



The Purrfect Palace Heist

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

Detective: _____ Date: _____

The Golden Tuna Trophy has been swiped from the luxury hotel! A sneaky cat burglar slipped past the lasers and snuck into the kitchen. We need to find the culprit before the grand feast tonight!

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	SPECIAL GEAR	SPECIAL SKILL	LEFT/RIGHT PAWED	FUR COLOR	SCARE FACTOR
Chloe	laser pointer	loud purring	right pawed	sleek black fur	vacuum cleaner hum
Pumpkin	laser pointer	loud purring	left pawed	orange tabby fur	squeaky mouse toy
Sylvester	yarn ball	carpet scratching	right pawed	sleek black fur	vacuum cleaner hum
Boots	feather wand	fish breath	right pawed	fluffy white fur	squeaky mouse toy
Garfield	laser pointer	fish breath	left pawed	sleek black fur	vacuum cleaner hum
Morris	laser pointer	loud purring	right pawed	fluffy white fur	vacuum cleaner hum
Ziggy	feather wand	night vision	left pawed	sleek black fur	vacuum cleaner hum
Socks	catnip spray	fish breath	left pawed	sleek black fur	squeaky mouse toy
Milo	cardboard box	high jumping	left pawed	sleek black fur	vacuum cleaner hum
Buster	feather wand	fish breath	left pawed	orange tabby fur	spray water bottle
Fluffy	feather wand	loud purring	right pawed	fluffy white fur	vacuum cleaner hum
Luna	yarn ball	high jumping	left pawed	fluffy white fur	vacuum cleaner hum
Lucy	laser pointer	night vision	right pawed	orange tabby fur	squeaky mouse toy
Smokey	yarn ball	loud purring	left pawed	sleek black fur	vacuum cleaner hum
Cleo	laser pointer	loud purring	left pawed	sleek black fur	vacuum cleaner hum
Mittens	laser pointer	carpet scratching	right pawed	sleek black fur	squeaky mouse toy
Felix	catnip spray	night vision	right pawed	sleek black fur	vacuum cleaner hum
Oreo	yarn ball	high jumping	right pawed	fluffy white fur	vacuum cleaner hum
Shadow	catnip spray	night vision	right pawed	orange tabby fur	vacuum cleaner hum
Bella	cardboard box	night vision	right pawed	orange tabby fur	squeaky mouse toy
Simba	yarn ball	night vision	left pawed	sleek black fur	vacuum cleaner hum

CLUE 1 Rounding

The hotel security camera has a fuzzy screen that rounds the number of cats it sees to the nearest ten. Let us estimate the crowd.

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

T			T											T				
30	4300	900	30	4300	1700	900	110	20	700	900	430	1100	700	30	4300	70	9000	900
7000	700	230	20	2000	230	90	90	1700	1100	1300								

Round 34 to the nearest ten → **T**

Round 872 to the nearest hundred → **E**

Round 6,876 to the nearest thousand → **L**

Round 1,814 to the nearest thousand → **P**

Round 9,410 to the nearest thousand → **V**

Round 22 to the nearest ten → **D**

Round 433 to the nearest ten → **S**

Round 1,055 to the nearest hundred → **N**

Round 1,322 to the nearest hundred → **G**

Round 92 to the nearest ten → **R**

Round 114 to the nearest ten → **F**

Round 228 to the nearest ten → **U**

Round 74 to the nearest ten → **A**

Round 4,310 to the nearest hundred → **H**

Round 667 to the nearest hundred → **O**

Round 1,703 to the nearest hundred → **I**

Scratch space:

CLUE 2 Addition

A friendly detective counts up the stray kibbles left in the lobby and adds them to the kibbles found in the kitchen.

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

L																		
4660	3782	4034	9182	2959	3827	9423	2959	4522	3215	3321	9182	4034	3800	9886	3321	8329	3800	3321
9182	9092	3782	9182	9886	3321	3827	4751	3827	4034	3782								

$3144 + 1516 = \square \rightarrow \boxed{\text{L}}$	$1618 + 2164 = \square \rightarrow \boxed{\text{E}}$	$1004 + 2211 = \square \rightarrow \boxed{\text{I}}$
$2380 + 1420 = \square \rightarrow \boxed{\text{O}}$	$2748 + 1286 = \square \rightarrow \boxed{\text{F}}$	$3535 + 5557 = \square \rightarrow \boxed{\text{H}}$
$4097 + 5326 = \square \rightarrow \boxed{\text{W}}$	$3513 + 4816 = \square \rightarrow \boxed{\text{D}}$	$1006 + 2315 = \square \rightarrow \boxed{\text{N}}$
$3173 + 1578 = \square \rightarrow \boxed{\text{S}}$	$6498 + 3388 = \square \rightarrow \boxed{\text{U}}$	$2515 + 2007 = \square \rightarrow \boxed{\text{R}}$
$3651 + 5531 = \square \rightarrow \boxed{\text{T}}$	$1824 + 1135 = \square \rightarrow \boxed{\text{P}}$	$2405 + 1422 = \square \rightarrow \boxed{\text{A}}$

Scratch space:

CLUE 3

Subtraction

The thief knocked over a jar of gourmet treats, and some went missing. We must subtract the remaining treats to see how many were taken.

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

T			T												T		
3656	7130	6316	3656	7130	6488	6316	4984	7130	6488	5110	4984	5426	3564	1080	3656	7130	6316
4088	1931	1162	4475	4475	1080	2247	3564	6488	8747	6316							

$4859 - 1203 = \square \rightarrow \boxed{\text{T}}$

$5285 - 1197 = \square \rightarrow \boxed{\text{V}}$

$8978 - 2490 = \square \rightarrow \boxed{\text{I}}$

$10780 - 3650 = \square \rightarrow \boxed{\text{H}}$

$7392 - 3828 = \square \rightarrow \boxed{\text{O}}$

$2290 - 1210 = \square \rightarrow \boxed{\text{M}}$

$4711 - 236 = \square \rightarrow \boxed{\text{U}}$

$8368 - 2942 = \square \rightarrow \boxed{\text{R}}$

$5572 - 3325 = \square \rightarrow \boxed{\text{N}}$

$12830 - 4083 = \square \rightarrow \boxed{\text{S}}$

$6837 - 4906 = \square \rightarrow \boxed{\text{A}}$

$8053 - 3069 = \square \rightarrow \boxed{\text{F}}$

$4529 - 3367 = \square \rightarrow \boxed{\text{C}}$

$7994 - 1678 = \square \rightarrow \boxed{\text{E}}$

$6209 - 1099 = \square \rightarrow \boxed{\text{D}}$

Scratch space:

CLUE 4

Multiplication facts (1-12)

We found rows of paw prints in the wet garden mud. Each row has the same number of prints, so we multiply them to count the total.

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

B																	
42	10	120	144	56	15	16	4	144	10	21	108	99	21	108	99	49	7
							B										
49	44	24	49	120	42	10	24										

$7 \times 6 = \square \rightarrow \text{B}$

$1 \times 7 = \square \rightarrow \text{O}$

$8 \times 2 = \square \rightarrow \text{U}$

$7 \times 7 = \square \rightarrow \text{T}$

$11 \times 9 = \square \rightarrow \text{G}$

$12 \times 12 = \square \rightarrow \text{C}$

$12 \times 9 = \square \rightarrow \text{N}$

$7 \times 8 = \square \rightarrow \text{K}$

$5 \times 3 = \square \rightarrow \text{F}$

$3 \times 7 = \square \rightarrow \text{I}$

$3 \times 8 = \square \rightarrow \text{E}$

$4 \times 11 = \square \rightarrow \text{H}$

$2 \times 2 = \square \rightarrow \text{R}$

$12 \times 10 = \square \rightarrow \text{A}$

$5 \times 2 = \square \rightarrow \text{L}$

Scratch space:

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

The hotel staff needs to share the leftover catnip toys equally among the rescue kittens to see how many each kitten gets.

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:

$80 \div 10 = \square$

$60 \div 10 = \square$

$11 \div 1 = \square$

$48 \div 12 = \square$

$84 \div 7 = \square$

$55 \div 11 = \square$

$99 \div 11 = \square$

$18 \div 6 = \square$

$6 \div 6 = \square$

$84 \div 12 = \square$

$16 \div 8 = \square$

Step 2 - cross out the sentence with each answer:

1. The villain sprays catnip for a quick escape, then scratches carpets to climb up.
2. The villain throws a yarn ball to confuse the guards, then jumps high over the security gate.
3. The villain sprays catnip for a quick escape, then purrs loudly to jam the microphones.
4. The villain hides inside a cardboard box, then makes a fish breath fog screen.
5. The villain hides inside a cardboard box, then uses night vision to sneak in the dark.
6. The villain uses a feather wand to open doors, then uses night vision to sneak in the dark.
7. The villain uses a laser pointer to scale walls, then scratches carpets to climb up.
8. The villain hides inside a cardboard box, then jumps high over the security gate.
9. The villain uses a laser pointer to scale walls, then uses night vision to sneak in the dark.
10. The villain throws a yarn ball to confuse the guards, then uses night vision to sneak in the dark.
11. The villain uses a laser pointer to scale walls, then makes a fish breath fog screen.
12. The villain sprays catnip for a quick escape, then uses night vision to sneak in the dark.

Answer Key

The Purrfect Palace Heist

Culprit: Simba

yarn ball · night vision · left pawed · sleek black fur · vacuum cleaner hum

Trail: Start 21 → Clue 1 15 → Clue 2 7 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE THIEF DOES NOT HAVE LOUD PURRING"

Round 34 to the nearest ten = 30 (T) · Round 872 to the nearest hundred = 900 (E) · Round 6,876 to the nearest thousand = 7000 (L) · Round 1,814 to the nearest thousand = 2000 (P) · Round 9,410 to the nearest thousand = 9000 (V) · Round 22 to the nearest ten = 20 (D) · Round 433 to the nearest ten = 430 (S) · Round 1,055 to the nearest hundred = 1100 (N) · Round 1,322 to the nearest hundred = 1300 (G) · Round 92 to the nearest ten = 90 (R) · Round 114 to the nearest ten = 110 (F) · Round 228 to the nearest ten = 230 (U) · Round 74 to the nearest ten = 70 (A) · Round 4,310 to the nearest hundred = 4300 (H) · Round 667 to the nearest hundred = 700 (O) · Round 1,703 to the nearest hundred = 1700 (I)

Clue 2 (Addition): "LEFT PAW PRINT FOUND ON THE TUNA SAFE"

$3144 + 1516 = 4660$ (L) · $1618 + 2164 = 3782$ (E) · $1004 + 2211 = 3215$ (I) · $2380 + 1420 = 3800$ (O) · $2748 + 1286 = 4034$ (F) · $3535 + 5557 = 9092$ (H) · $4097 + 5326 = 9423$ (W) · $3513 + 4816 = 8329$ (D) · $1006 + 2315 = 3321$ (N) · $3173 + 1578 = 4751$ (S) · $6498 + 3388 = 9886$ (U) · $2515 + 2007 = 4522$ (R) · $3651 + 5531 = 9182$ (T) · $1824 + 1135 = 2959$ (P) · $2405 + 1422 = 3827$ (A)

Clue 3 (Subtraction): "THE THIEF HID FROM THE VACUUM NOISE"

$4859 - 1203 = 3656$ (T) · $5285 - 1197 = 4088$ (V) · $8978 - 2490 = 6488$ (I) · $10780 - 3650 = 7130$ (H) · $7392 - 3828 = 3564$ (O) · $2290 - 1210 = 1080$ (M) · $4711 - 236 = 4475$ (U) · $8368 - 2942 = 5426$ (R) · $5572 - 3325 = 2247$ (N) · $12830 - 4083 = 8747$ (S) · $6837 - 4906 = 1931$ (A) · $8053 - 3069 = 4984$ (F) · $4529 - 3367 = 1162$ (C) · $7994 - 1678 = 6316$ (E) · $6209 - 1099 = 5110$ (D)

Clue 4 (Multiplication facts (1-12)): "BLACK FUR CLINGING TO THE TABLE"

$7 \times 6 = 42$ (B) · $1 \times 7 = 7$ (O) · $8 \times 2 = 16$ (U) · $7 \times 7 = 49$ (T) · $11 \times 9 = 99$ (G) · $12 \times 12 = 144$ (C) · $12 \times 9 = 108$ (N) · $7 \times 8 = 56$ (K) · $5 \times 3 = 15$ (F) · $3 \times 7 = 21$ (I) · $3 \times 8 = 24$ (E) · $4 \times 11 = 44$ (H) · $2 \times 2 = 4$ (R) · $12 \times 10 = 120$ (A) · $5 \times 2 = 10$ (L)

Clue 5 (Division facts (1-12)): surviving statement is box 10 → Simba

$80 \div 10 = 8$ · $60 \div 10 = 6$ · $11 \div 1 = 11$ · $48 \div 12 = 4$ · $84 \div 7 = 12$ · $55 \div 11 = 5$ · $99 \div 11 = 9$ · $18 \div 6 = 3$ · $6 \div 6 = 1$ · $84 \div 12 = 7$ · $16 \div 8 = 2$