

The Case of the Missing Masterpiece

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

Detective: _____ Date: _____

Oh no! Someone drew all over the art room walls and hid the gold star trophy! We must find the Sneaky Artist. Grab your sketchbooks, kids! Let us solve this mystery.

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 Sneaky Artist is _____

Possible suspects

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

NAME	DRAWING STYLE	FAVORITE TOOL	DRAWING HAND	HAIR FEATURE	ART ROOM FEAR
Marc	doodles tiny insects	uses glitter paint	right handed sketcher	pencil behind ear	sticky tape
Charles	draws giant monsters	uses charcoal	right handed sketcher	art beret hat	water spills
Henri	colors magic portals	uses gold foil	right handed sketcher	art beret hat	water spills
Pablo	draws giant monsters	uses charcoal	left handed sketcher	art beret hat	water spills
Salvador	sketches super heroes	uses neon ink	left handed sketcher	art beret hat	giant erasers
Beatrix	sketches super heroes	uses glitter paint	left handed sketcher	art beret hat	water spills
Mo	sketches super heroes	uses neon ink	left handed sketcher	paint splattered hair	sticky tape
Ed	paints messy splashes	uses glitter paint	left handed sketcher	art beret hat	giant erasers
Gene	sketches super heroes	uses charcoal	right handed sketcher	art beret hat	water spills
Frida	draws giant monsters	uses gold foil	right handed sketcher	pencil behind ear	giant erasers
Bob	doodles tiny insects	uses gold foil	left handed sketcher	pencil behind ear	sticky tape
Georgia	doodles tiny insects	uses neon ink	left handed sketcher	pencil behind ear	sticky tape
Stan	colors magic portals	uses neon ink	right handed sketcher	art beret hat	sticky tape
Mary	doodles tiny insects	uses gold foil	right handed sketcher	paint splattered hair	sticky tape
Andy	draws giant monsters	uses glitter paint	right handed sketcher	art beret hat	water spills
Faith	doodles tiny insects	uses charcoal	right handed sketcher	art beret hat	water spills
Dav	sketches super heroes	uses gold foil	right handed sketcher	art beret hat	water spills
Keith	colors magic portals	uses charcoal	left handed sketcher	paint splattered hair	sticky tape
Yoko	colors magic portals	uses glitter paint	left handed sketcher	paint splattered hair	giant erasers
Theodor	colors magic portals	uses gold foil	right handed sketcher	pencil behind ear	sticky tape
Vincent	colors magic portals	uses neon ink	right handed sketcher	paint splattered hair	water spills

CLUE 1 Addition

We found some red markers and blue markers on the floor. Let us add them together to find the first clue.

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

T 5	13	18	11	4	18	6	10	20	6	8	T 5	9	11	T 5	14	7	18	11
4	7	T 5	19	11	18	3	7	17	14	12	7	9	17					

$1 + 4 = \square \rightarrow \boxed{\text{T}}$	$8 + 6 = \square \rightarrow \boxed{\text{D}}$	$5 + 12 = \square \rightarrow \boxed{\text{L}}$	$3 + 7 = \square \rightarrow \boxed{\text{K}}$
$1 + 2 = \square \rightarrow \boxed{\text{G}}$	$5 + 7 = \square \rightarrow \boxed{\text{F}}$	$2 + 7 = \square \rightarrow \boxed{\text{I}}$	$3 + 4 = \square \rightarrow \boxed{\text{O}}$
$7 + 4 = \square \rightarrow \boxed{\text{S}}$	$3 + 5 = \square \rightarrow \boxed{\text{R}}$	$5 + 1 = \square \rightarrow \boxed{\text{A}}$	$6 + 12 = \square \rightarrow \boxed{\text{E}}$
$4 + 9 = \square \rightarrow \boxed{\text{H}}$	$3 + 1 = \square \rightarrow \boxed{\text{N}}$	$13 + 7 = \square \rightarrow \boxed{\text{Y}}$	
$12 + 7 = \square \rightarrow \boxed{\text{U}}$			

Scratch space:

CLUE 2

The class had a box of shiny stickers. Some stickers are missing now. Subtract them to get the next clue.

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

Diagram illustrating memory blocks and their values:

Row 1 (Top): 14 blocks. Values: 19, 1, 13, 6, 7, 10, 10, 15, 7, 17, 16, 8, 15, 3, 11, 3, 7, 19, 1. The first block (19) and the 17th block (19) are highlighted with an orange background and a 'T' label.

Row 2 (Bottom): 14 blocks. Values: 19, 1, 13, 8, 7, 14, 1, 19, 1, 15, 17, 16. The 8th block (19) is highlighted with an orange background and a 'T' label.

20 - 1 = → **T**

$7 - 6 = \square \rightarrow \boxed{\text{H}}$

14 - 6 = → **R**

$16 - 1 = \square \rightarrow \boxed{\mathbf{A}}$

20 - 6 = → **G**

14 - 7 = →

$17 - 1 = \boxed{} \rightarrow \boxed{\text{D}}$

14 - 8 = → **V**

$16 - 3 = \boxed{} \rightarrow \boxed{\text{E}}$

12 - 9 = → **W**

12 - 2 = → **L**

20 - 3 = → **N**

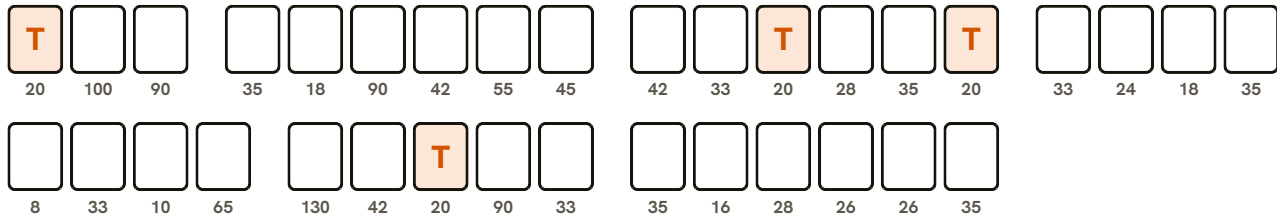
14 - 3 = → **S**

Scratch space:

CLUE 3 Skip counting

Look at the paint brushes lined up in jars. We can count them by twos to reveal a secret hair clue.

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



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

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

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

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

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

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

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

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 → **L**

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

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

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

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

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

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

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

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

Scratch space:

CLUE 4 Place value

We have big boxes of ten crayons and some extra single crayons. Let us use place value to find the next clue.

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

T											T			T				T
67	30	88	43	25	88	57	31	77	57	74	67	85	43	67	91	37	43	67

				T					T			T
57	25	57	74	67	26	88	74	88	67	30	57	67

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

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

What number has 3 tens and 1 one? → **K**

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

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

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

What number has 9 tens and 1 one? → **L**

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

What number has 3 tens and 7 ones? → **O**

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

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

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

What number has 2 tens and 5 ones? → **N**

Scratch space:

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

We need twelve colorful chalks for our drawing but we only have eight. How many more do we need to solve the final clue.

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:

$8 + \underline{\quad} = 10$

$7 + \underline{\quad} = 15$

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

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

$1 + \underline{\quad} = 4$

$3 + \underline{\quad} = 12$

$3 + \underline{\quad} = 8$

$4 + \underline{\quad} = 11$

$5 + \underline{\quad} = 16$

$10 + \underline{\quad} = 22$

$5 + \underline{\quad} = 15$

Step 2 - cross out the sentence with each answer:

1. The villain draws a giant monster on the wall, then smudges with dark charcoal.
2. The villain doodles a tiny insect on the paper, then smudges with dark charcoal.
3. The villain sketches a super hero on the desk, then sparkles with gold foil.
4. The villain draws a giant monster on the wall, then shines with glitter paint.
5. The villain paints a messy splash on the floor, then dusts the floor with white chalk.
6. The villain draws a giant monster on the wall, then sparkles with gold foil.
7. The villain colors a magic portal on the door, then smudges with dark charcoal.
8. The villain sketches a super hero on the desk, then smudges with dark charcoal.
9. The villain paints a messy splash on the floor, then smudges with dark charcoal.
10. The villain colors a magic portal on the door, then shines with glitter paint.
11. The villain colors a magic portal on the door, then glows with neon ink.
12. The villain paints a messy splash on the floor, then glows with neon ink.

Answer Key

The Case of the Missing Masterpiece

Culprit: Andy

draws giant monsters · uses glitter paint · right handed sketcher · art beret hat · water spills

Trail: Start 21 → Clue 1 15 → Clue 2 7 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SNEAKY ARTIST DOES NOT USE GOLD FOIL"

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

Clue 2 (Subtraction): "THE VILLAIN DRAWS WITH THE RIGHT HAND"

$20 - 1 = 19$ (T) · $7 - 6 = 1$ (H) · $14 - 6 = 8$ (R) · $16 - 1 = 15$ (A) · $20 - 6 = 14$ (G) · $14 - 7 = 7$ (I) · $17 - 1 = 16$ (D) · $14 - 8 = 6$ (V) · $16 - 3 = 13$ (E) · $12 - 9 = 3$ (W) · $12 - 2 = 10$ (L) · $20 - 3 = 17$ (N) · $14 - 3 = 11$ (S)

Clue 3 (Skip counting): "THE SNEAKY ARTIST RUNS FROM WATER SPILLS"

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, __, 22, 24 = 20 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 = 130 (W) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 = 55 (K) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 = 10 (O) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (H) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 = 65 (M) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (E) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 = 33 (R) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (L) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 = 16 (P) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (S) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, __, 27, 30 = 24 (U) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, __, 21, 24 = 18 (N) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 = 28 (I) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (A) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 = 45 (Y) · Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 = 8 (F)

Clue 4 (Place value): "THE SNEAKY ARTIST LOST AN ART BERET HAT"

What number has 6 tens and 7 ones? = 67 (T) · What number has 8 tens and 5 ones? = 85 (I) · What number has 3 tens and 1 one? = 31 (K) · What number has 5 tens and 7 ones? = 57 (A) · What number has 2 tens and 6 ones? = 26 (B) · What number has 7 tens and 7 ones? = 77 (Y) · What number has 9 tens and 1 one? = 91 (L) · What number has 7 tens and 4 ones? = 74 (R) · What number has 3 tens and 7 ones? = 37 (O) · What number has 8 tens and 8 ones? = 88 (E) · What number has 4 tens and 3 ones? = 43 (S) · What number has 3 tens and 0 ones? = 30 (H) · What number has 2 tens and 5 ones? = 25 (N)

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

$8 + \underline{\quad} = 10 = 2$ · $7 + \underline{\quad} = 15 = 8$ · $6 + \underline{\quad} = 7 = 1$ · $3 + \underline{\quad} = 9 = 6$ · $1 + \underline{\quad} = 4 = 3$ · $3 + \underline{\quad} = 12 = 9$ · $3 + \underline{\quad} = 8 = 5$ · $4 + \underline{\quad} = 11 = 7$ · $5 + \underline{\quad} = 16 = 11$ · $10 + \underline{\quad} = 22 = 12$ · $5 + \underline{\quad} = 15 = 10$