The Great Salty Pretzel Mystery

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

Detective: _____ **Date:** _____

Someone snuck into the Whisker Bakery and took the grand prize pretzel! The helper cats found clues covered in salt and cat fur.

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 Snack Thief Cat is _____

Possible suspects

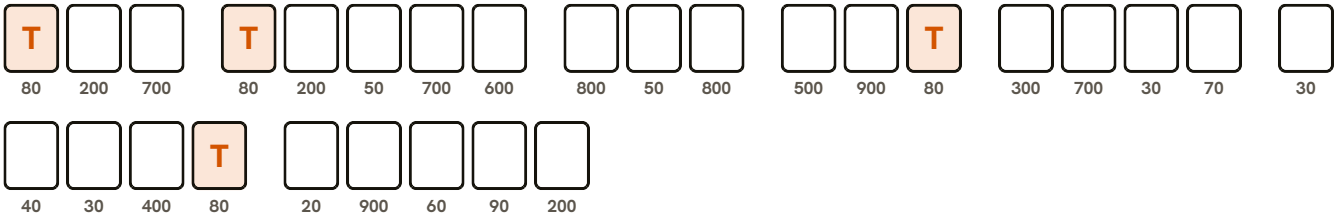
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	SNACK SKILL	SNACK GEAR	EAR TWITCH	FUR COLOR	TOY DISTRACTION
Crackers	Toasting Nuts	Pretzel Hat	Right Ear Twitch	Orange Fur	Feather Toy
Felix	Toasting Nuts	Salt Pouch	Right Ear Twitch	Orange Fur	Feather Toy
Pumpkin	Toasting Nuts	Butter Cape	Left Ear Twitch	Orange Fur	Feather Toy
Chip	Toasting Nuts	Chip Gloves	Left Ear Twitch	Black Fur	Shiny Bell
Jasper	Crushing Chips	Butter Cape	Left Ear Twitch	Calico Fur	Feather Toy
Pretzel	Toasting Nuts	Cheese Badge	Right Ear Twitch	Orange Fur	Shiny Bell
Cookie	Toasting Nuts	Butter Cape	Right Ear Twitch	Orange Fur	Feather Toy
Ziggy	Toasting Nuts	Pretzel Hat	Right Ear Twitch	Black Fur	Feather Toy
Peanut	Toasting Nuts	Pretzel Hat	Left Ear Twitch	Black Fur	Feather Toy
Mittens	Dipping Crackers	Cheese Badge	Left Ear Twitch	Calico Fur	Wool Yarn
Oliver	Baking Pretzels	Salt Pouch	Left Ear Twitch	Calico Fur	Shiny Bell
Smudge	Crushing Chips	Chip Gloves	Left Ear Twitch	Orange Fur	Shiny Bell
Leo	Crushing Chips	Pretzel Hat	Left Ear Twitch	Orange Fur	Feather Toy
Barnaby	Toasting Nuts	Pretzel Hat	Right Ear Twitch	Calico Fur	Feather Toy
Biscuit	Toasting Nuts	Salt Pouch	Right Ear Twitch	Black Fur	Shiny Bell
Milo	Crushing Chips	Chip Gloves	Right Ear Twitch	Orange Fur	Wool Yarn
Salty	Dipping Crackers	Chip Gloves	Right Ear Twitch	Orange Fur	Feather Toy
Nacho	Dipping Crackers	Chip Gloves	Left Ear Twitch	Black Fur	Shiny Bell
Socks	Toasting Nuts	Pretzel Hat	Right Ear Twitch	Orange Fur	Wool Yarn
Bella	Baking Pretzels	Butter Cape	Right Ear Twitch	Orange Fur	Shiny Bell
Cleo	Toasting Nuts	Cheese Badge	Right Ear Twitch	Orange Fur	Feather Toy

CLUE 1 Rounding

The bakery salt scale shows an estimated number rounded to ten.

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



Round 83 to the nearest ten ☐ → T

Round 227 to the nearest hundred ☐ → H

Round 413 to the nearest hundred ☐ → L

Round 26 to the nearest ten ☐ → A

Round 53 to the nearest ten ☐ → I

Round 57 to the nearest ten ☐ → U

Round 754 to the nearest hundred ☐ → D

Round 86 to the nearest ten ☐ → C

Round 71 to the nearest ten ☐ → R

Round 316 to the nearest hundred ☐ → W

Round 596 to the nearest hundred ☐ → F

Round 714 to the nearest hundred ☐ → E

Round 39 to the nearest ten ☐ → S

Round 546 to the nearest hundred ☐ → N

Round 925 to the nearest hundred ☐ → O

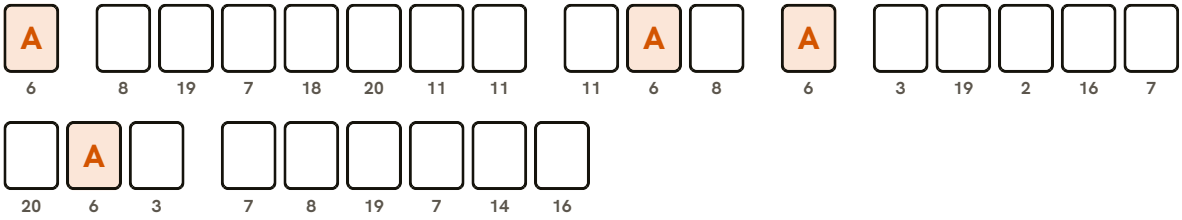
Round 23 to the nearest ten ☐ → P

Scratch space:

CLUE 2 Addition

We count the leftover pretzel sticks by adding them together.

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



2 + 4 = ☐ → A

6 + 5 = ☐ → S

1 + 1 = ☐ → G

5 + 13 = ☐ → N

4 + 10 = ☐ → C

2 + 1 = ☐ → R

6 + 14 = ☐ → E

9 + 10 = ☐ → I

5 + 3 = ☐ → W

10 + 6 = ☐ → H

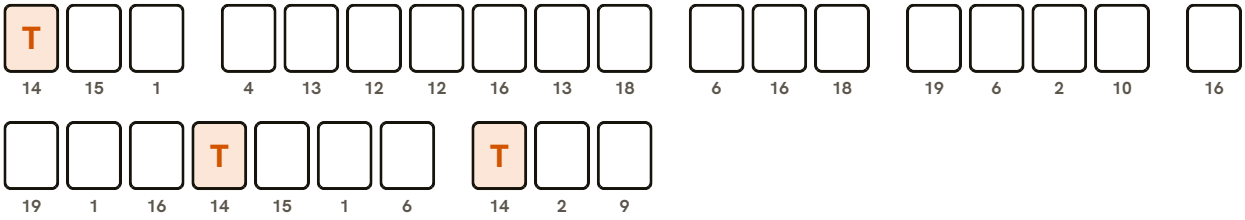
2 + 5 = ☐ → T

Scratch space:

CLUE 3 Subtraction

We subtract the eaten crackers from the box to find what is gone.

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



15 - 1 = ☐ → T

17 - 1 = ☐ → A

11 - 2 = ☐ → Y

6 - 5 = ☐ → E

4 - 2 = ☐ → O

15 - 5 = ☐ → M

20 - 2 = ☐ → N

16 - 3 = ☐ → I

10 - 6 = ☐ → V

15 - 3 = ☐ → L

20 - 1 = ☐ → F

11 - 5 = ☐ → R

16 - 1 = ☐ → H

Scratch space:

CLUE 4 Skip counting

We skip count the cat paw prints by twos across the flour.

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

F																							
140	22	14	16	90	22	12	30	16	21	9	140	14	12	30	33	33	42	9	40	30	18	9	12	110

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

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

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

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

Skip-count by 3s. Fill the blank: 3, 6, ___, 12, 15 ☐ → **E**

Skip-count by 10s. Fill the blank: 10, 20, 30, ___, 50, 60 ☐ → **B**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, ___, 35, 40 ☐ → **A**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, ___, 45, 48 ☐ → **H**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, ___, 16, 18 ☐ → **U**

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

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

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

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

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

Scratch space:

CLUE 5 Missing addends - the last clue

We find the missing number of snack bags to unlock the cupboard.

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:

4 + ___ = 13 ☐	2 + ___ = 9 ☐	6 + ___ = 18 ☐	10 + ___ = 12 ☐
7 + ___ = 15 ☐	5 + ___ = 15 ☐	6 + ___ = 17 ☐	8 + ___ = 14 ☐
4 + ___ = 7 ☐	10 + ___ = 14 ☐	4 + ___ = 9 ☐	

Step 2 - cross out the sentence with each answer:

1. The villain toasted nuts, then pinned on a cheese badge.
2. The villain salted popcorn, then wore a pretzel hat.
3. The villain toasted nuts, then pulled on chip gloves.
4. The villain crushed chips, then wore a pretzel hat.
5. The villain salted popcorn, then grabbed a salt pouch.
6. The villain salted popcorn, then pinned on a cheese badge.
7. The villain toasted nuts, then put on a butter cape.
8. The villain crushed chips, then put on a butter cape.
9. The villain toasted nuts, then wore a pretzel hat.
10. The villain salted popcorn, then put on a butter cape.
11. The villain dipped crackers, then pinned on a cheese badge.
12. The villain dipped crackers, then pulled on chip gloves.

TEACHER / PARENT

Answer Key

The Great Salty Pretzel Mystery

Culprit: Cleo

Toasting Nuts · Cheese Badge · Right Ear Twitch · Orange Fur · Feather Toy

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE THIEF DID NOT WEAR A SALT POUCH"

Round 83 to the nearest ten = 80 (T) · Round 227 to the nearest hundred = 200 (H) · Round 413 to the nearest hundred = 400 (L) · Round 26 to the nearest ten = 30 (A) · Round 53 to the nearest ten = 50 (I) · Round 57 to the nearest ten = 60 (U) · Round 754 to the nearest hundred = 800 (D) · Round 86 to the nearest ten = 90 (C) · Round 71 to the nearest ten = 70 (R) · Round 316 to the nearest hundred = 300 (W) · Round 596 to the nearest hundred = 600 (F) · Round 714 to the nearest hundred = 700 (E) · Round 39 to the nearest ten = 40 (S) · Round 546 to the nearest hundred = 500 (N) · Round 925 to the nearest hundred = 900 (O) · Round 23 to the nearest ten = 20 (P)

Clue 2 (Addition): "A WITNESS SAW A RIGHT EAR TWITCH"

2 + 4 = 6 (A) · 6 + 5 = 11 (S) · 1 + 1 = 2 (G) · 5 + 13 = 18 (N) · 4 + 10 = 14 (C) · 2 + 1 = 3 (R) · 6 + 14 = 20 (E) · 9 + 10 = 19 (I) · 5 + 3 = 8 (W) · 10 + 6 = 16 (H) · 2 + 5 = 7 (T)

Clue 3 (Subtraction): "THE VILLAIN RAN FROM A FEATHER TOY"

15 - 1 = 14 (T) · 17 - 1 = 16 (A) · 11 - 2 = 9 (Y) · 6 - 5 = 1 (E) · 4 - 2 = 2 (O) · 15 - 5 = 10 (M) · 20 - 2 = 18 (N) · 16 - 3 = 13 (I) · 10 - 6 = 4 (V) · 15 - 3 = 12 (L) · 20 - 1 = 19 (F) · 11 - 5 = 6 (R) · 16 - 1 = 15 (H)

Clue 4 (Skip counting): "FOUND ORANGE FUR AT THE BAKERY"

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, ___, 150, 160 = 140 (F) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, ___, 18, 20 = 16 (N) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, ___, 24, 26 = 22 (O) · Skip-count by 3s. Fill the blank: 3, 6, 9, ___, 15, 18 = 12 (R) · Skip-count by 3s. Fill the blank: 3, 6, ___, 12, 15 = 9 (E) · Skip-count by 10s. Fill the blank: 10, 20, 30, ___, 50, 60 = 40 (B) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, ___, 35, 40 = 30 (A) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, ___, 45, 48 = 42 (H) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, ___, 16, 18 = 14 (U) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, ___, 120, 130 = 110 (Y) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, ___, 36, 39 = 33 (T) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, ___, 20, 22 = 18 (K) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, ___, 24, 27 = 21 (G) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, ___, 100, 110 = 90 (D)

Clue 5 (Missing addends): surviving statement is box 1 → Cleo

4 + ___ = 13 = 9 · 2 + ___ = 9 = 7 · 6 + ___ = 18 = 12 · 10 + ___ = 12 = 2 · 7 + ___ = 15 = 8 · 5 + ___ = 15 = 10 · 6 + ___ = 17 = 11 · 8 + ___ = 14 = 6 · 4 + ___ = 7 = 3 · 10 + ___ = 14 = 4 · 4 + ___ = 9 = 5