The Kitty Cafe Mystery

Grade 2 math · Place value, Addition, Subtraction, Skip counting, Missing addends · Reading level grades 1-2

Detective: _____ **Date:** _____

Oh no! Someone swiped the Golden Fish Treat from the Purr Palace kitchen! The head chef needs your help to find 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	SPECIAL SKILL	SNEAKY TOOL	BOY OR GIRL	FUR TYPE	DISTRACTION
Socks	high jump	fake mouse	boy cat	curly coat	tuna snack
Daisy	silent creep	fish bone	girl cat	curly coat	paper bag
Leo	silent creep	fake mouse	girl cat	short coat	laser dot
Lucky	wall climb	shiny bell	girl cat	curly coat	paper bag
Max	super pounce	yarn ball	girl cat	curly coat	paper bag
Bella	fast sprint	yarn ball	boy cat	short coat	laser dot
Misty	high jump	yarn ball	girl cat	curly coat	tuna snack
Sassy	super pounce	fish bone	girl cat	short coat	tuna snack
Ginger	high jump	fish bone	boy cat	curly coat	paper bag
Jasper	silent creep	yarn ball	girl cat	fluffy coat	laser dot
Oscar	fast sprint	shiny bell	girl cat	curly coat	paper bag
Lola	super pounce	shiny bell	girl cat	short coat	paper bag
Milo	silent creep	feather wand	boy cat	curly coat	laser dot
Fluffy	super pounce	fake mouse	boy cat	short coat	paper bag
Oliver	silent creep	feather wand	girl cat	curly coat	paper bag
Peanut	silent creep	shiny bell	boy cat	fluffy coat	tuna snack
Tiger	wall climb	feather wand	girl cat	fluffy coat	paper bag
Smokey	super pounce	fish bone	boy cat	curly coat	laser dot
Toby	silent creep	feather wand	girl cat	short coat	laser dot
Cookie	fast sprint	fake mouse	girl cat	short coat	tuna snack
Barnaby	wall climb	fish bone	boy cat	fluffy coat	tuna snack

CLUE 1 Place value (tens & ones)

> The hotel camera took a picture of the suspect. To unlock the screen, you must look at the blocks. How many tens and ones are there?

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

N											N			
43	62	45	16	98	83	93	16	89	27	98	43	28		

What number has 4 tens and 3 ones? ☐ **N**

What number has 9 tens and 3 ones? ☐ **H**

What number has 1 ten and 6 ones? ☐ **E**

What number has 4 tens and 5 ones? ☐ **F**

What number has 2 tens and 8 ones? ☐ **D**

What number has 2 tens and 7 ones? ☐ **W**

What number has 9 tens and 8 ones? ☐ **A**

What number has 8 tens and 3 ones? ☐ **T**

What number has 6 tens and 2 ones? ☐ **O**

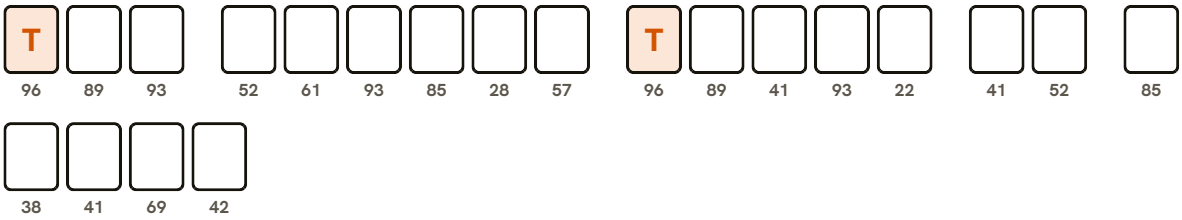
What number has 8 tens and 9 ones? ☐ **R**

Scratch space:

CLUE 2 Addition

> We found some paw prints in the kitchen. Let us count them. We add the front prints to the back prints to find the total.

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



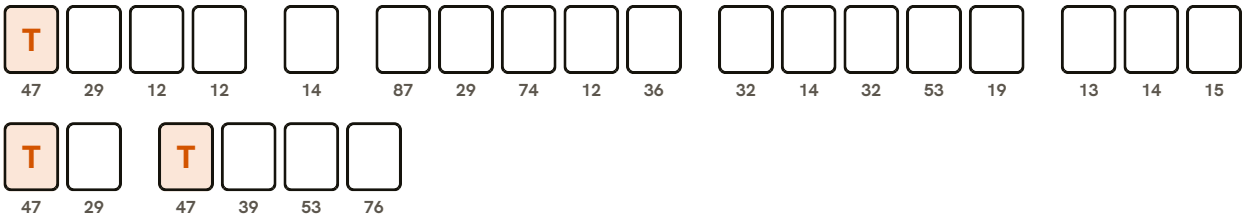
52 + 44 =		T	19 + 33 =		S	16 + 22 =		G
6 + 16 =		F	21 + 20 =		I	30 + 55 =		A
15 + 13 =		K	60 + 29 =		H	24 + 33 =		Y
29 + 13 =		L	65 + 28 =		E	38 + 31 =		R
38 + 23 =		N						

Scratch space:

CLUE 3 Subtraction

> The thief knocked over a jar of cat treats. There were some treats on the floor, but a puppy ate some. Let us subtract to see how many are left.

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



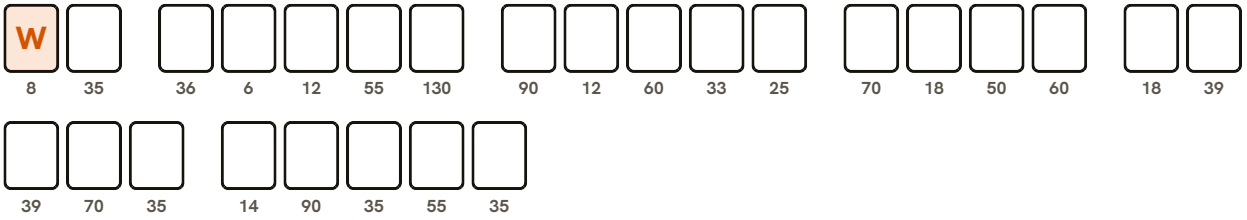
85 - 38 =		T	50 - 18 =		P	15 - 2 =		B
66 - 37 =		O	25 - 10 =		G	92 - 5 =		N
74 - 21 =		E	52 - 33 =		R	28 - 16 =		S
52 - 13 =		H	42 - 28 =		A	79 - 3 =		M
39 - 3 =		Y	100 - 26 =		I			

Scratch space:

CLUE 4 Skip counting

The thief ran up the stairs. We can count the steps by twos. Skip count to find the top step!

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



Skip-count by 2s. Fill the blank: 2, 4, 6, ___, 10, 12 [ ] **W**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, ___, 100, 110 [ ] **C**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, ___, 40, 45 [ ] **E**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, ___, 39, 42 [ ] **F**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, ___, 140, 150 [ ] **D**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, ___, 65, 70 [ ] **R**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, ___, 30, 35 [ ] **Y**

Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 [ ] **O**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, ___, 42, 45 [ ] **T**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, ___, 36, 39 [ ] **L**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, ___, 60, 65 [ ] **N**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, ___, 80, 90 [ ] **H**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, ___, 14, 16 [ ] **U**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, ___, 55, 60 [ ] **I**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, ___, 16, 18 [ ] **S**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, ___, 21, 24 [ ] **A**

Scratch space:

CLUE 5 Missing addends - the last clue

> We have six toy mice, but we need ten to set a trap. How many more toy mice do we need to find?

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:

3 + ___ = 6 ☐	4 + ___ = 13 ☐	4 + ___ = 15 ☐
3 + ___ = 4 ☐	4 + ___ = 9 ☐	10 + ___ = 16 ☐
1 + ___ = 9 ☐	8 + ___ = 20 ☐	3 + ___ = 10 ☐
10 + ___ = 14 ☐	7 + ___ = 9 ☐	

Step 2 - cross out the sentence with each answer:

1. The villain scales the tall scratching post, then rolls a ball of yarn.
2. The villain leaps over the velvet sofa, then rolls a ball of yarn.
3. The villain pounces onto the food counter, then rolls a ball of yarn.
4. The villain leaps over the velvet sofa, then shakes a shiny bell.
5. The villain leaps over the velvet sofa, then drops a fake mouse.
6. The villain dashes through the lobby, then drops a fake mouse.
7. The villain sneaks past the sleeping guard, then shakes a shiny bell.
8. The villain dashes through the lobby, then chews on a dry fish bone.
9. The villain dashes through the lobby, then shakes a shiny bell.
10. The villain sneaks past the sleeping guard, then chews on a dry fish bone.
11. The villain scales the tall scratching post, then shakes a shiny bell.
12. The villain pounces onto the food counter, then shakes a shiny bell.

TEACHER / PARENT

Answer Key

The Kitty Cafe Mystery

Culprit: Daisy

silent creep · fish bone · girl cat · curly coat · paper bag

Trail: Start 21 → Clue 1 17 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Place value (tens & ones)): "NO FEATHER WAND"

What number has 4 tens and 3 ones? = 43 (N) · What number has 9 tens and 3 ones? = 93 (H) · What number has 1 ten and 6 ones? = 16 (E) · What number has 4 tens and 5 ones? = 45 (F) · What number has 2 tens and 8 ones? = 28 (D) · What number has 2 tens and 7 ones? = 27 (W) · What number has 9 tens and 8 ones? = 98 (A) · What number has 8 tens and 3 ones? = 83 (T) · What number has 6 tens and 2 ones? = 62 (O) · What number has 8 tens and 9 ones? = 89 (R)

Clue 2 (Addition): "THE SNEAKY THIEF IS A GIRL"

52 + 44 = 96 (T) · 19 + 33 = 52 (S) · 16 + 22 = 38 (G) · 6 + 16 = 22 (F) · 21 + 20 = 41 (I) · 30 + 55 = 85 (A) · 15 + 13 = 28 (K) · 60 + 29 = 89 (H) · 24 + 33 = 57 (Y) · 29 + 13 = 42 (L) · 65 + 28 = 93 (E) · 38 + 31 = 69 (R) · 38 + 23 = 61 (N)

Clue 3 (Subtraction): "TOSS A NOISY PAPER BAG TO THEM"

85 - 38 = 47 (T) · 50 - 18 = 32 (P) · 15 - 2 = 13 (B) · 66 - 37 = 29 (O) · 25 - 10 = 15 (G) · 92 - 5 = 87 (N) · 74 - 21 = 53 (E) · 52 - 33 = 19 (R) · 28 - 16 = 12 (S) · 52 - 13 = 39 (H) · 42 - 28 = 14 (A) · 79 - 3 = 76 (M) · 39 - 3 = 36 (Y) · 100 - 26 = 74 (I)

Clue 4 (Skip counting): "WE FOUND CURLY HAIR AT THE SCENE"

Skip-count by 2s. Fill the blank: 2, 4, 6, ___, 10, 12 = 8 (W) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, ___, 100, 110 = 90 (C) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, ___, 40, 45 = 35 (E) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, ___, 39, 42 = 36 (F) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, ___, 140, 150 = 130 (D) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, ___, 65, 70 = 60 (R) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, ___, 30, 35 = 25 (Y) · Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 = 6 (O) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, ___, 42, 45 = 39 (T) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, ___, 36, 39 = 33 (L) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, ___, 60, 65 = 55 (N) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, ___, 80, 90 = 70 (H) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, ___, 14, 16 = 12 (U) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, ___, 55, 60 = 50 (I) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, ___, 16, 18 = 14 (S) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, ___, 21, 24 = 18 (A)

Clue 5 (Missing addends): surviving statement is box 10 → Daisy

3 + ___ = 6 = 3 · 4 + ___ = 13 = 9 · 4 + ___ = 15 = 11 · 3 + ___ = 4 = 1 · 4 + ___ = 9 = 5 · 10 + ___ = 16 = 6 · 1 + ___ = 9 = 8 · 8 + ___ = 20 = 12 · 3 + ___ = 10 = 7 · 10 + ___ = 14 = 4 · 7 + ___ = 9 = 2