

The Glitter Valley Mystery

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

Detective: _____ Date: _____

A sneaky unicorn has taken the Golden Cup cake from the Pixie Guard! We must follow the sparkly trail to find who did it. Look for clues in the sweet meadow. Let us solve the mystery together!

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 glitter thief is _____

Possible suspects

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

NAME	MEADOW MAGIC	SPECIAL SKILL	BELL SOUND	MANE COLOR	SILLY WEAKNESS
Velvet	spits shiny bubbles	heals sick plants	Wears a silver bell	Pink mane	Dislikes sour apples
Dash	makes soft music	heals sick plants	Wears a gold bell	Blue mane	Dislikes sour apples
Clover	glows in the dark	heals sick plants	Wears a gold bell	Pink mane	Sneeze at daisy pollen
Sprinkles	glows in the dark	jumps over clouds	Wears a silver bell	Blue mane	Dislikes sour apples
Goldie	glows in the dark	bakes sweet pies	Wears a silver bell	Pink mane	Sneeze at daisy pollen
Peaches	makes soft music	flies with wings	Wears a silver bell	Blue mane	Sneeze at daisy pollen
Star	glows in the dark	speaks to birds	Wears a gold bell	Blue mane	Scared of tickle grass
Blossom	glows in the dark	heals sick plants	Wears a gold bell	Blue mane	Dislikes sour apples
Daisy	creates rainbow bridges	bakes sweet pies	Wears a silver bell	Blue mane	Sneeze at daisy pollen
Bluebell	creates rainbow bridges	heals sick plants	Wears a silver bell	Pink mane	Sneeze at daisy pollen
Sunny	glows in the dark	heals sick plants	Wears a gold bell	Blue mane	Sneeze at daisy pollen
Jewel	makes soft music	flies with wings	Wears a gold bell	Purple mane	Sneeze at daisy pollen
Pip	spits shiny bubbles	speaks to birds	Wears a silver bell	Blue mane	Dislikes sour apples
Sparkles	glows in the dark	bakes sweet pies	Wears a silver bell	Blue mane	Dislikes sour apples
Twinkle	spits shiny bubbles	speaks to birds	Wears a gold bell	Blue mane	Dislikes sour apples
Misty	makes soft music	heals sick plants	Wears a silver bell	Blue mane	Sneeze at daisy pollen
Sky	makes soft music	flies with wings	Wears a silver bell	Blue mane	Dislikes sour apples
Honey	creates rainbow bridges	jumps over clouds	Wears a gold bell	Purple mane	Scared of tickle grass
Twilight	grows giant flowers	bakes sweet pies	Wears a gold bell	Pink mane	Dislikes sour apples
Buttercup	spits shiny bubbles	heals sick plants	Wears a gold bell	Purple mane	Sneeze at daisy pollen
Cotton	glows in the dark	heals sick plants	Wears a silver bell	Blue mane	Dislikes sour apples

CLUE 1 Addition

We count the star gems on the grass. Add them up to get a secret code.

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

T																
9	20	11	14	19	11	8	5	12	4	17	19	12	18	17	11	14

		T														
19	17	9	6	3	16	4	17	13	11	7	10	2	17	3	18	14

$5 + 4 = \square \rightarrow$ T	$5 + 6 = \square \rightarrow$ E	$3 + 1 = \square \rightarrow$ P	$7 + 9 = \square \rightarrow$ M
$2 + 1 = \square \rightarrow$ U	$10 + 3 = \square \rightarrow$ V	$5 + 12 = \square \rightarrow$ O	
$9 + 9 = \square \rightarrow$ D	$2 + 5 = \square \rightarrow$ R	$1 + 1 = \square \rightarrow$ L	$6 + 13 = \square \rightarrow$ N
$3 + 2 = \square \rightarrow$ K	$9 + 5 = \square \rightarrow$ S	$3 + 5 = \square \rightarrow$ A	$7 + 13 = \square \rightarrow$ H
$1 + 5 = \square \rightarrow$ J	$6 + 4 = \square \rightarrow$ C	$4 + 8 = \square \rightarrow$ Y	

Scratch space:

CLUE 2

Subtraction

Some magic berries are gone from the bush. Subtract to see how many were taken.

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

T									T						
6	14	5	11	8	12	10	3	16	6	15	5	4	3	17	4

17	16	12	13	5	3	2	5	12	12

$12 - 6 = \square \rightarrow \boxed{\text{T}}$

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

$19 - 6 = \square \rightarrow \boxed{\text{V}}$

$19 - 7 = \square \rightarrow \boxed{\text{L}}$

$16 - 6 = \square \rightarrow \boxed{\text{P}}$

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

$9 - 4 = \square \rightarrow \boxed{\text{E}}$

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

$11 - 8 = \square \rightarrow \boxed{\text{R}}$

$8 - 4 = \square \rightarrow \boxed{\text{A}}$

$19 - 8 = \square \rightarrow \boxed{\text{C}}$

$19 - 5 = \square \rightarrow \boxed{\text{H}}$

$8 - 6 = \square \rightarrow \boxed{\text{B}}$

$19 - 3 = \square \rightarrow \boxed{\text{I}}$

Scratch space:

CLUE 3



S

T																	
42	35	27	14	39	27	33	20	30	18	60	39	30					
130	6	14	28	6	20	27	14	14	60	10	36	33	18	18	28	27	14

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

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 → **K**

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 → **D**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 → **U**

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

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

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, __, 35, 40 → **Y**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, __, 20, 22 → **P**

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

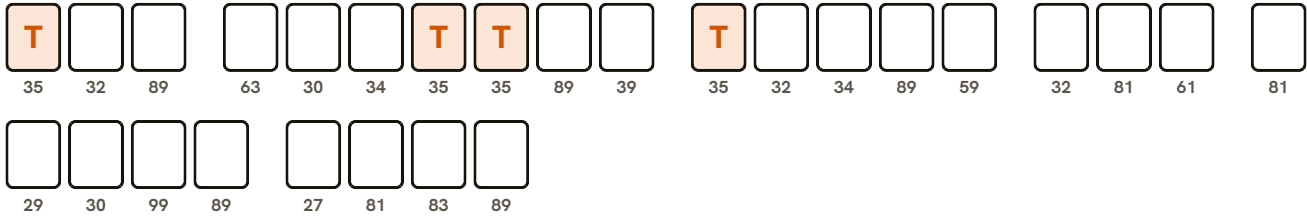
Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 →

Scratch space:

CLUE 4 Place value

Look at the magic blocks. Count the tens and ones to find the clue box.

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



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

What number has 3 tens and 4 ones? → **I**

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

What number has 6 tens and 1 one? → **S**

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

What number has 3 tens and 0 ones? → **L**

What number has 2 tens and 9 ones? → **B**

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

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

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

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

What number has 8 tens and 9 ones? → **E**

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

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

Scratch space:

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

We need ten star carrots to open the gate. Find how many more we must add.

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:

$2 + \underline{\quad} = 6$

$3 + \underline{\quad} = 9$

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

$2 + \underline{\quad} = 10$

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

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

$6 + \underline{\quad} = 17$

$5 + \underline{\quad} = 8$

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

$5 + \underline{\quad} = 7$

$2 + \underline{\quad} = 9$

Step 2 - cross out the sentence with each answer:

1. The villain spits shiny bubbles, then heals sick plants.
2. The villain creates rainbow bridges, then flies with wings.
3. The villain creates rainbow bridges, then heals sick plants.
4. The villain glows in the dark, then heals sick plants.
5. The villain spits shiny bubbles, then speaks to birds.
6. The villain makes soft music, then flies with wings.
7. The villain creates rainbow bridges, then jumps over clouds.
8. The villain glows in the dark, then speaks to birds.
9. The villain glows in the dark, then bakes sweet pies.
10. The villain grows giant flowers, then bakes sweet pies.
11. The villain glows in the dark, then jumps over clouds.
12. The villain makes soft music, then bakes sweet pies.

Answer Key

The Glitter Valley Mystery

Culprit: Pip

spits shiny bubbles · speaks to birds · Wears a silver bell · Blue mane · Dislikes sour apples

Trail: Start 21 → Clue 1 19 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SNEAKY PONY DOES NOT JUMP OVER CLOUDS"

$5 + 4 = 9$ (T) · $5 + 6 = 11$ (E) · $3 + 1 = 4$ (P) · $7 + 9 = 16$ (M) · $2 + 1 = 3$ (U) · $10 + 3 = 13$ (V) · $5 + 12 = 17$ (O) · $9 + 9 = 18$ (D) · $2 + 5 = 7$ (R) · $1 + 1 = 2$ (L) · $6 + 13 = 19$ (N) · $3 + 2 = 5$ (K) · $9 + 5 = 14$ (S) · $3 + 5 = 8$ (A) · $7 + 13 = 20$ (H) · $1 + 5 = 6$ (J) · $6 + 4 = 10$ (C) · $4 + 8 = 12$ (Y)

Clue 2 (Subtraction): "THE CULPRIT WEARS A SILVER BELL"

$12 - 6 = 6$ (T) · $14 - 6 = 8$ (U) · $19 - 6 = 13$ (V) · $19 - 7 = 12$ (L) · $16 - 6 = 10$ (P) · $18 - 1 = 17$ (S) · $9 - 4 = 5$ (E) · $16 - 1 = 15$ (W) · $11 - 8 = 3$ (R) · $8 - 4 = 4$ (A) · $19 - 8 = 11$ (C) · $19 - 5 = 14$ (H) · $8 - 6 = 2$ (B) · $19 - 3 = 16$ (I)

Clue 3 (Skip counting): "THE SNEAKY PONY DISLIKES SOUR APPLES"

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (T) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 = 14 (S) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 = 27 (E) · Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 = 20 (K) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 = 33 (A) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 = 130 (D) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 = 10 (U) · Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 = 6 (I) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (N) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (H) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 = 36 (R) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, __, 35, 40 = 30 (Y) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, __, 20, 22 = 18 (P) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, __, 70, 80 = 60 (O) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 = 28 (L)

Clue 4 (Place value): "THE GLITTER THIEF HAS A BLUE MANE"

What number has 3 tens and 5 ones? = 35 (T) · What number has 3 tens and 4 ones? = 34 (I) · What number has 5 tens and 9 ones? = 59 (F) · What number has 6 tens and 1 one? = 61 (S) · What number has 3 tens and 9 ones? = 39 (R) · What number has 3 tens and 0 ones? = 30 (L) · What number has 2 tens and 9 ones? = 29 (B) · What number has 9 tens and 9 ones? = 99 (U) · What number has 3 tens and 2 ones? = 32 (H) · What number has 2 tens and 7 ones? = 27 (M) · What number has 8 tens and 3 ones? = 83 (N) · What number has 8 tens and 9 ones? = 89 (E) · What number has 8 tens and 1 one? = 81 (A) · What number has 6 tens and 3 ones? = 63 (G)

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

$2 + \underline{\quad} = 6 = 4$ · $3 + \underline{\quad} = 9 = 6$ · $6 + \underline{\quad} = 15 = 9$ · $2 + \underline{\quad} = 10 = 8$ · $6 + \underline{\quad} = 16 = 10$ · $4 + \underline{\quad} = 5 = 1$ · $6 + \underline{\quad} = 17 = 11$ · $5 + \underline{\quad} = 8 = 3$ · $9 + \underline{\quad} = 21 = 12$ · $5 + \underline{\quad} = 7 = 2$ · $2 + \underline{\quad} = 9 = 7$