



The Mystery of the Mischievous Bot

Grade 5 math · Multiplication, Fractions of a number, Order of operations, Rounding, Division · Reading level grades 3-4

Detective: _____ Date: _____

A sneaky robot snuck into the Gear City Factory and scrambled the blueprints! The Chief Inventor needs your help to decode clues, analyze evidence, and figure out which rogue bot 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 Bot is _____

Possible suspects

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

NAME	PRIMARY TOOL	SECONDARY GADGET	SENSOR HAND	ANTENNA COLOR	DEFENSIVE COUNTER
Titan	rocket boots	radar dish	right hand sensor	red antenna	water cannon
Nano	laser torch	EMP jammer	left hand sensor	red antenna	foam blaster
Beep	grappling hook	oil sprayer	left hand sensor	red antenna	water cannon
Data	grappling hook	shield generator	right hand sensor	blue antenna	magnet beam
Echo	sonic boom	shield generator	left hand sensor	red antenna	water cannon
Gears	laser torch	shield generator	left hand sensor	red antenna	water cannon
Vortex	plasma welder	shield generator	left hand sensor	blue antenna	magnet beam
Omega	sonic boom	oil sprayer	right hand sensor	red antenna	foam blaster
Bolt	sonic boom	strobe light	right hand sensor	yellow antenna	water cannon
Sparky	plasma welder	strobe light	left hand sensor	blue antenna	water cannon
Matrix	grappling hook	oil sprayer	left hand sensor	blue antenna	magnet beam
Sprocket	laser torch	shield generator	left hand sensor	yellow antenna	magnet beam
Gizmo	laser torch	strobe light	left hand sensor	red antenna	foam blaster
Atlas	rocket boots	EMP jammer	right hand sensor	blue antenna	magnet beam
Boop	grappling hook	oil sprayer	left hand sensor	blue antenna	foam blaster
Flux	laser torch	radar dish	left hand sensor	red antenna	foam blaster
Circuit	laser torch	EMP jammer	right hand sensor	yellow antenna	magnet beam
Cipher	plasma welder	shield generator	left hand sensor	red antenna	water cannon
Widget	sonic boom	oil sprayer	left hand sensor	yellow antenna	foam blaster
Chip	plasma welder	radar dish	left hand sensor	red antenna	water cannon
Rust-E	plasma welder	EMP jammer	left hand sensor	blue antenna	magnet beam

CLUE 1
Multiplication facts (1-12)

Technician Sparky counts the rows of spare robot batteries on the assembly line.

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

T																T
66	120	28	12	30	2	2	14	30	48	15	49	28	144	48	49	66
120	14	12	28	14	48	49	30	2	144	99	81	14	50	28	81	

$6 \times 11 = \square \rightarrow \text{T}$

$12 \times 12 = \square \rightarrow \text{S}$

$3 \times 5 = \square \rightarrow \text{D}$

$10 \times 12 = \square \rightarrow \text{H}$

$2 \times 1 = \square \rightarrow \text{L}$

$6 \times 2 = \square \rightarrow \text{V}$

$7 \times 2 = \square \rightarrow \text{A}$

$7 \times 4 = \square \rightarrow \text{E}$

$5 \times 10 = \square \rightarrow \text{Y}$

$9 \times 11 = \square \rightarrow \text{P}$

$6 \times 8 = \square \rightarrow \text{N}$

$9 \times 9 = \square \rightarrow \text{R}$

$5 \times 6 = \square \rightarrow \text{I}$

$7 \times 7 = \square \rightarrow \text{O}$

Scratch space:

CLUE 2
Fractions of a number

Sparky checks what fraction of the charging station grid is active.

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

W									W									
29	40	39	25	4	17	17	17	15	29	15	32	4	33	39	13	15	25	11

17	4	25	17	37	24

$1/2 \text{ of } 58 = \square \rightarrow \text{W}$

$1/5 \text{ of } 125 = \square \rightarrow \text{N}$

$1/10 \text{ of } 130 = \square \rightarrow \text{H}$

$1/4 \text{ of } 132 = \square \rightarrow \text{F}$

$1/8 \text{ of } 192 = \square \rightarrow \text{R}$

$5/10 \text{ of } 74 = \square \rightarrow \text{O}$

$1/5 \text{ of } 85 = \square \rightarrow \text{S}$

$2/8 \text{ of } 128 = \square \rightarrow \text{L}$

$6/10 \text{ of } 25 = \square \rightarrow \text{A}$

$2/6 \text{ of } 117 = \square \rightarrow \text{T}$

$1/4 \text{ of } 44 = \square \rightarrow \text{D}$

$1/3 \text{ of } 120 = \square \rightarrow \text{I}$

$1/6 \text{ of } 24 = \square \rightarrow \text{E}$

Scratch space:

CLUE 3
Order of operations

Sparky follows a step-by-step repair code to reset the workshop console.

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

T														T						
56	67	48	76	41	33	33	12	41	23	20	12	45	45	56	78	68	68	48	54	

					T									
26	8	12	20	12	56	48	19	50	12	23	23	78	23	

$12 \times 5 - 4 = \square \rightarrow \boxed{\text{T}}$

$18 + 9 \times 4 = \square \rightarrow \boxed{\text{D}}$

$15 + 9 \times 2 = \square \rightarrow \boxed{\text{L}}$

$44 + 4 \times 8 = \square \rightarrow \boxed{\text{V}}$

$7 \times 8 - 30 = \square \rightarrow \boxed{\text{B}}$

$4 + 2 \times 2 = \square \rightarrow \boxed{\text{Y}}$

$36 + 3 \times 3 = \square \rightarrow \boxed{\text{S}}$

$9 \times 9 - 3 = \square \rightarrow \boxed{\text{O}}$

$14 + 3 \times 9 = \square \rightarrow \boxed{\text{I}}$

$4 + 4 \times 4 = \square \rightarrow \boxed{\text{W}}$

$5 \times 6 - 7 = \square \rightarrow \boxed{\text{N}}$

$6 \times 4 - 5 = \square \rightarrow \boxed{\text{R}}$

$3 + 3 \times 3 = \square \rightarrow \boxed{\text{A}}$

$29 + 3 \times 7 = \square \rightarrow \boxed{\text{C}}$

$39 + 4 \times 7 = \square \rightarrow \boxed{\text{H}}$

$28 + 5 \times 4 = \square \rightarrow \boxed{\text{E}}$

$8 \times 11 - 20 = \square \rightarrow \boxed{\text{P}}$

Scratch space:

CLUE 4

Rounding

The workshop scanner screen rounds the total energy reading to the nearest hundred.

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

E				E			E										E	
230	2000	110	700	230	1700	20	230	3700	500	200	9000	3700	300	30	230	700		
			E								E							
300	1700	1300	230	1700	1700	300	9000	300	3700	130	230	4300	1300					

Round 229 to the nearest ten → **E**

Round 1,714 to the nearest thousand → **V**

Round 513 to the nearest hundred → **H**

Round 129 to the nearest ten → **L**

Round 1,689 to the nearest hundred → **N**

Round 110 to the nearest ten → **I**

Round 4,345 to the nearest hundred → **F**

Round 251 to the nearest hundred → **A**

Round 1,320 to the nearest hundred → **T**

Round 9,241 to the nearest thousand → **W**

Round 698 to the nearest hundred → **D**

Round 3,749 to the nearest hundred → **S**

Round 167 to the nearest hundred → **O**

Round 28 to the nearest ten → **R**

Round 17 to the nearest ten → **C**

Scratch space:

CLUE 5**Division facts (1-12) - the last clue**

Sparky divides the shiny steel gears evenly among the repair stations.

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:

$18 \div 3 = \boxed{}$

$20 \div 5 = \boxed{}$

$2 \div 1 = \boxed{}$

$60 \div 5 = \boxed{}$

$27 \div 3 = \boxed{}$

$30 \div 6 = \boxed{}$

$3 \div 1 = \boxed{}$

$64 \div 8 = \boxed{}$

$77 \div 11 = \boxed{}$

$12 \div 12 = \boxed{}$

$20 \div 2 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain fired a laser torch, then squirted an oil sprayer.
2. The villain fired a laser torch, then turned on a shield generator.
3. The villain launched a grappling hook, then jammed signals with an EMP.
4. The villain sparked a plasma welder, then turned on a shield generator.
5. The villain blasted a sonic boom, then jammed signals with an EMP.
6. The villain sparked a plasma welder, then scanned with a radar dish.
7. The villain launched a grappling hook, then scanned with a radar dish.
8. The villain blasted a sonic boom, then squirted an oil sprayer.
9. The villain boosted on rocket boots, then squirted an oil sprayer.
10. The villain boosted on rocket boots, then jammed signals with an EMP.
11. The villain blasted a sonic boom, then turned on a shield generator.
12. The villain boosted on rocket boots, then turned on a shield generator.

Answer Key

The Mystery of the Mischievous Bot

Culprit: Echo

sonic boom · shield generator · left hand sensor · red antenna · water cannon

Trail: Start 21 → Clue 1 16 → Clue 2 11 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT HAVE AN OIL SPRAYER"

$6 \times 11 = 66$ (T) · $12 \times 12 = 144$ (S) · $3 \times 5 = 15$ (D) · $10 \times 12 = 120$ (H) · $2 \times 1 = 2$ (L) · $6 \times 2 = 12$ (V) · $7 \times 2 = 14$ (A) · $7 \times 4 = 28$ (E) · $5 \times 10 = 50$ (Y) · $9 \times 11 = 99$ (P) · $6 \times 8 = 48$ (N) · $9 \times 9 = 81$ (R) · $5 \times 6 = 30$ (I) · $7 \times 7 = 49$ (O)

Clue 2 (Fractions of a number): "WITNESS SAW A LEFT HAND SENSOR"

$\frac{1}{2}$ of 58 = 29 (W) · $\frac{1}{5}$ of 125 = 25 (N) · $\frac{1}{10}$ of 130 = 13 (H) · $\frac{1}{4}$ of 132 = 33 (F) · $\frac{1}{8}$ of 192 = 24 (R) · $\frac{5}{10}$ of 74 = 37 (O) · $\frac{1}{5}$ of 85 = 17 (S) · $\frac{2}{8}$ of 128 = 32 (L) · $\frac{6}{10}$ of 25 = 15 (A) · $\frac{2}{6}$ of 117 = 39 (T) · $\frac{1}{4}$ of 44 = 11 (D) · $\frac{1}{3}$ of 120 = 40 (I) · $\frac{1}{6}$ of 24 = 4 (E)

Clue 3 (Order of operations): "THE VILLAIN WAS STOPPED BY A WATER CANNON"

$12 \times 5 - 4 = 56$ (T) · $18 + 9 \times 4 = 54$ (D) · $15 + 9 \times 2 = 33$ (L) · $44 + 4 \times 8 = 76$ (V) · $7 \times 8 - 30 = 26$ (B) · $4 + 2 \times 2 = 8$ (Y) · $36 + 3 \times 3 = 45$ (S) · $9 \times 9 - 3 = 78$ (O) · $14 + 3 \times 9 = 41$ (I) · $4 + 4 \times 4 = 20$ (W) · $5 \times 6 - 7 = 23$ (N) · $6 \times 4 - 5 = 19$ (R) · $3 + 3 \times 3 = 12$ (A) · $29 + 3 \times 7 = 50$ (C) · $39 + 4 \times 7 = 67$ (H) · $28 + 5 \times 4 = 48$ (E) · $8 \times 11 - 20 = 68$ (P)

Clue 4 (Rounding): "EVIDENCE SHOWS A RED ANTENNA WAS LEFT"

Round 229 to the nearest ten = 230 (E) · Round 1,714 to the nearest thousand = 2000 (V) · Round 513 to the nearest hundred = 500 (H) · Round 129 to the nearest ten = 130 (L) · Round 1,689 to the nearest hundred = 1700 (N) · Round 110 to the nearest ten = 110 (I) · Round 4,345 to the nearest hundred = 4300 (F) · Round 251 to the nearest hundred = 300 (A) · Round 1,320 to the nearest hundred = 1300 (T) · Round 9,241 to the nearest thousand = 9000 (W) · Round 698 to the nearest hundred = 700 (D) · Round 3,749 to the nearest hundred = 3700 (S) · Round 167 to the nearest hundred = 200 (O) · Round 28 to the nearest ten = 30 (R) · Round 17 to the nearest ten = 20 (C)

Clue 5 (Division facts (1-12)): surviving statement is box 11 → Echo

$18 \div 3 = 6$ · $20 \div 5 = 4$ · $2 \div 1 = 2$ · $60 \div 5 = 12$ · $27 \div 3 = 9$ · $30 \div 6 = 5$ · $3 \div 1 = 3$ · $64 \div 8 = 8$ · $77 \div 11 = 7$ · $12 \div 12 = 1$ · $20 \div 2 = 10$