



# Case of the Yarn Bandit

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

Detective: \_\_\_\_\_ Date: \_\_\_\_\_

Someone snuck into the Whisker Town Cat Cafe and grabbed Mittens, the softest cat in town. All the yarn balls were rolled across the floor. You are the cafe's best kitten detective, and the trail is still warm.

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 Yarn Bandit is** \_\_\_\_\_

## Possible suspects

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

NAME	SNEAKY TRICK	CAFE MOVE	CAT TYPE	FUR COLOR	STOPPED BY
Biscuit	tiptoes past the bowls	steals the treats	queen cat	gray fur	a squeaky toy
Mochi	pounces from the shelf	steals the treats	queen cat	gray fur	a loud bell
Smokey	pounces from the shelf	knocks down the cups	queen cat	orange fur	a loud bell
Tiger	leaps from the window	knocks down the cups	tomcat	black fur	a squeaky toy
Whiskers	pounces from the shelf	unrolls the yarn	tomcat	gray fur	a water spray
Bandit	slinks under the tables	knocks down the cups	queen cat	orange fur	a water spray
Clover	tiptoes past the bowls	scratches the post	tomcat	gray fur	a water spray
Nala	hides in the basket	steals the treats	tomcat	gray fur	a squeaky toy
Tabby	slinks under the tables	tips over the milk	queen cat	black fur	a water spray
Marsh	tiptoes past the bowls	steals the treats	queen cat	orange fur	a squeaky toy
Snowball	tiptoes past the bowls	knocks down the cups	queen cat	gray fur	a loud bell
Shadow	slinks under the tables	scratches the post	tomcat	gray fur	a loud bell
Patches	pounces from the shelf	knocks down the cups	tomcat	black fur	a water spray
Ginger	slinks under the tables	steals the treats	queen cat	black fur	a loud bell
Boots	tiptoes past the bowls	tips over the milk	tomcat	black fur	a water spray
Pepper	leaps from the window	scratches the post	queen cat	gray fur	a loud bell
Oreo	tiptoes past the bowls	unrolls the yarn	queen cat	orange fur	a loud bell
Noodle	slinks under the tables	tips over the milk	queen cat	black fur	a loud bell
Mittens Jr	pounces from the shelf	knocks down the cups	queen cat	gray fur	a loud bell
Muffin	leaps from the window	steals the treats	queen cat	gray fur	a loud bell
Luna	tiptoes past the bowls	unrolls the yarn	tomcat	gray fur	a loud bell

**CLUE 1** Place value (tens & ones)

You find a paw note on the wall. The big number tells which spot the bandit cannot do, so read its tens and ones to know its real value.

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

<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>
86	75	70	61	15	71	79	45	86	17	15	71	71	35	86
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="T"/>	<input type="text"/>
96	17	97	15	86	17	75	86	75	70	43	35	96	86	

- |                                    |                      |                                |                                    |                      |                                |                                    |                      |                                |
|------------------------------------|----------------------|--------------------------------|------------------------------------|----------------------|--------------------------------|------------------------------------|----------------------|--------------------------------|
| What number has 8 tens and 6 ones? | <input type="text"/> | <input type="text" value="T"/> | What number has 7 tens and 1 one?  | <input type="text"/> | <input type="text" value="N"/> | What number has 3 tens and 5 ones? | <input type="text"/> | <input type="text" value="O"/> |
| What number has 6 tens and 1 one?  | <input type="text"/> | <input type="text" value="B"/> | What number has 9 tens and 7 ones? | <input type="text"/> | <input type="text" value="R"/> | What number has 7 tens and 9 ones? | <input type="text"/> | <input type="text" value="D"/> |
| What number has 1 ten and 5 ones?  | <input type="text"/> | <input type="text" value="A"/> | What number has 4 tens and 3 ones? | <input type="text"/> | <input type="text" value="P"/> | What number has 7 tens and 5 ones? | <input type="text"/> | <input type="text" value="H"/> |
| What number has 9 tens and 6 ones? | <input type="text"/> | <input type="text" value="S"/> | What number has 7 tens and 0 ones? | <input type="text"/> | <input type="text" value="E"/> | What number has 4 tens and 5 ones? | <input type="text"/> | <input type="text" value="I"/> |
| What number has 1 ten and 7 ones?  | <input type="text"/> | <input type="text" value="C"/> |                                    |                      |                                |                                    |                      |                                |

Scratch space:

**CLUE 2**

**Addition**

Spilled treats are all over the floor. Add up the little piles to learn the bandit's cafe move.

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

<input type="text" value="A"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="A"/>	<input type="text"/>	<input type="text" value="A"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
87	66	44	95	85	97	37	37	37	87	66	87	37	67	97	97	54	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="A"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
45	81	97	97	85	70	87	95	27	81	85	61	86	86				

$30 + 57 =$	<input type="text"/>	<input type="text" value="A"/>	$37 + 24 =$	<input type="text"/>	<input type="text" value="O"/>	$15 + 29 =$	<input type="text"/>	<input type="text" value="I"/>
$26 + 19 =$	<input type="text"/>	<input type="text" value="Q"/>	$40 + 41 =$	<input type="text"/>	<input type="text" value="U"/>	$33 + 21 =$	<input type="text"/>	<input type="text" value="K"/>
$41 + 25 =$	<input type="text"/>	<input type="text" value="W"/>	$57 + 29 =$	<input type="text"/>	<input type="text" value="F"/>	$46 + 39 =$	<input type="text"/>	<input type="text" value="N"/>
$11 + 16 =$	<input type="text"/>	<input type="text" value="R"/>	$26 + 41 =$	<input type="text"/>	<input type="text" value="L"/>	$25 + 45 =$	<input type="text"/>	<input type="text" value="C"/>
$59 + 38 =$	<input type="text"/>	<input type="text" value="E"/>	$12 + 25 =$	<input type="text"/>	<input type="text" value="S"/>	$57 + 38 =$	<input type="text"/>	<input type="text" value="T"/>

Scratch space:

**CLUE 3**

**Subtraction**

Some cups are missing from the rack. Take away the broken ones to count the cups left and find the clue.

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

<input type="checkbox"/> A	<input type="checkbox"/>	<input type="checkbox"/> A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33	18	33	66	60	38	80	81	60	20	21	21	38	54	66	60
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	66	60	44	33	53	20	11	54	26	38	53	53			

$46 - 13 =$	<input type="checkbox"/>	<input type="checkbox"/> A	$97 - 37 =$	<input type="checkbox"/>	<input type="checkbox"/> T	$37 - 26 =$	<input type="checkbox"/>	<input type="checkbox"/> U
$83 - 39 =$	<input type="checkbox"/>	<input type="checkbox"/> H	$41 - 21 =$	<input type="checkbox"/>	<input type="checkbox"/> O	$100 - 19 =$	<input type="checkbox"/>	<input type="checkbox"/> S
$91 - 38 =$	<input type="checkbox"/>	<input type="checkbox"/> L	$103 - 23 =$	<input type="checkbox"/>	<input type="checkbox"/> R	$37 - 19 =$	<input type="checkbox"/>	<input type="checkbox"/> W
$78 - 24 =$	<input type="checkbox"/>	<input type="checkbox"/> D	$104 - 38 =$	<input type="checkbox"/>	<input type="checkbox"/> I	$48 - 10 =$	<input type="checkbox"/>	<input type="checkbox"/> E
$28 - 7 =$	<input type="checkbox"/>	<input type="checkbox"/> P	$57 - 31 =$	<input type="checkbox"/>	<input type="checkbox"/> B			

Scratch space:

**CLUE 4**

**Skip counting**

The bandit left muddy paw prints in neat little jumps. Skip count the prints to spot the fur color.

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

<b>G</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
70	14	39	25	60	22	14	130	39	26	15	36	60	42	65	16	42	27	36	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
45	27	39	33	14															

Skip-count by 10s. Fill the blank: 10, 20, 30, 40,  **G**  
50, 60, \_\_, 80, 90

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12,  **R**  
\_\_, 16, 18

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, \_\_,  **F**  
65, 70

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60,  **O**  
\_\_, 70, 75

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, \_\_,  **Y**  
30, 35

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18,  **H**  
21, 24, \_\_, 30, 33

Skip-count by 5s. Fill the blank: 5, 10, \_\_, 20, 25  **L**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, \_\_,  **A**  
42, 45

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, \_\_,  **S**  
28, 30

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, \_\_, 39,  **E**  
42

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25,  **C**  
30, 35, 40, \_\_, 50, 55

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, \_\_, 24, 26  **U**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, \_\_, 36, 39  **I**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39,  **T**  
\_\_, 45, 48

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100,  **W**  
110, 120, \_\_, 140, 150

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12,  **N**  
14, \_\_, 18, 20

Scratch space:

**CLUE 5****Missing addends - the last clue**

Mittens hid some yarn balls in a row. Find the missing yarn to fill the gap and learn who stopped the bandit.

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:**

$2 + \underline{\quad} = 11$

$4 + \underline{\quad} = 6$

$6 + \underline{\quad} = 10$

$10 + \underline{\quad} = 15$

$6 + \underline{\quad} = 9$

$3 + \underline{\quad} = 4$

$10 + \underline{\quad} = 16$

$4 + \underline{\quad} = 16$

$5 + \underline{\quad} = 15$

$9 + \underline{\quad} = 20$

$10 + \underline{\quad} = 18$

**Step 2 - cross out the sentence with each answer:**

1. The villain tiptoes past the bowls, then scratches the post.
2. The villain leaps from the window, then steals the treats.
3. The villain pounces from the shelf, then unrolls the yarn.
4. The villain tiptoes past the bowls, then knocks down the cups.
5. The villain leaps from the window, then knocks down the cups.
6. The villain leaps from the window, then tips over the milk.
7. The villain pounces from the shelf, then knocks down the cups.
8. The villain hides in the basket, then knocks down the cups.
9. The villain pounces from the shelf, then steals the treats.
10. The villain tiptoes past the bowls, then unrolls the yarn.
11. The villain slinks under the tables, then knocks down the cups.
12. The villain slinks under the tables, then scratches the post.

# Answer Key

## Case of the Yarn Bandit

### Culprit: Mittens Jr

pounces from the shelf · knocks down the cups · queen cat · gray fur · a loud bell

Trail: Start 21 → Clue 1 18 → Clue 2 12 → Clue 3 8 → Clue 4 4 → Clue 5 1

#### Clue 1 (Place value (tens & ones)): "THE BANDIT CANNOT SCRATCH THE POST"

What number has 8 tens and 6 ones? = 86 (T) · What number has 7 tens and 1 one? = 71 (N) · What number has 3 tens and 5 ones? = 35 (O) · What number has 6 tens and 1 one? = 61 (B) · What number has 9 tens and 7 ones? = 97 (R) · What number has 7 tens and 9 ones? = 79 (D) · What number has 1 ten and 5 ones? = 15 (A) · What number has 4 tens and 3 ones? = 43 (P) · What number has 7 tens and 5 ones? = 75 (H) · What number has 9 tens and 6 ones? = 96 (S) · What number has 7 tens and 0 ones? = 70 (E) · What number has 4 tens and 5 ones? = 45 (I) · What number has 1 ten and 7 ones? = 17 (C)

#### Clue 2 (Addition): "A WITNESS SAW A SLEEK QUEEN CAT RUN OFF"

$30 + 57 = 87$  (A) ·  $37 + 24 = 61$  (O) ·  $15 + 29 = 44$  (I) ·  $26 + 19 = 45$  (Q) ·  $40 + 41 = 81$  (U) ·  $33 + 21 = 54$  (K) ·  $41 + 25 = 66$  (W) ·  $57 + 29 = 86$  (F) ·  $46 + 39 = 85$  (N) ·  $11 + 16 = 27$  (R) ·  $26 + 41 = 67$  (L) ·  $25 + 45 = 70$  (C) ·  $59 + 38 = 97$  (E) ·  $12 + 25 = 37$  (S) ·  $57 + 38 = 95$  (T)

#### Clue 3 (Subtraction): "A WAITER STOPPED IT WITH A LOUD BELL"

$46 - 13 = 33$  (A) ·  $97 - 37 = 60$  (T) ·  $37 - 26 = 11$  (U) ·  $83 - 39 = 44$  (H) ·  $41 - 21 = 20$  (O) ·  $100 - 19 = 81$  (S) ·  $91 - 38 = 53$  (L) ·  $103 - 23 = 80$  (R) ·  $37 - 19 = 18$  (W) ·  $78 - 24 = 54$  (D) ·  $104 - 38 = 66$  (I) ·  $48 - 10 = 38$  (E) ·  $28 - 7 = 21$  (P) ·  $57 - 31 = 26$  (B)

#### Clue 4 (Skip counting): "GRAY FUR WAS LEFT ON THE CHAIR"

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, \_\_, 80, 90 = 70 (G) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, \_\_, 16, 18 = 14 (R) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, \_\_, 65, 70 = 60 (F) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, \_\_, 70, 75 = 65 (O) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, \_\_, 30, 35 = 25 (Y) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, \_\_, 30, 33 = 27 (H) · Skip-count by 5s. Fill the blank: 5, 10, \_\_, 20, 25 = 15 (L) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, \_\_, 42, 45 = 39 (A) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, \_\_, 28, 30 = 26 (S) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, \_\_, 39, 42 = 36 (E) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, \_\_, 50, 55 = 45 (C) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, \_\_, 24, 26 = 22 (U) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, \_\_, 36, 39 = 33 (I) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, \_\_, 45, 48 = 42 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, \_\_, 140, 150 = 130 (W) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, \_\_, 18, 20 = 16 (N)

#### Clue 5 (Missing addends): surviving statement is box 7 → Mittens Jr

$2 + \underline{\quad} = 11 = 9$  ·  $4 + \underline{\quad} = 6 = 2$  ·  $6 + \underline{\quad} = 10 = 4$  ·  $10 + \underline{\quad} = 15 = 5$  ·  $6 + \underline{\quad} = 9 = 3$  ·  $3 + \underline{\quad} = 4 = 1$  ·  $10 + \underline{\quad} = 16 = 6$  ·  $4 + \underline{\quad} = 16 = 12$  ·  $5 + \underline{\quad} = 15 = 10$  ·  $9 + \underline{\quad} = 20 = 11$  ·  $10 + \underline{\quad} = 18 = 8$