



The Case of the Missing Golden Bone

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

Detective: _____ **Date:** _____

A sneaky pup took the Golden Bone from the park office! Ranger Rick needs your help to find which puppy did it.

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 sneaky pup is _____

Possible suspects

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

NAME	FAVORITE TOY	SUPER SKILL	PUPPY GROUP	FUR STYLE	DISTRACTION
Sadie	Squeaky Duck	Fast Runner	Boy Puppy	Spotted Fur	Cheese Treats
Rex	Red Ball	Deep Digger	Boy Puppy	Spotted Fur	Cheese Treats
Daisy	Red Ball	Fast Runner	Boy Puppy	Curly Fur	Cheese Treats
Buster	Red Ball	Fast Runner	Boy Puppy	Spotted Fur	Peanut Butter
Bailey	Red Ball	Fast Runner	Boy Puppy	Shaggy Fur	Belly Rubs
Charlie	Rope Tug	High Jumper	Boy Puppy	Spotted Fur	Belly Rubs
Bear	Red Ball	Water Swimmer	Girl Puppy	Curly Fur	Peanut Butter
Cooper	Squeaky Duck	Loud Barker	Girl Puppy	Shaggy Fur	Belly Rubs
Duke	Red Ball	Water Swimmer	Boy Puppy	Spotted Fur	Belly Rubs
Lucy	Chew Stick	Deep Digger	Boy Puppy	Spotted Fur	Belly Rubs
Penny	Rope Tug	High Jumper	Boy Puppy	Shaggy Fur	Cheese Treats
Max	Red Ball	Loud Barker	Boy Puppy	Spotted Fur	Cheese Treats
Lola	Blue Frisbee	Loud Barker	Boy Puppy	Spotted Fur	Cheese Treats
Rusty	Squeaky Duck	Deep Digger	Girl Puppy	Curly Fur	Cheese Treats
Coco	Red Ball	Water Swimmer	Girl Puppy	Spotted Fur	Cheese Treats
Rocky	Squeaky Duck	Loud Barker	Girl Puppy	Spotted Fur	Belly Rubs
Milo	Rope Tug	Fast Runner	Girl Puppy	Spotted Fur	Cheese Treats
Ginger	Rope Tug	High Jumper	Boy Puppy	Spotted Fur	Cheese Treats
Buddy	Squeaky Duck	Fast Runner	Boy Puppy	Shaggy Fur	Belly Rubs
Lucky	Red Ball	Loud Barker	Boy Puppy	Shaggy Fur	Peanut Butter
Zoe	Blue Frisbee	Loud Barker	Girl Puppy	Spotted Fur	Peanut Butter

CLUE 1

We count the tennis balls left by the gate. We add three green balls and four yellow balls. This sum gives us our first secret clue number.

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

A number line from 0 to 100. The line is divided into 10 groups of 10 boxes each. The first group (0-9) has a box with 'T' at 0. The second group (10-19) has a box with '20' at 10. The third group (20-29) has a box with 'T' at 20. The fourth group (30-39) has a box with '30' at 30. The fifth group (40-49) has a box with '40' at 40. The sixth group (50-59) has a box with '50' at 50. The seventh group (60-69) has a box with '60' at 60. The eighth group (70-79) has a box with '70' at 70. The ninth group (80-89) has a box with '80' at 80. The tenth group (90-99) has a box with '90' at 90. The box at 20 is highlighted in orange.

$7 + 13 = \boxed{} \rightarrow \boxed{\text{T}}$

$6 + 6 = \square \rightarrow \boxed{\mathbf{D}}$

$9 + 7 = \square \rightarrow \boxed{\mathbf{U}}$

$1 + 2 = \boxed{} \rightarrow \boxed{\mathbf{G}}$

$8 + 3 = \square \rightarrow \boxed{\mathbf{S}}$

$14 + 5 = \boxed{} \rightarrow \boxed{\mathbf{Y}}$

$3 + 1 = \square \rightarrow \text{H}$

$$3 + 6 = \boxed{} \rightarrow \boxed{1}$$

$$2 + 3 = \boxed{} \rightarrow \boxed{0}$$

$$7 + 11 = \boxed{} \rightarrow \boxed{\mathbf{R}}$$

$4 + 3 = \boxed{} \rightarrow \boxed{\mathbf{E}}$

$3 + 7 = \square \rightarrow \boxed{\mathbf{A}}$

$$5 + 12 = \boxed{} \rightarrow \boxed{\text{P}}$$

$5 + 8 = \boxed{} \rightarrow \boxed{\text{K}}$

$$5 + 1 = \boxed{} \rightarrow \boxed{\mathbf{N}}$$

Scratch space:

CLUE 2 Subtraction

The puppy box had ten yummy treats. Now there are only six left. We subtract to find how many treats the sneaky pup ate.

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

T					T											
1	19	6	16	11	1	2	6	17	17	19	6	7	13	18	7	
5	9	10	18	8	9	14	15	10	15	15	14	8	7	13	12	

$10 - 9 = \square \rightarrow$ T	$14 - 6 = \square \rightarrow$ B	$13 - 6 = \square \rightarrow$ A
$18 - 3 = \square \rightarrow$ P	$18 - 1 = \square \rightarrow$ S	$10 - 5 = \square \rightarrow$ L
$12 - 6 = \square \rightarrow$ E	$19 - 1 = \square \rightarrow$ D	$13 - 1 = \square \rightarrow$ K
$20 - 1 = \square \rightarrow$ H	$17 - 4 = \square \rightarrow$ R	$18 - 8 = \square \rightarrow$ U
$17 - 1 = \square \rightarrow$ W	$11 - 9 = \square \rightarrow$ N	$19 - 5 = \square \rightarrow$ Y
$14 - 5 = \square \rightarrow$ O	$14 - 3 = \square \rightarrow$ I	

Scratch space:

CLUE 3 Skip counting

Look at the muddy paw prints on the path. They go by twos. We skip count by twos to find the next clue number.

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

S										S						S	
110	35	27	15	33	25	130	45	26	26	110	26	35	28	26	22	35	110

				S						S				
12	27	120	120	110	35	50	70	35	45	27	110	70	30	70

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

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

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

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

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

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

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

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 → **W**

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

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

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

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

Skip-count by 10s. Fill the blank: 10, 20, __, 40, 50 → **U**

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, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 → **A**

Scratch space:

CLUE 4
Place value (tens & ones)

We find a collar with shiny stars on it. There is one group of ten stars and five single stars. What number does that make?

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

T																			
50	99	82	77	85	47	33	86	26	99	17	56	56	83	47	50	50	82	26	
70	33	85	56	99	82	26	47	86	64	50									

What number has 5 tens and 0 ones? → **T**

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

What number has 9 tens and 9 ones? → **H**

What number has 1 ten and 7 ones? → **A**

What number has 7 tens and 0 ones? → **F**

What number has 7 tens and 7 ones? → **G**

What number has 8 tens and 3 ones? → **P**

What number has 4 tens and 7 ones? → **O**

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

What number has 6 tens and 4 ones? → **I**

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

What number has 3 tens and 3 ones? → **U**

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

What number has 8 tens and 6 ones? → **N**

Scratch space:

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

The toy bin holds eight plastic bones. Right now we only see five bones. How many more bones do we need to make eight?

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:

$1 + \underline{\quad} = 13$

$1 + \underline{\quad} = 9$

$5 + \underline{\quad} = 6$

$2 + \underline{\quad} = 6$

$4 + \underline{\quad} = 15$

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

$9 + \underline{\quad} = 12$

$1 + \underline{\quad} = 8$

$1 + \underline{\quad} = 11$

$9 + \underline{\quad} = 11$

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

Step 2 - cross out the sentence with each answer:

1. The villain tugs a thick yellow rope, then leaps over the park gate.
2. The villain squeaks a rubber duck, then splashes across the big pond.
3. The villain catches a shiny blue frisbee, then splashes across the big pond.
4. The villain squeaks a rubber duck, then digs a huge hole in the grass.
5. The villain bounces a red ball, then splashes across the big pond.
6. The villain catches a shiny blue frisbee, then lets out a very loud bark.
7. The villain gnaws on a wood chew stick, then digs a huge hole in the grass.
8. The villain squeaks a rubber duck, then dashes past the bench.
9. The villain gnaws on a wood chew stick, then splashes across the big pond.
10. The villain catches a shiny blue frisbee, then dashes past the bench.
11. The villain tugs a thick yellow rope, then lets out a very loud bark.
12. The villain bounces a red ball, then lets out a very loud bark.

Answer Key

The Case of the Missing Golden Bone

Culprit: Lola

Blue Frisbee · Loud Barker · Boy Puppy · Spotted Fur · Cheese Treats

Trail: Start 21 → Clue 1 18 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SNEAKY PUP IS NOT A DEEP DIGGER"

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

Clue 2 (Subtraction): "THE WITNESS HEARD A LOUD BOY PUPPY BARK"

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

Clue 3 (Skip counting): "STINKY CHEESE TREATS WILL STOP THIS PUP"

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

Clue 4 (Place value (tens & ones)): "THE GROUND HAS SPOTTED FUR SHED ON IT"

What number has 5 tens and 0 ones? = 50 (T) · What number has 2 tens and 6 ones? = 26 (D) · What number has 9 tens and 9 ones? = 99 (H) · What number has 1 ten and 7 ones? = 17 (A) · What number has 7 tens and 0 ones? = 70 (F) · What number has 7 tens and 7 ones? = 77 (G) · What number has 8 tens and 3 ones? = 83 (P) · What number has 4 tens and 7 ones? = 47 (O) · What number has 5 tens and 6 ones? = 56 (S) · What number has 6 tens and 4 ones? = 64 (I) · What number has 8 tens and 5 ones? = 85 (R) · What number has 3 tens and 3 ones? = 33 (U) · What number has 8 tens and 2 ones? = 82 (E) · What number has 8 tens and 6 ones? = 86 (N)

Clue 5 (Missing addends): surviving statement is box 6 → Lola

$1 + \underline{\quad} = 13 = 12$ · $1 + \underline{\quad} = 9 = 8$ · $5 + \underline{\quad} = 6 = 1$ · $2 + \underline{\quad} = 6 = 4$ · $4 + \underline{\quad} = 15 = 11$ · $10 + \underline{\quad} = 15 = 5$ · $9 + \underline{\quad} = 12 = 3$ · $1 + \underline{\quad} = 8 = 7$ · $1 + \underline{\quad} = 11 = 10$ · $9 + \underline{\quad} = 11 = 2$ · $2 + \underline{\quad} = 11 = 9$