The Case of the Missing Yellow Bolt

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

Detective: _____ **Date:** _____

Bolt is the new yellow transformer in Brick City. He can turn into a race car in one click. But last night someone snatched Bolt right off his shelf, and now the city needs you to find the Brick Snatcher.

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 Brick Snatcher is _____

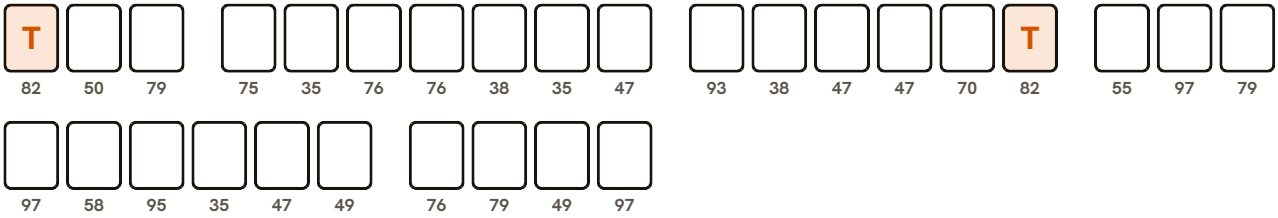
Possible suspects

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

NAME	TRANSFORM MODE	BRICK GADGET	BUILDER TYPE	BRICK COLOR	WEAK SPOT
Gear	Race Car	Smoke Puff	girl minifig	green bricks	trips on loose bricks
Dot	Speed Boat	Magnet Hands	girl minifig	red bricks	very ticklish
Nova	Race Car	Light Beam	boy minifig	red bricks	very ticklish
Brick	Robot Dog	Grappling Hook	girl minifig	red bricks	very ticklish
Mia	Speed Boat	Spring Legs	boy minifig	blue bricks	trips on loose bricks
Max	Robot Dog	Smoke Puff	boy minifig	red bricks	very ticklish
Bolt	Speed Boat	Spring Legs	boy minifig	blue bricks	very ticklish
Lux	Speed Boat	Grappling Hook	boy minifig	red bricks	trips on loose bricks
Snap	Speed Boat	Light Beam	girl minifig	green bricks	trips on loose bricks
Sparky	Speed Boat	Spring Legs	boy minifig	green bricks	very ticklish
Roxy	Helicopter	Smoke Puff	girl minifig	blue bricks	very ticklish
Stud	Race Car	Magnet Hands	boy minifig	green bricks	afraid of water
Dash	Robot Dog	Light Beam	girl minifig	green bricks	afraid of water
Rex	Race Car	Smoke Puff	boy minifig	red bricks	afraid of water
Jet	Helicopter	Spring Legs	boy minifig	red bricks	very ticklish
Pip	Race Car	Spring Legs	boy minifig	red bricks	trips on loose bricks
Lily	Speed Boat	Light Beam	boy minifig	blue bricks	afraid of water
Finn	Helicopter	Smoke Puff	boy minifig	green bricks	very ticklish
Coral	Jet Plane	Grappling Hook	girl minifig	red bricks	very ticklish
Plate	Helicopter	Light Beam	boy minifig	red bricks	very ticklish
Tile	Race Car	Magnet Hands	boy minifig	red bricks	very ticklish

CLUE 1 Addition

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

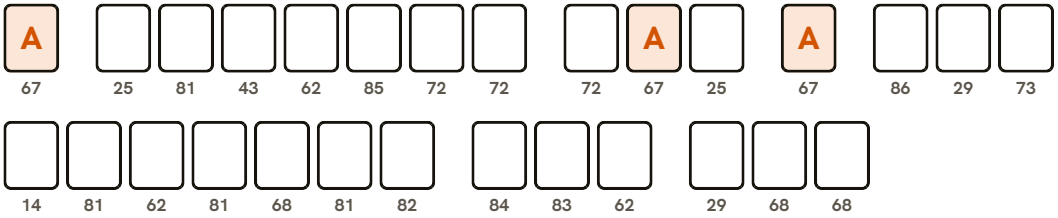


58 + 24 =		T	20 + 30 =		H	26 + 53 =		E
49 + 26 =		V	12 + 23 =		I	39 + 37 =		L
12 + 26 =		A	27 + 20 =		N	43 + 50 =		C
32 + 38 =		O	23 + 32 =		U	37 + 60 =		S
21 + 37 =		P	53 + 42 =		R	27 + 22 =		G

Scratch space:

CLUE 2 Subtraction

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

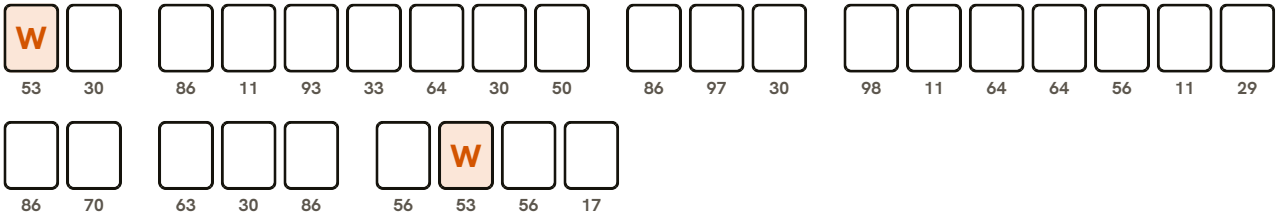


74 - 7 =		A	35 - 10 =		W	105 - 24 =		I
81 - 38 =		T	75 - 13 =		N	86 - 1 =		E
81 - 9 =		S	88 - 2 =		B	64 - 35 =		O
81 - 8 =		Y	18 - 4 =		M	100 - 32 =		F
104 - 22 =		G	113 - 29 =		R	116 - 33 =		U

Scratch space:

CLUE 3 Place value (tens & ones)

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

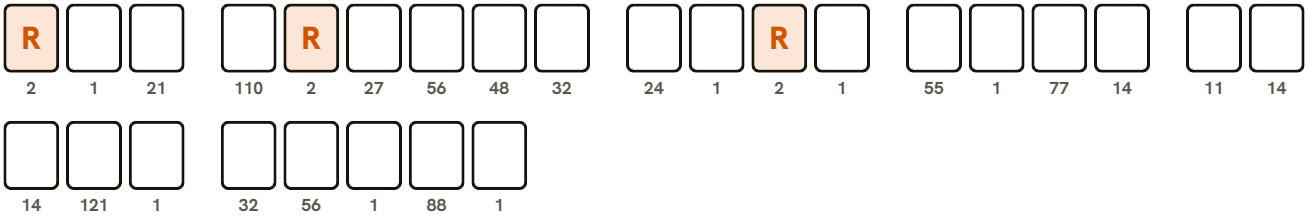


What number has 5 tens and 3 ones?		W	What number has 3 tens and 0 ones?		E	What number has 8 tens and 6 ones?		T
What number has 1 ten and 1 one?		I	What number has 9 tens and 3 ones?		C	What number has 3 tens and 3 ones?		K
What number has 6 tens and 4 ones?		L	What number has 5 tens and 0 ones?		D	What number has 9 tens and 7 ones?		H
What number has 9 tens and 8 ones?		V	What number has 5 tens and 6 ones?		A	What number has 2 tens and 9 ones?		N
What number has 7 tens and 0 ones?		O	What number has 6 tens and 3 ones?		G	What number has 1 ten and 7 ones?		Y

Scratch space:

CLUE 4 Multiplication facts (1-12)

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



2 × 1 =		R	1 × 1 =		E	3 × 7 =		D
11 × 10 =		B	3 × 9 =		I	8 × 7 =		C
12 × 4 =		K	4 × 8 =		S	6 × 4 =		W
5 × 11 =		L	7 × 11 =		F	7 × 2 =		T
11 × 1 =		A	11 × 11 =		H	8 × 11 =		N

Scratch space:

CLUE 5 Missing addends - the last 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:

4 + ___ = 16 ☐	9 + ___ = 18 ☐	10 + ___ = 20 ☐
7 + ___ = 10 ☐	8 + ___ = 16 ☐	3 + ___ = 10 ☐
8 + ___ = 14 ☐	8 + ___ = 12 ☐	3 + ___ = 5 ☐
1 + ___ = 6 ☐	9 + ___ = 10 ☐	

Step 2 - cross out the sentence with each answer:

1. The villain sneaks up as a robot dog, then swings off on a grappling hook.
2. The villain spins in as a helicopter, then hops away on spring legs.
3. The villain sneaks up as a robot dog, then hops away on spring legs.
4. The villain speeds over as a speed boat, then hops away on spring legs.
5. The villain zooms in as a race car, then swings off on a grappling hook.
6. The villain zooms in as a race car, then hides in a smoke puff.
7. The villain sneaks up as a robot dog, then blinds the guards with a light beam.
8. The villain swoops down as a jet plane, then grabs the loot with magnet hands.
9. The villain zooms in as a race car, then grabs the loot with magnet hands.
10. The villain zooms in as a race car, then blinds the guards with a light beam.
11. The villain spins in as a helicopter, then blinds the guards with a light beam.
12. The villain sneaks up as a robot dog, then hides in a smoke puff.

TEACHER / PARENT

Answer Key

The Case of the Missing Yellow Bolt

Culprit: Plate

Helicopter · Light Beam · boy minifig · red bricks · very ticklish

Trail: Start 21 → Clue 1 16 → Clue 2 9 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN CANNOT USE SPRING LEGS"

58 + 24 = 82 (T) · 20 + 30 = 50 (H) · 26 + 53 = 79 (E) · 49 + 26 = 75 (V) · 12 + 23 = 35 (I) · 39 + 37 = 76 (L) · 12 + 26 = 38 (A) · 27 + 20 = 47 (N) · 43 + 50 = 93 (C) · 32 + 38 = 70 (O) · 23 + 32 = 55 (U) · 37 + 60 = 97 (S) · 21 + 37 = 58 (P) · 53 + 42 = 95 (R) · 27 + 22 = 49 (G)

Clue 2 (Subtraction): "A WITNESS SAW A BOY MINIFIG RUN OFF"

74 - 7 = 67 (A) · 35 - 10 = 25 (W) · 105 - 24 = 81 (I) · 81 - 38 = 43 (T) · 75 - 13 = 62 (N) · 86 - 1 = 85 (E) · 81 - 9 = 72 (S) · 88 - 2 = 86 (B) · 64 - 35 = 29 (O) · 81 - 8 = 73 (Y) · 18 - 4 = 14 (M) · 100 - 32 = 68 (F) · 104 - 22 = 82 (G) · 113 - 29 = 84 (R) · 116 - 33 = 83 (U)

Clue 3 (Place value (tens & ones)): "WE TICKLED THE VILLAIN TO GET AWAY"

What number has 5 tens and 3 ones? = 53 (W) · What number has 3 tens and 0 ones? = 30 (E) · What number has 8 tens and 6 ones? = 86 (T) · What number has 1 ten and 1 one? = 11 (I) · What number has 9 tens and 3 ones? = 93 (C) · What number has 3 tens and 3 ones? = 33 (K) · What number has 6 tens and 4 ones? = 64 (L) · What number has 5 tens and 0 ones? = 50 (D) · What number has 9 tens and 7 ones? = 97 (H) · What number has 9 tens and 8 ones? = 98 (V) · What number has 5 tens and 6 ones? = 56 (A) · What number has 2 tens and 9 ones? = 29 (N) · What number has 7 tens and 0 ones? = 70 (O) · What number has 6 tens and 3 ones? = 63 (G) · What number has 1 ten and 7 ones? = 17 (Y)

Clue 4 (Multiplication facts (1-12)): "RED BRICKS WERE LEFT AT THE SCENE"

2 × 1 = 2 (R) · 1 × 1 = 1 (E) · 3 × 7 = 21 (D) · 11 × 10 = 110 (B) · 3 × 9 = 27 (I) · 8 × 7 = 56 (C) · 12 × 4 = 48 (K) · 4 × 8 = 32 (S) · 6 × 4 = 24 (W) · 5 × 11 = 55 (L) · 7 × 11 = 77 (F) · 7 × 2 = 14 (T) · 11 × 1 = 11 (A) · 11 × 11 = 121 (H) · 8 × 11 = 88 (N)

Clue 5 (Missing addends): surviving statement is box 11 → Plate

4 + ___ = 16 = 12 · 9 + ___ = 18 = 9 · 10 + ___ = 20 = 10 · 7 + ___ = 10 = 3 · 8 + ___ = 16 = 8 · 3 + ___ = 10 = 7 · 8 + ___ = 14 = 6 · 8 + ___ = 12 = 4 · 3 + ___ = 5 = 2 · 1 + ___ = 6 = 5 · 9 + ___ = 10 = 1