



The Great Catnip Caper

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

Detective: _____ Date: _____

Someone snatched the royal catnip stash right before the Grand Fancy Feline Show at Purrlington Manor! Detective Whiskers needs your math skills to sniff out 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 Sneaky Snatcher is _____

Possible suspects

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

NAME	DISTRACTION TOY	ESCAPE MOVE	DOMINANT PAW	FUR PATTERN	PET SCARED BY
Nala	Feather Wand	Night Prowler	Left Pawed	Tabby Fur	Vacuum Noise
Toby	Laser Pointer	Box Hider	Left Pawed	Tuxedo Fur	Water Spray
Oliver	Yarn Roller	Wall Climber	Right Pawed	Tuxedo Fur	Water Spray
Cleopatra	Squeaky Mouse	Pouncer	Left Pawed	Tabby Fur	Dog Bark
Simba	Catnip Bomb	Wall Climber	Right Pawed	Tuxedo Fur	Water Spray
Garfield	Laser Pointer	Night Prowler	Left Pawed	Tuxedo Fur	Water Spray
Ziggy	Catnip Bomb	Pouncer	Right Pawed	Tuxedo Fur	Vacuum Noise
Penelope	Yarn Roller	Box Hider	Right Pawed	Calico Fur	Dog Bark
Milo	Feather Wand	Pouncer	Right Pawed	Tabby Fur	Water Spray
Socks	Squeaky Mouse	Wall Climber	Left Pawed	Tabby Fur	Dog Bark
Barnaby	Catnip Bomb	Wall Climber	Right Pawed	Tabby Fur	Vacuum Noise
Whiskers	Laser Pointer	Dash Sprinter	Right Pawed	Tuxedo Fur	Water Spray
Otis	Yarn Roller	Night Prowler	Right Pawed	Tuxedo Fur	Water Spray
Felix	Yarn Roller	Pouncer	Right Pawed	Tabby Fur	Water Spray
Berlioz	Laser Pointer	Pouncer	Right Pawed	Tuxedo Fur	Vacuum Noise
Peanut	Yarn Roller	Dash Sprinter	Left Pawed	Tabby Fur	Dog Bark
Duchess	Yarn Roller	Night Prowler	Right Pawed	Tuxedo Fur	Vacuum Noise
Sassy	Yarn Roller	Box Hider	Left Pawed	Tuxedo Fur	Dog Bark
Sylvester	Catnip Bomb	Pouncer	Left Pawed	Calico Fur	Vacuum Noise
Figaro	Laser Pointer	Night Prowler	Right Pawed	Tuxedo Fur	Dog Bark
Mittens	Squeaky Mouse	Dash Sprinter	Right Pawed	Tuxedo Fur	Water Spray

CLUE 1 Place value

Inspect the digital security collar tag to read the exact digit in the hundreds place.

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

T																	
500	70	600	700	400	600	300	2000	80	50	6000	9000	9000	300	6000	400	6000	700
		T						T									
400	200	500	300	400	6000	7000	70	500	30	8000	200	1000	9000	600	8000		

What is the value of the 5 in 562? → **T**

What is the value of the 9 in 9,826? → **L**

What is the value of the 7 in 1,725? → **S**

What is the value of the 4 in 416? → **N**

What is the value of the 6 in 682? → **E**

What is the value of the 8 in 984? → **Y**

What is the value of the 7 in 5,472? → **H**

What is the value of the 6 in 46,423? → **I**

What is the value of the 8 in 8,774? → **R**

What is the value of the 1 in 1,846? → **W**

What is the value of the 2 in 2,930? → **K**

What is the value of the 3 in 379? → **A**

What is the value of the 7 in 47,603? → **G**

What is the value of the 2 in 230? → **O**

What is the value of the 5 in 953? → **V**

What is the value of the 3 in 6,630? → **P**

Scratch space:

CLUE 2 Multiplication facts (1-12)

Count the catnip treats arranged in neat rows across the pantry shelves.

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

Diagram illustrating the arrangement of numbers in a 3x10 grid. The numbers are arranged in three rows, with the top row containing 10 numbers, the middle row containing 10 numbers, and the bottom row containing 10 numbers. The numbers are: 120, 144, 24, 48, 35, 48, 96, 24, 63, 120 (top row); 48, 77, 10, 96, 24, 60, 77, 10, 120, 144 (middle row); 90, 9, 10, 21, 144, 120, 96, 90, 77 (bottom row). The boxes containing 120 in the top row, 120 in the middle row, and 120 in the bottom row are highlighted with an orange background and a 'T' symbol.

$10 \times 12 = \boxed{} \rightarrow \boxed{\text{T}}$

$12 \times 4 = \square \rightarrow \mathbf{S}$

$3 \times 7 = \square \rightarrow \boxed{\mathbf{G}}$

$9 \times 1 = \boxed{} \rightarrow \boxed{\text{R}}$

$9 \times 7 = \square \rightarrow \boxed{\text{C}}$

$7 \times 5 = \square \rightarrow \boxed{\mathbf{U}}$

$10 \times 9 =$ $\rightarrow$ **A**

$2 \times 12 = \boxed{} \rightarrow \boxed{\text{E}}$

$$1 \times 10 = \boxed{} \rightarrow \boxed{1}$$

$8 \times 12 = \boxed{} \rightarrow \boxed{\text{P}}$

$$12 \times 12 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$5 \times 12 = \boxed{} \rightarrow \boxed{\mathbf{D}}$$

$$11 \times 7 = \boxed{} \rightarrow \boxed{\mathbf{W}}$$

Scratch space:

CLUE 3
Subtraction

Calculate how many fish snacks are missing from the pantry jar.

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

A		A							A							
3953	5739	3953	5513	2771	2413	4079	3781	2413	3953	2147	8947	2496	5513	5513	2108	2771
		A														
6358	8658	3953	4079	2771	6793	5513	8658	2771	2152	2496	8509	8509				

$7936 - 3983 = \square \rightarrow \boxed{\mathbf{A}}$

$6914 - 4418 = \square \rightarrow \boxed{\mathbf{O}}$

$5211 - 1430 = \square \rightarrow \boxed{\mathbf{P}}$

$3243 - 1096 = \square \rightarrow \boxed{\mathbf{Y}}$

$2504 - 352 = \square \rightarrow \boxed{\mathbf{M}}$

$6972 - 4864 = \square \rightarrow \boxed{\mathbf{L}}$

$5974 - 235 = \square \rightarrow \boxed{\mathbf{W}}$

$9109 - 2316 = \square \rightarrow \boxed{\mathbf{D}}$

$6677 - 319 = \square \rightarrow \boxed{\mathbf{C}}$

$7892 - 2379 = \square \rightarrow \boxed{\mathbf{T}}$

$10255 - 1746 = \square \rightarrow \boxed{\mathbf{F}}$

$6167 - 2088 = \square \rightarrow \boxed{\mathbf{S}}$

$7312 - 4541 = \square \rightarrow \boxed{\mathbf{E}}$

$12085 - 3427 = \square \rightarrow \boxed{\mathbf{H}}$

$5152 - 2739 = \square \rightarrow \boxed{\mathbf{R}}$

$9086 - 139 = \square \rightarrow \boxed{\mathbf{B}}$

Scratch space:

CLUE 4 Addition

Add up all the squeaky toys collected from the parlor rug.

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

A																	
3088	5252	8389	5547	6101	7827	8389	2049	8389	9601	2137	5252	7840	5942	2231	8389	4923	2137

5252	5942	8510	5547	8389	8510	8389	5252	2137	5942	9267	4923

$1510 + 1578 = \square \rightarrow \boxed{\text{A}}$

$2100 + 2823 = \square \rightarrow \boxed{\text{D}}$

$2723 + 3378 = \square \rightarrow \boxed{\text{P}}$

$5765 + 3836 = \square \rightarrow \boxed{\text{S}}$

$905 + 1144 = \square \rightarrow \boxed{\text{C}}$

$3056 + 2491 = \square \rightarrow \boxed{\text{W}}$

$1202 + 935 = \square \rightarrow \boxed{\text{O}}$

$4696 + 3693 = \square \rightarrow \boxed{\text{E}}$

$3481 + 1771 = \square \rightarrow \boxed{\text{F}}$

$4598 + 3242 = \square \rightarrow \boxed{\text{T}}$

$5600 + 2910 = \square \rightarrow \boxed{\text{R}}$

$5091 + 2736 = \square \rightarrow \boxed{\text{I}}$

$1411 + 820 = \square \rightarrow \boxed{\text{X}}$

$6117 + 3150 = \square \rightarrow \boxed{\text{N}}$

$3900 + 2042 = \square \rightarrow \boxed{\text{U}}$

Scratch space:

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

Divide the remaining milk saucers equally among the shelter kittens.

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:

$9 \div 1 = \boxed{}$

$6 \div 6 = \boxed{}$

$35 \div 5 = \boxed{}$

$5 \div 1 = \boxed{}$

$88 \div 11 = \boxed{}$

$48 \div 4 = \boxed{}$

$14 \div 7 = \boxed{}$

$28 \div 7 = \boxed{}$

$36 \div 6 = \boxed{}$

$90 \div 9 = \boxed{}$

$55 \div 5 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain squeaked a toy mouse, then dashed down the grand staircase.
2. The villain waved a shiny feather wand, then hid inside a giant cardboard box.
3. The villain tossed a smelly catnip bomb, then scaled the tall scratching post.
4. The villain flashed a bright laser pointer, then pounced over the velvet couch.
5. The villain tossed a smelly catnip bomb, then pounced over the velvet couch.
6. The villain squeaked a toy mouse, then prowled through the dark hallway.
7. The villain rolled a giant yarn ball, then scaled the tall scratching post.
8. The villain squeaked a toy mouse, then hid inside a giant cardboard box.
9. The villain flashed a bright laser pointer, then dashed down the grand staircase.
10. The villain waved a shiny feather wand, then scaled the tall scratching post.
11. The villain waved a shiny feather wand, then pounced over the velvet couch.
12. The villain tossed a smelly catnip bomb, then hid inside a giant cardboard box.

Answer Key

The Great Catnip Caper

Culprit: Simba

Catnip Bomb · Wall Climber · Right Pawed · Tuxedo Fur · Water Spray

Trail: Start 21 → Clue 1 16 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE SNEAKY VILLAIN IS NOT A NIGHT PROWLER"

What is the value of the 5 in 562? = 500 (T) · What is the value of the 9 in 9,826? = 9000 (L) · What is the value of the 7 in 1,725? = 700 (S) · What is the value of the 4 in 416? = 400 (N) · What is the value of the 6 in 682? = 600 (E) · What is the value of the 8 in 984? = 80 (Y) · What is the value of the 7 in 5,472? = 70 (H) · What is the value of the 6 in 46,423? = 6000 (I) · What is the value of the 8 in 8,774? = 8000 (R) · What is the value of the 1 in 1,846? = 1000 (W) · What is the value of the 2 in 2,930? = 2000 (K) · What is the value of the 3 in 379? = 300 (A) · What is the value of the 7 in 47,603? = 7000 (G) · What is the value of the 2 in 230? = 200 (O) · What is the value of the 5 in 953? = 50 (V) · What is the value of the 3 in 6,630? = 30 (P)

Clue 2 (Multiplication facts (1-12)): "THE SUSPECT SWIPED WITH A RIGHT PAW"

$10 \times 12 = 120$ (T) · $12 \times 4 = 48$ (S) · $3 \times 7 = 21$ (G) · $9 \times 1 = 9$ (R) · $9 \times 7 = 63$ (C) · $7 \times 5 = 35$ (U) · $10 \times 9 = 90$ (A) · $2 \times 12 = 24$ (E) · $1 \times 10 = 10$ (I) · $8 \times 12 = 96$ (P) · $12 \times 12 = 144$ (H) · $5 \times 12 = 60$ (D) · $11 \times 7 = 77$ (W)

Clue 3 (Subtraction): "A WATER SPRAY BOTTLE CHASED THEM OFF"

$7936 - 3983 = 3953$ (A) · $6914 - 4418 = 2496$ (O) · $5211 - 1430 = 3781$ (P) · $3243 - 1096 = 2147$ (Y) · $2504 - 352 = 2152$ (M) · $6972 - 4864 = 2108$ (L) · $5974 - 235 = 5739$ (W) · $9109 - 2316 = 6793$ (D) · $6677 - 319 = 6358$ (C) · $7892 - 2379 = 5513$ (T) · $10255 - 1746 = 8509$ (F) · $6167 - 2088 = 4079$ (S) · $7312 - 4541 = 2771$ (E) · $12085 - 3427 = 8658$ (H) · $5152 - 2739 = 2413$ (R) · $9086 - 139 = 8947$ (B)

Clue 4 (Addition): "A FEW PIECES OF TUXEDO FUR WERE FOUND"

$1510 + 1578 = 3088$ (A) · $2100 + 2823 = 4923$ (D) · $2723 + 3378 = 6101$ (P) · $5765 + 3836 = 9601$ (S) · $905 + 1144 = 2049$ (C) · $3056 + 2491 = 5547$ (W) · $1202 + 935 = 2137$ (O) · $4696 + 3693 = 8389$ (E) · $3481 + 1771 = 5252$ (F) · $4598 + 3242 = 7840$ (T) · $5600 + 2910 = 8510$ (R) · $5091 + 2736 = 7827$ (I) · $1411 + 820 = 2231$ (X) · $6117 + 3150 = 9267$ (N) · $3900 + 2042 = 5942$ (U)

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

$9 \div 1 = 9$ · $6 \div 6 = 1$ · $35 \div 5 = 7$ · $5 \div 1 = 5$ · $88 \div 11 = 8$ · $48 \div 4 = 12$ · $14 \div 7 = 2$ · $28 \div 7 = 4$ · $36 \div 6 = 6$ · $90 \div 9 = 10$ · $55 \div 5 = 11$