The Great Catnip Caper

Grade 5 math · Fractions of a number, Order of operations, Multiplication, Rounding, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

Someone swiped the Golden Catnip Trophy from the Whisker Haven Fancy Feline Showcase! Detective Paws is on the case, inspecting pawprints, stray fur, and leftover clues to catch the sneaky cat burglar.

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	AGILITY MOVE	STEALTH GEAR	DOMINANT PAW	FUR PATTERN	DISTRACTION
Ruby Calico	Wall Spring	Night Goggles	Left Pawed	Solid Tuxedo	Warm Sunbeams
Luna Latch	Fence Dash	Smoke Pellets	Right Pawed	Calico Patches	Warm Sunbeams
Milo Mischief	Wall Spring	Catnip Cloak	Right Pawed	Tabby Stripes	Squeaky Mice
Ziggy Zoom	Fence Dash	Night Goggles	Left Pawed	Tabby Stripes	Warm Sunbeams
Penny Paw	Shadow Creep	Smoke Pellets	Left Pawed	Solid Tuxedo	Laser Pointers
Daisy Dappled	Fence Dash	Night Goggles	Left Pawed	Solid Tuxedo	Laser Pointers
Oliver Ounce	Shadow Creep	Velvet Gloves	Left Pawed	Solid Tuxedo	Squeaky Mice
Hazel Hiss	Silent Leap	Night Goggles	Left Pawed	Tabby Stripes	Laser Pointers
Clawdia Purr	Roof Dash	Night Goggles	Left Pawed	Calico Patches	Laser Pointers
Smokey Stripe	Silent Leap	Night Goggles	Right Pawed	Solid Tuxedo	Warm Sunbeams
Leo Leaper	Wall Spring	Velvet Gloves	Right Pawed	Tabby Stripes	Laser Pointers
Shadow Stalker	Fence Dash	Velvet Gloves	Left Pawed	Solid Tuxedo	Squeaky Mice
Bandit Bobtail	Silent Leap	Smoke Pellets	Left Pawed	Tabby Stripes	Warm Sunbeams
Socks Sterling	Silent Leap	Padded Boots	Left Pawed	Calico Patches	Laser Pointers
Sir Pounce	Silent Leap	Smoke Pellets	Right Pawed	Solid Tuxedo	Laser Pointers
Felix Fuzzy	Wall Spring	Catnip Cloak	Right Pawed	Tabby Stripes	Warm Sunbeams
Bella Butter	Fence Dash	Smoke Pellets	Left Pawed	Tabby Stripes	Squeaky Mice
Whiskers White	Fence Dash	Smoke Pellets	Right Pawed	Tabby Stripes	Warm Sunbeams
Peanut Paws	Roof Dash	Velvet Gloves	Left Pawed	Solid Tuxedo	Laser Pointers
Jasper Jingle	Roof Dash	Night Goggles	Left Pawed	Solid Tuxedo	Laser Pointers
Cleo Catnip	Wall Spring	Catnip Cloak	Left Pawed	Solid Tuxedo	Laser Pointers

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CLUE 1 Fractions of a number

> Detective Paws examines the trail of stray whiskers left behind, calculating what fraction of the clue total points to gear.

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

T										T																T										
16	11	40	14	27	14	5	40	7	16		21	36	40	14		38	36	16																	
31	40	37	20	37	7	37	16	38	39	5	7	24	36	37	29																				

2/4 of 32 = ☐ → T

1/2 of 54 = ☐ → U

3/6 of 72 = ☐ → O

2/4 of 14 = ☐ → C

3/6 of 62 = ☐ → W

1/5 of 200 = ☐ → E

1/8 of 192 = ☐ → L

4/8 of 42 = ☐ → D

4/8 of 74 = ☐ → A

1/6 of 174 = ☐ → K

1/4 of 56 = ☐ → S

4/8 of 10 = ☐ → P

1/2 of 22 = ☐ → H

5/10 of 76 = ☐ → N

3/5 of 65 = ☐ → I

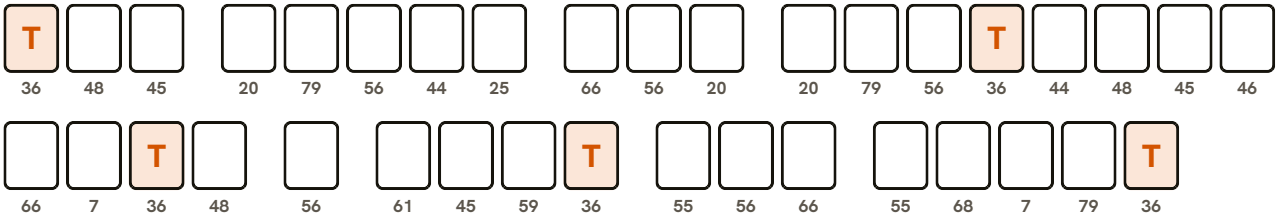
1/5 of 100 = ☐ → R

Scratch space:

CLUE 2 Order of operations

To decode the lock screen on the security collar, Detective Paws solves the multi step operational sequence.

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



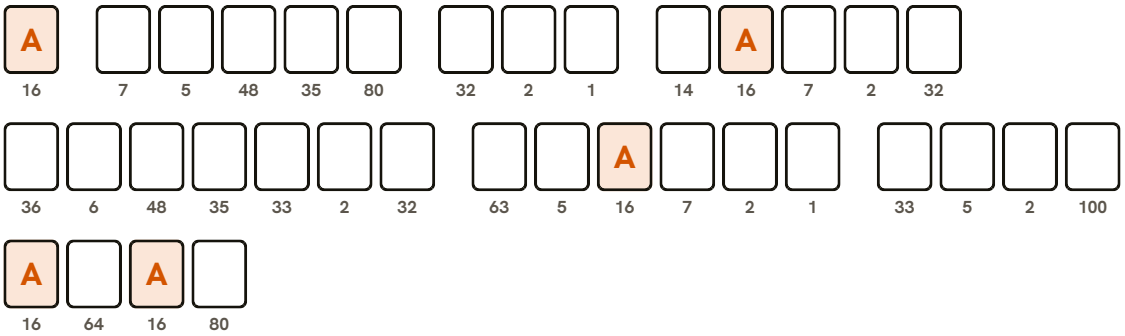
5 × 12 - 24 = ☐ → T	39 + 4 × 4 = ☐ → P	7 × 7 - 3 = ☐ → D
10 × 4 - 20 = ☐ → S	3 + 2 × 2 = ☐ → I	11 × 8 - 27 = ☐ → L
6 × 10 - 4 = ☐ → A	11 × 9 - 20 = ☐ → N	13 + 5 × 7 = ☐ → H
8 × 9 - 28 = ☐ → C	9 × 9 - 22 = ☐ → F	11 + 2 × 7 = ☐ → K
12 × 7 - 18 = ☐ → W	12 × 4 - 3 = ☐ → E	5 + 7 × 9 = ☐ → R

Scratch space:

CLUE 3 Multiplication facts (1-12)

> The alley wall has several grid patterns of dusty paw prints, so Detective Paws multiplies the rows to find the total count.

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



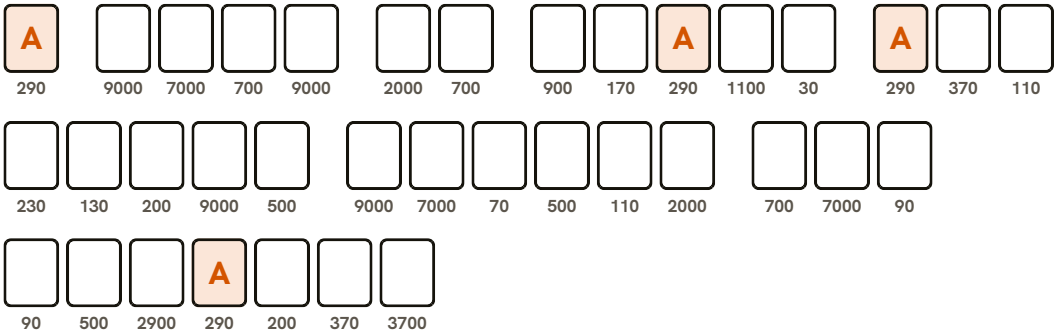
4 × 4 = ☐ → A	4 × 8 = ☐ → R	7 × 2 = ☐ → L	11 × 3 = ☐ → T
2 × 1 = ☐ → E	6 × 8 = ☐ → I	8 × 8 = ☐ → W	2 × 3 = ☐ → O
7 × 5 = ☐ → N	1 × 5 = ☐ → H	1 × 7 = ☐ → S	
10 × 10 = ☐ → M	6 × 6 = ☐ → P	10 × 8 = ☐ → Y	
1 × 1 = ☐ → D	7 × 9 = ☐ → C		

Scratch space:

CLUE 4 Rounding

The digital scale registered the thief weight, but the worn display only shows a rounded estimate.

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



Round 294 to the nearest ten ☐ → A

Round 661 to the nearest hundred ☐ → F

Round 8,729 to the nearest thousand ☐ → T

Round 27 to the nearest ten ☐ → K

Round 373 to the nearest ten ☐ → N

Round 112 to the nearest ten ☐ → D

Round 169 to the nearest ten ☐ → L

Round 74 to the nearest ten ☐ → X

Round 499 to the nearest hundred ☐ → E

Round 2,919 to the nearest hundred ☐ → M

Round 1,084 to the nearest hundred ☐ → C

Round 230 to the nearest ten ☐ → W

Round 130 to the nearest ten ☐ → H

Round 6,878 to the nearest thousand ☐ → U

Round 219 to the nearest hundred ☐ → I

Round 2,062 to the nearest thousand ☐ → O

Round 3,733 to the nearest hundred ☐ → S

Round 910 to the nearest hundred ☐ → B

Round 93 to the nearest ten ☐ → R

Scratch space:

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

> Detective Paws divides the total number of cat treats dropped along the escape route equally among the alley witnesses.

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:

60 ÷ 6 = ☐ | 32 ÷ 8 = ☐ | 14 ÷ 2 = ☐ | 110 ÷ 10 = ☐ | 81 ÷ 9 = ☐

36 ÷ 6 = ☐ | 88 ÷ 11 = ☐ | 10 ÷ 5 = ☐ | 1 ÷ 1 = ☐ | 60 ÷ 12 = ☐

72 ÷ 6 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain makes silent leaps, then flips down night goggles.
2. The villain springs off high walls, then drops dark smoke pellets.
3. The villain creeps through shadows, then drops dark smoke pellets.
4. The villain dashes across roofs, then flips down night goggles.
5. The villain creeps through shadows, then flips down night goggles.
6. The villain makes silent leaps, then slips on velvet gloves.
7. The villain sprints along fences, then flips down night goggles.
8. The villain sprints along fences, then wraps a catnip cloak.
9. The villain springs off high walls, then laces padded boots.
10. The villain dashes across roofs, then slips on velvet gloves.
11. The villain springs off high walls, then flips down night goggles.
12. The villain dashes across roofs, then drops dark smoke pellets.

TEACHER / PARENT

Answer Key

The Great Catnip Caper

Culprit: Penny Paw

Shadow Creep · Smoke Pellets · Left Pawed · Solid Tuxedo · Laser Pointers

Trail: Start 21 → Clue 1 18 → Clue 2 13 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE SUSPECT DOES NOT WEAR A CATNIP CLOAK"

2/4 of 32 = 16 (T) · 1/2 of 54 = 27 (U) · 3/6 of 72 = 36 (O) · 2/4 of 14 = 7 (C) · 3/6 of 62 = 31 (W) · 1/5 of 200 = 40 (E) · 1/8 of 192 = 24 (L) · 4/8 of 42 = 21 (D) · 4/8 of 74 = 37 (A) · 1/6 of 174 = 29 (K) · 1/4 of 56 = 14 (S) · 4/8 of 10 = 5 (P) · 1/2 of 22 = 11 (H) · 5/10 of 76 = 38 (N) · 3/5 of 65 = 39 (I) · 1/5 of 100 = 20 (R)

Clue 2 (Order of operations): "THE SNACK WAS SNATCHED WITH A LEFT PAW PRINT"

5 × 12 - 24 = 36 (T) · 39 + 4 × 4 = 55 (P) · 7 × 7 - 3 = 46 (D) · 10 × 4 - 20 = 20 (S) · 3 + 2 × 2 = 7 (I) · 11 × 8 - 27 = 61 (L) · 6 × 10 - 4 = 56 (A) · 11 × 9 - 20 = 79 (N) · 13 + 5 × 7 = 48 (H) · 8 × 9 - 28 = 44 (C) · 9 × 9 - 22 = 59 (F) · 11 + 2 × 7 = 25 (K) · 12 × 7 - 18 = 66 (W) · 12 × 4 - 3 = 45 (E) · 5 + 7 × 9 = 68 (R)

Clue 3 (Multiplication facts (1-12)): "A SHINY RED LASER POINTER CHASED THEM AWAY"

4 × 4 = 16 (A) · 4 × 8 = 32 (R) · 7 × 2 = 14 (L) · 11 × 3 = 33 (T) · 2 × 1 = 2 (E) · 6 × 8 = 48 (I) · 8 × 8 = 64 (W) · 2 × 3 = 6 (O) · 7 × 5 = 35 (N) · 1 × 5 = 5 (H) · 1 × 7 = 7 (S) · 10 × 10 = 100 (M) · 6 × 6 = 36 (P) · 10 × 8 = 80 (Y) · 1 × 1 = 1 (D) · 7 × 9 = 63 (C)

Clue 4 (Rounding): "A TUFT OF BLACK AND WHITE TUXEDO FUR REMAINS"

Round 294 to the nearest ten = 290 (A) · Round 661 to the nearest hundred = 700 (F) · Round 8,729 to the nearest thousand = 9000 (T) · Round 27 to the nearest ten = 30 (K) · Round 373 to the nearest ten = 370 (N) · Round 112 to the nearest ten = 110 (D) · Round 169 to the nearest ten = 170 (L) · Round 74 to the nearest ten = 70 (X) · Round 499 to the nearest hundred = 500 (E) · Round 2,919 to the nearest hundred = 2900 (M) · Round 1,084 to the nearest hundred = 1100 (C) · Round 230 to the nearest ten = 230 (W) · Round 130 to the nearest ten = 130 (H) · Round 6,878 to the nearest thousand = 7000 (U) · Round 219 to the nearest hundred = 200 (I) · Round 2,062 to the nearest thousand = 2000 (O) · Round 3,733 to the nearest hundred = 3700 (S) · Round 910 to the nearest hundred = 900 (B) · Round 93 to the nearest ten = 90 (R)

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

60 ÷ 6 = 10 · 32 ÷ 8 = 4 · 14 ÷ 2 = 7 · 110 ÷ 10 = 11 · 81 ÷ 9 = 9 · 36 ÷ 6 = 6 · 88 ÷ 11 = 8 · 10 ÷ 5 = 2 · 1 ÷ 1 = 1 · 60 ÷ 12 = 5 · 72 ÷ 6 = 12