The Great Catnip Caper

Grade 5 math · Multiplication, Multi-step word problems, Word problems, Fractions of a number, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

Someone snuck into the cafe after closing and swiped the golden catnip trophy! Detective Whiskers needs your help finding out which feline committed the crime.

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 Catnip Bandit is _____

Possible suspects

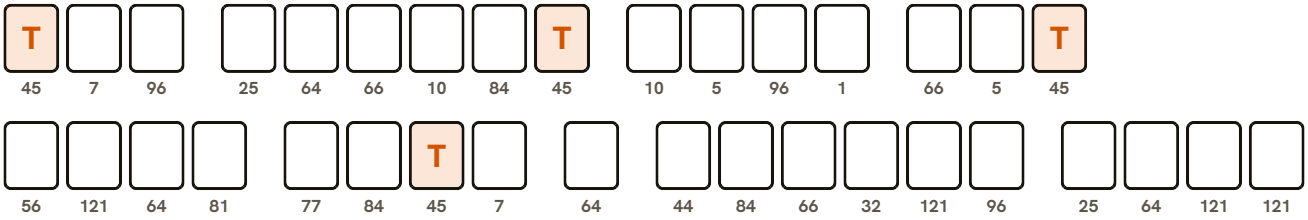
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	CAT TRICK	FAVORITE TOY	PAW HABIT	FUR COAT	DISTRACTION
Iggy	Wall Climb	Catnip Mouse	Right Paws First	Sleek Black	Cardboard Box
Yeti	Night Vision	Laser Pointer	Left Paws First	Orange Tabby	Tuna Snaps
Barnaby	Wall Climb	Laser Pointer	Left Paws First	Calico Patch	Tuna Snaps
Xander	High Jump	Jingle Ball	Left Paws First	Calico Patch	Warm Milk
Violet	Silent Sprint	Laser Pointer	Left Paws First	Calico Patch	Warm Milk
Jasper	Wall Climb	Laser Pointer	Left Paws First	Sleek Black	Tuna Snaps
Milo	Silent Sprint	Scratch Post	Right Paws First	Orange Tabby	Warm Milk
Una	Super Purr	Laser Pointer	Left Paws First	Orange Tabby	Cardboard Box
Kiki	High Jump	Catnip Mouse	Right Paws First	Orange Tabby	Tuna Snaps
Luna	Night Vision	Scratch Post	Left Paws First	Sleek Black	Cardboard Box
Nala	Night Vision	Feather Wand	Right Paws First	Sleek Black	Tuna Snaps
Zelda	Wall Climb	Catnip Mouse	Left Paws First	Orange Tabby	Cardboard Box
Quincy	Silent Sprint	Catnip Mouse	Left Paws First	Orange Tabby	Cardboard Box
Waffles	Super Purr	Feather Wand	Right Paws First	Calico Patch	Warm Milk
Hazel	Super Purr	Jingle Ball	Left Paws First	Orange Tabby	Cardboard Box
Garfield	High Jump	Laser Pointer	Right Paws First	Orange Tabby	Cardboard Box
Tigger	Silent Sprint	Laser Pointer	Right Paws First	Orange Tabby	Cardboard Box
Romeo	Wall Climb	Catnip Mouse	Left Paws First	Orange Tabby	Warm Milk
Felix	Night Vision	Feather Wand	Left Paws First	Sleek Black	Warm Milk
Ziggy	Night Vision	Laser Pointer	Left Paws First	Calico Patch	Tuna Snaps
Oliver	High Jump	Laser Pointer	Left Paws First	Orange Tabby	Cardboard Box

CLUE 1 Multiplication facts (1-12)

Detective Whiskers counts five rows of cat treats with four treats in each row to unlock the first clue vault.

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



9 × 5 = ☐ → T

1 × 7 = ☐ → H

7 × 12 = ☐ → I

7 × 8 = ☐ → P

4 × 11 = ☐ → J

8 × 4 = ☐ → G

11 × 11 = ☐ → L

5 × 2 = ☐ → D

1 × 1 = ☐ → S

11 × 6 = ☐ → N

5 × 1 = ☐ → O

8 × 8 = ☐ → A

9 × 9 = ☐ → Y

8 × 12 = ☐ → E

5 × 5 = ☐ → B

11 × 7 = ☐ → W

Scratch space:

CLUE 2 Multi-step word problems

The team solves a multi-step order form for cat supplies to decode the witness report.

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

A witness saw the villain was

L							S		I	R	S	
32	76	65	22	21	47	44		65				22

.

Detective Whiskers collected 14 food bowls in the morning and 50 food bowls in the afternoon, then split them equally among 2 Feline Rescue Unit. How many food bowls did each get?

Answer: ☐ → L

There were 177 yarn balls in all. 9 yarn balls were set aside. The rest were shared equally among 8 Feline Rescue Unit. How many yarn balls did each get?

Answer: ☐ → P

There were 219 food bowls in all. 1 Feline Rescue Unit used 24 food bowls each. The other 3 Feline Rescue Unit shared the rest equally. How many food bowls did each of the other Feline Rescue Unit get?

Answer: ☐ → F

There were 270 cat treats in all. 35 cat treats were set aside. The rest were shared equally among 5 Feline Rescue Unit. How many cat treats did each get?

Answer: ☐ → A

Detective Whiskers collected 53 feather toys in the morning and 35 feather toys in the afternoon, then split them equally among 4 Feline Rescue Unit. How many feather toys did each get?

Answer: ☐ → T

Detective Whiskers earned 6 yarn balls in each of 3 rounds, plus 65 bonus yarn balls. Then 7 yarn balls were lost. How many yarn balls are left?

Answer: ☐ → E

There were 259 food bowls in all. 39 food bowls were set aside. The rest were shared equally among 5 Feline Rescue Unit. How many food bowls did each get?

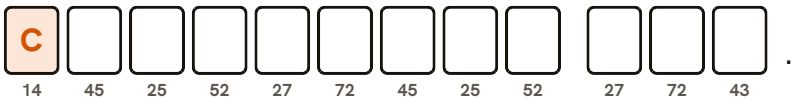
Answer: ☐ → W

Scratch space:

CLUE 3 Word problems

A mysterious note found under a scratching post reveals details about the suspect's habits.

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

Someone scared the villain off with 

.

There were 43 scratcher pads. 29 were used up. How many scratcher pads are left?

Answer: ☐ → **C**

Detective Whiskers lined up 6 rows of 12 food bowls. How many food bowls in all?

Answer: ☐ → **O**

Detective Whiskers lined up 5 rows of 9 scratcher pads. How many scratcher pads in all?

Answer: ☐ → **A**

There were 57 food bowls. 14 were used up. How many food bowls are left?

Answer: ☐ → **X**

Detective Whiskers lined up 9 rows of 3 feather toys. How many feather toys in all?

Answer: ☐ → **B**

Detective Whiskers found 11 yarn balls yesterday and 14 more today. How many yarn balls in all?

Answer: ☐ → **R**

Detective Whiskers found 37 food bowls yesterday and 15 more today. How many food bowls in all?

Answer: ☐ → **D**

Scratch space:

CLUE 4 Fractions of a number

> Whiskers inspects three fourths of the cozy cat beds to discover a hidden clue.

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

O																	
31	16	4	27	32	19	37	4	24	24	22	9	3	16	26	4	38	
	O																
9	31	3	27	18	27	19	4	16	37	5	19	38	4	9	19		

1/6 of 186 = ☐ → O

8/10 of 40 = ☐ → G

1/4 of 12 = ☐ → U

5/10 of 18 = ☐ → F

2/8 of 104 = ☐ → W

4/5 of 30 = ☐ → B

1/8 of 152 = ☐ → E

1/8 of 176 = ☐ → Y

5/10 of 36 = ☐ → D

2/4 of 54 = ☐ → N

1/2 of 32 = ☐ → R

1/2 of 10 = ☐ → H

1/10 of 40 = ☐ → A

4/8 of 74 = ☐ → T

2/5 of 95 = ☐ → S

Scratch space:

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

> Sharing twenty fish treats equally among five bowls unlocks the final piece of evidence.

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:

44 ÷ 4 = ☐	10 ÷ 10 = ☐	8 ÷ 4 = ☐	18 ÷ 3 = ☐	45 ÷ 9 = ☐
8 ÷ 2 = ☐	6 ÷ 2 = ☐	88 ÷ 11 = ☐	108 ÷ 12 = ☐	144 ÷ 12 = ☐
80 ÷ 8 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain sprinted silently across the room, then snagged a catnip mouse.
2. The villain leaped onto the highest shelf, then shone a laser pointer.
3. The villain leaped onto the highest shelf, then swiped a feather wand.
4. The villain purred loudly to distract the guard, then snagged a catnip mouse.
5. The villain navigated the dark hallway easily, then swiped a feather wand.
6. The villain leaped onto the highest shelf, then battered a jingle ball.
7. The villain scaled the wallpaper in seconds, then snagged a catnip mouse.
8. The villain navigated the dark hallway easily, then battered a jingle ball.
9. The villain navigated the dark hallway easily, then knocked over a scratch post.
10. The villain leaped onto the highest shelf, then snagged a catnip mouse.
11. The villain purred loudly to distract the guard, then shone a laser pointer.
12. The villain purred loudly to distract the guard, then knocked over a scratch post.

TEACHER / PARENT

Answer Key

The Great Catnip Caper

Culprit: Zelda

Wall Climb · Catnip Mouse · Left Paws First · Orange Tabby · Cardboard Box

Trail: Start 21 → Clue 1 19 → Clue 2 12 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE BANDIT DOES NOT PLAY WITH A JINGLE BALL"

9 × 5 = 45 (T) · 1 × 7 = 7 (H) · 7 × 12 = 84 (I) · 7 × 8 = 56 (P) · 4 × 11 = 44 (J) · 8 × 4 = 32 (G) · 11 × 11 = 121 (L) · 5 × 2 = 10 (D) · 1 × 1 = 1 (S) · 11 × 6 = 66 (N) · 5 × 1 = 5 (O) · 8 × 8 = 64 (A) · 9 × 9 = 81 (Y) · 8 × 12 = 96 (E) · 5 × 5 = 25 (B) · 11 × 7 = 77 (W)

Clue 2 (Multi-step word problems): "LEFT PAWS FIRST"

Detective Whiskers collected 14 food bowls in the morning and 50 food bowls in the afternoon, then split them equally among 2 Feline Rescue Unit. How many food bowls did each get? = 32 (L) · There were 177 yarn balls in all. 9 yarn balls were set aside. The rest were shared equally among 8 Feline Rescue Unit. How many yarn balls did each get? = 21 (P) · There were 219 food bowls in all. 1 Feline Rescue Unit used 24 food bowls each. The other 3 Feline Rescue Unit shared the rest equally. How many food bowls did each of the other Feline Rescue Unit get? = 65 (F) · There were 270 cat treats in all. 35 cat treats were set aside. The rest were shared equally among 5 Feline Rescue Unit. How many cat treats did each get? = 47 (A) · Detective Whiskers collected 53 feather toys in the morning and 35 feather toys in the afternoon, then split them equally among 4 Feline Rescue Unit. How many feather toys did each get? = 22 (T) · Detective Whiskers earned 6 yarn balls in each of 3 rounds, plus 65 bonus yarn balls. Then 7 yarn balls were lost. How many yarn balls are left? = 76 (E) · There were 259 food bowls in all. 39 food bowls were set aside. The rest were shared equally among 5 Feline Rescue Unit. How many food bowls did each get? = 44 (W)

Clue 3 (Word problems): "CARDBOARD BOX"

There were 43 scratcher pads. 29 were used up. How many scratcher pads are left? = 14 (C) · Detective Whiskers lined up 6 rows of 12 food bowls. How many food bowls in all? = 72 (O) · Detective Whiskers lined up 5 rows of 9 scratcher pads. How many scratcher pads in all? = 45 (A) · There were 57 food bowls. 14 were used up. How many food bowls are left? = 43 (X) · Detective Whiskers lined up 9 rows of 3 feather toys. How many feather toys in all? = 27 (B) · Detective Whiskers found 11 yarn balls yesterday and 14 more today. How many yarn balls in all? = 25 (R) · Detective Whiskers found 37 food bowls yesterday and 15 more today. How many food bowls in all? = 52 (D)

Clue 4 (Fractions of a number): "ORANGE TABBY FUR WAS FOUND NEAR THE SAFE"

1/6 of 186 = 31 (O) · 8/10 of 40 = 32 (G) · 1/4 of 12 = 3 (U) · 5/10 of 18 = 9 (F) · 2/8 of 104 = 26 (W) · 4/5 of 30 = 24 (B) · 1/8 of 152 = 19 (E) · 1/8 of 176 = 22 (Y) · 5/10 of 36 = 18 (D) · 2/4 of 54 = 27 (N) · 1/2 of 32 = 16 (R) · 1/2 of 10 = 5 (H) · 1/10 of 40 = 4 (A) · 4/8 of 74 = 37 (T) · 2/5 of 95 = 38 (S)

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

44 ÷ 4 = 11 · 10 ÷ 10 = 1 · 8 ÷ 4 = 2 · 18 ÷ 3 = 6 · 45 ÷ 9 = 5 · 8 ÷ 2 = 4 · 6 ÷ 2 = 3 · 88 ÷ 11 = 8 · 108 ÷ 12 = 9 · 144 ÷ 12 = 12 · 80 ÷ 8 = 10