



The Mystery of the Missing Golden Acorn

Grade 2 math · Multiplication, Skip counting, Place value, Addition, Division · Reading level grades 1-2

Detective: _____ Date: _____

Someone snuck into Sunny Valley Zoo and took the Golden Acorn! Help the Junior Rangers solve the math clues and catch the culprit.

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 Zoo Bandit is _____

Possible suspects

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

NAME	ANIMAL SKILL	SPECIAL GEAR	WITNESS SIGN	FUR COLOR	SNACK DISTRACTION
Barnaby Bear	Falcon Dive	Grappling Hook	Wears Right Glove	Bright Yellow	Sweet Bananas
Wally Walrus	Gorilla Power	Grappling Hook	Wears Left Glove	Bright Yellow	Sweet Bananas
Leo Lion	Cheetah Sprint	Camouflage Cape	Wears Left Glove	Bright Yellow	Fresh Apples
Toby Turtle	Cheetah Sprint	Golden Net	Wears Left Glove	Bright Yellow	Sweet Bananas
Kiki Koala	Kangaroo Hop	Super Sound Whistle	Wears Left Glove	Dark Brown	Sweet Bananas
Pippa Penguin	Falcon Dive	Super Sound Whistle	Wears Right Glove	Bright Yellow	Crunchy Carrots
Molly Mouse	Gorilla Power	Night Vision Goggles	Wears Right Glove	Snowy White	Sweet Bananas
Fiona Hippo	Cheetah Sprint	Grappling Hook	Wears Right Glove	Bright Yellow	Sweet Bananas
Steve Irwin	Gorilla Power	Super Sound Whistle	Wears Right Glove	Snowy White	Fresh Apples
Ziggy Zebra	Falcon Dive	Grappling Hook	Wears Left Glove	Bright Yellow	Sweet Bananas
Felix Fox	Kangaroo Hop	Night Vision Goggles	Wears Right Glove	Bright Yellow	Sweet Bananas
Penny Panda	Cheetah Sprint	Super Sound Whistle	Wears Right Glove	Bright Yellow	Fresh Apples
David Attenborough	Cheetah Sprint	Golden Net	Wears Right Glove	Snowy White	Fresh Apples
Jane Goodall	Cheetah Sprint	Night Vision Goggles	Wears Right Glove	Dark Brown	Sweet Bananas
Quincy Quail	Cheetah Sprint	Camouflage Cape	Wears Left Glove	Dark Brown	Fresh Apples
Chester Cheetah	Cheetah Sprint	Golden Net	Wears Right Glove	Bright Yellow	Sweet Bananas
Ollie Otter	Gorilla Power	Grappling Hook	Wears Right Glove	Bright Yellow	Sweet Bananas
Benny Badger	Kangaroo Hop	Camouflage Cape	Wears Right Glove	Snowy White	Fresh Apples
Bella Beaver	Kangaroo Hop	Super Sound Whistle	Wears Right Glove	Bright Yellow	Fresh Apples
Daisy Duck	Kangaroo Hop	Camouflage Cape	Wears Left Glove	Bright Yellow	Fresh Apples
Sammy Squirrel	Kangaroo Hop	Grappling Hook	Wears Left Glove	Bright Yellow	Fresh Apples

CLUE 1

Multiplication facts (1-12)

The zookeeper counted rows of crates in the animal barn to find the first clue.

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

T																T
27	72	24	5	16	120	120	2	16	35	77	45	24	84	35	45	27

												T
80	84	24	2	48	45	120	77	24	35	35	24	27

$9 \times 3 = \square \rightarrow \boxed{\text{T}}$

$11 \times 7 = \square \rightarrow \boxed{\text{D}}$

$5 \times 9 = \square \rightarrow \boxed{\text{O}}$

$7 \times 5 = \square \rightarrow \boxed{\text{N}}$

$12 \times 10 = \square \rightarrow \boxed{\text{L}}$

$7 \times 12 = \square \rightarrow \boxed{\text{S}}$

$8 \times 2 = \square \rightarrow \boxed{\text{I}}$

$3 \times 8 = \square \rightarrow \boxed{\text{E}}$

$4 \times 12 = \square \rightarrow \boxed{\text{G}}$

$5 \times 1 = \square \rightarrow \boxed{\text{V}}$

$10 \times 8 = \square \rightarrow \boxed{\text{U}}$

$2 \times 1 = \square \rightarrow \boxed{\text{A}}$

$6 \times 12 = \square \rightarrow \boxed{\text{H}}$

Scratch space:

CLUE 2 Skip counting

We followed animal footprints by counting by twos down the park path.

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

W									W								
6	12	100	140	33	8	8	8	15	6	15	14	25	70	28	33	70	140

100	39	33	55	12	14	39	100	39	15	140	36

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

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

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

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

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

Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 → **S**

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

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

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

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

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

Skip-count by 5s. Fill the blank: 5, 10, __, 20, 25 → **A**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, __, 80, 90 → **O**

Skip-count by 3s. Fill the blank: 3, 6, 9, __, 15, 18 →

Scratch space:

CLUE 3
Place value

A digital scale at the vet clinic showed tens and ones to unlock the box.

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

T																		
33	18	51	27	20	87	87	52	20	12	95	87	20	59	59	51	62	44	12
				T														
95	39	51	51	33	55	52	12	52	12	52	95							

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

What number has 5 tens and 9 ones? → **P**

What number has 2 tens and 7 ones? → **V**

What number has 9 tens and 5 ones? → **S**

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

What number has 8 tens and 7 ones? → **L**

What number has 5 tens and 2 ones? → **A**

What number has 3 tens and 9 ones? → **W**

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

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

What number has 5 tens and 5 ones? → **B**

What number has 1 ten and 8 ones? → **H**

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

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

Scratch space:

CLUE 4 Addition

We added up all the lost feathers found near the duck pond.

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

T					T			T								
45	69	68	94	68	45	68	31	45	66	81	68	29	76	46	75	94
					T											
39	34	66	58	69	45	77	68	50	50	76	37	29	46	34		

$13 + 32 = \square \rightarrow$ T	$22 + 46 = \square \rightarrow$ E	$52 + 29 = \square \rightarrow$ V
$41 + 53 = \square \rightarrow$ D	$18 + 40 = \square \rightarrow$ G	$52 + 23 = \square \rightarrow$ N
$23 + 23 = \square \rightarrow$ U	$27 + 42 = \square \rightarrow$ H	$44 + 22 = \square \rightarrow$ I
$15 + 16 = \square \rightarrow$ C	$12 + 22 = \square \rightarrow$ R	$20 + 9 = \square \rightarrow$ F
$17 + 20 = \square \rightarrow$ W	$21 + 29 = \square \rightarrow$ L	$34 + 43 = \square \rightarrow$ Y
$42 + 34 = \square \rightarrow$ O	$16 + 23 = \square \rightarrow$ B	

Scratch space:

CLUE 5**Division facts (1-12) - the last clue**

We shared treats equally among the monkeys to hear their report.

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:

$50 \div 5 = \boxed{}$

$18 \div 3 = \boxed{}$

$121 \div 11 = \boxed{}$

$21 \div 7 = \boxed{}$

$144 \div 12 = \boxed{}$

$4 \div 1 = \boxed{}$

$2 \div 1 = \boxed{}$

$63 \div 9 = \boxed{}$

$56 \div 7 = \boxed{}$

$25 \div 5 = \boxed{}$

$2 \div 2 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain zoomed past using cheetah sprint, then put on night vision goggles.
2. The villain swooped down using falcon dive, then blew a super sound whistle.
3. The villain zipped off with dolphin swim, then blew a super sound whistle.
4. The villain smashed through using gorilla power, then pulled on a camouflage cape.
5. The villain zipped off with dolphin swim, then fired a grappling hook.
6. The villain bounced away with kangaroo hop, then put on night vision goggles.
7. The villain smashed through using gorilla power, then blew a super sound whistle.
8. The villain bounced away with kangaroo hop, then blew a super sound whistle.
9. The villain smashed through using gorilla power, then fired a grappling hook.
10. The villain zoomed past using cheetah sprint, then fired a grappling hook.
11. The villain swooped down using falcon dive, then fired a grappling hook.
12. The villain zoomed past using cheetah sprint, then blew a super sound whistle.

Answer Key

The Mystery of the Missing Golden Acorn

Culprit: Ollie Otter

Gorilla Power · Grappling Hook · Wears Right Glove · Bright Yellow · Sweet Bananas

Trail: Start 21 → Clue 1 18 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT USE A GOLDEN NET"

$9 \times 3 = 27$ (T) · $11 \times 7 = 77$ (D) · $5 \times 9 = 45$ (O) · $7 \times 5 = 35$ (N) · $12 \times 10 = 120$ (L) · $7 \times 12 = 84$ (S) · $8 \times 2 = 16$ (I) · $3 \times 8 = 24$ (E) · $4 \times 12 = 48$ (G) · $5 \times 1 = 5$ (V) · $10 \times 8 = 80$ (U) · $2 \times 1 = 2$ (A) · $6 \times 12 = 72$ (H)

Clue 2 (Skip counting): "WITNESS SAW A GLOVE ON THE RIGHT HAND"

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

Clue 3 (Place value): "THE VILLAIN SLIPPED ON SWEET BANANAS"

What number has 3 tens and 3 ones? = 33 (T) · What number has 5 tens and 9 ones? = 59 (P) · What number has 2 tens and 7 ones? = 27 (V) · What number has 9 tens and 5 ones? = 95 (S) · What number has 5 tens and 1 one? = 51 (E) · What number has 8 tens and 7 ones? = 87 (L) · What number has 5 tens and 2 ones? = 52 (A) · What number has 3 tens and 9 ones? = 39 (W) · What number has 2 tens and 0 ones? = 20 (I) · What number has 4 tens and 4 ones? = 44 (O) · What number has 5 tens and 5 ones? = 55 (B) · What number has 1 ten and 8 ones? = 18 (H) · What number has 1 ten and 2 ones? = 12 (N) · What number has 6 tens and 2 ones? = 62 (D)

Clue 4 (Addition): "THE DETECTIVE FOUND BRIGHT YELLOW FUR"

$13 + 32 = 45$ (T) · $22 + 46 = 68$ (E) · $52 + 29 = 81$ (V) · $41 + 53 = 94$ (D) · $18 + 40 = 58$ (G) · $52 + 23 = 75$ (N) · $23 + 23 = 46$ (U) · $27 + 42 = 69$ (H) · $44 + 22 = 66$ (I) · $15 + 16 = 31$ (C) · $12 + 22 = 34$ (R) · $20 + 9 = 29$ (F) · $17 + 20 = 37$ (W) · $21 + 29 = 50$ (L) · $34 + 43 = 77$ (Y) · $42 + 34 = 76$ (O) · $16 + 23 = 39$ (B)

Clue 5 (Division facts (1-12)): surviving statement is box 9 → Ollie Otter

$50 \div 5 = 10$ · $18 \div 3 = 6$ · $121 \div 11 = 11$ · $21 \div 7 = 3$ · $144 \div 12 = 12$ · $4 \div 1 = 4$ · $2 \div 1 = 2$ · $63 \div 9 = 7$ · $56 \div 7 = 8$ · $25 \div 5 = 5$ · $2 \div 2 = 1$