



The Great Robo-Cat Heist

Grade 4 math · Addition, Subtraction, Rounding, Multiplication, Division · Reading level grades 3-4

Detective: _____ Date: _____

A sneaky mechanical cat has stolen the Golden Scratching Post! Detective Whiskers needs your help to scan the circuits, follow the metal paw prints, and catch the right robot.

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 robo-burglar is _____

Possible suspects

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

NAME	MAIN ABILITY	SPECIAL UPGRADE	LASER POINTER	METAL PLATING	FOIL TOOL
Mittens	laser beam	spring ears	green laser beam	shiny chrome	strong magnet
Carbon	holo tail	mouse radar	green laser beam	matte carbon	strong magnet
Micro	sonic purr	iron teeth	green laser beam	shiny chrome	strong magnet
Socks	sonic purr	iron teeth	red laser beam	matte carbon	spray of water
Felix	rocket jump	iron teeth	green laser beam	matte carbon	spray of water
Gizmo	rocket jump	solar tail	green laser beam	matte carbon	spray of water
Chrome	laser beam	solar tail	red laser beam	shiny chrome	strong magnet
Sonic	laser beam	solar tail	green laser beam	matte carbon	spray of water
Sprocket	turbo speed	mouse radar	green laser beam	matte carbon	ball of yarn
Cyber	laser beam	solar tail	red laser beam	shiny chrome	spray of water
Rocket	laser beam	spring ears	green laser beam	copper bronze	spray of water
Bolt	rocket jump	iron teeth	green laser beam	copper bronze	spray of water
Gearbox	rocket jump	mouse radar	green laser beam	matte carbon	spray of water
Pixel	rocket jump	hover paws	red laser beam	matte carbon	spray of water
Sparky	rocket jump	spring ears	green laser beam	matte carbon	spray of water
Turbo	holo tail	iron teeth	green laser beam	shiny chrome	spray of water
Circuit	sonic purr	mouse radar	red laser beam	shiny chrome	ball of yarn
Byte	sonic purr	spring ears	green laser beam	shiny chrome	spray of water
Hover	laser beam	iron teeth	green laser beam	copper bronze	ball of yarn
Widget	holo tail	mouse radar	red laser beam	shiny chrome	strong magnet
Whiskers	laser beam	hover paws	green laser beam	matte carbon	spray of water

CLUE 1 Addition

Inspector Bolt counts the spare battery packs left in the workshop to find the first clue.

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

T								T								T
3479	6646	6612	6085	9254	6089	6728	7295	6867	3479	2524	2112	6612	9682	4980	2112	3479
									T							
9254	9682	6612	8710	9682	2112	6089	8710	7295	3479	8710	6867	6089				

$2006 + 1473 = \square \rightarrow \text{T}$	$948 + 1576 = \square \rightarrow \text{D}$	$1335 + 777 = \square \rightarrow \text{O}$
$4519 + 2093 = \square \rightarrow \text{E}$	$5480 + 4202 = \square \rightarrow \text{S}$	$2892 + 3754 = \square \rightarrow \text{H}$
$3373 + 1607 = \square \rightarrow \text{N}$	$3263 + 3604 = \square \rightarrow \text{I}$	$3337 + 3958 = \square \rightarrow \text{R}$
$2449 + 4279 = \square \rightarrow \text{P}$	$4630 + 4080 = \square \rightarrow \text{A}$	$3407 + 2682 = \square \rightarrow \text{L}$
$3602 + 5652 = \square \rightarrow \text{U}$	$3897 + 2188 = \square \rightarrow \text{C}$	

Scratch space:

CLUE 2

Subtraction

The security guard subtracts the used oil cans from the total supply to see how much the thief took.

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

T														
1829	8723	2790	3476	3360	7233	7233	8415	8723	3360	7628	7362	4266	2790	7312

7233	3360	8415	2790	4266	8839	3360	4266	1024	8415

$6254 - 4425 = \square \rightarrow \boxed{\text{T}}$

$10645 - 3333 = \square \rightarrow \boxed{\text{N}}$

$8916 - 4650 = \square \rightarrow \boxed{\text{R}}$

$6460 - 2984 = \square \rightarrow \boxed{\text{W}}$

$12266 - 3427 = \square \rightarrow \boxed{\text{M}}$

$8824 - 1196 = \square \rightarrow \boxed{\text{D}}$

$9566 - 1151 = \square \rightarrow \boxed{\text{S}}$

$5084 - 4060 = \square \rightarrow \boxed{\text{K}}$

$3623 - 833 = \square \rightarrow \boxed{\text{E}}$

$4383 - 1023 = \square \rightarrow \boxed{\text{A}}$

$8827 - 104 = \square \rightarrow \boxed{\text{H}}$

$8391 - 1029 = \square \rightarrow \boxed{\text{G}}$

$8002 - 769 = \square \rightarrow \boxed{\text{L}}$

Scratch space:

CLUE 3 Rounding

The radar sensor only shows rounded numbers of volts but it is enough to track the escape route.

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

A				A					A					A		
5000	50	4300	9000	5000	110	370	2000	20	5000	200	230	9000	500	5000	2300	230

200	290	230	500	9000	1700	50	200

Round 5,475 to the nearest thousand → **A**

Round 291 to the nearest ten → **H**

Round 112 to the nearest ten → **Y**

Round 9,277 to the nearest thousand → **R**

Round 2,297 to the nearest hundred → **D**

Round 211 to the nearest hundred → **T**

Round 1,598 to the nearest thousand → **F**

Round 52 to the nearest ten → **S**

Round 229 to the nearest ten → **E**

Round 21 to the nearest ten → **W**

Round 368 to the nearest ten → **O**

Round 509 to the nearest hundred → **M**

Round 1,717 to the nearest hundred → **U**

Round 4,344 to the nearest hundred → **P**

Scratch space:

CLUE 4

Multiplication facts (1-12)

To crack the keypad we multiply the rows of glowing cat buttons on the locked control panel.

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

W																	
84	90	99	25	64	80	32	18	2	44	44	90	77	2	20	108	25	80

32	64	120	44

$7 \times 12 = \square \rightarrow \boxed{\text{W}}$

$8 \times 4 = \square \rightarrow \boxed{\text{D}}$

$1 \times 2 = \square \rightarrow \boxed{\text{A}}$

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

$8 \times 8 = \square \rightarrow \boxed{\text{U}}$

$5 \times 5 = \square \rightarrow \boxed{\text{O}}$

$10 \times 12 = \square \rightarrow \boxed{\text{S}}$

$8 \times 10 = \square \rightarrow \boxed{\text{N}}$

$11 \times 9 = \square \rightarrow \boxed{\text{F}}$

$11 \times 4 = \square \rightarrow \boxed{\text{T}}$

$6 \times 3 = \square \rightarrow \boxed{\text{M}}$

$11 \times 7 = \square \rightarrow \boxed{\text{C}}$

$9 \times 12 = \square \rightarrow \boxed{\text{B}}$

$10 \times 9 = \square \rightarrow \boxed{\text{E}}$

Scratch space:

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

We divide the microchips equally among the patrol bots so they can search the dark alleys.

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:

$16 \div 8 = \boxed{}$

$66 \div 6 = \boxed{}$

$77 \div 11 = \boxed{}$

$24 \div 6 = \boxed{}$

$48 \div 8 = \boxed{}$

$63 \div 7 = \boxed{}$

$25 \div 5 = \boxed{}$

$18 \div 6 = \boxed{}$

$96 \div 12 = \boxed{}$

$10 \div 1 = \boxed{}$

$7 \div 7 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain fired a glowing energy beam, then chewed through the heavy metal cage.
2. The villain leaped onto the high roof, then bounced over the high laser gate.
3. The villain emitted a loud high pitch purr, then tracked down the target item.
4. The villain dashed past the security cameras, then tracked down the target item.
5. The villain dashed past the security cameras, then recharged in the bright sunlight.
6. The villain made a distraction with light, then tracked down the target item.
7. The villain leaped onto the high roof, then chewed through the heavy metal cage.
8. The villain emitted a loud high pitch purr, then recharged in the bright sunlight.
9. The villain emitted a loud high pitch purr, then chewed through the heavy metal cage.
10. The villain made a distraction with light, then bounced over the high laser gate.
11. The villain fired a glowing energy beam, then floated over the pressure plates.
12. The villain leaped onto the high roof, then tracked down the target item.

Answer Key

The Great Robo-Cat Heist

Culprit: Gearbox

rocket jump · mouse radar · green laser beam · matte carbon · spray of water

Trail: Start 21 → Clue 1 17 → Clue 2 13 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE CULPRIT DOES NOT USE A SOLAR TAIL"

$2006 + 1473 = 3479$ (T) · $948 + 1576 = 2524$ (D) · $1335 + 777 = 2112$ (O) · $4519 + 2093 = 6612$ (E) · $5480 + 4202 = 9682$ (S) · $2892 + 3754 = 6646$ (H) · $3373 + 1607 = 4980$ (N) · $3263 + 3604 = 6867$ (I) · $3337 + 3958 = 7295$ (R) · $2449 + 4279 = 6728$ (P) · $4630 + 4080 = 8710$ (A) · $3407 + 2682 = 6089$ (L) · $3602 + 5652 = 9254$ (U) · $3897 + 2188 = 6085$ (C)

Clue 2 (Subtraction): "THE WALLS HAD GREEN LASER MARKS"

$6254 - 4425 = 1829$ (T) · $10645 - 3333 = 7312$ (N) · $8916 - 4650 = 4266$ (R) · $6460 - 2984 = 3476$ (W) · $12266 - 3427 = 8839$ (M) · $8824 - 1196 = 7628$ (D) · $9566 - 1151 = 8415$ (S) · $5084 - 4060 = 1024$ (K) · $3623 - 833 = 2790$ (E) · $4383 - 1023 = 3360$ (A) · $8827 - 104 = 8723$ (H) · $8391 - 1029 = 7362$ (G) · $8002 - 769 = 7233$ (L)

Clue 3 (Rounding): "A SPRAY OF WATER MADE THEM RUST"

Round 5,475 to the nearest thousand = 5000 (A) · Round 291 to the nearest ten = 290 (H) · Round 112 to the nearest ten = 110 (Y) · Round 9,277 to the nearest thousand = 9000 (R) · Round 2,297 to the nearest hundred = 2300 (D) · Round 211 to the nearest hundred = 200 (T) · Round 1,598 to the nearest thousand = 2000 (F) · Round 52 to the nearest ten = 50 (S) · Round 229 to the nearest ten = 230 (E) · Round 21 to the nearest ten = 20 (W) · Round 368 to the nearest ten = 370 (O) · Round 509 to the nearest hundred = 500 (M) · Round 1,717 to the nearest hundred = 1700 (U) · Round 4,344 to the nearest hundred = 4300 (P)

Clue 4 (Multiplication facts (1-12)): "WE FOUND MATTE CARBON DUST"

$7 \times 12 = 84$ (W) · $8 \times 4 = 32$ (D) · $1 \times 2 = 2$ (A) · $4 \times 5 = 20$ (R) · $8 \times 8 = 64$ (U) · $5 \times 5 = 25$ (O) · $10 \times 12 = 120$ (S) · $8 \times 10 = 80$ (N) · $11 \times 9 = 99$ (F) · $11 \times 4 = 44$ (T) · $6 \times 3 = 18$ (M) · $11 \times 7 = 77$ (C) · $9 \times 12 = 108$ (B) · $10 \times 9 = 90$ (E)

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

$16 \div 8 = 2$ · $66 \div 6 = 11$ · $77 \div 11 = 7$ · $24 \div 6 = 4$ · $48 \div 8 = 6$ · $63 \div 7 = 9$ · $25 \div 5 = 5$ · $18 \div 6 = 3$ · $96 \div 12 = 8$ · $10 \div 1 = 10$ · $7 \div 7 = 1$