



The Mystery of the Glitch Bot

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

Detective: _____ Date: _____

Someone scrambled the robot factory control board! Help Chief Mechanic Rita figure out which robot caused the chaos.

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 rogue robot is _____

Possible suspects

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

NAME	MAIN TOOL	GADGET	HANDEDNESS	ANTENNA	WEAKNESS
Rover	Power Drill	Rocket Boots	LEFT GRIP	SQUARE DISH	WATER SPRAY
Volt	Welding Torch	Rocket Boots	LEFT GRIP	SQUARE DISH	WATER SPRAY
Clinker	Freeze Ray	Turbo Boost	LEFT GRIP	SPIKY WIRE	MAGNETIC WAND
Sparky	Laser Beam	Grappling Hook	LEFT GRIP	SPIKY WIRE	MAGNETIC WAND
Gearbox	Freeze Ray	Plasma Shield	RIGHT GRIP	SPIKY WIRE	LOUD BEEP
Sprocket	Power Drill	Oil Can	LEFT GRIP	SQUARE DISH	LOUD BEEP
Tinker	Sonic Blaster	Grappling Hook	LEFT GRIP	SQUARE DISH	WATER SPRAY
Echo	Power Drill	Oil Can	LEFT GRIP	LOOP ANTENNA	WATER SPRAY
Widget	Freeze Ray	Turbo Boost	RIGHT GRIP	SPIKY WIRE	MAGNETIC WAND
Beep	Welding Torch	Plasma Shield	LEFT GRIP	SQUARE DISH	LOUD BEEP
RustE	Sonic Blaster	Plasma Shield	LEFT GRIP	SPIKY WIRE	WATER SPRAY
Circuit	Laser Beam	Grappling Hook	LEFT GRIP	SQUARE DISH	MAGNETIC WAND
Gizmo	Sonic Blaster	Oil Can	LEFT GRIP	SPIKY WIRE	WATER SPRAY
Data	Freeze Ray	Oil Can	LEFT GRIP	SQUARE DISH	WATER SPRAY
Radar	Freeze Ray	Rocket Boots	LEFT GRIP	LOOP ANTENNA	LOUD BEEP
Bolt	Laser Beam	Turbo Boost	LEFT GRIP	LOOP ANTENNA	WATER SPRAY
Zero	Sonic Blaster	Grappling Hook	LEFT GRIP	SPIKY WIRE	MAGNETIC WAND
Nano	Sonic Blaster	Plasma Shield	RIGHT GRIP	LOOP ANTENNA	LOUD BEEP
Pixel	Sonic Blaster	Grappling Hook	RIGHT GRIP	SQUARE DISH	WATER SPRAY
Byte	Laser Beam	Grappling Hook	LEFT GRIP	SQUARE DISH	WATER SPRAY
Vector	Laser Beam	Rocket Boots	LEFT GRIP	SPIKY WIRE	WATER SPRAY

CLUE 2

Addition

Count the spare gears in both boxes and add them together to find the key number.

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

T					T												T
45	64	91	75	37	45	40	91	88	88	88	46	75	46	67	22	45	

		T						T				
75	37	45	64	46	32	91	63	45	44	24	37	89

$27 + 18 = \square \rightarrow \boxed{\text{T}}$

$35 + 53 = \square \rightarrow \boxed{\text{S}}$

$13 + 27 = \square \rightarrow \boxed{\text{N}}$

$36 + 28 = \square \rightarrow \boxed{\text{H}}$

$21 + 16 = \square \rightarrow \boxed{\text{I}}$

$27 + 19 = \square \rightarrow \boxed{\text{A}}$

$23 + 9 = \square \rightarrow \boxed{\text{L}}$

$15 + 7 = \square \rightarrow \boxed{\text{O}}$

$26 + 41 = \square \rightarrow \boxed{\text{B}}$

$20 + 24 = \square \rightarrow \boxed{\text{G}}$

$53 + 22 = \square \rightarrow \boxed{\text{W}}$

$54 + 35 = \square \rightarrow \boxed{\text{P}}$

$15 + 9 = \square \rightarrow \boxed{\text{R}}$

$35 + 28 = \square \rightarrow \boxed{\text{F}}$

$39 + 52 = \square \rightarrow \boxed{\text{E}}$

Scratch space:

CLUE 3

Subtraction

Take away the broken batteries from the pile to see how many good ones remain.

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

T					T					T									
62	23	49	72	56	62	36	29	30	30	62	56	24	24	49	78	72	73	29	
		T																	
36	29	62	49	31	30	24	31	29	73										

$72 - 10 = \square \rightarrow \text{[T]}$

$38 - 2 = \square \rightarrow \text{[W]}$

$43 - 13 = \square \rightarrow \text{[S]}$

$59 - 3 = \square \rightarrow \text{[O]}$

$93 - 15 = \square \rightarrow \text{[D]}$

$69 - 38 = \square \rightarrow \text{[R]}$

$83 - 10 = \square \rightarrow \text{[Y]}$

$74 - 2 = \square \rightarrow \text{[B]}$

$29 - 5 = \square \rightarrow \text{[P]}$

$68 - 39 = \square \rightarrow \text{[A]}$

$62 - 13 = \square \rightarrow \text{[E]}$

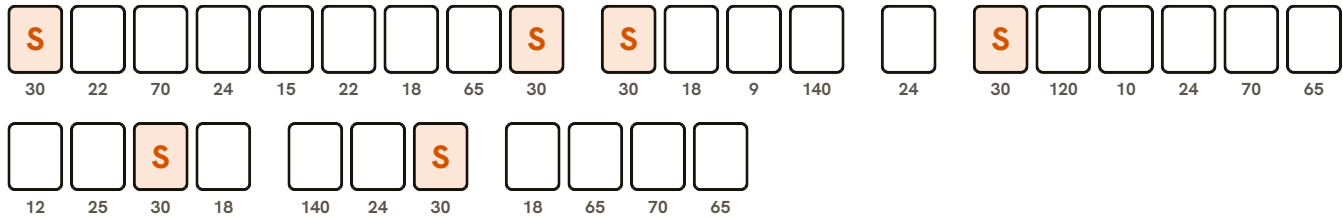
$51 - 28 = \square \rightarrow \text{[H]}$

Scratch space:

CLUE 4 Skip counting

Count the shiny robot bolts on the tray by twos to crack the mystery lock.

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



Skip-count by 10s. Fill the blank: 10, 20, __, 40, 50 → **S**

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

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 → **Q**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 → **I**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, __, 75, 80 → **R**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 → **W**

Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 → **O**

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

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

Skip-count by 5s. Fill the blank: 5, 10, __, 20, 25 → **T**

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

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

Scratch space:

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

Find how many missing microchips are needed to reach a total of ten.

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:

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

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

$10 + \underline{\quad} = 19$

$1 + \underline{\quad} = 11$

$10 + \underline{\quad} = 17$

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

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

$9 + \underline{\quad} = 12$

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

$9 + \underline{\quad} = 10$

$1 + \underline{\quad} = 6$

Step 2 - cross out the sentence with each answer:

1. The villain drilled into the safe, then blocked the hallway with a plasma shield.
2. The villain drilled into the safe, then zoomed away on rocket boots.
3. The villain zapped the main power box, then zoomed away on rocket boots.
4. The villain sparks the control panel, then zoomed away on rocket boots.
5. The villain sparks the control panel, then blocked the hallway with a plasma shield.
6. The villain zapped the main power box, then sped off using turbo boost.
7. The villain froze the conveyor belt, then escaped up the wall with a grappling hook.
8. The villain zapped the main power box, then escaped up the wall with a grappling hook.
9. The villain blasted the warehouse doors, then escaped up the wall with a grappling hook.
10. The villain drilled into the safe, then squirted slippery oil on the floor.
11. The villain blasted the warehouse doors, then sped off using turbo boost.
12. The villain zapped the main power box, then squirted slippery oil on the floor.

Answer Key

The Mystery of the Glitch Bot

Culprit: Byte

Laser Beam · Grappling Hook · LEFT GRIP · SQUARE DISH · WATER SPRAY

Trail: Start 21 → Clue 1 17 → Clue 2 13 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE SNEAKY BOT DOES NOT USE AN OIL CAN"

What number has 4 tens and 1 one? = 41 (T) · What number has 4 tens and 4 ones? = 44 (N) · What number has 9 tens and 6 ones? = 96 (L) · What number has 1 ten and 3 ones? = 13 (O) · What number has 2 tens and 0 ones? = 20 (U) · What number has 8 tens and 5 ones? = 85 (S) · What number has 7 tens and 5 ones? = 75 (K) · What number has 2 tens and 5 ones? = 25 (B) · What number has 9 tens and 2 ones? = 92 (D) · What number has 2 tens and 3 ones? = 23 (H) · What number has 7 tens and 3 ones? = 73 (E) · What number has 1 ten and 5 ones? = 15 (I) · What number has 6 tens and 5 ones? = 65 (Y) · What number has 4 tens and 2 ones? = 42 (C) · What number has 6 tens and 3 ones? = 63 (A)

Clue 2 (Addition): "THE WITNESS SAW A BOT WITH A LEFT GRIP"

$27 + 18 = 45$ (T) · $35 + 53 = 88$ (S) · $13 + 27 = 40$ (N) · $36 + 28 = 64$ (H) · $21 + 16 = 37$ (I) · $27 + 19 = 46$ (A) · $23 + 9 = 32$ (L) · $15 + 7 = 22$ (O) · $26 + 41 = 67$ (B) · $20 + 24 = 44$ (G) · $53 + 22 = 75$ (W) · $54 + 35 = 89$ (P) · $15 + 9 = 24$ (R) · $35 + 28 = 63$ (F) · $39 + 52 = 91$ (E)

Clue 3 (Subtraction): "THE BOT WAS STOPPED BY A WATER SPRAY"

$72 - 10 = 62$ (T) · $38 - 2 = 36$ (W) · $43 - 13 = 30$ (S) · $59 - 3 = 56$ (O) · $93 - 15 = 78$ (D) · $69 - 38 = 31$ (R) · $83 - 10 = 73$ (Y) · $74 - 2 = 72$ (B) · $29 - 5 = 24$ (P) · $68 - 39 = 29$ (A) · $62 - 13 = 49$ (E) · $51 - 28 = 23$ (H)

Clue 4 (Skip counting): "SCRATCHES SHOW A SQUARE DISH WAS HERE"

Skip-count by 10s. Fill the blank: 10, 20, __, 40, 50 = 30 (S) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, __, 27, 30 = 24 (A) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 = 22 (C) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 = 120 (Q) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (I) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, __, 75, 80 = 70 (R) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 = 140 (W) · Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 = 9 (O) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 = 65 (E) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 = 10 (U) · Skip-count by 5s. Fill the blank: 5, 10, __, 20, 25 = 15 (T) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, __, 20, 22 = 18 (H) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 = 12 (D)

Clue 5 (Missing addends): surviving statement is box 8 → Byte

$9 + \underline{\quad} = 13 = 4$ · $7 + \underline{\quad} = 9 = 2$ · $10 + \underline{\quad} = 19 = 9$ · $1 + \underline{\quad} = 11 = 10$ · $10 + \underline{\quad} = 17 = 7$ · $6 + \underline{\quad} = 17 = 11$ · $10 + \underline{\quad} = 22 = 12$ · $9 + \underline{\quad} = 12 = 3$ · $6 + \underline{\quad} = 12 = 6$ · $9 + \underline{\quad} = 10 = 1$ · $1 + \underline{\quad} = 6 = 5$