



The Case of the Missing Catnip Treats

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

Detective: _____ Date: _____

The Halloween Pumpkin Festival at Whisker Hollow was going great until the giant batch of glowing catnip treats vanished! Detective Whiskers needs your help to decode clues and find the sneaky feline culprit.

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 Pumpkin Bandit is _____

Possible suspects

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

NAME	MAGIC TRICK	COSTUME ACCESSORY	PAW PREFERENCE	FUR COLOR	DISTRACTION
Cleo Moon	Pumpkin Glide	Bat Wings	Left Paws	Calico Fur	Crinkly Paper
Simba Night	Ghost Whistle	Pumpkin Mask	Right Paws	Black Fur	Crinkly Paper
Barnaby Whiskers	Shadow Leap	Ghost Cape	Right Paws	Calico Fur	Laser Pointer
Leo Shadow	Pumpkin Glide	Witch Hat	Right Paws	Black Fur	Crinkly Paper
Felix Blackwood	Glow Stare	Pumpkin Mask	Right Paws	Calico Fur	Crinkly Paper
Hazel Claw	Shadow Leap	Pumpkin Mask	Left Paws	Orange Fur	Crinkly Paper
Mochi Dusk	Glow Stare	Witch Hat	Left Paws	Black Fur	Squeaky Mouse
Shadow Paws	Shadow Leap	Witch Hat	Left Paws	Calico Fur	Squeaky Mouse
Ziggy Bat	Pumpkin Glide	Ghost Cape	Right Paws	Calico Fur	Laser Pointer
Archie Fang	Shadow Leap	Ghost Cape	Left Paws	Orange Fur	Crinkly Paper
Ruby Spook	Shadow Leap	Ghost Cape	Left Paws	Orange Fur	Squeaky Mouse
Otis Bramble	Ghost Whistle	Ghost Cape	Right Paws	Calico Fur	Crinkly Paper
Pepper Fog	Pumpkin Glide	Bat Wings	Left Paws	Orange Fur	Crinkly Paper
Oliver Pumpkin	Bat Flutter	Pumpkin Mask	Right Paws	Calico Fur	Crinkly Paper
Gizmo Ghoul	Pumpkin Glide	Ghost Cape	Right Paws	Calico Fur	Crinkly Paper
Bella Lantern	Ghost Whistle	Pumpkin Mask	Left Paws	Calico Fur	Crinkly Paper
Nala Midnight	Bat Flutter	Spider Cap	Right Paws	Calico Fur	Crinkly Paper
Luna Cobweb	Shadow Leap	Witch Hat	Left Paws	Black Fur	Crinkly Paper
Penny Cauldron	Bat Flutter	Bat Wings	Right Paws	Orange Fur	Squeaky Mouse
Chloe Phantom	Glow Stare	Ghost Cape	Left Paws	Calico Fur	Squeaky Mouse
Jasper Broom	Shadow Leap	Spider Cap	Right Paws	Calico Fur	Laser Pointer

CLUE 1 Place value

A code wheel on the bakery door uses digit place values to unlock clue one.

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

T															
700	80	600	20	2000	600	90	500	1000	300	50	60	60	90	50	2000

2000	600	300	600	400	8000	600	90	400	20	90	20	7000	50	900	600	400

3000	90	7000

What is the value of the 7 in 761? → **T**

What is the value of the 9 in 984? → **D**

What is the value of the 9 in 5,392? → **A**

What is the value of the 2 in 4,620? → **S**

What is the value of the 5 in 4,566? → **K**

What is the value of the 6 in 9,069? → **L**

What is the value of the 8 in 7,986? → **H**

What is the value of the 1 in 1,808? → **Y**

What is the value of the 2 in 2,069? → **N**

What is the value of the 4 in 479? → **R**

What is the value of the 6 in 633? → **E**

What is the value of the 8 in 8,761? → **W**

What is the value of the 5 in 1,356? → **I**

What is the value of the 3 in 362? → **V**

What is the value of the 7 in 87,852? → **P**

What is the value of the 3 in 3,967? → **C**

Scratch space:

CLUE 2 Addition

Detective Whiskers totals up all dropped treats along the spooky trail to find clue two.

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

T															
2291	2988	2803	4156	9544	8339	8339	8359	9544	3554	3761	3554	8339	8081		
	T								T					T	
3011	2291	7402	9544	5294	2803	3011	2388	9544	2291	2988	7402	9544	8490	2988	2291

$921 + 1370 = \square \rightarrow$ T	$4182 + 4157 = \square \rightarrow$ L	$3274 + 2020 = \square \rightarrow$ K
$1339 + 1649 = \square \rightarrow$ H	$2299 + 1857 = \square \rightarrow$ V	$3134 + 6410 = \square \rightarrow$ I
$1878 + 1133 = \square \rightarrow$ S	$3999 + 3403 = \square \rightarrow$ R	$1252 + 1551 = \square \rightarrow$ E
$5582 + 2777 = \square \rightarrow$ A	$1159 + 2395 = \square \rightarrow$ N	$1678 + 2083 = \square \rightarrow$ O
$1461 + 927 = \square \rightarrow$ W	$4793 + 3411 = \square \rightarrow$ P	$3459 + 4622 = \square \rightarrow$ Y
$4143 + 4347 = \square \rightarrow$ G		

Scratch space:

CLUE 3
Subtraction

Comparing the pumpkin count before and after the commotion reveals clue three.

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

T						T		T											
1136	5080	3417	5761	4150	6476	1136	5761	1136	4933	4952	5761	4589	5884	5761	5080	3417	6779	2421	

	T													
6476	1136	4150	4589	3417	6779	8302	1642	8402	4952	6476	4952	7302	4589	

$3892 - 2756 = \square \rightarrow \boxed{\text{T}}$

$5957 - 1005 = \square \rightarrow \boxed{\text{P}}$

$9856 - 1454 = \square \rightarrow \boxed{\text{Y}}$

$10104 - 1802 = \square \rightarrow \boxed{\text{K}}$

$5381 - 1964 = \square \rightarrow \boxed{\text{I}}$

$7372 - 4951 = \square \rightarrow \boxed{\text{G}}$

$10275 - 2973 = \square \rightarrow \boxed{\text{E}}$

$10456 - 4695 = \square \rightarrow \boxed{\text{S}}$

$6463 - 1383 = \square \rightarrow \boxed{\text{H}}$

$5371 - 1221 = \square \rightarrow \boxed{\text{C}}$

$8274 - 1495 = \square \rightarrow \boxed{\text{N}}$

$5042 - 109 = \square \rightarrow \boxed{\text{O}}$

$5746 - 4104 = \square \rightarrow \boxed{\text{L}}$

$9584 - 3108 = \square \rightarrow \boxed{\text{A}}$

$8753 - 2869 = \square \rightarrow \boxed{\text{U}}$

$5428 - 839 = \square \rightarrow \boxed{\text{R}}$

Scratch space:

CLUE 4
Rounding

The automated scanner on the festival scoreboard rounds up fur counts to uncover clue four.

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

T																	
2000	430	70	7000	900	70	3700	70	430	90	7000	90	7000	2000	5000	90	3700	20

3000	50	900	90	700	230	900	3000	50	2300	5000

Round 2,463 to the nearest thousand

→ **T**

Round 46 to the nearest ten

→ **F**

Round 73 to the nearest ten

→ **E**

Round 17 to the nearest ten

→ **D**

Round 432 to the nearest ten

→ **H**

Round 91 to the nearest ten

→ **A**

Round 919 to the nearest hundred

→ **C**

Round 6,613 to the nearest thousand

→ **S**

Round 748 to the nearest hundred

→ **L**

Round 2,302 to the nearest hundred

→ **U**

Round 3,730 to the nearest hundred

→ **N**

Round 2,538 to the nearest thousand

→ **O**

Round 233 to the nearest ten

→ **I**

Round 4,970 to the nearest thousand

→ **R**

Scratch space:

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

Splitting the remaining catnip treats equally among the helper kittens unveils clue five.

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:

$9 \div 9 = \boxed{}$

$25 \div 5 = \boxed{}$

$44 \div 4 = \boxed{}$

$44 \div 11 = \boxed{}$

$14 \div 2 = \boxed{}$

$80 \div 8 = \boxed{}$

$24 \div 2 = \boxed{}$

$99 \div 11 = \boxed{}$

$54 \div 9 = \boxed{}$

$24 \div 12 = \boxed{}$

$96 \div 12 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain stared with a green glow, then put on a pumpkin mask.
2. The villain blew a ghost whistle, then fixed a spider cap.
3. The villain glided on a pumpkin, then swished a ghost cape.
4. The villain blew a ghost whistle, then put on a pumpkin mask.
5. The villain fluttered like a bat, then put on a pumpkin mask.
6. The villain glided on a pumpkin, then flapped bat wings.
7. The villain blew a ghost whistle, then adjusted a witch hat.
8. The villain fluttered like a bat, then flapped bat wings.
9. The villain fluttered like a bat, then fixed a spider cap.
10. The villain glided on a pumpkin, then adjusted a witch hat.
11. The villain blew a ghost whistle, then swished a ghost cape.
12. The villain leaped through shadows, then fixed a spider cap.

Answer Key

The Case of the Missing Catnip Treats

Culprit: Gizmo Ghoul

Pumpkin Glide · Ghost Cape · Right Paws · Calico Fur · Crinkly Paper

Trail: Start 21 → Clue 1 19 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE SNEAKY VILLAIN NEVER WEARS A SPIDER CAP"

What is the value of the 7 in 761? = 700 (T) · What is the value of the 9 in 984? = 900 (D) · What is the value of the 9 in 5,392? = 90 (A) · What is the value of the 2 in 4,620? = 20 (S) · What is the value of the 5 in 4,566? = 500 (K) · What is the value of the 6 in 9,069? = 60 (L) · What is the value of the 8 in 7,986? = 80 (H) · What is the value of the 1 in 1,808? = 1000 (Y) · What is the value of the 2 in 2,069? = 2000 (N) · What is the value of the 4 in 479? = 400 (R) · What is the value of the 6 in 633? = 600 (E) · What is the value of the 8 in 8,761? = 8000 (W) · What is the value of the 5 in 1,356? = 50 (I) · What is the value of the 3 in 362? = 300 (V) · What is the value of the 7 in 87,852? = 7000 (P) · What is the value of the 3 in 3,967? = 3000 (C)

Clue 2 (Addition): "THE VILLAIN ONLY STRIKES WITH RIGHT PAWS"

$921 + 1370 = 2291$ (T) · $4182 + 4157 = 8339$ (L) · $3274 + 2020 = 5294$ (K) · $1339 + 1649 = 2988$ (H) · $2299 + 1857 = 4156$ (V) · $3134 + 6410 = 9544$ (I) · $1878 + 1133 = 3011$ (S) · $3999 + 3403 = 7402$ (R) · $1252 + 1551 = 2803$ (E) · $5582 + 2777 = 8359$ (A) · $1159 + 2395 = 3554$ (N) · $1678 + 2083 = 3761$ (O) · $1461 + 927 = 2388$ (W) · $4793 + 3411 = 8204$ (P) · $3459 + 4622 = 8081$ (Y) · $4143 + 4347 = 8490$ (G)

Clue 3 (Subtraction): "THIS CAT STOPS RUSHING AT CRINKLY PAPER"

$3892 - 2756 = 1136$ (T) · $5957 - 1005 = 4952$ (P) · $9856 - 1454 = 8402$ (Y) · $10104 - 1802 = 8302$ (K) · $5381 - 1964 = 3417$ (I) · $7372 - 4951 = 2421$ (G) · $10275 - 2973 = 7302$ (E) · $10456 - 4695 = 5761$ (S) · $6463 - 1383 = 5080$ (H) · $5371 - 1221 = 4150$ (C) · $8274 - 1495 = 6779$ (N) · $5042 - 109 = 4933$ (O) · $5746 - 4104 = 1642$ (L) · $9584 - 3108 = 6476$ (A) · $8753 - 2869 = 5884$ (U) · $5428 - 839 = 4589$ (R)

Clue 4 (Rounding): "THE SCENE HAS A STRAND OF CALICO FUR"

Round 2,463 to the nearest thousand = 2000 (T) · Round 46 to the nearest ten = 50 (F) · Round 73 to the nearest ten = 70 (E) · Round 17 to the nearest ten = 20 (D) · Round 432 to the nearest ten = 430 (H) · Round 91 to the nearest ten = 90 (A) · Round 919 to the nearest hundred = 900 (C) · Round 6,613 to the nearest thousand = 7000 (S) · Round 748 to the nearest hundred = 700 (L) · Round 2,302 to the nearest hundred = 2300 (U) · Round 3,730 to the nearest hundred = 3700 (N) · Round 2,538 to the nearest thousand = 3000 (O) · Round 233 to the nearest ten = 230 (I) · Round 4,970 to the nearest thousand = 5000 (R)

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

$9 \div 9 = 1$ · $25 \div 5 = 5$ · $44 \div 4 = 11$ · $44 \div 11 = 4$ · $14 \div 2 = 7$ · $80 \div 8 = 10$ · $24 \div 2 = 12$ · $99 \div 11 = 9$ · $54 \div 9 = 6$ · $24 \div 12 = 2$ · $96 \div 12 = 8$