



The Poison Pizza Puzzle

Grade 5 math · Place value, Skip counting, Multiplication, Rounding, Division · Reading level grades 3-4

Detective: _____ Date: _____

Oh no! Someone is putting sleepy potion on Pepe's famous pizzas. The Chief Food Inspector ate a slice and fell fast asleep! The Crust Patrol needs your help. We must find the bad chef before lunch time.

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 Pizza Bandit is _____

Possible suspects

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

NAME	TOPPING TECHNIQUE	SECRET INGREDIENT	SLICING HAND	CHEF HAT STYLE	DISLIKED DRINK
Penny Pineapple	cheese melting	sour pickle juice	right handed cutter	paper soda cap	grape punch
Freddy Feta	soggy crusting	blue cheese crumble	right handed cutter	paper soda cap	grape punch
Bella Basil	pepperoni tossing	ghost pepper dust	left handed cutter	paper soda cap	grape punch
Wolfgang Wheat	anchovy spraying	sour pickle juice	right handed cutter	paper soda cap	grape punch
Luigi Linguine	garlic blasting	blue cheese crumble	right handed cutter	paper soda cap	pineapple soda
Rosa Rosemary	garlic blasting	sour pickle juice	right handed cutter	paper soda cap	grape punch
Mary Mozzarella	anchovy spraying	salty olive juice	right handed cutter	paper soda cap	grape punch
Wally Water	anchovy spraying	ghost pepper dust	right handed cutter	paper soda cap	cherry cola
Gordon Garlic	anchovy spraying	ghost pepper dust	left handed cutter	paper soda cap	cherry cola
Paulie Parmesan	soggy crusting	mustard drizzle	right handed cutter	spotted hairnet	grape punch
Guy Garlic	pepperoni tossing	mustard drizzle	left handed cutter	paper soda cap	cherry cola
Tony Tomato	garlic blasting	ghost pepper dust	right handed cutter	paper soda cap	cherry cola
Vicky Veggie	garlic blasting	salty olive juice	left handed cutter	tall white toque	pineapple soda
Sal Anchovy	soggy crusting	sour pickle juice	right handed cutter	tall white toque	grape punch
Julia Cheese	garlic blasting	mustard drizzle	right handed cutter	spotted hairnet	grape punch
Sammy Sauce	soggy crusting	mustard drizzle	left handed cutter	spotted hairnet	pineapple soda
Marco Meatball	garlic blasting	mustard drizzle	left handed cutter	paper soda cap	cherry cola
Chef Mario	anchovy spraying	blue cheese crumble	left handed cutter	spotted hairnet	grape punch
Bobby Basil	soggy crusting	mustard drizzle	right handed cutter	tall white toque	grape punch
Pete Pepperoni	garlic blasting	blue cheese crumble	left handed cutter	tall white toque	cherry cola
Olivia Olive	anchovy spraying	ghost pepper dust	left handed cutter	paper soda cap	pineapple soda

CLUE 1

We examine the delivery truck odometer to find the villain's getaway distance. Help us decode the digits.

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

The diagram illustrates the following number sequences:

- Top Row:**
 - Group 1: T, 1000, 9000, 20
 - Group 2: T, 900, 30, 80, 80, 600, 30, 70
 - Group 3: T, 2000, 800, 20, 5000
- Bottom Row:**
 - Group 4: T, 8000, 5000, 20
 - Group 5: T, 200, 80, 8000, 20
 - Group 6: T, 300, 9000, 20, 20, 5000, 20

What is the value of the 1 in 91,643?



What is the value of the 3 in 188,348?

A diagram illustrating a transformation. On the left is a rounded rectangle containing a question mark. An arrow points to the right, where there is a square containing the letter 'C'.

What is the value of the 3 in 129,831?

A diagram showing a transformation. On the left is a rectangle. An arrow points to the right, where there is a square containing a vertical line.

What is the value of the 8 in 930,849?

A diagram showing a transformation. On the left is a rectangle. An arrow points to the right, where there is a square containing a circle.

What is the value of the 7 in 88,873?



What is the value of the 9 in 857,971?

A diagram illustrating a transformation. On the left is a rounded rectangle containing a question mark. An arrow points to the right, where another rounded rectangle contains the letter 'V'.

What is the value of the 8 in 292,487?

A diagram showing a transition from an empty box to a box containing the letter L. The first box is empty, followed by a right-pointing arrow, and then a second box containing the letter 'L'.

What is the value of the 2 in 543,268?

A diagram showing a box with an arrow pointing to a box labeled B.

What is the value of the 5 in 415,224?

A diagram showing a transition from an empty box to a box containing the letter S. The first box is empty, followed by a right-pointing arrow, and then a box containing the letter S.

What is the value of the 2 in 35,323?

A diagram showing a box with a question mark pointing to a box with the letter E.

What is the value of the 9 in 679,285?

A diagram illustrating a transition. On the left is an empty rounded rectangle. An arrow points to the right, where there is a rounded rectangle containing the letter 'H'.

What is the value of the 6 in 99,613?

A diagram illustrating a transition. On the left is a rounded rectangle. An arrow points from this rectangle to another rounded rectangle on the right. The second rectangle contains the letter 'A'.

What is the value of the 8 in 98,943?

A diagram illustrating a transformation. On the left is a simple rectangular box. An arrow points from this box to a second box on the right. The second box contains the letter 'U'.

What is the value of the 2 in 92,739?

A diagram showing a transition. On the left is a simple rectangular box. An arrow points from this box to a second box on the right. The second box is identical in shape but has a thick border and contains the letter 'D' in a bold, black, sans-serif font.

Scratch space:

CLUE 2

We need to count the spilled pepperoni slices on the floor. They are arranged in patterns.

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

A 2x10 grid of boxes. The top row contains the numbers 65, 39, 100, 120, 36, 100, 40, 140, 24, 28, 39, 100, 60, 28, 33, 65, 120. The bottom row contains the numbers 21, 18, 65, 39, 65, 39, 100, 18, 27, 27, 18, 22, 39, 65, 39, 40, 36, 90. In the top row, the box containing 65 is highlighted with an orange border and an orange 'T' inside. In the bottom row, the boxes containing 65 (at index 3) and 65 (at index 5) are highlighted with an orange border and an orange 'T' inside.

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 → **T**

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, __, 65, 70 → **F**

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, __, 20, 22 →

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, , 27, 30 → **Y**

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

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, , 24, 27 → **W**

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

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

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

Skip-count by 10s. Fill the blank: 10, 20, 30, __, 50, 60 → **A**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 → **C**

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

Scratch space:

CLUE 3

Multiplication facts (1-12)

The bakery has rows of dough trays stacked high. We must multiply the columns to find the total.

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

T																
5	22	30	21	99	27	14	28	7	25	28	44	48	35	25	64	90
14	25	99	45	30	45	28	44	100	22							

$1 \times 5 = \square \rightarrow \text{[T]}$

$7 \times 4 = \square \rightarrow \text{[U]}$

$5 \times 9 = \square \rightarrow \text{[P]}$

$9 \times 11 = \square \rightarrow \text{[A]}$

$3 \times 7 = \square \rightarrow \text{[B]}$

$10 \times 10 = \square \rightarrow \text{[C]}$

$7 \times 2 = \square \rightarrow \text{[G]}$

$10 \times 9 = \square \rightarrow \text{[M]}$

$4 \times 11 = \square \rightarrow \text{[N]}$

$11 \times 2 = \square \rightarrow \text{[H]}$

$8 \times 8 = \square \rightarrow \text{[O]}$

$5 \times 5 = \square \rightarrow \text{[R]}$

$7 \times 5 = \square \rightarrow \text{[F]}$

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

$3 \times 9 = \square \rightarrow \text{[D]}$

$12 \times 4 = \square \rightarrow \text{[S]}$

$1 \times 7 = \square \rightarrow \text{[Y]}$

Scratch space:

CLUE 4 Rounding

The kitchen scale only shows weights rounded to the nearest ten. Round the pizza weight to get a clue.

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

A		A							A		A			A	
170	3700	170	3700	900	3000	90	1300	4300	170	2900	170	3700	50	170	90
9000	1300	5000	1700	4300	370	1700	20	230	900	4300	1300	5000	430	230	

Round 167 to the nearest ten → **A**

Round 3,711 to the nearest hundred → **P**

Round 93 to the nearest ten → **S**

Round 4,298 to the nearest hundred → **D**

Round 877 to the nearest hundred → **E**

Round 233 to the nearest ten → **H**

Round 23 to the nearest ten → **T**

Round 48 to the nearest ten → **W**

Round 1,728 to the nearest hundred → **N**

Round 4,802 to the nearest thousand → **U**

Round 367 to the nearest ten → **I**

Round 1,311 to the nearest hundred → **O**

Round 3,487 to the nearest thousand → **R**

Round 9,052 to the nearest thousand → **F**

Round 2,949 to the nearest hundred → **C**

Round 430 to the nearest ten → **G**

Scratch space:

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

We must share the remaining garlic knots equally among the deputies to keep up our energy.

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:

$70 \div 7 = \boxed{}$

$18 \div 3 = \boxed{}$

$72 \div 9 = \boxed{}$

$7 \div 7 = \boxed{}$

$30 \div 6 = \boxed{}$

$121 \div 11 = \boxed{}$

$6 \div 3 = \boxed{}$

$9 \div 1 = \boxed{}$

$14 \div 2 = \boxed{}$

$60 \div 5 = \boxed{}$

$32 \div 8 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain sprays smelly garlic juice, then pours salty olive juice.
2. The villain sprays smelly garlic juice, then drizzles bright yellow mustard.
3. The villain melts sticky hot cheese, then splashes sour pickle juice.
4. The villain throws sharp pepperoni slices, then drizzles bright yellow mustard.
5. The villain makes the pizza crust soggy, then splashes sour pickle juice.
6. The villain sprays smelly garlic juice, then splashes sour pickle juice.
7. The villain makes the pizza crust soggy, then drizzles bright yellow mustard.
8. The villain shoots salty anchovies, then splashes sour pickle juice.
9. The villain melts sticky hot cheese, then pours salty olive juice.
10. The villain shoots salty anchovies, then pours salty olive juice.
11. The villain sprays smelly garlic juice, then drops smelly blue cheese crumble.
12. The villain throws sharp pepperoni slices, then drops smelly blue cheese crumble.

Answer Key

The Poison Pizza Puzzle

Culprit: Penny Pineapple

cheese melting · sour pickle juice · right handed cutter · paper soda cap · grape punch

Trail: Start 21 → Clue 1 17 → Clue 2 10 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT USE BLUE CHEESE"

What is the value of the 1 in 91,643? = 1000 (T) · What is the value of the 3 in 188,348? = 300 (C) · What is the value of the 3 in 129,831? = 30 (I) · What is the value of the 8 in 930,849? = 800 (O) · What is the value of the 7 in 88,873? = 70 (N) · What is the value of the 9 in 857,971? = 900 (V) · What is the value of the 8 in 292,487? = 80 (L) · What is the value of the 2 in 543,268? = 200 (B) · What is the value of the 5 in 415,224? = 5000 (S) · What is the value of the 2 in 35,323? = 20 (E) · What is the value of the 9 in 679,285? = 9000 (H) · What is the value of the 6 in 99,613? = 600 (A) · What is the value of the 8 in 98,943? = 8000 (U) · What is the value of the 2 in 92,739? = 2000 (D)

Clue 2 (Skip counting): "THE SNEAKY CHEF CUTS WITH THEIR RIGHT HAND"

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 = 65 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (E) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 = 22 (G) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, __, 65, 70 = 60 (F) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 = 33 (U) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, __, 20, 22 = 18 (I) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, __, 27, 30 = 24 (Y) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (D) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 = 27 (R) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 = 21 (W) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 = 120 (S) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 = 36 (N) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 = 140 (K) · Skip-count by 10s. Fill the blank: 10, 20, 30, __, 50, 60 = 40 (A) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 = 28 (C) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (H)

Clue 3 (Multiplication facts (1-12)): "THE BAD GUY RUNS FROM GRAPE PUNCH"

$1 \times 5 = 5$ (T) · $7 \times 4 = 28$ (U) · $5 \times 9 = 45$ (P) · $9 \times 11 = 99$ (A) · $3 \times 7 = 21$ (B) · $10 \times 10 = 100$ (C) · $7 \times 2 = 14$ (G) · $10 \times 9 = 90$ (M) · $4 \times 11 = 44$ (N) · $11 \times 2 = 22$ (H) · $8 \times 8 = 64$ (O) · $5 \times 5 = 25$ (R) · $7 \times 5 = 35$ (F) · $10 \times 3 = 30$ (E) · $3 \times 9 = 27$ (D) · $12 \times 4 = 48$ (S) · $1 \times 7 = 7$ (Y)

Clue 4 (Rounding): "A PAPER SODA CAP WAS FOUND IN THE DOUGH"

Round 167 to the nearest ten = 170 (A) · Round 3,711 to the nearest hundred = 3700 (P) · Round 93 to the nearest ten = 90 (S) · Round 4,298 to the nearest hundred = 4300 (D) · Round 877 to the nearest hundred = 900 (E) · Round 233 to the nearest ten = 230 (H) · Round 23 to the nearest ten = 20 (T) · Round 48 to the nearest ten = 50 (W) · Round 1,728 to the nearest hundred = 1700 (N) · Round 4,802 to the nearest thousand = 5000 (U) · Round 367 to the nearest ten = 370 (I) · Round 1,311 to the nearest hundred = 1300 (O) · Round 3,487 to the nearest thousand = 3000 (R) · Round 9,052 to the nearest thousand = 9000 (F) · Round 2,949 to the nearest hundred = 2900 (C) · Round 430 to the nearest ten = 430 (G)

Clue 5 (Division facts (1-12)): surviving statement is box 3 → Penny Pineapple

$70 \div 7 = 10$ · $18 \div 3 = 6$ · $72 \div 9 = 8$ · $7 \div 7 = 1$ · $30 \div 6 = 5$ · $121 \div 11 = 11$ · $6 \div 3 = 2$ · $9 \div 1 = 9$ · $14 \div 2 = 7$ · $60 \div 5 = 12$ · $32 \div 8 = 4$