



The Great Gelatinia Heist

Grade 6 math · Addition, Subtraction, Percentages, Exponents, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

The kingdom of Gelatinia is in a sticky situation! Someone has broken into the royal vaults and made off with the Golden Spatula of Wobble. The Chief Gelatin Chef needs your help to track down the culprit before the grand feast ruins.

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 Jelly Thief is _____

Possible suspects

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

NAME	JELLY FLAVOR POWER	SPECIAL GEAR	STIRRING HAND	TOPPING STYLE	MELTING THREAT
Spread	Strawberry Slinger	Whipped Cream Sprayer	Left Handed Stirrer	Gummy Sprinkles	Salt Sprinkling
Berry	Blueberry Bouncer	Spoon Launcher	Right Handed Stirrer	Gummy Sprinkles	Salt Sprinkling
Pectin	Strawberry Slinger	Spoon Launcher	Right Handed Stirrer	Sugar Crystals	Salt Sprinkling
Wobbletop	Orange Oozer	Peanut Butter Jetpack	Right Handed Stirrer	Sugar Crystals	Salt Sprinkling
Smucker	Orange Oozer	Spoon Launcher	Right Handed Stirrer	Sugar Crystals	Cold Ice
Marmalade	Lime Leaper	Toast Shield	Right Handed Stirrer	Sugar Crystals	Salt Sprinkling
Wobster	Orange Oozer	Whipped Cream Sprayer	Left Handed Stirrer	Sugar Crystals	Salt Sprinkling
Gel	Lime Leaper	Whipped Cream Sprayer	Right Handed Stirrer	Mint Leaves	Hot Tea
Gelato	Strawberry Slinger	Peanut Butter Jetpack	Right Handed Stirrer	Gummy Sprinkles	Cold Ice
Spooner	Orange Oozer	Peanut Butter Jetpack	Right Handed Stirrer	Mint Leaves	Hot Tea
Wobbles	Orange Oozer	Peanut Butter Jetpack	Left Handed Stirrer	Mint Leaves	Cold Ice
Jarvis	Lime Leaper	Peanut Butter Jetpack	Left Handed Stirrer	Mint Leaves	Cold Ice
Gellie	Lime Leaper	Whipped Cream Sprayer	Right Handed Stirrer	Sugar Crystals	Salt Sprinkling
Jiggly	Orange Oozer	Spoon Launcher	Right Handed Stirrer	Mint Leaves	Hot Tea
Toastie	Orange Oozer	Spoon Launcher	Left Handed Stirrer	Sugar Crystals	Cold Ice
Squeeze	Strawberry Slinger	Peanut Butter Jetpack	Right Handed Stirrer	Mint Leaves	Salt Sprinkling
Squish	Lime Leaper	Whipped Cream Sprayer	Right Handed Stirrer	Mint Leaves	Salt Sprinkling
Agar	Grape Glider	Toast Shield	Right Handed Stirrer	Mint Leaves	Salt Sprinkling
Jiggleton	Lime Leaper	Whipped Cream Sprayer	Left Handed Stirrer	Mint Leaves	Cold Ice
Preserves	Orange Oozer	Spoon Launcher	Right Handed Stirrer	Sugar Crystals	Salt Sprinkling
Jammy	Lime Leaper	Peanut Butter Jetpack	Left Handed Stirrer	Sugar Crystals	Salt Sprinkling

CLUE 1

Our helpers count the spilled jelly jars in the pantry. Add up the broken jars to find the first clue.

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

Diagram illustrating a sequence of numbers (likely a list or array) with some elements highlighted in orange, indicating they are 'true' or 'known' values.

Row 1 (Top):

- 4644 (True)
- 5961
- 6705
- 4644 (True)
- 5961
- 5730
- 6705
- 8388
- 4870
- 7223
- 6705
- 9457
- 4718
- 7223
- 4644 (True)
- 8244
- 9457
- 6705

Row 2 (Bottom):

- 9840
- 5961
- 5730
- 7777
- 7777
- 6705
- 4870
- 7991
- 2597
- 6705
- 6021
- 8220

$$1522 + 3122 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$3671 + 2059 = \boxed{} \rightarrow \boxed{\text{I}}$$

$$2775 + 4448 = \boxed{} \rightarrow \boxed{0}$$

$$4368 + 5472 = \boxed{} \rightarrow \boxed{\text{W}}$$

$$3028 + 5192 = \boxed{} \rightarrow \boxed{\text{M}}$$

$$5277 + 2967 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$3162 + 3543 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$1695 + 902 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$3031 + 2990 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$5243 + 3145 = \boxed{} \rightarrow \boxed{\text{F}}$$

$$3910 + 5547 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$3915 + 3862 = \boxed{} \rightarrow \boxed{\text{P}}$$

$$2906 + 3055 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$1972 + 2898 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$2936 + 1782 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$2732 + 5259 = \boxed{} \rightarrow \boxed{\text{C}}$$

Scratch space:

CLUE 2

Subtraction

The bakery was looted of its fresh jam rolls. Subtract the eaten rolls from the oven sheet to uncover the next lead.

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

T																			
7691	6372	5127	3052	7032	3814	3814	4215	7032	4984	1009	4215	7691	3052	3052	6372	3814	8770	6817	

4984	1009	3911	6372	7691	6372	6817	4215	1344	5127	1344	3911	4984	1009	7032					

$12127 - 4436 = \square \rightarrow \text{T}$

$8945 - 3961 = \square \rightarrow \text{R}$

$6073 - 946 = \square \rightarrow \text{E}$

$6137 - 2323 = \square \rightarrow \text{O}$

$7256 - 439 = \square \rightarrow \text{A}$

$3983 - 2639 = \square \rightarrow \text{D}$

$10021 - 1251 = \square \rightarrow \text{W}$

$4622 - 711 = \square \rightarrow \text{G}$

$11166 - 4794 = \square \rightarrow \text{H}$

$6616 - 2401 = \square \rightarrow \text{N}$

$6161 - 3109 = \square \rightarrow \text{S}$

$9329 - 2297 = \square \rightarrow \text{P}$

$3108 - 2099 = \square \rightarrow \text{I}$

Scratch space:

CLUE 3 Percentages

We need to mix the anti-stick spray with exactly the right percent of water. Calculate the percentage to unlock this evidence.

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

S				S									S
42	41	31	10	42	18	15	40	21	39	31	16	42	

		S	S							S									
26	40	42	42	23	31	14	16	10	32	16	42	10	40	37	39	24	28	23	23

60% of 70 = → S	25% of 148 = → C	5% of 480 = → Y
75% of 52 = → K	25% of 40 = → T	40% of 45 = → P
5% of 520 = → D	5% of 620 = → L	60% of 35 = → N
50% of 64 = → H	40% of 40 = → E	25% of 60 = → R
40% of 100 = → I	20% of 115 = → O	25% of 56 = → V
10% of 410 = → A	25% of 112 = → G	

Scratch space:

CLUE 4 Exponents

The sticky residue multiplies fast in power-of-two batches. Calculate the exponent growth to read the next clue.

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

S								S				S				
81	8	343	128	169	243	169	100	81	121	128	49	81	256	144	169	144
												S				
4	169	32	289	289	144	4	128	121	121	9	144	81	243	144	400	144

$9^2 = \square \rightarrow$ S	$7^3 = \square \rightarrow$ G	$16^2 = \square \rightarrow$ W	$20^2 = \square \rightarrow$ N
$7^2 = \square \rightarrow$ L	$17^2 = \square \rightarrow$ P	$2^5 = \square \rightarrow$ O	$2^2 = \square \rightarrow$ D
$2^3 = \square \rightarrow$ U	$13^2 = \square \rightarrow$ R	$2^7 = \square \rightarrow$ A	$3^2 = \square \rightarrow$ H
$12^2 = \square \rightarrow$ E	$3^5 = \square \rightarrow$ C	$10^2 = \square \rightarrow$ Y	$11^2 = \square \rightarrow$ T

Scratch space:

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

The Royal Guard must divide the remaining gelatin powder equally among the team. Divide the boxes to solve the mystery.

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:

$27 \div 9 = \boxed{}$

$72 \div 9 = \boxed{}$

$10 \div 10 = \boxed{}$

$18 \div 2 = \boxed{}$

$72 \div 6 = \boxed{}$

$32 \div 8 = \boxed{}$

$25 \div 5 = \boxed{}$

$21 \div 3 = \boxed{}$

$55 \div 5 = \boxed{}$

$4 \div 2 = \boxed{}$

$6 \div 1 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain squeezes through the jar neck, then knocks over the sugar bowl.
2. The villain squeezes through the jar neck, then eats the royal strawberries.
3. The villain rolls down the marmalade hill, then snatches the recipe book.
4. The villain splats across the pantry floor, then steals the golden whisk.
5. The villain bounces off the pudding pad, then knocks over the sugar bowl.
6. The villain slides down the jam chute, then steals the golden whisk.
7. The villain slides down the jam chute, then knocks over the sugar bowl.
8. The villain rolls down the marmalade hill, then sticky-prints the glass case.
9. The villain bounces off the pudding pad, then snatches the recipe book.
10. The villain bounces off the pudding pad, then sticky-prints the glass case.
11. The villain squeezes through the jar neck, then sticky-prints the glass case.
12. The villain rolls down the marmalade hill, then eats the royal strawberries.

Answer Key

The Great Gelatinia Heist

Culprit: Pectin

Strawberry Slinger · Spoon Launcher · Right Handed Stirrer · Sugar Crystals · Salt Sprinkling

Trail: Start 21 → Clue 1 15 → Clue 2 11 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE THIEF DOES NOT USE WHIPPED CREAM"

1522 + 3122 = 4644 (T) · 3671 + 2059 = 5730 (I) · 2775 + 4448 = 7223 (O) · 4368 + 5472 = 9840 (W) · 3028 + 5192 = 8220 (M) · 5277 + 2967 = 8244 (U) · 3162 + 3543 = 6705 (E) · 1695 + 902 = 2597 (R) · 3031 + 2990 = 6021 (A) · 5243 + 3145 = 8388 (F) · 3910 + 5547 = 9457 (S) · 3915 + 3862 = 7777 (P) · 2906 + 3055 = 5961 (H) · 1972 + 2898 = 4870 (D) · 2936 + 1782 = 4718 (N) · 2732 + 5259 = 7991 (C)

Clue 2 (Subtraction): "THE SPOON PRINTS SHOW A RIGHT HANDED GRIP"

12127 - 4436 = 7691 (T) · 8945 - 3961 = 4984 (R) · 6073 - 946 = 5127 (E) · 6137 - 2323 = 3814 (O) · 7256 - 439 = 6817 (A) · 3983 - 2639 = 1344 (D) · 10021 - 1251 = 8770 (W) · 4622 - 711 = 3911 (G) · 11166 - 4794 = 6372 (H) · 6616 - 2401 = 4215 (N) · 6161 - 3109 = 3052 (S) · 9329 - 2297 = 7032 (P) · 3108 - 2099 = 1009 (I)

Clue 3 (Percentages): "SALT SPRINKLES DISSOLVE THE STICKY GOO"

60% of 70 = 42 (S) · 25% of 148 = 37 (C) · 5% of 480 = 24 (Y) · 75% of 52 = 39 (K) · 25% of 40 = 10 (T) · 40% of 45 = 18 (P) · 5% of 520 = 26 (D) · 5% of 620 = 31 (L) · 60% of 35 = 21 (N) · 50% of 64 = 32 (H) · 40% of 40 = 16 (E) · 25% of 60 = 15 (R) · 40% of 100 = 40 (I) · 20% of 115 = 23 (O) · 25% of 56 = 14 (V) · 10% of 410 = 41 (A) · 25% of 112 = 28 (G)

Clue 4 (Exponents): "SUGAR CRYSTALS WERE DROPPED AT THE SCENE"

$9^2 = 81$ (S) · $7^3 = 343$ (G) · $16^2 = 256$ (W) · $20^2 = 400$ (N) · $7^2 = 49$ (L) · $17^2 = 289$ (P) · $2^5 = 32$ (O) · $2^2 = 4$ (D) · $2^3 = 8$ (U) · $13^2 = 169$ (R) · $2^7 = 128$ (A) · $3^2 = 9$ (H) · $12^2 = 144$ (E) · $3^5 = 243$ (C) · $10^2 = 100$ (Y) · $11^2 = 121$ (T)

Clue 5 (Division facts (1-12)): surviving statement is box 10 → Pectin

$27 \div 9 = 3$ · $72 \div 9 = 8$ · $10 \div 10 = 1$ · $18 \div 2 = 9$ · $72 \div 6 = 12$ · $32 \div 8 = 4$ · $25 \div 5 = 5$ · $21 \div 3 = 7$ · $55 \div 5 = 11$ · $4 \div 2 = 2$ · $6 \div 1 = 6$