



The Golden Pumpkin Mystery

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

Detective: _____ **Date:** _____

Someone took the Golden Pumpkin from the Great Fall Festival! The Festival Director needs your help to find the sneaky Leaf Thief before the big parade.

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 Leaf Thief is _____

Possible suspects

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

NAME	FESTIVAL TOOL	FESTIVAL TRICK	FAVORITE HAND	LEAFY HAIR COLOR	WEAKNESS
Piper	rake shield	corn maze dash	left handed	acorn brown hair	squirrel chase
Brooke	pumpkin roller	pie shield	right handed	acorn brown hair	squirrel chase
Hunter	leaf blower	cider spray	right handed	acorn brown hair	squirrel chase
River	acorn launcher	hay hurdle	right handed	maple orange hair	squirrel chase
Oakley	leaf blower	hay hurdle	right handed	maple orange hair	wind gust
Maple	leaf blower	cider spray	right handed	maple orange hair	puddle slip
Cody	leaf blower	hay hurdle	left handed	apple red hair	wind gust
Ginger	apple tosser	hay hurdle	left handed	maple orange hair	wind gust
Leo	leaf blower	pie shield	left handed	acorn brown hair	wind gust
Rusty	leaf blower	pie shield	right handed	apple red hair	wind gust
Cooper	apple tosser	scarf swing	left handed	acorn brown hair	squirrel chase
Sawyer	pumpkin roller	scarf swing	right handed	acorn brown hair	squirrel chase
Amber	leaf blower	pie shield	left handed	acorn brown hair	squirrel chase
Mia	pumpkin roller	cider spray	left handed	acorn brown hair	squirrel chase
Toby	rake shield	corn maze dash	right handed	acorn brown hair	puddle slip
Jack	acorn launcher	corn maze dash	left handed	acorn brown hair	squirrel chase
Forrest	apple tosser	hay hurdle	right handed	acorn brown hair	wind gust
Eli	leaf blower	corn maze dash	left handed	acorn brown hair	wind gust
Zoe	rake shield	scarf swing	left handed	maple orange hair	puddle slip
Apple	leaf blower	scarf swing	left handed	apple red hair	squirrel chase
Rowan	acorn launcher	hay hurdle	left handed	acorn brown hair	puddle slip

CLUE 1 Addition

Let us count the pumpkins in the patch. We add the big pumpkins and the small pumpkins to get the total.

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

T			T											T			
4	13	9	4	13	17	9	19	12	3	9	15	8	3	4	5	15	9

T											
4	13	9	14	17	9	15	13	17	9	20	12

$1 + 3 = \square \rightarrow$ T	$6 + 6 = \square \rightarrow$ D	$10 + 9 = \square \rightarrow$ F	
$5 + 10 = \square \rightarrow$ S	$6 + 3 = \square \rightarrow$ E	$13 + 7 = \square \rightarrow$ L	
$6 + 2 = \square \rightarrow$ N	$7 + 10 = \square \rightarrow$ I	$2 + 1 = \square \rightarrow$ O	$6 + 7 = \square \rightarrow$ H
$1 + 4 = \square \rightarrow$ U	$7 + 7 = \square \rightarrow$ P		

Scratch space:

CLUE 2

Subtraction

Some corn cobs are missing from the stand. We subtract the stolen corn from the pile to see how many are left.

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

T														
18	11	13	17	2	4	7	6	9	4	19	10	4	17	
												T		
19	12	9	9	13	3	9	8	4	15	13	16	18	8	

$19 - 1 = \square \rightarrow \boxed{\text{T}}$

$15 - 2 = \square \rightarrow \boxed{\text{E}}$

$16 - 7 = \square \rightarrow \boxed{\text{B}}$

$10 - 8 = \square \rightarrow \boxed{\text{N}}$

$18 - 6 = \square \rightarrow \boxed{\text{O}}$

$18 - 1 = \square \rightarrow \boxed{\text{S}}$

$13 - 3 = \square \rightarrow \boxed{\text{W}}$

$14 - 6 = \square \rightarrow \boxed{\text{Y}}$

$16 - 1 = \square \rightarrow \boxed{\text{L}}$

$12 - 9 = \square \rightarrow \boxed{\text{D}}$

$11 - 7 = \square \rightarrow \boxed{\text{A}}$

$20 - 1 = \square \rightarrow \boxed{\text{R}}$

$13 - 6 = \square \rightarrow \boxed{\text{C}}$

$17 - 1 = \square \rightarrow \boxed{\text{F}}$

$20 - 9 = \square \rightarrow \boxed{\text{H}}$

$13 - 7 = \square \rightarrow \boxed{\text{K}}$

Scratch space:

CLUE 3 Skip counting

Let us count the boots by twos. Skip counting the boots helps us find the track fast.

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

A																
65	50	80	90	90	33	120	36	80	50	140	40	15	60	39	120	90
													A			
30	8	33	60	140	100	33	140	100	39	33	15	30	65	6	70	

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 → **A**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

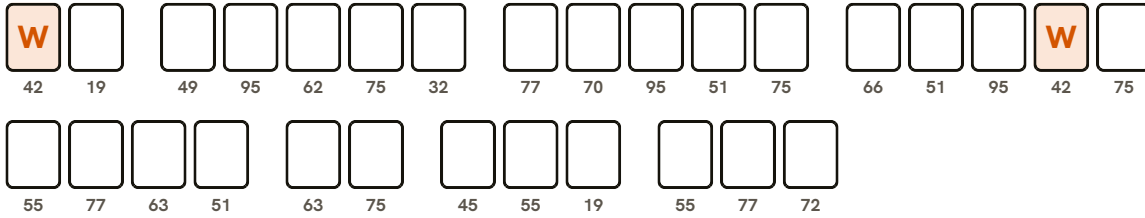
Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 → **T**

Scratch space:

CLUE 4
Place value

The pinecones are bundled in groups of ten and single ones. Let us count the tens and ones.

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



What number has 4 tens and 2 ones? → **W**

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

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

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

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

What number has 7 tens and 5 ones? → **N**

What number has 4 tens and 9 ones? → **F**

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

What number has 1 ten and 9 ones? → **E**

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

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

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

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

What number has 6 tens and 6 ones? → **B**

What number has 6 tens and 3 ones? → **I**

Scratch space:

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

We need ten pies but only have six. Let us find the missing number of pies to solve this.

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:

$8 + \underline{\quad} = 19$

$8 + \underline{\quad} = 11$

$4 + \underline{\quad} = 13$

$5 + \underline{\quad} = 9$

$3 + \underline{\quad} = 5$

$4 + \underline{\quad} = 10$

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

$5 + \underline{\quad} = 10$

$4 + \underline{\quad} = 14$

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

$10 + \underline{\quad} = 11$

Step 2 - cross out the sentence with each answer:

1. The villain rolls a giant orange pumpkin, then holds up a warm pumpkin pie.
2. The villain launches a heap of acorns, then sprays sweet apple cider.
3. The villain blocks the path with a rake, then dashes through the corn maze.
4. The villain tosses a red apple in the air, then dashes through the corn maze.
5. The villain rolls a giant orange pumpkin, then dashes through the corn maze.
6. The villain blocks the path with a rake, then jumps over a big hay bale.
7. The villain rolls a giant orange pumpkin, then sprays sweet apple cider.
8. The villain blows away the autumn leaves, then swings a long fuzzy scarf.
9. The villain tosses a red apple in the air, then swings a long fuzzy scarf.
10. The villain tosses a red apple in the air, then holds up a warm pumpkin pie.
11. The villain launches a heap of acorns, then dashes through the corn maze.
12. The villain blows away the autumn leaves, then dashes through the corn maze.

Answer Key

The Golden Pumpkin Mystery

Culprit: Mia

pumpkin roller · cider spray · left handed · acorn brown hair · squirrel chase

Trail: Start 21 → Clue 1 17 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE THIEF DOES NOT USE THE PIE SHIELD"

$1 + 3 = 4$ (T) · $6 + 6 = 12$ (D) · $10 + 9 = 19$ (F) · $5 + 10 = 15$ (S) · $6 + 3 = 9$ (E) · $13 + 7 = 20$ (L) · $6 + 2 = 8$ (N) · $7 + 10 = 17$ (I) · $2 + 1 = 3$ (O) · $6 + 7 = 13$ (H) · $1 + 4 = 5$ (U) · $7 + 7 = 14$ (P)

Clue 2 (Subtraction): "THE SNACK BAR WAS ROBBED BY A LEFTY"

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

Clue 3 (Skip counting): "A SUDDEN GUST OF WIND BLEW THE THIEF BACK"

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 = 65 (A) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 = 36 (G) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, __, 55, 60 = 50 (S) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, __, 45, 50 = 40 (O) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, __, 70, 80 = 60 (W) · Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 = 6 (C) · Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 = 8 (L) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (H) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 = 120 (N) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, __, 18, 21 = 15 (F) · Skip-count by 10s. Fill the blank: 10, 20, __, 40, 50 = 30 (B) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, __, 80, 90 = 70 (K) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (D) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 = 33 (E) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (U) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (I) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 = 140 (T)

Clue 4 (Place value): "WE FOUND ACORN BROWN HAIR IN THE HAY"

What number has 4 tens and 2 ones? = 42 (W) · What number has 4 tens and 5 ones? = 45 (T) · What number has 5 tens and 1 one? = 51 (R) · What number has 7 tens and 0 ones? = 70 (C) · What number has 9 tens and 5 ones? = 95 (O) · What number has 7 tens and 5 ones? = 75 (N) · What number has 4 tens and 9 ones? = 49 (F) · What number has 7 tens and 2 ones? = 72 (Y) · What number has 1 ten and 9 ones? = 19 (E) · What number has 5 tens and 5 ones? = 55 (H) · What number has 3 tens and 2 ones? = 32 (D) · What number has 7 tens and 7 ones? = 77 (A) · What number has 6 tens and 2 ones? = 62 (U) · What number has 6 tens and 6 ones? = 66 (B) · What number has 6 tens and 3 ones? = 63 (I)

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

$8 + \underline{\quad} = 19 = 11$ · $8 + \underline{\quad} = 11 = 3$ · $4 + \underline{\quad} = 13 = 9$ · $5 + \underline{\quad} = 9 = 4$ · $3 + \underline{\quad} = 5 = 2$ · $4 + \underline{\quad} = 10 = 6$ · $5 + \underline{\quad} = 13 = 8$ · $5 + \underline{\quad} = 10 = 5$ · $4 + \underline{\quad} = 14 = 10$ · $1 + \underline{\quad} = 13 = 12$ · $10 + \underline{\quad} = 11 = 1$