



The Mystery of the Golden Pumpkin

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

Detective: _____ Date: _____

Someone snuck into the patch and stole the grand Golden Pumpkin! Solve the math clues to catch the thief.

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 Pumpkin Thief is _____

Possible suspects

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

NAME	SPOOKY MAGIC	HALLOWEEN GADGET	HANDEDNESS	HAT COLOR	TREAT DISLIKE
Elphaba Broom	Floating Broom	Candy Magnet	Right handed	Orange Hat	Sour Apples
Glinda Witch	Floating Broom	Slime Blaster	Left handed	Orange Hat	Sour Apples
Hagrid Giant	Ghostly Howl	Fog Machine	Right handed	Orange Hat	Sour Apples
Count Vlad	Shadow Cloak	Candy Magnet	Left handed	Orange Hat	Chocolate Bars
Morticia Addams	Ghostly Howl	Fog Machine	Left handed	Orange Hat	Candy Corn
Mummy Mo	Shadow Cloak	Fog Machine	Right handed	Orange Hat	Chocolate Bars
Gomez Addams	Ghostly Howl	Glow Lantern	Left handed	Orange Hat	Chocolate Bars
Bride Frankie	Pumpkin Beam	Slime Blaster	Left handed	Orange Hat	Candy Corn
Mary Sanderson	Ghostly Howl	Glow Lantern	Left handed	Purple Hat	Sour Apples
Buster Bone	Floating Broom	Fog Machine	Right handed	Purple Hat	Sour Apples
Wolfman Jack	Shadow Cloak	Candy Magnet	Left handed	Orange Hat	Sour Apples
Pugsley Addams	Pumpkin Beam	Fog Machine	Right handed	Purple Hat	Sour Apples
Draco Malfoy	Bat Swarm	Candy Magnet	Left handed	Orange Hat	Sour Apples
Mavis Dracula	Floating Broom	Candy Magnet	Left handed	Black Hat	Sour Apples
Sally Skellington	Bat Swarm	Glow Lantern	Left handed	Purple Hat	Sour Apples
Igor Helper	Bat Swarm	Glow Lantern	Left handed	Orange Hat	Sour Apples
Winnie Sanderson	Bat Swarm	Spider Net	Left handed	Black Hat	Sour Apples
Sarah Sanderson	Pumpkin Beam	Fog Machine	Left handed	Black Hat	Chocolate Bars
Casper Ghost	Bat Swarm	Fog Machine	Left handed	Black Hat	Candy Corn
Luna Lovegood	Ghostly Howl	Spider Net	Left handed	Purple Hat	Chocolate Bars
Jack Lantern	Ghostly Howl	Fog Machine	Left handed	Orange Hat	Sour Apples

CLUE 1
Rounding

The spooky owl radar only shows numbers rounded to the nearest ten.

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

T																T
20	400	800	600	70	300	300	700	70	900	30	200	800	60	900	200	20
80	60	800	700	500	200	40	50	700	90	400	70	900	800			

Round 21 to the nearest ten → **T**

Round 845 to the nearest hundred → **E**

Round 636 to the nearest hundred → **V**

Round 331 to the nearest hundred → **L**

Round 44 to the nearest ten → **G**

Round 920 to the nearest hundred → **N**

Round 238 to the nearest hundred → **O**

Round 90 to the nearest ten → **C**

Round 30 to the nearest ten → **D**

Round 468 to the nearest hundred → **F**

Round 47 to the nearest ten → **M**

Round 431 to the nearest hundred → **H**

Round 64 to the nearest ten → **S**

Round 74 to the nearest ten → **I**

Round 76 to the nearest ten → **U**

Round 672 to the nearest hundred → **A**

Scratch space:

CLUE 2
Place value

The pumpkin crate digital lock uses digits for tens and ones.

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

W									W										
99	41	33	90	67	35	35	35	93	99	69	67	24	33	70	93	90	14	67	14
74	88	41	90	33	97	90	83	69	93	35	35								

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

What number has 3 tens and 5 ones? → **S**

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

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

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

What number has 6 tens and 7 ones? → **E**

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

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

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

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

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

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

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

What number has 4 tens and 1 one? → **I**

What number has 1 ten and 4 ones? → **D**

Scratch space:

Addition

We count up all the treats found along the dark path.

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

A 2x10 grid of boxes. The top row contains the following numbers from left to right: 34, 60, 75, 63, 57, 64, 30, 75, 64, 70, 60, 57, 37, 75, 71, 34, 60, 75, 30. The bottom row contains the following numbers from left to right: 39, 63, 63, 73, 76, 34, 60, 37, 39, 68, 64, 57, 52, 52, 69, 75, 37. In the top row, the box containing '34' at the second position and the box containing '34' at the sixteenth position are highlighted in orange and each contains a small orange 'T' above the number. In the bottom row, the box containing '34' at the sixth position is highlighted in orange and contains a small orange 'T' above the number.

$11 + 23 = \boxed{} \rightarrow \boxed{\text{T}}$

$23 + 53 = \boxed{} \rightarrow \boxed{\text{I}}$

$22 + 35 = \boxed{} \rightarrow \boxed{\text{A}}$

$38 + 31 = \boxed{} \rightarrow \boxed{\text{L}}$

$29 + 42 = \boxed{} \rightarrow \boxed{\text{D}}$

$$23 + 37 = \boxed{} \rightarrow \boxed{\text{H}}$$

$51 + 24 = \boxed{} \rightarrow \boxed{\text{E}}$

$$22 + 42 = \boxed{} \rightarrow \boxed{\text{R}}$$

$11 + 28 = \boxed{} \rightarrow \boxed{\text{O}}$

$14 + 16 = \boxed{} \rightarrow \boxed{\mathbf{M}}$

$$40 + 33 = \boxed{} \rightarrow \boxed{\text{W}}$$

$25 + 45 = \boxed{} \rightarrow \boxed{\text{C}}$

$30 + 38 = \boxed{} \rightarrow \boxed{\text{U}}$

$19 + 33 = \boxed{} \rightarrow \boxed{\text{P}}$

$42 + 21 = \boxed{} \rightarrow \boxed{\text{F}}$

$11 + 26 = \boxed{} \rightarrow \boxed{\text{S}}$

Scratch space:

CLUE 4

Subtraction

We figure out how many candy corn pieces are missing from the jar.

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

A				A					A				A			
71	18	38	57	71	18	28	62	58	71	49	35	49	57	71	18	48
	A							A								
82	71	35	53	38	54	18	48	71	49	35	63	62	18	62		

$102 - 31 = \square \rightarrow \boxed{\text{A}}$

$71 - 22 = \square \rightarrow \boxed{\text{T}}$

$65 - 7 = \square \rightarrow \boxed{\text{H}}$

$62 - 24 = \square \rightarrow \boxed{\text{O}}$

$97 - 35 = \square \rightarrow \boxed{\text{E}}$

$73 - 38 = \square \rightarrow \boxed{\text{S}}$

$83 - 1 = \square \rightarrow \boxed{\text{W}}$

$81 - 24 = \square \rightarrow \boxed{\text{R}}$

$57 - 4 = \square \rightarrow \boxed{\text{F}}$

$53 - 5 = \square \rightarrow \boxed{\text{D}}$

$93 - 39 = \square \rightarrow \boxed{\text{U}}$

$91 - 28 = \square \rightarrow \boxed{\text{C}}$

$22 - 4 = \square \rightarrow \boxed{\text{N}}$

$35 - 7 = \square \rightarrow \boxed{\text{G}}$

Scratch space:

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

We need to find the missing treat box to open the gate.

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:

$9 + \underline{\quad} = 21$

$9 + \underline{\quad} = 16$

$2 + \underline{\quad} = 7$

$7 + \underline{\quad} = 9$

$4 + \underline{\quad} = 5$

$4 + \underline{\quad} = 12$

$6 + \underline{\quad} = 15$

$10 + \underline{\quad} = 21$

$9 + \underline{\quad} = 15$

$6 + \underline{\quad} = 16$

$3 + \underline{\quad} = 6$

Step 2 - cross out the sentence with each answer:

1. The villain summoned a bat swarm, then trapped treats in a spider net.
2. The villain let out a loud howl, then lit up a glow lantern.
3. The villain flew on a broomstick, then pulled candy with a magnet.
4. The villain flew on a broomstick, then sprayed gooey slime.
5. The villain wrapped in a cloak, then pulled candy with a magnet.
6. The villain let out a loud howl, then sprayed gooey slime.
7. The villain summoned a bat swarm, then pulled candy with a magnet.
8. The villain blasted a pumpkin beam, then pulled candy with a magnet.
9. The villain let out a loud howl, then trapped treats in a spider net.
10. The villain blasted a pumpkin beam, then lit up a glow lantern.
11. The villain let out a loud howl, then pumped out thick fog.
12. The villain summoned a bat swarm, then lit up a glow lantern.

Answer Key

The Mystery of the Golden Pumpkin

Culprit: Glinda Witch

Floating Broom · Slime Blaster · Left handed · Orange Hat · Sour Apples

Trail: Start 21 → Clue 1 13 → Clue 2 12 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN DOES NOT USE A FOG MACHINE"

Round 21 to the nearest ten = 20 (T) · Round 845 to the nearest hundred = 800 (E) · Round 636 to the nearest hundred = 600 (V) · Round 331 to the nearest hundred = 300 (L) · Round 44 to the nearest ten = 40 (G) · Round 920 to the nearest hundred = 900 (N) · Round 238 to the nearest hundred = 200 (O) · Round 90 to the nearest ten = 90 (C) · Round 30 to the nearest ten = 30 (D) · Round 468 to the nearest hundred = 500 (F) · Round 47 to the nearest ten = 50 (M) · Round 431 to the nearest hundred = 400 (H) · Round 64 to the nearest ten = 60 (S) · Round 74 to the nearest ten = 70 (I) · Round 76 to the nearest ten = 80 (U) · Round 672 to the nearest hundred = 700 (A)

Clue 2 (Place value): "WITNESS SAW LEFT HANDED PRINT ON GLASS"

What number has 9 tens and 9 ones? = 99 (W) · What number has 3 tens and 5 ones? = 35 (S) · What number has 7 tens and 4 ones? = 74 (P) · What number has 7 tens and 0 ones? = 70 (H) · What number has 6 tens and 9 ones? = 69 (L) · What number has 6 tens and 7 ones? = 67 (E) · What number has 8 tens and 8 ones? = 88 (R) · What number has 9 tens and 3 ones? = 93 (A) · What number has 9 tens and 0 ones? = 90 (N) · What number has 8 tens and 3 ones? = 83 (G) · What number has 2 tens and 4 ones? = 24 (F) · What number has 3 tens and 3 ones? = 33 (T) · What number has 9 tens and 7 ones? = 97 (O) · What number has 4 tens and 1 one? = 41 (I) · What number has 1 ten and 4 ones? = 14 (D)

Clue 3 (Addition): "THE FARMER CHASED THEM OFF WITH SOUR APPLES"

$11 + 23 = 34$ (T) · $23 + 53 = 76$ (I) · $22 + 35 = 57$ (A) · $38 + 31 = 69$ (L) · $29 + 42 = 71$ (D) · $23 + 37 = 60$ (H) · $51 + 24 = 75$ (E) · $22 + 42 = 64$ (R) · $11 + 28 = 39$ (O) · $14 + 16 = 30$ (M) · $40 + 33 = 73$ (W) · $25 + 45 = 70$ (C) · $30 + 38 = 68$ (U) · $19 + 33 = 52$ (P) · $42 + 21 = 63$ (F) · $11 + 26 = 37$ (S)

Clue 4 (Subtraction): "AN ORANGE HAT STRAND WAS FOUND AT SCENE"

$102 - 31 = 71$ (A) · $71 - 22 = 49$ (T) · $65 - 7 = 58$ (H) · $62 - 24 = 38$ (O) · $97 - 35 = 62$ (E) · $73 - 38 = 35$ (S) · $83 - 1 = 82$ (W) · $81 - 24 = 57$ (R) · $57 - 4 = 53$ (F) · $53 - 5 = 48$ (D) · $93 - 39 = 54$ (U) · $91 - 28 = 63$ (C) · $22 - 4 = 18$ (N) · $35 - 7 = 28$ (G)

Clue 5 (Missing addends): surviving statement is box 4 → Glinda Witch

$9 + \underline{\quad} = 21 = 12$ · $9 + \underline{\quad} = 16 = 7$ · $2 + \underline{\quad} = 7 = 5$ · $7 + \underline{\quad} = 9 = 2$ · $4 + \underline{\quad} = 5 = 1$ · $4 + \underline{\quad} = 12 = 8$ · $6 + \underline{\quad} = 15 = 9$ · $10 + \underline{\quad} = 21 = 11$ · $9 + \underline{\quad} = 15 = 6$ · $6 + \underline{\quad} = 16 = 10$ · $3 + \underline{\quad} = 6 = 3$