



The Case of the Missing Golden Yarn

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

Detective: _____ Date: _____

The legendary Golden Yarn Ball has been swiped from the Grand Meow Museum! A sneaky cat has left paw prints all over the scene. We must help the Golden Yarn Keeper find the thief.

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 The Scratch Bandit is _____

Possible suspects

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

NAME	SUPER SKILL	SECRET GADGET	DOMINANT PAW	FUR PATTERN	DISTRACTION
Garfield	Quick Dash	Laser Pointer	Right Pawed	Tabby Stripes	Warm Sunbeam
Toulouse	Quick Dash	Laser Pointer	Right Pawed	Tabby Stripes	Crinkly Paper
Felix	Super Purr	Squeaky Mouse	Left Pawed	Solid Orange	Crinkly Paper
Snowball	Silent Prowl	Squeaky Mouse	Right Pawed	Tabby Stripes	Warm Sunbeam
Sylvester	Super Purr	Feather Wand	Right Pawed	Solid Orange	Can Opener Sound
Salem	Wall Climb	Squeaky Mouse	Left Pawed	Solid Orange	Warm Sunbeam
Nala	High Jump	Fish Treat Launcher	Right Pawed	Calico Patches	Warm Sunbeam
Berlioz	High Jump	Laser Pointer	Left Pawed	Tabby Stripes	Warm Sunbeam
Simba	High Jump	Fish Treat Launcher	Right Pawed	Tabby Stripes	Crinkly Paper
Morris	High Jump	Catnip Bomb	Right Pawed	Tabby Stripes	Crinkly Paper
Marie	Super Purr	Feather Wand	Right Pawed	Tabby Stripes	Warm Sunbeam
Boots	Wall Climb	Feather Wand	Right Pawed	Calico Patches	Warm Sunbeam
Duchess	Quick Dash	Catnip Bomb	Left Pawed	Solid Orange	Crinkly Paper
Socks	Quick Dash	Fish Treat Launcher	Left Pawed	Tabby Stripes	Warm Sunbeam
Whiskers	Quick Dash	Fish Treat Launcher	Right Pawed	Calico Patches	Warm Sunbeam
Heathcliff	High Jump	Laser Pointer	Left Pawed	Tabby Stripes	Crinkly Paper
Figaro	Silent Prowl	Catnip Bomb	Right Pawed	Tabby Stripes	Warm Sunbeam
Mittens	Wall Climb	Squeaky Mouse	Left Pawed	Tabby Stripes	Can Opener Sound
Tom	Wall Climb	Fish Treat Launcher	Right Pawed	Tabby Stripes	Warm Sunbeam
Chloe	Silent Prowl	Squeaky Mouse	Left Pawed	Solid Orange	Can Opener Sound
Grumpy Cat	Silent Prowl	Squeaky Mouse	Left Pawed	Tabby Stripes	Can Opener Sound

CLUE 1 Addition

The museum guards are counting the missing fish treats to find a clue. Let us add up their tallies.

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

T			T											T
6429	8927	9669	6429	8927	3879	9669	4936	8765	6666	9669	4689	3999	6666	6429

									T							
3123	3984	6284	6284	3945	3984	4936	9669	3984	6429	8927	9669	6284	6848	3984	3999	8765

$2656 + 3773 = \square \rightarrow \boxed{\text{T}}$

$3129 + 3155 = \square \rightarrow \boxed{\text{R}}$

$4168 + 4597 = \square \rightarrow \boxed{\text{D}}$

$2453 + 1546 = \square \rightarrow \boxed{\text{N}}$

$3442 + 1494 = \square \rightarrow \boxed{\text{F}}$

$2091 + 1893 = \square \rightarrow \boxed{\text{A}}$

$4469 + 2379 = \square \rightarrow \boxed{\text{W}}$

$1939 + 2750 = \square \rightarrow \boxed{\text{S}}$

$2538 + 1341 = \square \rightarrow \boxed{\text{I}}$

$2687 + 1258 = \square \rightarrow \boxed{\text{Y}}$

$1872 + 1251 = \square \rightarrow \boxed{\text{C}}$

$5769 + 3158 = \square \rightarrow \boxed{\text{H}}$

$3548 + 3118 = \square \rightarrow \boxed{\text{O}}$

$3779 + 5890 = \square \rightarrow \boxed{\text{E}}$

Scratch space:

CLUE 2

Word problems

The clever cat detective needs to solve a tricky word puzzle left behind near the empty pedestal.

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

A witness saw the villain was R W E D .

38 63 73 50 79 58 55

Captain Whiskers found 9 milk bowls yesterday and 29 more today. How many milk bowls in all?

Answer: → R

Captain Whiskers found 26 milk bowls yesterday and 47 more today. How many milk bowls in all?

Answer: → G

There were 88 fish treats. 25 were used up. How many fish treats are left?

Answer: → I

Captain Whiskers lined up 5 rows of 11 yarn balls. How many yarn balls in all?

Answer: → A

Captain Whiskers found 22 milk bowls yesterday and 36 more today. How many milk bowls in all?

Answer: → P

Captain Whiskers lined up 10 rows of 5 fish treats. How many fish treats in all?

Answer: → H

Captain Whiskers found 9 fish treats yesterday and 70 more today. How many fish treats in all?

Answer: → T

Scratch space:

CLUE 3
Rounding

The security radar has scanned the getaway route, but the distance readings are all rounded to the nearest ten.

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

W				W													
90	5000	2900	1100	90	700	300	5000	500	290	5000	430	1100	20	20	70	430	200

			W														
70	430	1100	90	1100	170	110	2900	3700	430	4300	5000	1100	110				

Round 91 to the nearest ten → **W**

Round 1,068 to the nearest hundred → **A**

Round 112 to the nearest ten → **M**

Round 272 to the nearest hundred → **H**

Round 734 to the nearest hundred → **T**

Round 166 to the nearest ten → **R**

Round 4,638 to the nearest thousand → **E**

Round 434 to the nearest ten → **N**

Round 289 to the nearest ten → **O**

Round 4,269 to the nearest hundred → **B**

Round 500 to the nearest hundred → **F**

Round 68 to the nearest ten → **I**

Round 220 to the nearest hundred → **G**

Round 16 to the nearest ten → **P**

Round 3,715 to the nearest hundred → **U**

Round 2,907 to the nearest hundred → **S**

Scratch space:

CLUE 4

Subtraction

We are checking the remaining inventory. Subtract the leftover yarn balls from the total to see what is missing.

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

W													
3381	5982	3915	6174	5049	8002	8002	5982	8224	8002	7946	6840	6840	7618

3915	8002	8515	3274	6174	5982	3915	5049	5703	8002	8356	5982	1922	7946	6279	5982	8515	7946

$6191 - 2810 = \square \rightarrow \boxed{\text{W}}$

$8459 - 4544 = \square \rightarrow \boxed{\text{S}}$

$3404 - 1482 = \square \rightarrow \boxed{\text{C}}$

$7657 - 817 = \square \rightarrow \boxed{\text{B}}$

$5162 - 1888 = \square \rightarrow \boxed{\text{I}}$

$12132 - 3776 = \square \rightarrow \boxed{\text{H}}$

$9659 - 3380 = \square \rightarrow \boxed{\text{M}}$

$7435 - 2386 = \square \rightarrow \boxed{\text{O}}$

$12551 - 4327 = \square \rightarrow \boxed{\text{D}}$

$8988 - 3285 = \square \rightarrow \boxed{\text{N}}$

$7596 - 1422 = \square \rightarrow \boxed{\text{P}}$

$6413 - 431 = \square \rightarrow \boxed{\text{E}}$

$12662 - 4147 = \square \rightarrow \boxed{\text{R}}$

$8760 - 758 = \square \rightarrow \boxed{\text{T}}$

$12150 - 4532 = \square \rightarrow \boxed{\text{Y}}$

$8774 - 828 = \square \rightarrow \boxed{\text{A}}$

Scratch space:

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

The local kittens need to split the leftover milk cartons equally to figure out where the thief went.

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:

$18 \div 6 = \boxed{}$

$70 \div 10 = \boxed{}$

$11 \div 11 = \boxed{}$

$22 \div 2 = \boxed{}$

$32 \div 8 = \boxed{}$

$36 \div 4 = \boxed{}$

$10 \div 1 = \boxed{}$

$36 \div 6 = \boxed{}$

$20 \div 10 = \boxed{}$

$96 \div 8 = \boxed{}$

$40 \div 8 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain sneaks past the sleepy guard dogs, then smokes out the room with a catnip bomb.
2. The villain scales the high glass dome, then smokes out the room with a catnip bomb.
3. The villain sneaks past the sleepy guard dogs, then tosses a squeaky mouse to trick the guard.
4. The villain leaps over the museum lasers, then smokes out the room with a catnip bomb.
5. The villain dashes through the open cat flap, then smokes out the room with a catnip bomb.
6. The villain dashes through the open cat flap, then blasts a path with a fish treat launcher.
7. The villain scales the high glass dome, then blasts a path with a fish treat launcher.
8. The villain dashes through the open cat flap, then distracts the robotic mice with a laser pointer.
9. The villain scales the high glass dome, then tosses a squeaky mouse to trick the guard.
10. The villain leaps over the museum lasers, then blasts a path with a fish treat launcher.
11. The villain leaps over the museum lasers, then distracts the robotic mice with a laser pointer.
12. The villain hypnotizes the guards with a loud purr, then blasts a path with a fish treat launcher.

Answer Key

The Case of the Missing Golden Yarn

Culprit: Garfield

Quick Dash · Laser Pointer · Right Pawed · Tabby Stripes · Warm Sunbeam

Trail: Start 21 → Clue 1 18 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE THIEF DOES NOT CARRY A FEATHER WAND"

$2656 + 3773 = 6429$ (T) · $3129 + 3155 = 6284$ (R) · $4168 + 4597 = 8765$ (D) · $2453 + 1546 = 3999$ (N) · $3442 + 1494 = 4936$ (F) · $2091 + 1893 = 3984$ (A) · $4469 + 2379 = 6848$ (W) · $1939 + 2750 = 4689$ (S) · $2538 + 1341 = 3879$ (I) · $2687 + 1258 = 3945$ (Y) · $1872 + 1251 = 3123$ (C) · $5769 + 3158 = 8927$ (H) · $3548 + 3118 = 6666$ (O) · $3779 + 5890 = 9669$ (E)

Clue 2 (Word problems): "RIGHT PAWED"

Captain Whiskers found 9 milk bowls yesterday and 29 more today. How many milk bowls in all? = 38 (R) · Captain Whiskers found 26 milk bowls yesterday and 47 more today. How many milk bowls in all? = 73 (G) · There were 88 fish treats. 25 were used up. How many fish treats are left? = 63 (I) · Captain Whiskers lined up 5 rows of 11 yarn balls. How many yarn balls in all? = 55 (A) · Captain Whiskers found 22 milk bowls yesterday and 36 more today. How many milk bowls in all? = 58 (P) · Captain Whiskers lined up 10 rows of 5 fish treats. How many fish treats in all? = 50 (H) · Captain Whiskers found 9 fish treats yesterday and 70 more today. How many fish treats in all? = 79 (T)

Clue 3 (Rounding): "WE SAW THE FOE NAPPING IN A WARM SUNBEAM"

Round 91 to the nearest ten = 90 (W) · Round 1,068 to the nearest hundred = 1100 (A) · Round 112 to the nearest ten = 110 (M) · Round 272 to the nearest hundred = 300 (H) · Round 734 to the nearest hundred = 700 (T) · Round 166 to the nearest ten = 170 (R) · Round 4,638 to the nearest thousand = 5000 (E) · Round 434 to the nearest ten = 430 (N) · Round 289 to the nearest ten = 290 (O) · Round 4,269 to the nearest hundred = 4300 (B) · Round 500 to the nearest hundred = 500 (F) · Round 68 to the nearest ten = 70 (I) · Round 220 to the nearest hundred = 200 (G) · Round 16 to the nearest ten = 20 (P) · Round 3,715 to the nearest hundred = 3700 (U) · Round 2,907 to the nearest hundred = 2900 (S)

Clue 4 (Subtraction): "WE SPOTTED TABBY STRIPES ON THE CAMERA"

$6191 - 2810 = 3381$ (W) · $8459 - 4544 = 3915$ (S) · $3404 - 1482 = 1922$ (C) · $7657 - 817 = 6840$ (B) · $5162 - 1888 = 3274$ (I) · $12132 - 3776 = 8356$ (H) · $9659 - 3380 = 6279$ (M) · $7435 - 2386 = 5049$ (O) · $12551 - 4327 = 8224$ (D) · $8988 - 3285 = 5703$ (N) · $7596 - 1422 = 6174$ (P) · $6413 - 431 = 5982$ (E) · $12662 - 4147 = 8515$ (R) · $8760 - 758 = 8002$ (T) · $12150 - 4532 = 7618$ (Y) · $8774 - 828 = 7946$ (A)

Clue 5 (Division facts (1-12)): surviving statement is box 8 → Garfield

$18 \div 6 = 3$ · $70 \div 10 = 7$ · $11 \div 11 = 1$ · $22 \div 2 = 11$ · $32 \div 8 = 4$ · $36 \div 4 = 9$ · $10 \div 1 = 10$ · $36 \div 6 = 6$ · $20 \div 10 = 2$ · $96 \div 8 = 12$ · $40 \div 8 = 5$