The Case of the Missing Magic Feather

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

Detective: _____ **Date:** _____

Someone snatched the giant magic feather right before the big pretend game! Search the yard and solve the clues to catch 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 Feather Thief is _____

Possible suspects

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

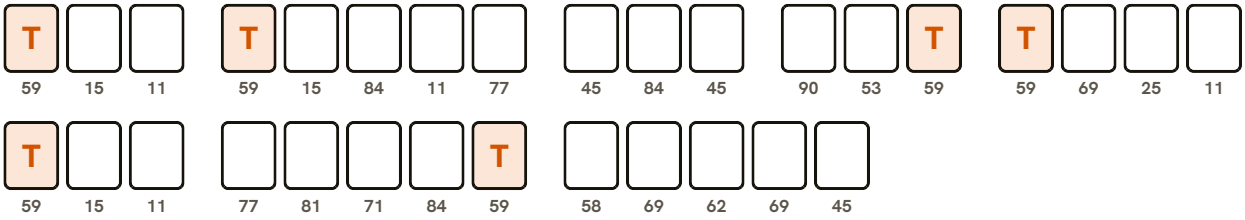
NAME	PRETEND GAME	SNACK STASH	PAWS	FUR SHADE	DISTRACTION
Rosie	Shadowlands	Ice Cream Blocks	Left Pawed	Orange Fur	Squeaky Toy
Lola	Keepy Uppy	Fruit Salad	Right Pawed	Blue Fur	Chalk Crayons
Coco	Dance Mode	Fruit Salad	Right Pawed	Blue Fur	Bubble Blower
Buster	Shadowlands	Cheese Slices	Left Pawed	Orange Fur	Chalk Crayons
Daisy	Dance Mode	Fancy Chip	Right Pawed	Spotted Fur	Bubble Blower
Duke	Shadowlands	Ice Cream Blocks	Left Pawed	Spotted Fur	Chalk Crayons
Sadie	Featherwand	Cheese Slices	Left Pawed	Blue Fur	Chalk Crayons
Finn	Dance Mode	Fancy Chip	Right Pawed	Orange Fur	Chalk Crayons
Ziggy	Taxi Driver	Pavlova	Left Pawed	Orange Fur	Squeaky Toy
Ginger	Shadowlands	Cheese Slices	Right Pawed	Blue Fur	Chalk Crayons
Sammy	Featherwand	Pavlova	Left Pawed	Spotted Fur	Squeaky Toy
Toby	Taxi Driver	Ice Cream Blocks	Left Pawed	Blue Fur	Squeaky Toy
Archie	Dance Mode	Ice Cream Blocks	Left Pawed	Orange Fur	Squeaky Toy
Marley	Featherwand	Fancy Chip	Right Pawed	Blue Fur	Chalk Crayons
Jasper	Keepy Uppy	Cheese Slices	Right Pawed	Blue Fur	Squeaky Toy
Bella	Keepy Uppy	Fancy Chip	Right Pawed	Blue Fur	Chalk Crayons
Rocky	Taxi Driver	Fancy Chip	Right Pawed	Blue Fur	Squeaky Toy
Zoe	Keepy Uppy	Pavlova	Right Pawed	Blue Fur	Squeaky Toy
Max	Dance Mode	Ice Cream Blocks	Right Pawed	Blue Fur	Chalk Crayons
Barnaby	Keepy Uppy	Fancy Chip	Right Pawed	Blue Fur	Bubble Blower
Penny	Featherwand	Cheese Slices	Left Pawed	Spotted Fur	Chalk Crayons

make your own at mathcrackers.com

CLUE 1 Place value

You check the score sign by the sandbox. The tens and ones digits reveal a hint about the snack.

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



What number has 5 tens and 9 ones? ☐ → T

What number has 9 tens and 0 ones? ☐ → N

What number has 1 ten and 5 ones? ☐ → H

What number has 6 tens and 2 ones? ☐ → L

What number has 1 ten and 1 one? ☐ → E

What number has 5 tens and 3 ones? ☐ → O

What number has 6 tens and 9 ones? ☐ → A

What number has 4 tens and 5 ones? ☐ → D

What number has 8 tens and 1 one? ☐ → R

What number has 8 tens and 4 ones? ☐ → I

What number has 2 tens and 5 ones? ☐ → K

What number has 7 tens and 1 one? ☐ → U

What number has 5 tens and 8 ones? ☐ → S

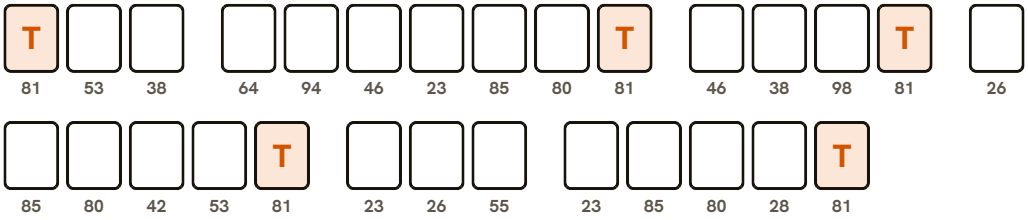
What number has 7 tens and 7 ones? ☐ → F

Scratch space:

CLUE 2 Addition

You add up the toy blocks scattered on the lawn to see which way the thief ran.

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



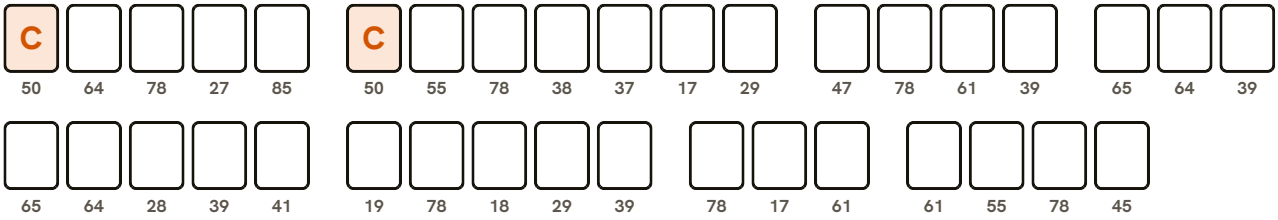
49 + 32 = ☐ → T	37 + 48 = ☐ → R	63 + 31 = ☐ → U
28 + 52 = ☐ → I	12 + 14 = ☐ → A	21 + 32 = ☐ → H
60 + 38 = ☐ → F	33 + 13 = ☐ → L	45 + 19 = ☐ → C
10 + 13 = ☐ → P	18 + 10 = ☐ → N	26 + 29 = ☐ → W
19 + 23 = ☐ → G	15 + 23 = ☐ → E	

Scratch space:

CLUE 3 Subtraction

You count the leftover tennis balls in the bucket to clear away some suspects.

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



67 - 17 = ☐ → C

89 - 24 = ☐ → T

56 - 38 = ☐ → U

19 - 2 = ☐ → N

44 - 3 = ☐ → F

118 - 40 = ☐ → A

73 - 34 = ☐ → E

82 - 18 = ☐ → H

78 - 23 = ☐ → R

47 - 10 = ☐ → O

36 - 8 = ☐ → I

78 - 33 = ☐ → W

51 - 4 = ☐ → M

37 - 8 = ☐ → S

49 - 11 = ☐ → Y

33 - 14 = ☐ → P

118 - 33 = ☐ → K

48 - 21 = ☐ → L

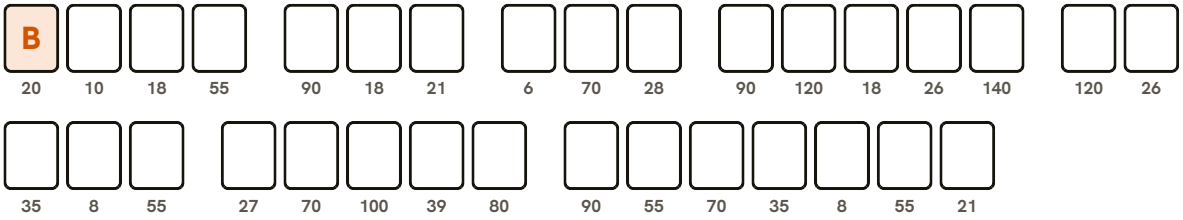
70 - 9 = ☐ → D

Scratch space:

CLUE 4 Skip counting

You skip count the chalk paw prints along the fence line to track the fur clues.

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



Skip-count by 5s. Fill the blank: 5, 10, 15, ___, 25, 30 ☐ → B

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, ___, 40, 45 ☐ → T

Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 ☐ → W

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, ___, 130, 140 ☐ → O

Skip-count by 2s. Fill the blank: 2, 4, 6, ___, 10, 12 ☐ → H

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, ___, 30, 32 ☐ → S

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, ___, 20, 22 ☐ → U

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, ___, 100, 110 ☐ → F

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, ___, 12, 14 ☐ → L

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, ___, 90, 100 ☐ → C

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, ___, 28, 30 ☐ → N

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, ___, 110, 120 ☐ → G

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, ___, 24, 27 ☐ → R

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, ___, 75, 80 ☐ → **A**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, ___, 150, 160 ☐ → **D**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, ___, 30, 33 ☐ → **M**

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

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

Scratch space:

CLUE 5 Missing addends - the last clue

You figure out how many more party hats are needed to solve the final mystery.

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:

10 + ___ = 22 ☐	3 + ___ = 4 ☐	1 + ___ = 8 ☐	3 + ___ = 8 ☐
5 + ___ = 11 ☐	3 + ___ = 5 ☐	3 + ___ = 6 ☐	3 + ___ = 11 ☐
10 + ___ = 14 ☐	2 + ___ = 11 ☐	10 + ___ = 21 ☐	

Step 2 - cross out the sentence with each answer:

1. The villain waved the magical featherwand, then snacked on a single fancy chip.
2. The villain started a game of keepy uppy, then gobbled up the sweet pavlova.
3. The villain drove the imaginary taxi, then giggled and grabbed ice cream blocks.
4. The villain snuck through the shadowlands, then giggled and grabbed ice cream blocks.
5. The villain waved the magical featherwand, then giggled and grabbed ice cream blocks.
6. The villain turned on full dance mode, then gobbled up the sweet pavlova.
7. The villain snuck through the shadowlands, then munching on yummy cheese slices.
8. The villain started a game of keepy uppy, then swiped the bowl of fruit salad.
9. The villain snuck through the shadowlands, then swiped the bowl of fruit salad.
10. The villain started a game of keepy uppy, then snacked on a single fancy chip.
11. The villain drove the imaginary taxi, then gobbled up the sweet pavlova.
12. The villain turned on full dance mode, then giggled and grabbed ice cream blocks.

TEACHER / PARENT

Answer Key

The Case of the Missing Magic Feather

Culprit: Bella

Keepy Uppy · Fancy Chip · Right Pawed · Blue Fur · Chalk Crayons

Trail: Start 21 → Clue 1 19 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE THIEF DID NOT TAKE THE FRUIT SALAD"

What number has 5 tens and 9 ones? = 59 (T) · What number has 9 tens and 0 ones? = 90 (N) · What number has 1 ten and 5 ones? = 15 (H) · What number has 6 tens and 2 ones? = 62 (L) · What number has 1 ten and 1 one? = 11 (E) · What number has 5 tens and 3 ones? = 53 (O) · What number has 6 tens and 9 ones? = 69 (A) · What number has 4 tens and 5 ones? = 45 (D) · What number has 8 tens and 1 one? = 81 (R) · What number has 8 tens and 4 ones? = 84 (I) · What number has 2 tens and 5 ones? = 25 (K) · What number has 7 tens and 1 one? = 71 (U) · What number has 5 tens and 8 ones? = 58 (S) · What number has 7 tens and 7 ones? = 77 (F)

Clue 2 (Addition): "THE CULPRIT LEFT A RIGHT PAW PRINT"

49 + 32 = 81 (T) · 37 + 48 = 85 (R) · 63 + 31 = 94 (U) · 28 + 52 = 80 (I) · 12 + 14 = 26 (A) · 21 + 32 = 53 (H) · 60 + 38 = 98 (F) · 33 + 13 = 46 (L) · 45 + 19 = 64 (C) · 10 + 13 = 23 (P) · 18 + 10 = 28 (N) · 26 + 29 = 55 (W) · 19 + 23 = 42 (G) · 15 + 23 = 38 (E)

Clue 3 (Subtraction): "CHALK CRAYONS MADE THE THIEF PAUSE AND DRAW"

67 - 17 = 50 (C) · 89 - 24 = 65 (T) · 56 - 38 = 18 (U) · 19 - 2 = 17 (N) · 44 - 3 = 41 (F) · 118 - 40 = 78 (A) · 73 - 34 = 39 (E) · 82 - 18 = 64 (H) · 78 - 23 = 55 (R) · 47 - 10 = 37 (O) · 36 - 8 = 28 (I) · 78 - 33 = 45 (W) · 51 - 4 = 47 (M) · 37 - 8 = 29 (S) · 49 - 11 = 38 (Y) · 33 - 14 = 19 (P) · 118 - 33 = 85 (K) · 48 - 21 = 27 (L) · 70 - 9 = 61 (D)

Clue 4 (Skip counting): "BLUE FUR WAS FOUND ON THE MAGIC FEATHER"

Skip-count by 5s. Fill the blank: 5, 10, 15, ___, 25, 30 = 20 (B) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, ___, 40, 45 = 35 (T) · Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 = 6 (W) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, ___, 130, 140 = 120 (O) · Skip-count by 2s. Fill the blank: 2, 4, 6, ___, 10, 12 = 8 (H) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, ___, 30, 32 = 28 (S) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, ___, 20, 22 = 18 (U) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, ___, 100, 110 = 90 (F) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, ___, 12, 14 = 10 (L) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, ___, 90, 100 = 80 (C) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, ___, 28, 30 = 26 (N) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, ___, 110, 120 = 100 (G) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, ___, 24, 27 = 21 (R) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, ___, 75, 80 = 70 (A) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, ___, 150, 160 = 140 (D) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, ___, 30, 33 = 27 (M) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, ___, 60, 65 = 55 (E) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, ___, 42, 45 = 39 (I)

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

10 + ___ = 22 = 12 · 3 + ___ = 4 = 1 · 1 + ___ = 8 = 7 · 3 + ___ = 8 = 5 · 5 + ___ = 11 = 6 · 3 + ___ = 5 = 2 · 3 + ___ = 6 = 3 · 3 + ___ = 11 = 8 · 10 + ___ = 14 = 4 · 2 + ___ = 11 = 9 · 10 + ___ = 21 = 11