The Great Catnip Caper

Grade 5 math · Fractions of a number, Order of operations, Multiplication, Rounding, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

The Golden Paw Trophy has gone missing right before the best-in-show award! A crafty feline sneaked into the hall and snatched it. Help Detective Whiskers follow the clues and catch 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 Mischievous Moggy is _____

Possible suspects

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

NAME	GADGET TOOL	SPECIAL HABIT	ACCESSORY	FUR PATTERN	DISTRACTION
Quincy Purr	Yarn Balls	Chasing Bubbles	Bell Collar	Orange Tabby	Warm Blanket
Garrick Garfield	Catnip Sprays	Climbing Trees	Spotted Bowtie	Jet Black Fur	Fresh Tuna
Barnaby Boots	Catnip Sprays	Chasing Bubbles	Bell Collar	Calico Fur	Warm Blanket
Jasper Jingle	Feather Dusters	Napping In Sun	Bell Collar	Orange Tabby	Fresh Tuna
Xander Claw	Laser Pointers	Climbing Trees	Bell Collar	Orange Tabby	Fresh Tuna
Valerie Velvet	Squeaky Mice	Purring Loudly	Spotted Bowtie	Jet Black Fur	Warm Blanket
Hazel Whiskers	Feather Dusters	Purring Loudly	Bell Collar	Orange Tabby	Cardboard Box
Nala Nibbles	Laser Pointers	Knocking Off Cups	Spotted Bowtie	Orange Tabby	Cardboard Box
Zelda Zigzag	Feather Dusters	Knocking Off Cups	Spotted Bowtie	Orange Tabby	Warm Blanket
Penelope Pounce	Catnip Sprays	Climbing Trees	Bell Collar	Orange Tabby	Warm Blanket
Ignatius Itchy	Catnip Sprays	Knocking Off Cups	Spotted Bowtie	Jet Black Fur	Fresh Tuna
Buster Biscuit	Laser Pointers	Chasing Bubbles	Bell Collar	Orange Tabby	Warm Blanket
Felix Fluff	Yarn Balls	Napping In Sun	Spotted Bowtie	Orange Tabby	Warm Blanket
Una Unikitty	Catnip Sprays	Napping In Sun	Spotted Bowtie	Orange Tabby	Warm Blanket
Luna Paws	Catnip Sprays	Chasing Bubbles	Spotted Bowtie	Orange Tabby	Warm Blanket
Cleo Catnip	Feather Dusters	Purring Loudly	Bell Collar	Jet Black Fur	Fresh Tuna
Rosie Rascal	Yarn Balls	Knocking Off Cups	Bell Collar	Jet Black Fur	Fresh Tuna
Winston Whisker	Feather Dusters	Climbing Trees	Bell Collar	Orange Tabby	Cardboard Box
Trixie Tail	Yarn Balls	Chasing Bubbles	Bell Collar	Orange Tabby	Fresh Tuna
Yara Yarn	Squeaky Mice	Climbing Trees	Spotted Bowtie	Orange Tabby	Warm Blanket
Simba Scratch	Squeaky Mice	Knocking Off Cups	Spotted Bowtie	Calico Fur	Warm Blanket

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CLUE 1 Fractions of a number

Detective Whiskers counted a fraction of the stray kibble left behind to uncover the first note.

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

T																			
23	9	20	5	25	31	31	19	25	15	22	24	20	32	15	24	23			

2	9	19	32	20	32	24	19	27	10	30	10	10	31	20	32				

2/10 of 115 = ☐ → T

3/5 of 40 = ☐ → O

2/4 of 62 = ☐ → L

4/6 of 30 = ☐ → E

5/10 of 10 = ☐ → V

4/8 of 4 = ☐ → C

2/6 of 45 = ☐ → N

1/6 of 162 = ☐ → P

1/6 of 192 = ☐ → S

2/10 of 150 = ☐ → U

2/5 of 55 = ☐ → D

5/8 of 16 = ☐ → B

2/10 of 125 = ☐ → I

2/6 of 57 = ☐ → A

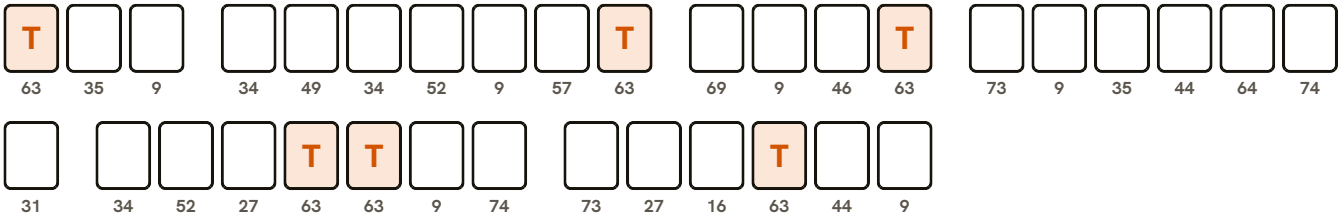
3/4 of 12 = ☐ → H

Scratch space:

CLUE 2 Order of operations

To unlock the secret diary, the team followed a multi step agility course code.

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



31 + 4 × 8 = ☐ → T

8 × 7 - 12 = ☐ → I

7 + 3 × 3 = ☐ → W

8 × 9 - 20 = ☐ → P

3 + 6 × 4 = ☐ → O

11 × 6 - 17 = ☐ → U

5 × 11 - 21 = ☐ → S

8 × 10 - 11 = ☐ → L

8 × 9 - 8 = ☐ → N

4 × 11 - 13 = ☐ → A

6 × 7 - 7 = ☐ → H

6 × 12 - 15 = ☐ → C

10 × 10 - 27 = ☐ → B

7 × 5 - 26 = ☐ → E

11 × 8 - 14 = ☐ → D

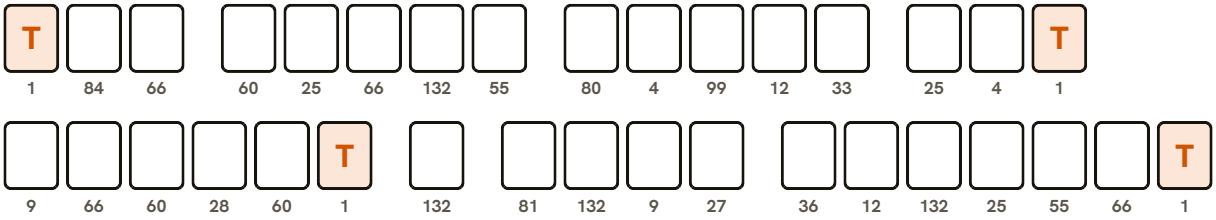
8 × 6 - 2 = ☐ → F

Scratch space:

CLUE 3 Multiplication facts (1-12)

Examining the pantry shelves, Whiskers counted equal rows of fish cans to reveal a clue.

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



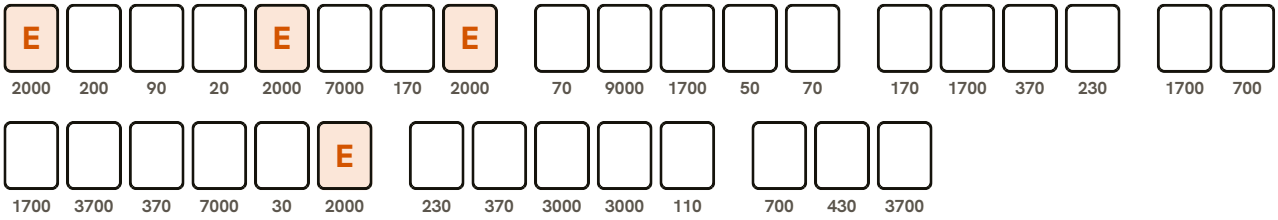
1 × 1 = ☐ → T	11 × 3 = ☐ → D	6 × 11 = ☐ → E
5 × 5 = ☐ → N	4 × 7 = ☐ → I	9 × 11 = ☐ → U
8 × 10 = ☐ → C	9 × 9 = ☐ → W	6 × 10 = ☐ → S
4 × 1 = ☐ → O	5 × 11 = ☐ → K	1 × 9 = ☐ → R
9 × 3 = ☐ → M		
11 × 12 = ☐ → A	4 × 3 = ☐ → L	7 × 12 = ☐ → H
9 × 4 = ☐ → B		

Scratch space:

CLUE 4 Rounding

The digital paw scanner only displayed rounded weights, hiding a suspect detail.

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



Round 2,328 to the nearest thousand ☐ → **E**

Round 108 to the nearest ten ☐ → **Y**

Round 9,427 to the nearest thousand ☐ → **H**

Round 171 to the nearest hundred ☐ → **V**

Round 3,191 to the nearest thousand ☐ → **B**

Round 34 to the nearest ten ☐ → **G**

Round 87 to the nearest ten ☐ → **I**

Round 228 to the nearest ten ☐ → **T**

Round 48 to the nearest ten ☐ → **W**

Round 3,705 to the nearest hundred ☐ → **R**

Round 6,580 to the nearest thousand ☐ → **N**

Round 713 to the nearest hundred ☐ → **F**

Round 170 to the nearest ten ☐ → **C**

Round 366 to the nearest ten ☐ → **A**

Round 19 to the nearest ten ☐ → **D**

Round 66 to the nearest ten ☐ → **S**

Round 1,691 to the nearest hundred ☐ → **O**

Round 431 to the nearest ten ☐ → **U**

Scratch space:

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

> Splitting the catnip toys evenly among cozy baskets revealed the final secret message.

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:

40 ÷ 10 = ☐	12 ÷ 6 = ☐	80 ÷ 10 = ☐	77 ÷ 11 = ☐	44 ÷ 4 = ☐
33 ÷ 11 = ☐	120 ÷ 12 = ☐	60 ÷ 12 = ☐	12 ÷ 1 = ☐	54 ÷ 6 = ☐
8 ÷ 8 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain zapped the stage with laser pointers, then purred loudly to cover the noise.
2. The villain dusted the trophies with feather dusters, then knocked ceramic cups off the tables.
3. The villain dusted the trophies with feather dusters, then purred loudly to cover the noise.
4. The villain distracted the guards with squeaky mice, then scrambled up the giant climbing trees.
5. The villain distracted the guards with squeaky mice, then purred loudly to cover the noise.
6. The villain sprayed the hallway with catnip mist, then curled up for a nap in the sun.
7. The villain tangled the entryway in yarn balls, then knocked ceramic cups off the tables.
8. The villain tangled the entryway in yarn balls, then curled up for a nap in the sun.
9. The villain distracted the guards with squeaky mice, then knocked ceramic cups off the tables.
10. The villain tangled the entryway in yarn balls, then chased soap bubbles across the hall.
11. The villain dusted the trophies with feather dusters, then curled up for a nap in the sun.
12. The villain sprayed the hallway with catnip mist, then purred loudly to cover the noise.

TEACHER / PARENT

Answer Key

The Great Catnip Caper

Culprit: Una Unikitty

Catnip Sprays · Napping In Sun · Spotted Bowtie · Orange Tabby · Warm Blanket

Trail: Start 21 → Clue 1 16 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE VILLAIN DOES NOT CHASE SOAP BUBBLES"

2/10 of 115 = 23 (T) · 3/5 of 40 = 24 (O) · 2/4 of 62 = 31 (L) · 4/6 of 30 = 20 (E) · 5/10 of 10 = 5 (V) · 4/8 of 4 = 2 (C) · 2/6 of 45 = 15 (N) · 1/6 of 162 = 27 (P) · 1/6 of 192 = 32 (S) · 2/10 of 150 = 30 (U) · 2/5 of 55 = 22 (D) · 5/8 of 16 = 10 (B) · 2/10 of 125 = 25 (I) · 2/6 of 57 = 19 (A) · 3/4 of 12 = 9 (H)

Clue 2 (Order of operations): "THE SUSPECT LEFT BEHIND A SPOTTED BOWTIE"

31 + 4 × 8 = 63 (T) · 8 × 7 - 12 = 44 (I) · 7 + 3 × 3 = 16 (W) · 8 × 9 - 20 = 52 (P) · 3 + 6 × 4 = 27 (O) · 11 × 6 - 17 = 49 (U) · 5 × 11 - 21 = 34 (S) · 8 × 10 - 11 = 69 (L) · 8 × 9 - 8 = 64 (N) · 4 × 11 - 13 = 31 (A) · 6 × 7 - 7 = 35 (H) · 6 × 12 - 15 = 57 (C) · 10 × 10 - 27 = 73 (B) · 7 × 5 - 26 = 9 (E) · 11 × 8 - 14 = 74 (D) · 8 × 6 - 2 = 46 (F)

Clue 3 (Multiplication facts (1-12)): "THE SNEAK COULD NOT RESIST A WARM BLANKET"

1 × 1 = 1 (T) · 11 × 3 = 33 (D) · 6 × 11 = 66 (E) · 5 × 5 = 25 (N) · 4 × 7 = 28 (I) · 9 × 11 = 99 (U) · 8 × 10 = 80 (C) · 9 × 9 = 81 (W) · 6 × 10 = 60 (S) · 4 × 1 = 4 (O) · 5 × 11 = 55 (K) · 1 × 9 = 9 (R) · 9 × 3 = 27 (M) · 11 × 12 = 132 (A) · 4 × 3 = 12 (L) · 7 × 12 = 84 (H) · 9 × 4 = 36 (B)

Clue 4 (Rounding): "EVIDENCE SHOWS COAT OF ORANGE TABBY FUR"

Round 2,328 to the nearest thousand = 2000 (E) · Round 108 to the nearest ten = 110 (Y) · Round 9,427 to the nearest thousand = 9000 (H) · Round 171 to the nearest hundred = 200 (V) · Round 3,191 to the nearest thousand = 3000 (B) · Round 34 to the nearest ten = 30 (G) · Round 87 to the nearest ten = 90 (I) · Round 228 to the nearest ten = 230 (T) · Round 48 to the nearest ten = 50 (W) · Round 3,705 to the nearest hundred = 3700 (R) · Round 6,580 to the nearest thousand = 7000 (N) · Round 713 to the nearest hundred = 700 (F) · Round 170 to the nearest ten = 170 (C) · Round 366 to the nearest ten = 370 (A) · Round 19 to the nearest ten = 20 (D) · Round 66 to the nearest ten = 70 (S) · Round 1,691 to the nearest hundred = 1700 (O) · Round 431 to the nearest ten = 430 (U)

Clue 5 (Division facts (1-12)): surviving statement is box 6 → Una Unikitty

40 ÷ 10 = 4 · 12 ÷ 6 = 2 · 80 ÷ 10 = 8 · 77 ÷ 11 = 7 · 44 ÷ 4 = 11 · 33 ÷ 11 = 3 · 120 ÷ 12 = 10 · 60 ÷ 12 = 5 · 12 ÷ 1 = 12 · 54 ÷ 6 = 9 · 8 ÷ 8 = 1