

The Great Zoo Snack Mystery

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

Detective: _____ Date: _____

Oh no! Someone took all the sweet treats from the Sunny Valley Zoo kitchen. The animals are hungry, and the kitchen is a big mess. Can you help us find the Snack Bandit and save the day?

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 Bandit is _____

Possible suspects

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

NAME	SUPER SKILL	WILD GEAR	FAVORITE PAW	COAT STYLE	BIG DISTRACTION
Pip Penguin	digs deep holes	fancy red scarf	holds map with left paw	striped fur coat	crunchy sweet carrots
Gerry Giraffe	roars very loud	shiny gold badge	holds map with left paw	striped fur coat	crunchy sweet carrots
Cleo Cheetah	digs deep holes	funny green hat	holds map with right paw	fluffy gray coat	crunchy sweet carrots
Gaby Goat	jumps very high	shiny gold badge	holds map with right paw	spotted fur coat	crunchy sweet carrots
Fiona Fox	jumps very high	glowing collar	holds map with right paw	spotted fur coat	fresh green leaves
Sammy Snake	digs deep holes	fancy red scarf	holds map with left paw	fluffy gray coat	crunchy sweet carrots
Ella Elephant	jumps very high	blue backpack	holds map with left paw	striped fur coat	squeaky yellow ducks
Zelda Zebra	swims super fast	blue backpack	holds map with left paw	spotted fur coat	squeaky yellow ducks
Penny Panda	digs deep holes	shiny gold badge	holds map with left paw	spotted fur coat	squeaky yellow ducks
Benny Badger	digs deep holes	funny green hat	holds map with right paw	striped fur coat	crunchy sweet carrots
Buster Bunny	swims super fast	funny green hat	holds map with left paw	fluffy gray coat	crunchy sweet carrots
Mimi Monkey	jumps very high	blue backpack	holds map with left paw	striped fur coat	crunchy sweet carrots
Koko Koala	climbs tall trees	glowing collar	holds map with left paw	striped fur coat	crunchy sweet carrots
Pippin Parrot	digs deep holes	glowing collar	holds map with left paw	fluffy gray coat	fresh green leaves
Bella Bear	jumps very high	fancy red scarf	holds map with right paw	fluffy gray coat	squeaky yellow ducks
Henry Hippo	jumps very high	blue backpack	holds map with right paw	fluffy gray coat	squeaky yellow ducks
Sally Seal	digs deep holes	blue backpack	holds map with left paw	striped fur coat	crunchy sweet carrots
Toby Tiger	roars very loud	glowing collar	holds map with left paw	fluffy gray coat	squeaky yellow ducks
Iggy Iguana	jumps very high	glowing collar	holds map with left paw	fluffy gray coat	squeaky yellow ducks
Rocky Raptor	jumps very high	shiny gold badge	holds map with left paw	striped fur coat	crunchy sweet carrots
Danny Dolphin	climbs tall trees	funny green hat	holds map with right paw	spotted fur coat	squeaky yellow ducks

CLUE 1 Addition

We need to find how many bags of food are left. Count the banana bags and the apple bags together to get the total.

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

T 11 10 16	T 11 10 12 16 14	17 19 16 18	T 4 19 11	13 16 20 9
20	18 10 12 4 15	3 19 5 17	8 20 17 3 16	

$3 + 8 = \square \rightarrow \boxed{\text{T}}$

$4 + 12 = \square \rightarrow \boxed{\text{E}}$

$4 + 8 = \square \rightarrow \boxed{\text{I}}$

$2 + 1 = \square \rightarrow \boxed{\text{G}}$

$4 + 6 = \square \rightarrow \boxed{\text{H}}$

$14 + 5 = \square \rightarrow \boxed{\text{O}}$

$11 + 4 = \square \rightarrow \boxed{\text{Y}}$

$11 + 7 = \square \rightarrow \boxed{\text{S}}$

$2 + 7 = \square \rightarrow \boxed{\text{R}}$

$3 + 10 = \square \rightarrow \boxed{\text{W}}$

$2 + 6 = \square \rightarrow \boxed{\text{B}}$

$7 + 7 = \square \rightarrow \boxed{\text{F}}$

$1 + 3 = \square \rightarrow \boxed{\text{N}}$

$8 + 12 = \square \rightarrow \boxed{\text{A}}$

$1 + 4 = \square \rightarrow \boxed{\text{L}}$

$9 + 8 = \square \rightarrow \boxed{\text{D}}$

Scratch space:

CLUE 2

Subtraction

The thief took some treat boxes. Subtract the missing boxes from the full pile to see what is gone.

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

W				W															
12	15	7	11	12	17	13	13	18	4	3	19	10	18	7	17	3	13	14	
									W										
18	9	15	6	15	17	18	4	11	12	13	10	6	5						

$19 - 7 = \square \rightarrow \boxed{W}$

$20 - 9 = \square \rightarrow \boxed{A}$

$17 - 2 = \square \rightarrow \boxed{E}$

$8 - 4 = \square \rightarrow \boxed{P}$

$9 - 2 = \square \rightarrow \boxed{S}$

$11 - 2 = \square \rightarrow \boxed{H}$

$14 - 4 = \square \rightarrow \boxed{N}$

$10 - 4 = \square \rightarrow \boxed{L}$

$18 - 4 = \square \rightarrow \boxed{M}$

$11 - 6 = \square \rightarrow \boxed{Y}$

$16 - 3 = \square \rightarrow \boxed{O}$

$20 - 3 = \square \rightarrow \boxed{F}$

$20 - 2 = \square \rightarrow \boxed{T}$

$20 - 1 = \square \rightarrow \boxed{I}$

$10 - 7 = \square \rightarrow \boxed{R}$

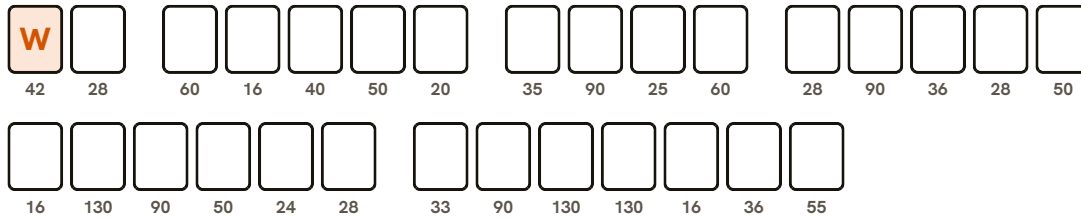
Scratch space:

CLUE 3

Skip counting

Look at the animal tracks on the path. Count the steps by twos to trace where the bandit ran.

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



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

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, __, 22, 24 → **D**

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

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

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

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

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

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

Skip-count by 10s. Fill the blank: 10, 20, 30, __, 50, 60 → **U**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 → **H**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, __, 27, 30 → **G**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 → **L**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, __, 55, 60 → **N**

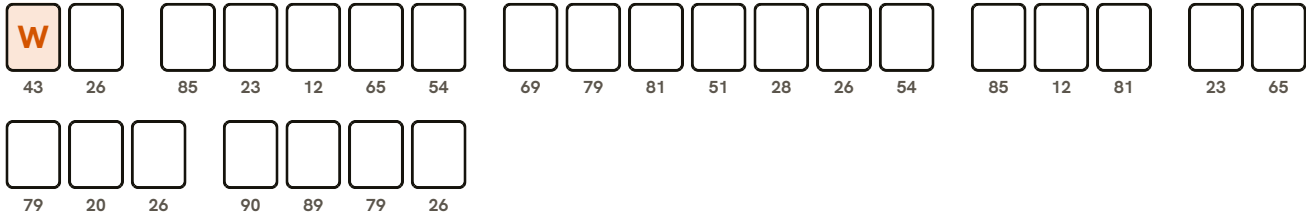
Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 → **R**

Scratch space:

CLUE 4
Place value

The kitchen lock has a secret number code. Look at the tens blocks and the ones blocks to read the code.

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



What number has 4 tens and 3 ones? → **W**

What number has 5 tens and 1 one? → **I**

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

What number has 6 tens and 9 ones? → **S**

What number has 7 tens and 9 ones? → **T**

What number has 9 tens and 0 ones? → **G**

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

What number has 2 tens and 0 ones? → **H**

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

What number has 2 tens and 8 ones? → **P**

What number has 2 tens and 6 ones? → **E**

What number has 1 ten and 2 ones? → **U**

What number has 2 tens and 3 ones? → **O**

What number has 6 tens and 5 ones? → **N**

What number has 8 tens and 5 ones? → **F**

Scratch space:

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

We have five treats but we need eight. Find how many more treats we must add to fill the shelf.

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:

$10 + \underline{\quad} = 12$

$4 + \underline{\quad} = 8$

$5 + \underline{\quad} = 17$

$5 + \underline{\quad} = 13$

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

$1 + \underline{\quad} = 2$

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

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

$3 + \underline{\quad} = 13$

$1 + \underline{\quad} = 6$

$1 + \underline{\quad} = 4$

Step 2 - cross out the sentence with each answer:

1. The villain climbed up the tall oak tree, then adjusted their fancy red scarf.
2. The villain dug a quick tunnel under the wall, then unzipped their blue backpack.
3. The villain dug a quick tunnel under the wall, then tipped their funny green hat.
4. The villain jumped over the safety fence, then unzipped their blue backpack.
5. The villain swam across the deep zoo pool, then tipped their funny green hat.
6. The villain roared to scare the night guard, then turned off their glowing collar.
7. The villain climbed up the tall oak tree, then turned off their glowing collar.
8. The villain roared to scare the night guard, then tipped their funny green hat.
9. The villain swam across the deep zoo pool, then turned off their glowing collar.
10. The villain jumped over the safety fence, then turned off their glowing collar.
11. The villain climbed up the tall oak tree, then polished their shiny gold badge.
12. The villain dug a quick tunnel under the wall, then adjusted their fancy red scarf.

Answer Key

The Great Zoo Snack Mystery

Culprit: Koko Koala

climbs tall trees · glowing collar · holds map with left paw · striped fur coat · crunchy sweet carrots

Trail: Start 21 → Clue 1 17 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE THIEF DOES NOT WEAR A SHINY GOLD BADGE"

$3 + 8 = 11$ (T) · $4 + 12 = 16$ (E) · $4 + 8 = 12$ (I) · $2 + 1 = 3$ (G) · $4 + 6 = 10$ (H) · $14 + 5 = 19$ (O) · $11 + 4 = 15$ (Y) · $11 + 7 = 18$ (S) · $2 + 7 = 9$ (R) · $3 + 10 = 13$ (W) · $2 + 6 = 8$ (B) · $7 + 7 = 14$ (F) · $1 + 3 = 4$ (N) · $8 + 12 = 20$ (A) · $1 + 4 = 5$ (L) · $9 + 8 = 17$ (D)

Clue 2 (Subtraction): "WE SAW FOOTPRINTS FROM THE LEFT PAW ONLY"

$19 - 7 = 12$ (W) · $20 - 9 = 11$ (A) · $17 - 2 = 15$ (E) · $8 - 4 = 4$ (P) · $9 - 2 = 7$ (S) · $11 - 2 = 9$ (H) · $14 - 4 = 10$ (N) · $10 - 4 = 6$ (L) · $18 - 4 = 14$ (M) · $11 - 6 = 5$ (Y) · $16 - 3 = 13$ (O) · $20 - 3 = 17$ (F) · $20 - 2 = 18$ (T) · $20 - 1 = 19$ (I) · $10 - 7 = 3$ (R)

Clue 3 (Skip counting): "WE FOUND HALF EATEN ORANGE CARROTS"

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (W) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 = 36 (T) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, __, 22, 24 = 20 (D) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 = 16 (O) · 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 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 = 28 (E) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (A) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 = 33 (C) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 = 55 (S) · Skip-count by 10s. Fill the blank: 10, 20, 30, __, 50, 60 = 40 (U) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (H) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, __, 27, 30 = 24 (G) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (L) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, __, 55, 60 = 50 (N) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 = 130 (R)

Clue 4 (Place value): "WE FOUND STRIPED FUR ON THE GATE"

What number has 4 tens and 3 ones? = 43 (W) · What number has 5 tens and 1 one? = 51 (I) · What number has 5 tens and 4 ones? = 54 (D) · What number has 6 tens and 9 ones? = 69 (S) · What number has 7 tens and 9 ones? = 79 (T) · What number has 9 tens and 0 ones? = 90 (G) · What number has 8 tens and 1 one? = 81 (R) · What number has 2 tens and 0 ones? = 20 (H) · What number has 8 tens and 9 ones? = 89 (A) · What number has 2 tens and 8 ones? = 28 (P) · What number has 2 tens and 6 ones? = 26 (E) · What number has 1 ten and 2 ones? = 12 (U) · What number has 2 tens and 3 ones? = 23 (O) · What number has 6 tens and 5 ones? = 65 (N) · What number has 8 tens and 5 ones? = 85 (F)

Clue 5 (Missing addends): surviving statement is box 7 → Koko Koala

$10 + \underline{\quad} = 12 = 2$ · $4 + \underline{\quad} = 8 = 4$ · $5 + \underline{\quad} = 17 = 12$ · $5 + \underline{\quad} = 13 = 8$ · $2 + \underline{\quad} = 11 = 9$ · $1 + \underline{\quad} = 2 = 1$ · $9 + \underline{\quad} = 20 = 11$ · $10 + \underline{\quad} = 16 = 6$ · $3 + \underline{\quad} = 13 = 10$ · $1 + \underline{\quad} = 6 = 5$ · $1 + \underline{\quad} = 4 = 3$