



The Case of the Catnip Caper

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

Detective: _____ Date: _____

The famous Golden Yarn Ball has vanished from the Whisker City Museum! A sneaky cat burglar slipped past the lasers. Detective, we need your help to crack the clues, solve the math puzzles, and find the 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 cat burglar is _____

Possible suspects

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

NAME	FAVORITE TOY	SUPER SKILL	COLLAR COLOR	FUR COAT	SECRET WEAPON
Socks	Laser Pointer	High Jumper	Red Collar	Sleek Black	Tuna Treats
Mittens	Yarn Ball	Super Climber	Red Collar	Orange Tabby	Scratches
Buster	Squeaky Mouse	Wall Runner	Blue Collar	Calico Patches	Tuna Treats
Sylvester	Yarn Ball	Wall Runner	Red Collar	Sleek Black	Scratches
Chloe	Squeaky Mouse	High Jumper	Red Collar	Orange Tabby	Tuna Treats
Sophie	Feather Wand	Super Climber	Blue Collar	Calico Patches	Warm Sunbeam
Garfield	Laser Pointer	Night Vision	Red Collar	Orange Tabby	Scratches
Ziggy	Catnip Mouse	Wall Runner	Red Collar	Calico Patches	Warm Sunbeam
Meowth	Yarn Ball	Night Vision	Red Collar	Sleek Black	Scratches
Oliver	Feather Wand	Wall Runner	Blue Collar	Orange Tabby	Tuna Treats
Fluffy	Feather Wand	Super Climber	Red Collar	Sleek Black	Scratches
Nala	Laser Pointer	Wall Runner	Red Collar	Orange Tabby	Tuna Treats
Cleo	Squeaky Mouse	Wall Runner	Blue Collar	Calico Patches	Scratches
Milo	Catnip Mouse	Night Vision	Blue Collar	Orange Tabby	Tuna Treats
Grumpy Cat	Squeaky Mouse	Super Climber	Blue Collar	Orange Tabby	Scratches
Shadow	Catnip Mouse	High Jumper	Blue Collar	Orange Tabby	Tuna Treats
Felix	Feather Wand	High Jumper	Red Collar	Sleek Black	Tuna Treats
Luna	Squeaky Mouse	High Jumper	Blue Collar	Sleek Black	Tuna Treats
Tom	Yarn Ball	Super Climber	Blue Collar	Orange Tabby	Tuna Treats
Simba	Laser Pointer	High Jumper	Blue Collar	Orange Tabby	Tuna Treats
Smokey	Squeaky Mouse	Super Climber	Red Collar	Sleek Black	Warm Sunbeam

CLUE 1 Rounding

We found a digital collar tracker that only shows rounded distances to the suspect's location.

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

T										T									
430	70	4300	9000	3700	4300	300	5000	90	430	70	700	4300	500	1300	200	4300	9000		
		T								T									
3700	200	430	70	300	230	4300	3700	700	20	70	430	230	700	9000	700	200	3700		

Round 428 to the nearest ten → **T**

Round 94 to the nearest ten → **Y**

Round 3,698 to the nearest hundred → **N**

Round 227 to the nearest ten → **V**

Round 1,252 to the nearest hundred → **D**

Round 247 to the nearest hundred → **O**

Round 8,848 to the nearest thousand → **S**

Round 4,971 to the nearest thousand → **K**

Round 495 to the nearest hundred → **F**

Round 68 to the nearest ten → **H**

Round 4,338 to the nearest hundred → **E**

Round 676 to the nearest hundred → **I**

Round 331 to the nearest hundred → **A**

Round 21 to the nearest ten → **G**

Scratch space:

CLUE 2 Addition

We counted all the spilled kibble piles to map out the direction the thief ran.

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

T																	
5974	4252	2021	4477	4662	6308	3195	5903	8615	6308	3779	6308	4812	6086	6086	2021	3779	8615

4477	5903	4662	2021	5342	4812	5903	5903	8615	6308

$4013 + 1961 = \square \rightarrow \boxed{\text{T}}$

$1882 + 1313 = \square \rightarrow \boxed{\text{G}}$

$3064 + 1413 = \square \rightarrow \boxed{\text{B}}$

$993 + 1028 = \square \rightarrow \boxed{\text{E}}$

$1532 + 2247 = \square \rightarrow \boxed{\text{D}}$

$2384 + 2958 = \square \rightarrow \boxed{\text{C}}$

$1422 + 2830 = \square \rightarrow \boxed{\text{H}}$

$4600 + 4015 = \square \rightarrow \boxed{\text{A}}$

$2339 + 3564 = \square \rightarrow \boxed{\text{L}}$

$2793 + 3293 = \square \rightarrow \boxed{\text{P}}$

$1727 + 3085 = \square \rightarrow \boxed{\text{O}}$

$3030 + 3278 = \square \rightarrow \boxed{\text{R}}$

$2223 + 2439 = \square \rightarrow \boxed{\text{U}}$

Scratch space:

CLUE 3

Subtraction

We measured the missing fish from the pantry to find out how many were taken.

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

T
 T

7162 2712 6809 2466 7031 7162 3437 8158 6539 6539 7031 6539 3437 7031 7807 7487

T

 T
 T T

7487 7162 4078 4625 6768 4078 4618 7162 2388 4341 7031 7162 4618 6809 7031 7162 7487

$10262 - 3100 = \boxed{} \rightarrow \boxed{\text{T}}$

$7060 - 2435 = \boxed{} \rightarrow \boxed{\text{P}}$

$8073 - 4636 = \boxed{} \rightarrow \boxed{\text{W}}$

$8969 - 2160 = \boxed{} \rightarrow \boxed{\text{E}}$

$8916 - 4298 = \boxed{} \rightarrow \boxed{\text{R}}$

$10226 - 3458 = \boxed{} \rightarrow \boxed{\text{F}}$

$8656 - 4315 = \boxed{} \rightarrow \boxed{\text{N}}$

$11395 - 3588 = \boxed{} \rightarrow \boxed{\text{Y}}$

$10290 - 3751 = \boxed{} \rightarrow \boxed{\text{L}}$

$8286 - 4208 = \boxed{} \rightarrow \boxed{\text{O}}$

$5252 - 2540 = \boxed{} \rightarrow \boxed{\text{H}}$

$3489 - 1023 = \boxed{} \rightarrow \boxed{\text{C}}$

$9138 - 2107 = \boxed{} \rightarrow \boxed{\text{A}}$

$3681 - 1293 = \boxed{} \rightarrow \boxed{\text{U}}$

$11590 - 4103 = \boxed{} \rightarrow \boxed{\text{S}}$

$8633 - 475 = \boxed{} \rightarrow \boxed{\text{I}}$

Scratch space:

CLUE 4

Multiplication facts (1-12)

We saw several neat rows of tiny muddy paw prints left on the museum floor.

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

T					T			T									
50	4	84	42	84	50	84	2	50	9	144	84	88	49	110	56	42	

						T								
49	25	99	56	22	84	50	99	3	3	14	88	110	25	

$5 \times 10 = \square \rightarrow \boxed{\text{T}}$

$12 \times 12 = \square \rightarrow \boxed{\text{V}}$

$3 \times 1 = \square \rightarrow \boxed{\text{B}}$

$9 \times 1 = \square \rightarrow \boxed{\text{I}}$

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

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

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

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

$2 \times 1 = \square \rightarrow \boxed{\text{C}}$

$7 \times 12 = \square \rightarrow \boxed{\text{E}}$

$6 \times 7 = \square \rightarrow \boxed{\text{D}}$

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

$11 \times 10 = \square \rightarrow \boxed{\text{U}}$

$7 \times 7 = \square \rightarrow \boxed{\text{O}}$

$8 \times 11 = \square \rightarrow \boxed{\text{F}}$

$8 \times 7 = \square \rightarrow \boxed{\text{N}}$

Scratch space:

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

We had to share the catnip toys equally among the guard dogs to keep them happy.

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:

$16 \div 8 = \boxed{}$

$35 \div 7 = \boxed{}$

$36 \div 12 = \boxed{}$

$10 \div 10 = \boxed{}$

$45 \div 5 = \boxed{}$

$90 \div 9 = \boxed{}$

$120 \div 10 = \boxed{}$

$55 \div 5 = \boxed{}$

$72 \div 12 = \boxed{}$

$32 \div 8 = \boxed{}$

$21 \div 3 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain chews the catnip mouse, then spots the exits in the dark.
2. The villain pounces on the laser pointer, then leaps high into the air.
3. The villain rolls the yarn ball, then climbs up the curtains.
4. The villain bats the feather wand, then leaps high into the air.
5. The villain chews the catnip mouse, then leaps high into the air.
6. The villain chews the catnip mouse, then climbs up the curtains.
7. The villain rolls the yarn ball, then dashes along the high walls.
8. The villain bats the feather wand, then dashes along the high walls.
9. The villain pounces on the laser pointer, then dashes along the high walls.
10. The villain rolls the yarn ball, then leaps high into the air.
11. The villain bats the feather wand, then sneaks by with quiet paws.
12. The villain bats the feather wand, then spots the exits in the dark.

Answer Key

The Case of the Catnip Capers

Culprit: Oliver

Feather Wand · Wall Runner · Blue Collar · Orange Tabby · Tuna Treats

Trail: Start 21 → Clue 1 18 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE SNEAKY THIEF DOES NOT HAVE NIGHT VISION"

Round 428 to the nearest ten = 430 (T) · Round 94 to the nearest ten = 90 (Y) · Round 3,698 to the nearest hundred = 3700 (N) · Round 227 to the nearest ten = 230 (V) · Round 1,252 to the nearest hundred = 1300 (D) · Round 247 to the nearest hundred = 200 (O) · Round 8,848 to the nearest thousand = 9000 (S) · Round 4,971 to the nearest thousand = 5000 (K) · Round 495 to the nearest hundred = 500 (F) · Round 68 to the nearest ten = 70 (H) · Round 4,338 to the nearest hundred = 4300 (E) · Round 676 to the nearest hundred = 700 (I) · Round 331 to the nearest hundred = 300 (A) · Round 21 to the nearest ten = 20 (G)

Clue 2 (Addition): "THE BURGLAR DROPPED A BLUE COLLAR"

$4013 + 1961 = 5974$ (T) · $1882 + 1313 = 3195$ (G) · $3064 + 1413 = 4477$ (B) · $993 + 1028 = 2021$ (E) · $1532 + 2247 = 3779$ (D) · $2384 + 2958 = 5342$ (C) · $1422 + 2830 = 4252$ (H) · $4600 + 4015 = 8615$ (A) · $2339 + 3564 = 5903$ (L) · $2793 + 3293 = 6086$ (P) · $1727 + 3085 = 4812$ (O) · $3030 + 3278 = 6308$ (R) · $2223 + 2439 = 4662$ (U)

Clue 3 (Subtraction): "THE CAT WILL ALWAYS STOP FOR TUNA TREATS"

$10262 - 3100 = 7162$ (T) · $7060 - 2435 = 4625$ (P) · $8073 - 4636 = 3437$ (W) · $8969 - 2160 = 6809$ (E) · $8916 - 4298 = 4618$ (R) · $10226 - 3458 = 6768$ (F) · $8656 - 4315 = 4341$ (N) · $11395 - 3588 = 7807$ (Y) · $10290 - 3751 = 6539$ (L) · $8286 - 4208 = 4078$ (O) · $5252 - 2540 = 2712$ (H) · $3489 - 1023 = 2466$ (C) · $9138 - 2107 = 7031$ (A) · $3681 - 1293 = 2388$ (U) · $11590 - 4103 = 7487$ (S) · $8633 - 475 = 8158$ (I)

Clue 4 (Multiplication facts (1-12)): "THE DETECTIVE FOUND ORANGE TABBY FUR"

$5 \times 10 = 50$ (T) · $12 \times 12 = 144$ (V) · $3 \times 1 = 3$ (B) · $9 \times 1 = 9$ (I) · $5 \times 5 = 25$ (R) · $4 \times 1 = 4$ (H) · $11 \times 9 = 99$ (A) · $11 \times 2 = 22$ (G) · $2 \times 1 = 2$ (C) · $7 \times 12 = 84$ (E) · $6 \times 7 = 42$ (D) · $2 \times 7 = 14$ (Y) · $11 \times 10 = 110$ (U) · $7 \times 7 = 49$ (O) · $8 \times 11 = 88$ (F) · $8 \times 7 = 56$ (N)

Clue 5 (Division facts (1-12)): surviving statement is box 8 → Oliver

$16 \div 8 = 2$ · $35 \div 7 = 5$ · $36 \div 12 = 3$ · $10 \div 10 = 1$ · $45 \div 5 = 9$ · $90 \div 9 = 10$ · $120 \div 10 = 12$ · $55 \div 5 = 11$ · $72 \div 12 = 6$ · $32 \div 8 = 4$ · $21 \div 3 = 7$