



The Great Catnip Trophy Caper

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

Detective: _____ **Date:** _____

The legendary Golden Catnip Trophy has vanished from the high-security vault at Purrmont Palace! The grand ballroom is packed with twenty-four famous felines. Only a master detective can use math clues to find the sneaky catburglar.

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 catburglar is _____

Possible suspects

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

NAME	MEOW MAGIC	SECRET GADGET	STEALTH STYLE	FUR PATTERN	FAVORITE TREAT
Smokey	Super Pounce	Bell Tracker	Left-pawed	Tuxedo coat	Tuna flake
Sylvester	Sonic Purr	Squeak Spy	Left-pawed	Tuxedo coat	Tuna flake
Oliver	Shadow Slither	Bell Tracker	Right-pawed	Tuxedo coat	Catnip drop
Milo	Shadow Slither	Yarn Grapple	Right-pawed	Tuxedo coat	Tuna flake
Chloe	Laser Dash	Yarn Grapple	Right-pawed	Calico patches	Catnip drop
Shadow	Laser Dash	Squeak Spy	Left-pawed	Tuxedo coat	Salmon bite
Nala	Wall Climb	Yarn Grapple	Left-pawed	Calico patches	Salmon bite
Whiskers	Sonic Purr	Catnip Bomb	Left-pawed	Tuxedo coat	Salmon bite
Lucy	Sonic Purr	Catnip Bomb	Right-pawed	Tabby stripes	Salmon bite
Mittens	Super Pounce	Yarn Grapple	Right-pawed	Calico patches	Catnip drop
Ziggy	Laser Dash	Bell Tracker	Right-pawed	Tuxedo coat	Salmon bite
Gizmo	Sonic Purr	Catnip Bomb	Left-pawed	Tuxedo coat	Tuna flake
Toby	Super Pounce	Feather Dart	Left-pawed	Tabby stripes	Tuna flake
Mr Fluffington	Wall Climb	Yarn Grapple	Left-pawed	Tuxedo coat	Tuna flake
Boots	Shadow Slither	Catnip Bomb	Right-pawed	Calico patches	Salmon bite
Garfield	Laser Dash	Squeak Spy	Right-pawed	Calico patches	Salmon bite
Luna	Super Pounce	Squeak Spy	Right-pawed	Tuxedo coat	Catnip drop
Princess Purr	Sonic Purr	Bell Tracker	Right-pawed	Calico patches	Catnip drop
Sassy	Wall Climb	Bell Tracker	Left-pawed	Calico patches	Tuna flake
Felix	Super Pounce	Catnip Bomb	Right-pawed	Calico patches	Salmon bite
Tom	Laser Dash	Catnip Bomb	Left-pawed	Tuxedo coat	Tuna flake

CLUE 1

We found a pile of stolen toy mice scattered on the floor. Count them up to unlock the first secret file.

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

A number line from 0 to 10,000. The line is divided into 10 equal segments by 11 vertical tick marks. Below each tick mark is a box for a number. The first box (0) contains the number 7000 and is highlighted in orange. The last box (10,000) contains the number 7000 and is also highlighted in orange. The other boxes are empty. The numbers 7000, 200, 370, 2000, 2900, 90, 90, 900, 2900, 700, 1300, 1100, 370, 3000, 700, 1100, and 7000 are written below the boxes. The numbers 1700, 3000, 370, 900, 3000, 50, 1700, 370, 900, 4300, 3000, 430, and 110 are written below the boxes.

Round 6,737 to the nearest thousand $\rightarrow$ **T**

Round 90 to the nearest ten $\rightarrow$ **L**

Round 373 to the nearest ten $\rightarrow$ **E**

Round 1,909 to the nearest thousand → **V**

Round 1,129 to the nearest hundred $\rightarrow$

Round 4,306 to the nearest hundred $\rightarrow$ **K**

Round 666 to the nearest hundred $\rightarrow$ **N**

Round 1,660 to the nearest hundred $\rightarrow$ **U**

Round 921 to the nearest hundred → **A**

Round 107 to the nearest ten $\rightarrow$ **Y**

Round 430 to the nearest ten $\rightarrow$ **P**

Round 1,330 to the nearest hundred $\rightarrow$ **D**

Round 2,739 to the nearest thousand $\rightarrow$ **S**

Round 173 to the nearest hundred $\rightarrow$ **H**

Round 2,897 to the nearest hundred $\rightarrow$

Round 46 to the nearest ten $\rightarrow$ **Q**

Scratch space:

CLUE 2

Word problems

The palace alarm system needs a quick estimate to reset. Round the security laser frequency to get the system running again.

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

A witness saw the villain was L D .

19 47 73 67 44 6 60 47

There were 55 milk bowls. 36 were used up. How many milk bowls are left?

Answer: → L

Detective kitten found 10 yarn balls yesterday and 34 more today. How many yarn balls in all?

Answer: → P

Detective kitten found 34 milk bowls yesterday and 13 more today. How many milk bowls in all?

Answer: → E

Detective kitten found 7 scratching posts yesterday and 66 more today. How many scratching posts in all?

Answer: → F

There were 69 milk bowls. 2 were used up. How many milk bowls are left?

Answer: → T

Detective kitten lined up 3 rows of 2 yarn balls. How many yarn balls in all?

Answer: → A

Detective kitten found 48 catnip mice yesterday and 12 more today. How many catnip mice in all?

Answer: → W

Scratch space:

CLUE 3 Addition

The guards are adding up all the spilled milk cans in the hallway. Help them find the total sum to trace the culprit's path.

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

T																			
3332	5552	2833	5675	8335	2833	6957	2833	5675	9273	2833	3138	3138	2833	8403	3138	4942	5521	2833	

T									
3332	2368	6957	6688	8107	3138	6688	5521	2833	5675

1345 + 1987 = → T	5328 + 3945 = → M	3779 + 4328 = → F
4205 + 4198 = → D	1372 + 1766 = → L	2791 + 5544 = → C
3436 + 1506 = → I	3423 + 2252 = → S	1402 + 966 = → U
2802 + 4155 = → N	2309 + 4379 = → A	2261 + 3291 = → H
1695 + 3826 = → K	1813 + 1020 = → E	

Scratch space:

CLUE 4

Subtraction

Some fish treats are missing from the pantry. Calculate how many were taken by subtracting the leftover snacks.

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

A			A			A								
6000	5703	6491	6000	2364	5132	6000	3244	1674	6550	6900	6764	2142	4336	
							A			A				
2142	8479	2661	4336	1674	5291	6900	6000	6764	2941	6550	6000	4607	4498	5291

$10711 - 4711 = \square \rightarrow \text{A}$

$9174 - 695 = \square \rightarrow \text{U}$

$9182 - 2691 = \square \rightarrow \text{L}$

$3863 - 1721 = \square \rightarrow \text{T}$

$7653 - 1950 = \square \rightarrow \text{B}$

$4402 - 1158 = \square \rightarrow \text{N}$

$7221 - 1930 = \square \rightarrow \text{O}$

$7161 - 4797 = \square \rightarrow \text{C}$

$5307 - 2366 = \square \rightarrow \text{R}$

$4874 - 538 = \square \rightarrow \text{E}$

$9634 - 4502 = \square \rightarrow \text{K}$

$6091 - 3430 = \square \rightarrow \text{X}$

$11322 - 4772 = \square \rightarrow \text{W}$

$6426 - 1928 = \square \rightarrow \text{F}$

$7015 - 115 = \square \rightarrow \text{H}$

$11347 - 4583 = \square \rightarrow \text{I}$

$5953 - 4279 = \square \rightarrow \text{D}$

$4624 - 17 = \square \rightarrow \text{S}$

Scratch space:

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

We need to divide the remaining patrol kittens into equal search teams. Split them up fairly to scour the palace garden.

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:

$24 \div 8 = \boxed{}$

$7 \div 7 = \boxed{}$

$110 \div 10 = \boxed{}$

$10 \div 1 = \boxed{}$

$132 \div 11 = \boxed{}$

$12 \div 6 = \boxed{}$

$60 \div 10 = \boxed{}$

$96 \div 12 = \boxed{}$

$72 \div 8 = \boxed{}$

$35 \div 7 = \boxed{}$

$28 \div 7 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain scales the marble wall, then zips away on a yarn grapple.
2. The villain jumps across the rafters, then blinds the cameras with a catnip bomb.
3. The villain jumps across the rafters, then tracks the exit with a bell tracker.
4. The villain slips under the door frame, then escapes while listening to a squeak spy.
5. The villain shatters the vase with a loud purr, then pins the guards with a feather dart.
6. The villain scales the marble wall, then blinds the cameras with a catnip bomb.
7. The villain speeds past the security guard, then blinds the cameras with a catnip bomb.
8. The villain slips under the door frame, then pins the guards with a feather dart.
9. The villain shatters the vase with a loud purr, then tracks the exit with a bell tracker.
10. The villain speeds past the security guard, then escapes while listening to a squeak spy.
11. The villain shatters the vase with a loud purr, then blinds the cameras with a catnip bomb.
12. The villain scales the marble wall, then escapes while listening to a squeak spy.

Answer Key

The Great Catnip Trophy Caper

Culprit: Tom

Laser Dash · Catnip Bomb · Left-pawed · Tuxedo coat · Tuna flake

Trail: Start 21 → Clue 1 17 → Clue 2 8 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN DOES NOT USE A SQUEAK SPY"

Round 6,737 to the nearest thousand = 7000 (T) · Round 90 to the nearest ten = 90 (L) · Round 373 to the nearest ten = 370 (E) · Round 1,909 to the nearest thousand = 2000 (V) · Round 1,129 to the nearest hundred = 1100 (O) · Round 4,306 to the nearest hundred = 4300 (K) · Round 666 to the nearest hundred = 700 (N) · Round 1,660 to the nearest hundred = 1700 (U) · Round 921 to the nearest hundred = 900 (A) · Round 107 to the nearest ten = 110 (Y) · Round 430 to the nearest ten = 430 (P) · Round 1,330 to the nearest hundred = 1300 (D) · Round 2,739 to the nearest thousand = 3000 (S) · Round 173 to the nearest hundred = 200 (H) · Round 2,897 to the nearest hundred = 2900 (I) · Round 46 to the nearest ten = 50 (Q)

Clue 2 (Word problems): "LEFT PAWED"

There were 55 milk bowls. 36 were used up. How many milk bowls are left? = 19 (L) · Detective kitten found 10 yarn balls yesterday and 34 more today. How many yarn balls in all? = 44 (P) · Detective kitten found 34 milk bowls yesterday and 13 more today. How many milk bowls in all? = 47 (E) · Detective kitten found 7 scratching posts yesterday and 66 more today. How many scratching posts in all? = 73 (F) · There were 69 milk bowls. 2 were used up. How many milk bowls are left? = 67 (T) · Detective kitten lined up 3 rows of 2 yarn balls. How many yarn balls in all? = 6 (A) · Detective kitten found 48 catnip mice yesterday and 12 more today. How many catnip mice in all? = 60 (W)

Clue 3 (Addition): "THE SCENE SMELLED LIKE TUNA FLAKES"

1345 + 1987 = 3332 (T) · 5328 + 3945 = 9273 (M) · 3779 + 4328 = 8107 (F) · 4205 + 4198 = 8403 (D) · 1372 + 1766 = 3138 (L) · 2791 + 5544 = 8335 (C) · 3436 + 1506 = 4942 (I) · 3423 + 2252 = 5675 (S) · 1402 + 966 = 2368 (U) · 2802 + 4155 = 6957 (N) · 2309 + 4379 = 6688 (A) · 2261 + 3291 = 5552 (H) · 1695 + 3826 = 5521 (K) · 1813 + 1020 = 2833 (E)

Clue 4 (Subtraction): "A BLACK AND WHITE TUXEDO HAIR WAS FOUND"

10711 - 4711 = 6000 (A) · 9174 - 695 = 8479 (U) · 9182 - 2691 = 6491 (L) · 3863 - 1721 = 2142 (T) · 7653 - 1950 = 5703 (B) · 4402 - 1158 = 3244 (N) · 7221 - 1930 = 5291 (O) · 7161 - 4797 = 2364 (C) · 5307 - 2366 = 2941 (R) · 4874 - 538 = 4336 (E) · 9634 - 4502 = 5132 (K) · 6091 - 3430 = 2661 (X) · 11322 - 4772 = 6550 (W) · 6426 - 1928 = 4498 (F) · 7015 - 115 = 6900 (H) · 11347 - 4583 = 6764 (I) · 5953 - 4279 = 1674 (D) · 4624 - 17 = 4607 (S)

Clue 5 (Division facts (1-12)): surviving statement is box 7 → Tom

24 ÷ 8 = 3 · 7 ÷ 7 = 1 · 110 ÷ 10 = 11 · 10 ÷ 1 = 10 · 132 ÷ 11 = 12 · 12 ÷ 6 = 2 · 60 ÷ 10 = 6 · 96 ÷ 12 = 8 · 72 ÷ 8 = 9 · 35 ÷ 7 = 5 · 28 ÷ 7 = 4