



The Case of the Missing Golden Sunflower Seed

Grade 4 math · Addition, Rounding, Subtraction, Multiplication, Division · Reading level grades 3-4

Detective: _____ Date: _____

Someone snuck into the high-canopy aviary and snatched the famous Golden Sunflower Seed right before showtime! Detective, solve the math clues to track down the culprit before they escape the sanctuary.

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 Feathered Thief is _____

Possible suspects

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

NAME	SPECIAL SKILL	ESCAPE GEAR	DOMINANT FOOT	FEATHER CREST	DISTRACTION
Jax Jingle	Nut Cracking	Mirror Shield	Right Footed	Golden Yellow Tuft	Mango Slices
Skyler Soar	Mimic Echo	Rope Swinger	Left Footed	Neon Green Plume	Shiny Mirrors
Penny Parrot	Seed Bombing	Smoke Bomb	Right Footed	Neon Green Plume	Soft Whistling
Polly Flutter	Wing Flapping	Smoke Bomb	Left Footed	Golden Yellow Tuft	Soft Whistling
Pipkin Plume	Loud Squawking	Glider Pack	Left Footed	Neon Green Plume	Soft Whistling
Kiwi Katy	Seed Bombing	Rope Swinger	Right Footed	Golden Yellow Tuft	Soft Whistling
Rico Crest	Seed Bombing	Rope Swinger	Left Footed	Neon Green Plume	Shiny Mirrors
Bella Feathers	Nut Cracking	Glider Pack	Left Footed	Bright Red Crest	Shiny Mirrors
Buster Beak	Mimic Echo	Glider Pack	Right Footed	Neon Green Plume	Shiny Mirrors
Pip Squawker	Mimic Echo	Rope Swinger	Left Footed	Bright Red Crest	Mango Slices
Ruby Talon	Loud Squawking	Flash Beacon	Left Footed	Neon Green Plume	Soft Whistling
Ziggy Wing	Loud Squawking	Rope Swinger	Left Footed	Bright Red Crest	Soft Whistling
Mango Mike	Seed Bombing	Smoke Bomb	Left Footed	Neon Green Plume	Soft Whistling
Fiona Feather	Mimic Echo	Flash Beacon	Right Footed	Golden Yellow Tuft	Soft Whistling
Chirpy Charlie	Seed Bombing	Glider Pack	Left Footed	Bright Red Crest	Mango Slices
Barnaby Birb	Wing Flapping	Glider Pack	Right Footed	Bright Red Crest	Shiny Mirrors
Captain Macaw	Nut Cracking	Smoke Bomb	Right Footed	Golden Yellow Tuft	Mango Slices
Toco Toucan	Mimic Echo	Flash Beacon	Left Footed	Neon Green Plume	Shiny Mirrors
Cleo Perch	Wing Flapping	Mirror Shield	Left Footed	Neon Green Plume	Soft Whistling
Felix Flapp	Loud Squawking	Glider Pack	Right Footed	Bright Red Crest	Soft Whistling
Sunny Skylark	Mimic Echo	Mirror Shield	Left Footed	Neon Green Plume	Soft Whistling

CLUE 1 Addition

We counted all the scattered birdseed packets along the aviary path to trace the thief.

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

T									T									
6895	3279	5300	4025	5523	5300	6677	6353	6832	6895	3279	7377	5300	6315	3654	2023	5300	4025	
		T																
5523	2023	6895	7095	4025	5300	6677	4575	2051	7377	3654	5300	8642	4929	6677	8265	6353		

$3890 + 3005 = \square \rightarrow \text{[T]}$

$1624 + 2030 = \square \rightarrow \text{[D]}$

$4248 + 2847 = \square \rightarrow \text{[U]}$

$2220 + 3080 = \square \rightarrow \text{[E]}$

$1818 + 3705 = \square \rightarrow \text{[N]}$

$1168 + 855 = \square \rightarrow \text{[O]}$

$2443 + 2132 = \square \rightarrow \text{[G]}$

$4650 + 2727 = \square \rightarrow \text{[I]}$

$1580 + 3349 = \square \rightarrow \text{[P]}$

$5209 + 3433 = \square \rightarrow \text{[R]}$

$1051 + 1000 = \square \rightarrow \text{[L]}$

$2978 + 3375 = \square \rightarrow \text{[K]}$

$1591 + 2434 = \square \rightarrow \text{[S]}$

$2296 + 983 = \square \rightarrow \text{[H]}$

$2880 + 3797 = \square \rightarrow \text{[A]}$

$3295 + 4970 = \square \rightarrow \text{[C]}$

$2838 + 3994 = \square \rightarrow \text{[Y]}$

$3989 + 2326 = \square \rightarrow \text{[F]}$

Scratch space:

CLUE 2 Rounding

The aviary security sensor rounded the visitor count to the nearest ten.

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

T			T								T					T		
3000	370	230	3000	370	50	230	110	30	4300	700	3000	500	370	230	2000	3000	370	230
					T						T						T	
30	230	230	2000	70	50	3000	370	130	230	110	3000	110	5000	5000	3000			

Round 3,415 to the nearest thousand → **T**

Round 66 to the nearest ten → **W**

Round 132 to the nearest ten → **L**

Round 49 to the nearest ten → **I**

Round 734 to the nearest hundred → **A**

Round 234 to the nearest ten → **E**

Round 2,030 to the nearest thousand → **D**

Round 109 to the nearest ten → **F**

Round 489 to the nearest hundred → **C**

Round 370 to the nearest ten → **H**

Round 4,269 to the nearest hundred → **N**

Round 27 to the nearest ten → **S**

Round 4,966 to the nearest thousand → **O**

Scratch space:

Subtraction

We checked how many mango snacks were missing from the feeding tray.

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

$$7915 - 3372 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$6087 - 4657 = \boxed{} \rightarrow \boxed{\text{W}}$$

$$2611 - 1018 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$2747 - 727 = \boxed{} \rightarrow \boxed{\text{D}}$$

$8133 - 3957 = \boxed{} \rightarrow \boxed{\text{F}}$

$5103 - 4061 = \boxed{} \rightarrow \boxed{\mathbf{G}}$

$$13559 - 4571 = \boxed{} \rightarrow \boxed{\mathbf{A}}$$

$$2369 - 595 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$13181 - 4963 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$5195 - 2939 = \boxed{} \rightarrow \boxed{\text{E}}$$

$13578 - 4997 = \boxed{} \rightarrow \boxed{\text{T}}$

$$8696 - 2259 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$3196 - 307 = \boxed{} \rightarrow \boxed{1}$$

$10384 - 4554 = \boxed{} \rightarrow \boxed{\text{M}}$

Scratch space:

CLUE 4

Multiplication facts (1-12)

The roosting perches were arranged in equal rows to count the flock.

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

G																	
54	45	22	22	121	15	96	24	30	22	42	22	56	28	49	22	45	3
14	22	45	22	96	22	42	28	56	28	28	49	22	3	48	22	121	22

$6 \times 9 = \square \rightarrow \text{G}$

$3 \times 5 = \square \rightarrow \text{P}$

$3 \times 1 = \square \rightarrow \text{S}$

$7 \times 2 = \square \rightarrow \text{W}$

$8 \times 6 = \square \rightarrow \text{C}$

$7 \times 8 = \square \rightarrow \text{A}$

$7 \times 7 = \square \rightarrow \text{H}$

$11 \times 11 = \square \rightarrow \text{N}$

$12 \times 2 = \square \rightarrow \text{U}$

$7 \times 6 = \square \rightarrow \text{F}$

$6 \times 5 = \square \rightarrow \text{M}$

$7 \times 4 = \square \rightarrow \text{T}$

$8 \times 12 = \square \rightarrow \text{L}$

$9 \times 5 = \square \rightarrow \text{R}$

$2 \times 11 = \square \rightarrow \text{E}$

Scratch space:

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

We shared the recovered sunflower seeds equally among the hungry macaws.

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:

$66 \div 6 = \boxed{}$

$7 \div 1 = \boxed{}$

$24 \div 12 = \boxed{}$

$1 \div 1 = \boxed{}$

$54 \div 6 = \boxed{}$

$18 \div 3 = \boxed{}$

$8 \div 1 = \boxed{}$

$120 \div 12 = \boxed{}$

$30 \div 6 = \boxed{}$

$9 \div 3 = \boxed{}$

$12 \div 3 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain flapped wings fast, then tossed a smoke bomb.
2. The villain flapped wings fast, then raised a mirror shield.
3. The villain flapped wings fast, then zoomed away on a glider.
4. The villain squawked very loudly, then raised a mirror shield.
5. The villain mimicked the keeper, then lit a bright flash beacon.
6. The villain cracked a hard nut, then lit a bright flash beacon.
7. The villain squawked very loudly, then lit a bright flash beacon.
8. The villain cracked a hard nut, then tossed a smoke bomb.
9. The villain flapped wings fast, then swung on a vine rope.
10. The villain cracked a hard nut, then swung on a vine rope.
11. The villain mimicked the keeper, then raised a mirror shield.
12. The villain dropped seed bombs, then tossed a smoke bomb.

Answer Key

The Case of the Missing Golden Sunflower Seed

Culprit: Mango Mike

Seed Bombing · Smoke Bomb · Left Footed · Neon Green Plume · Soft Whistling

Trail: Start 21 → Clue 1 15 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SNEAKY THIEF DOES NOT USE A GLIDER PACK"

$3890 + 3005 = 6895$ (T) · $1624 + 2030 = 3654$ (D) · $4248 + 2847 = 7095$ (U) · $2220 + 3080 = 5300$ (E) · $1818 + 3705 = 5523$ (N) · $1168 + 855 = 2023$ (O) · $2443 + 2132 = 4575$ (G) · $4650 + 2727 = 7377$ (I) · $1580 + 3349 = 4929$ (P) · $5209 + 3433 = 8642$ (R) · $1051 + 1000 = 2051$ (L) · $2978 + 3375 = 6353$ (K) · $1591 + 2434 = 4025$ (S) · $2296 + 983 = 3279$ (H) · $2880 + 3797 = 6677$ (A) · $3295 + 4970 = 8265$ (C) · $2838 + 3994 = 6832$ (Y) · $3989 + 2326 = 6315$ (F)

Clue 2 (Rounding): "THE THIEF SNATCHED THE SEED WITH LEFT FOOT"

Round 3,415 to the nearest thousand = 3000 (T) · Round 66 to the nearest ten = 70 (W) · Round 132 to the nearest ten = 130 (L) · Round 49 to the nearest ten = 50 (I) · Round 734 to the nearest hundred = 700 (A) · Round 234 to the nearest ten = 230 (E) · Round 2,030 to the nearest thousand = 2000 (D) · Round 109 to the nearest ten = 110 (F) · Round 489 to the nearest hundred = 500 (C) · Round 370 to the nearest ten = 370 (H) · Round 4,269 to the nearest hundred = 4300 (N) · Round 27 to the nearest ten = 30 (S) · Round 4,966 to the nearest thousand = 5000 (O)

Clue 3 (Subtraction): "HEARING A WHISTLE MADE THE THIEF HALT"

$7915 - 3372 = 4543$ (H) · $6087 - 4657 = 1430$ (W) · $2611 - 1018 = 1593$ (N) · $2747 - 727 = 2020$ (D) · $8133 - 3957 = 4176$ (F) · $5103 - 4061 = 1042$ (G) · $13559 - 4571 = 8988$ (A) · $2369 - 595 = 1774$ (S) · $13181 - 4963 = 8218$ (L) · $5195 - 2939 = 2256$ (E) · $13578 - 4997 = 8581$ (T) · $8696 - 2259 = 6437$ (R) · $3196 - 307 = 2889$ (I) · $10384 - 4554 = 5830$ (M)

Clue 4 (Multiplication facts (1-12)): "GREEN PLUME FEATHERS WERE LEFT AT THE SCENE"

$6 \times 9 = 54$ (G) · $3 \times 5 = 15$ (P) · $3 \times 1 = 3$ (S) · $7 \times 2 = 14$ (W) · $8 \times 6 = 48$ (C) · $7 \times 8 = 56$ (A) · $7 \times 7 = 49$ (H) · $11 \times 11 = 121$ (N) · $12 \times 2 = 24$ (U) · $7 \times 6 = 42$ (F) · $6 \times 5 = 30$ (M) · $7 \times 4 = 28$ (T) · $8 \times 12 = 96$ (L) · $9 \times 5 = 45$ (R) · $2 \times 11 = 22$ (E)

Clue 5 (Division facts (1-12)): surviving statement is box 12 → Mango Mike

$66 \div 6 = 11$ · $7 \div 1 = 7$ · $24 \div 12 = 2$ · $1 \div 1 = 1$ · $54 \div 6 = 9$ · $18 \div 3 = 6$ · $8 \div 1 = 8$ · $120 \div 12 = 10$ · $30 \div 6 = 5$ · $9 \div 3 = 3$ · $12 \div 3 = 4$