



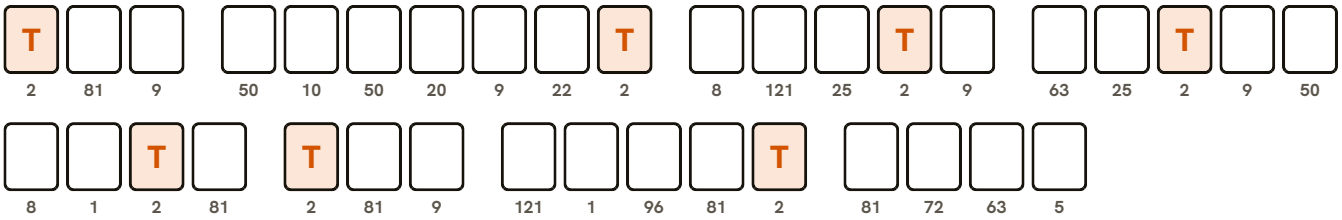
1530 + 1404 = ☐ → T	2443 + 4158 = ☐ → U	3131 + 4176 = ☐ → I
3697 + 3868 = ☐ → S	2290 + 4113 = ☐ → N	2900 + 4572 = ☐ → Y
2860 + 5827 = ☐ → L	4071 + 3670 = ☐ → O	2830 + 1289 = ☐ → E
6666 + 3173 = ☐ → G	4677 + 2890 = ☐ → H	5395 + 2369 = ☐ → R
2989 + 1385 = ☐ → V	4542 + 4035 = ☐ → A	3254 + 4255 = ☐ → D

Scratch space:

CLUE 2 Multiplication facts (1-12)

> The head baker counted the pie tins stored on equal shelves to calculate the total batch size before checking the ingredient logs.

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



1 × 2 = ☐ → T	12 × 8 = ☐ → G	1 × 8 = ☐ → W
5 × 10 = ☐ → S	11 × 11 = ☐ → R	5 × 5 = ☐ → O
1 × 1 = ☐ → I	2 × 11 = ☐ → C	12 × 6 = ☐ → A
9 × 7 = ☐ → N	5 × 4 = ☐ → P	5 × 1 = ☐ → D
2 × 5 = ☐ → U	9 × 9 = ☐ → H	
		1 × 9 = ☐ → E

Scratch space:

CLUE 3 Subtraction

> By taking the total count of dinner plates and subtracting the ones set on tables, the dining director spotted a missing stack.

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



6717 - 2288 = ☐ → T

12181 - 4169 = ☐ → L

9506 - 4790 = ☐ → Y

9950 - 1712 = ☐ → I

10482 - 3558 = ☐ → V

8564 - 4671 = ☐ → E

2095 - 678 = ☐ → A

9066 - 4501 = ☐ → S

7089 - 342 = ☐ → H

9274 - 4514 = ☐ → N

9147 - 155 = ☐ → K

9860 - 2474 = ☐ → D

2220 - 760 = ☐ → R

6555 - 1069 = ☐ → B

9082 - 2831 = ☐ → C

Scratch space:

CLUE 4 Word problems

> Detective Parker analyzed the timetable written on the flour sack to calculate when the intruder entered the pantry.

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

A strand of

S								N
94	90	33	14	90	45	15	30	

hair turned up at the scene.

Chef Plymouth found 66 cranberries yesterday and 28 more today. How many cranberries in all?

Answer: ☐ → **S**

Chef Plymouth found 27 pumpkin pies yesterday and 18 more today. How many pumpkin pies in all?

Answer: ☐ → **P**

Chef Plymouth found 25 ears of corn yesterday and 8 more today. How many ears of corn in all?

Answer: ☐ → **G**

Chef Plymouth lined up 3 rows of 5 dinner rolls. How many dinner rolls in all?

Answer: ☐ → **R**

There were 105 turkey legs. 15 were used up. How many turkey legs are left?

Answer: ☐ → **A**

Chef Plymouth lined up 6 rows of 5 pumpkin pies. How many pumpkin pies in all?

Answer: ☐ → **O**

Chef Plymouth lined up 2 rows of 7 ears of corn. How many ears of corn in all?

Answer: ☐ → **E**

Scratch space:

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

> The kitchen staff split the remaining turkey legs evenly among the serving trays to determine how many tables were covered.

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:

30 ÷ 10 = ☐ | 12 ÷ 12 = ☐ | 36 ÷ 3 = ☐ | 42 ÷ 6 = ☐ | 24 ÷ 3 = ☐

9 ÷ 1 = ☐ | 8 ÷ 2 = ☐ | 70 ÷ 7 = ☐ | 110 ÷ 10 = ☐ | 15 ÷ 3 = ☐

16 ÷ 8 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain mashed five sacks of spuds, then stirred soup with a silver whisk.
2. The villain carved the centerpiece roast, then sliced turkey with a carving knife.
3. The villain carved the centerpiece roast, then stirred soup with a silver whisk.
4. The villain baked warm golden cornbread, then stirred soup with a silver whisk.
5. The villain mashed five sacks of spuds, then rolled dough with a rolling pin.
6. The villain baked twenty pumpkin pies, then sliced turkey with a carving knife.
7. The villain carved the centerpiece roast, then rolled dough with a rolling pin.
8. The villain baked twenty pumpkin pies, then scrubbed the heavy roasting pan.
9. The villain carved the centerpiece roast, then scrubbed the heavy roasting pan.
10. The villain simmered sweet berry relish, then stirred soup with a silver whisk.
11. The villain baked twenty pumpkin pies, then scooped sauce with a gravy ladle.
12. The villain baked warm golden cornbread, then sliced turkey with a carving knife.

TEACHER / PARENT

Answer Key

The Case of the Missing Golden Gravy Boat

Culprit: Mayflower Mary

Pumpkin Pie · Carving Knife · Right Handed · Sage Apron · Cranberry Relish

Trail: Start 21 → Clue 1 20 → Clue 2 14 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DID NOT USE A GRAVY LADLE"

1530 + 1404 = 2934 (T) · 2443 + 4158 = 6601 (U) · 3131 + 4176 = 7307 (I) · 3697 + 3868 = 7565 (S) · 2290 + 4113 = 6403 (N) · 2900 + 4572 = 7472 (Y) · 2860 + 5827 = 8687 (L) · 4071 + 3670 = 7741 (O) · 2830 + 1289 = 4119 (E) · 6666 + 3173 = 9839 (G) · 4677 + 2890 = 7567 (H) · 5395 + 2369 = 7764 (R) · 2989 + 1385 = 4374 (V) · 4542 + 4035 = 8577 (A) · 3254 + 4255 = 7509 (D)

Clue 2 (Multiplication facts (1-12)): "THE SUSPECT WROTE NOTES WITH THE RIGHT HAND"

1 × 2 = 2 (T) · 12 × 8 = 96 (G) · 1 × 8 = 8 (W) · 5 × 10 = 50 (S) · 11 × 11 = 121 (R) · 5 × 5 = 25 (O) · 1 × 1 = 1 (I) · 2 × 11 = 22 (C) · 12 × 6 = 72 (A) · 9 × 7 = 63 (N) · 5 × 4 = 20 (P) · 5 × 1 = 5 (D) · 1 × 9 = 9 (E) · 2 × 5 = 10 (U) · 9 × 9 = 81 (H)

Clue 3 (Subtraction): "THE VILLAIN DISLIKES CRANBERRY RELISH"

6717 - 2288 = 4429 (T) · 12181 - 4169 = 8012 (L) · 9506 - 4790 = 4716 (Y) · 9950 - 1712 = 8238 (I) · 10482 - 3558 = 6924 (V) · 8564 - 4671 = 3893 (E) · 2095 - 678 = 1417 (A) · 9066 - 4501 = 4565 (S) · 7089 - 342 = 6747 (H) · 9274 - 4514 = 4760 (N) · 9147 - 155 = 8992 (K) · 9860 - 2474 = 7386 (D) · 2220 - 760 = 1460 (R) · 6555 - 1069 = 5486 (B) · 9082 - 2831 = 6251 (C)

Clue 4 (Word problems): "SAGE APRON"

Chef Plymouth found 66 cranberries yesterday and 28 more today. How many cranberries in all? = 94 (S) · Chef Plymouth found 27 pumpkin pies yesterday and 18 more today. How many pumpkin pies in all? = 45 (P) · Chef Plymouth found 25 ears of corn yesterday and 8 more today. How many ears of corn in all? = 33 (G) · Chef Plymouth lined up 3 rows of 5 dinner rolls. How many dinner rolls in all? = 15 (R) · There were 105 turkey legs. 15 were used up. How many turkey legs are left? = 90 (A) · Chef Plymouth lined up 6 rows of 5 pumpkin pies. How many pumpkin pies in all? = 30 (O) · Chef Plymouth lined up 2 rows of 7 ears of corn. How many ears of corn in all? = 14 (E)

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

30 ÷ 10 = 3 · 12 ÷ 12 = 1 · 36 ÷ 3 = 12 · 42 ÷ 6 = 7 · 24 ÷ 3 = 8 · 9 ÷ 1 = 9 · 8 ÷ 2 = 4 · 70 ÷ 7 = 10 · 110 ÷ 10 = 11 · 15 ÷ 3 = 5 · 16 ÷ 8 = 2