



# The Great Pumpkin Mystery

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

**Detective:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Oh no! The giant golden pumpkin disappeared right before Halloween! A sneaky trickster took it. Solve the clues to find out who 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 pumpkin snatcher is** \_\_\_\_\_

## Possible suspects

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

| NAME             | COSTUME       | TREAT BAG    | STICKER HAND | WIG COLOR   | SCARE ITEM      |
|------------------|---------------|--------------|--------------|-------------|-----------------|
| Barnaby Bat      | Ghost Mask    | Bat Bucket   | Right Handed | Green Hair  | Flashlight Beam |
| Frankie Stein    | Mummy Wrap    | Bat Bucket   | Right Handed | Purple Hair | Flashlight Beam |
| Pippa Patch      | Skeleton Suit | Bat Bucket   | Right Handed | Purple Hair | Squeaky Toy     |
| Ollie Owl        | Witch Hat     | Spider Pouch | Right Handed | Orange Hair | Silver Bell     |
| Zoe Zombie       | Ghost Mask    | Skull Sack   | Right Handed | Orange Hair | Silver Bell     |
| Sammy Spider     | Witch Hat     | Spider Pouch | Left Handed  | Green Hair  | Silver Bell     |
| Pip Pumpkin      | Ghost Mask    | Cat Basket   | Right Handed | Orange Hair | Silver Bell     |
| Luna Fog         | Skeleton Suit | Skull Sack   | Right Handed | Green Hair  | Silver Bell     |
| Fiona Fright     | Ghost Mask    | Spider Pouch | Left Handed  | Green Hair  | Squeaky Toy     |
| Toby Tomb        | Ghost Mask    | Ghost Tote   | Right Handed | Orange Hair | Flashlight Beam |
| Penny Potion     | Skeleton Suit | Spider Pouch | Left Handed  | Orange Hair | Flashlight Beam |
| Bramble Broom    | Mummy Wrap    | Cat Basket   | Left Handed  | Orange Hair | Squeaky Toy     |
| Vinnie Vampire   | Vampire Cape  | Skull Sack   | Left Handed  | Orange Hair | Silver Bell     |
| Ruby Raven       | Mummy Wrap    | Cat Basket   | Left Handed  | Orange Hair | Flashlight Beam |
| Mindy Moon       | Mummy Wrap    | Spider Pouch | Right Handed | Purple Hair | Flashlight Beam |
| Jack Lantern     | Ghost Mask    | Ghost Tote   | Left Handed  | Green Hair  | Squeaky Toy     |
| Trixie Treat     | Witch Hat     | Skull Sack   | Right Handed | Orange Hair | Silver Bell     |
| Gus Ghost        | Ghost Mask    | Skull Sack   | Right Handed | Purple Hair | Squeaky Toy     |
| Bruno Broomstick | Mummy Wrap    | Ghost Tote   | Right Handed | Orange Hair | Silver Bell     |
| Stella Shadow    | Skeleton Suit | Cat Basket   | Left Handed  | Orange Hair | Silver Bell     |
| Mummy Max        | Witch Hat     | Ghost Tote   | Left Handed  | Purple Hair | Flashlight Beam |

## CLUE 1 Addition

Count all the glowing candy buckets on the porch to unlock the first clue.

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

|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|
| T  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    | T |
| 40 | 30 | 32 | 84 | 52 | 62 | 62 | 89 | 52 | 26 | 50 | 68 | 32 | 75 | 26 | 68 | 40 |   |
|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |
| 30 | 89 | 84 | 32 | 89 | 75 | 90 | 52 | 50 | 32 | 38 | 90 | 68 | 21 | 63 | 30 |    |   |

$28 + 12 = \boxed{\phantom{00}} \rightarrow \boxed{\text{T}}$

$36 + 53 = \boxed{\phantom{00}} \rightarrow \boxed{\text{A}}$

$33 + 29 = \boxed{\phantom{00}} \rightarrow \boxed{\text{L}}$

$28 + 56 = \boxed{\phantom{00}} \rightarrow \boxed{\text{V}}$

$30 + 45 = \boxed{\phantom{00}} \rightarrow \boxed{\text{S}}$

$33 + 19 = \boxed{\phantom{00}} \rightarrow \boxed{\text{I}}$

$16 + 34 = \boxed{\phantom{00}} \rightarrow \boxed{\text{D}}$

$13 + 8 = \boxed{\phantom{00}} \rightarrow \boxed{\text{U}}$

$10 + 22 = \boxed{\phantom{00}} \rightarrow \boxed{\text{E}}$

$36 + 27 = \boxed{\phantom{00}} \rightarrow \boxed{\text{C}}$

$45 + 23 = \boxed{\phantom{00}} \rightarrow \boxed{\text{O}}$

$21 + 17 = \boxed{\phantom{00}} \rightarrow \boxed{\text{R}}$

$14 + 16 = \boxed{\phantom{00}} \rightarrow \boxed{\text{H}}$

$7 + 19 = \boxed{\phantom{00}} \rightarrow \boxed{\text{N}}$

$59 + 31 = \boxed{\phantom{00}} \rightarrow \boxed{\text{P}}$

Scratch space:

**CLUE 2**
**Place value**

Look at the tens and ones on the spooky house door to find the code.

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

|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| T  |    |    |    |    |    |    |    |    | T  |    |    |    | T  |    |    |    |
| 68 | 88 | 75 | 70 | 28 | 70 | 85 | 75 | 18 | 68 | 42 | 81 | 82 | 68 | 75 | 15 |    |
|    |    | T  |    |    |    | T  |    |    |    |    |    |    | T  |    |    |    |
| 21 | 82 | 68 | 75 | 42 | 67 | 68 | 88 | 81 | 67 | 27 | 88 | 68 | 88 | 15 | 21 | 76 |

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

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

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

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

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

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

What number has 1 ten and 5 ones?  → **A**

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

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

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

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

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

What number has 2 tens and 1 one?  → **N**

What number has 8 tens and 1 one?  → **R**

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

Scratch space:

## CLUE 3

## Subtraction

Take away the smashed pumpkins from the patch to see what is left.

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

|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| T  |    |    | T  |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 61 | 55 | 65 | 61 | 55 | 62 | 65 | 17 | 76 | 79 | 18 | 65 | 88 | 65 | 54 | 65 | 26 | 88 | 31 |

  

|    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|
|    | T  |    |    |    |    |    |    |    |    |    |    |    |
| 26 | 61 | 26 | 31 | 62 | 86 | 18 | 65 | 88 | 44 | 65 | 86 | 86 |

$70 - 9 = \square \rightarrow \boxed{\text{T}}$

$35 - 9 = \square \rightarrow \boxed{\text{A}}$

$67 - 13 = \square \rightarrow \boxed{\text{D}}$

$53 - 22 = \square \rightarrow \boxed{\text{S}}$

$85 - 9 = \square \rightarrow \boxed{\text{C}}$

$106 - 20 = \square \rightarrow \boxed{\text{L}}$

$24 - 7 = \square \rightarrow \boxed{\text{F}}$

$117 - 38 = \square \rightarrow \boxed{\text{O}}$

$93 - 28 = \square \rightarrow \boxed{\text{E}}$

$75 - 20 = \square \rightarrow \boxed{\text{H}}$

$107 - 19 = \square \rightarrow \boxed{\text{R}}$

$28 - 10 = \square \rightarrow \boxed{\text{V}}$

$64 - 2 = \square \rightarrow \boxed{\text{I}}$

$79 - 35 = \square \rightarrow \boxed{\text{B}}$

Scratch space:

## CLUE 4 Skip counting

Hop along the stone path by twos to track the footsteps.

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

|          |    |    |    |    |    |    |    |    |    |   |    |    |          |    |    |    |    |
|----------|----|----|----|----|----|----|----|----|----|---|----|----|----------|----|----|----|----|
| <b>O</b> |    |    |    |    |    |    |    |    |    |   |    |    | <b>O</b> |    |    |    |    |
| 22       | 24 | 50 | 42 | 55 | 14 | 27 | 50 | 10 | 24 | 6 | 50 | 70 | 16       | 22 | 12 | 42 | 35 |

  

|          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| <b>O</b> |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 22       | 42 | 39 | 27 | 14 | 25 | 12 | 90 | 25 | 36 | 10 | 42 | 70 | 39 | 50 | 42 | 35 |

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, \_\_, 24, 26  → **O**

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

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

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

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, \_\_, 18, 20  → **F**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, \_\_, 27, 30  → **R**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, \_\_, 45, 48  → **N**

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, \_\_, 40, 45  → **D**

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, \_\_, 12, 14  → **I**

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, \_\_, 30, 35  → **P**

Scratch space:

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

Find the missing number of bats to balance the Halloween scale.

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:**

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

$8 + \underline{\quad} = 17$

$9 + \underline{\quad} = 13$

$6 + \underline{\quad} = 12$

$3 + \underline{\quad} = 13$

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

$6 + \underline{\quad} = 7$

$4 + \underline{\quad} = 9$

$4 + \underline{\quad} = 7$

$8 + \underline{\quad} = 20$

$1 + \underline{\quad} = 3$

**Step 2 - cross out the sentence with each answer:**

1. The villain unraveled a long mummy wrap, then clutched a skull sack.
2. The villain wore a spooky ghost mask, then held a spider pouch.
3. The villain adjusted a tall witch hat, then held a spider pouch.
4. The villain unraveled a long mummy wrap, then carried a ghost tote.
5. The villain rattled in a skeleton suit, then clutched a skull sack.
6. The villain rattled in a skeleton suit, then held a spider pouch.
7. The villain swished a dark vampire cape, then clutched a skull sack.
8. The villain wore a spooky ghost mask, then clutched a skull sack.
9. The villain wore a spooky ghost mask, then swung a cat basket.
10. The villain rattled in a skeleton suit, then carried a bat bucket.
11. The villain adjusted a tall witch hat, then clutched a skull sack.
12. The villain adjusted a tall witch hat, then carried a bat bucket.

# Answer Key

## The Great Pumpkin Mystery

### Culprit: Trixie Treat

Witch Hat · Skull Sack · Right Handed · Orange Hair · Silver Bell

Trail: Start 21 → Clue 1 16 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

#### Clue 1 (Addition): "THE VILLAIN DOES NOT HAVE A SPIDER POUCH"

$28 + 12 = 40$  (T) ·  $36 + 53 = 89$  (A) ·  $33 + 29 = 62$  (L) ·  $28 + 56 = 84$  (V) ·  $30 + 45 = 75$  (S) ·  $33 + 19 = 52$  (I) ·  $16 + 34 = 50$  (D) ·  $13 + 8 = 21$  (U) ·  $10 + 22 = 32$  (E) ·  $36 + 27 = 63$  (C) ·  $45 + 23 = 68$  (O) ·  $21 + 17 = 38$  (R) ·  $14 + 16 = 30$  (H) ·  $7 + 19 = 26$  (N) ·  $59 + 31 = 90$  (P)

#### Clue 2 (Place value): "THE SUSPECT WROTE A NOTE WITH RIGHT HAND"

What number has 6 tens and 8 ones? = 68 (T) · What number has 8 tens and 5 ones? = 85 (P) · What number has 7 tens and 6 ones? = 76 (D) · What number has 2 tens and 8 ones? = 28 (U) · What number has 2 tens and 7 ones? = 27 (G) · What number has 1 ten and 8 ones? = 18 (C) · What number has 1 ten and 5 ones? = 15 (A) · What number has 8 tens and 8 ones? = 88 (H) · What number has 6 tens and 7 ones? = 67 (I) · What number has 7 tens and 0 ones? = 70 (S) · What number has 8 tens and 2 ones? = 82 (O) · What number has 7 tens and 5 ones? = 75 (E) · What number has 2 tens and 1 one? = 21 (N) · What number has 8 tens and 1 one? = 81 (R) · What number has 4 tens and 2 ones? = 42 (W)

#### Clue 3 (Subtraction): "THE THIEF COVERED EARS AT A SILVER BELL"

$70 - 9 = 61$  (T) ·  $35 - 9 = 26$  (A) ·  $67 - 13 = 54$  (D) ·  $53 - 22 = 31$  (S) ·  $85 - 9 = 76$  (C) ·  $106 - 20 = 86$  (L) ·  $24 - 7 = 17$  (F) ·  $117 - 38 = 79$  (O) ·  $93 - 28 = 65$  (E) ·  $75 - 20 = 55$  (H) ·  $107 - 19 = 88$  (R) ·  $28 - 10 = 18$  (V) ·  $64 - 2 = 62$  (I) ·  $79 - 35 = 44$  (B)

#### Clue 4 (Skip counting): "ORANGE HAIR WAS FOUND ON THE PUMPKIN STAND"

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, \_\_, 24, 26 = 22 (O) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, \_\_, 55, 60 = 50 (A) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, \_\_, 16, 18 = 14 (E) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, \_\_, 60, 65 = 55 (G) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, \_\_, 80, 90 = 70 (S) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, \_\_, 18, 20 = 16 (F) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, \_\_, 42, 45 = 39 (T) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, \_\_, 27, 30 = 24 (R) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, \_\_, 14, 16 = 12 (U) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, \_\_, 45, 48 = 42 (N) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, \_\_, 100, 110 = 90 (M) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, \_\_, 39, 42 = 36 (K) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, \_\_, 40, 45 = 35 (D) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, \_\_, 30, 33 = 27 (H) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, \_\_, 12, 14 = 10 (I) · Skip-count by 2s. Fill the blank: 2, 4, \_\_, 8, 10 = 6 (W) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, \_\_, 30, 35 = 25 (P)

#### Clue 5 (Missing addends): surviving statement is box 11 → Trixie Treat

$5 + \underline{\quad} = 13 = 8$  ·  $8 + \underline{\quad} = 17 = 9$  ·  $9 + \underline{\quad} = 13 = 4$  ·  $6 + \underline{\quad} = 12 = 6$  ·  $3 + \underline{\quad} = 13 = 10$  ·  $9 + \underline{\quad} = 16 = 7$  ·  $6 + \underline{\quad} = 7 = 1$  ·  $4 + \underline{\quad} = 9 = 5$  ·  $4 + \underline{\quad} = 7 = 3$  ·  $8 + \underline{\quad} = 20 = 12$  ·  $1 + \underline{\quad} = 3 = 2$