



The Cyber Reef Mystery

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

Detective: _____ Date: _____

A mischievous robotic mermaid-unicorn hacked the underwater pearl vault in Aqua-Sparkle Lagoon! Use your detective skills and solve the math clues to uncover the villain.

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 ATTACK	SPECIAL GEAR	DOMINANT FIN	HEAD WIRES	MAJOR WEAKNESS
Crystal Hydro	Laser Tail Spin	Digital Wave Surge	Right Fin Dominant	Coral Pink Wires	Loud Brass Horns
Shimmer Bolt	Bubble Shield Pulse	Starlight Glow	Left Fin Dominant	Coral Pink Wires	Bright Flashlights
Laser Lagoon	Horn Spark Flash	Neon Tail Sweep	Left Fin Dominant	Golden Mane Cables	Bright Flashlights
Chrome Coralie	Bubble Shield Pulse	Starlight Glow	Right Fin Dominant	Golden Mane Cables	Bright Flashlights
Byte Barnacle	Bubble Shield Pulse	Neon Tail Sweep	Right Fin Dominant	Neon Blue Wires	Loud Brass Horns
Aqua Horn	Bubble Shield Pulse	Neon Tail Sweep	Left Fin Dominant	Coral Pink Wires	Rusting Sea Salt
Uni Splash	Horn Spark Flash	Starlight Glow	Left Fin Dominant	Neon Blue Wires	Bright Flashlights
Glimmer Sub	Rainbow Beam Blast	Neon Tail Sweep	Left Fin Dominant	Golden Mane Cables	Rusting Sea Salt
Sparkle Fin	Rainbow Beam Blast	Digital Wave Surge	Right Fin Dominant	Coral Pink Wires	Bright Flashlights
Wave Wire	Laser Tail Spin	Cyber Horn Surge	Right Fin Dominant	Golden Mane Cables	Loud Brass Horns
Turbo Triton	Sonic Wave Blast	Cyber Horn Surge	Left Fin Dominant	Golden Mane Cables	Loud Brass Horns
Voltage Mane	Rainbow Beam Blast	Digital Wave Surge	Right Fin Dominant	Neon Blue Wires	Rusting Sea Salt
Prisma Kelp	Laser Tail Spin	Cyber Horn Surge	Left Fin Dominant	Golden Mane Cables	Rusting Sea Salt
Siren Socket	Rainbow Beam Blast	Neon Tail Sweep	Right Fin Dominant	Neon Blue Wires	Rusting Sea Salt
Circuit Sirena	Laser Tail Spin	Neon Tail Sweep	Left Fin Dominant	Golden Mane Cables	Rusting Sea Salt
Robo Rainbow	Rainbow Beam Blast	Turbo Hydro Dash	Left Fin Dominant	Golden Mane Cables	Rusting Sea Salt
Neon Nautilus	Horn Spark Flash	Digital Wave Surge	Left Fin Dominant	Golden Mane Cables	Loud Brass Horns
Prism Pony	Sonic Wave Blast	Cyber Horn Surge	Right Fin Dominant	Coral Pink Wires	Loud Brass Horns
Glitch Star	Bubble Shield Pulse	Turbo Hydro Dash	Left Fin Dominant	Golden Mane Cables	Rusting Sea Salt
Pearl Pixel	Laser Tail Spin	Starlight Glow	Left Fin Dominant	Golden Mane Cables	Bright Flashlights
Cyber Marina	Rainbow Beam Blast	Digital Wave Surge	Right Fin Dominant	Golden Mane Cables	Rusting Sea Salt

CLUE 1
Multiplication facts (1-12)

The Reef Security Team found rows of glowing pearls lined up near the vault gates.

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

T																			
84	21	30	99	60	12	12	42	60	1	132	60	132	1	28	84	49	33	30	
11	7	5	30	45	21	28	45	1	33	49	45	108	30						

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

$6 \times 7 = \square \rightarrow \boxed{\text{A}}$

$1 \times 12 = \square \rightarrow \boxed{\text{L}}$

$3 \times 10 = \square \rightarrow \boxed{\text{E}}$

$7 \times 1 = \square \rightarrow \boxed{\text{Y}}$

$1 \times 1 = \square \rightarrow \boxed{\text{N}}$

$7 \times 7 = \square \rightarrow \boxed{\text{U}}$

$11 \times 12 = \square \rightarrow \boxed{\text{D}}$

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

$4 \times 7 = \square \rightarrow \boxed{\text{O}}$

$1 \times 11 = \square \rightarrow \boxed{\text{C}}$

$9 \times 5 = \square \rightarrow \boxed{\text{R}}$

$6 \times 10 = \square \rightarrow \boxed{\text{I}}$

$11 \times 3 = \square \rightarrow \boxed{\text{S}}$

$7 \times 3 = \square \rightarrow \boxed{\text{H}}$

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

$1 \times 5 = \square \rightarrow \boxed{\text{B}}$

Scratch space:

CLUE 2 Rounding

The underwater sonar radar rounded the energy reading to the nearest ten to save battery.

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

T									T					T					
40	6000	3000	30	90	30	20	3000	4000	40	90	30	3000	70	40	6000	3000	200	60	

			T				T							
300	3000	8000	40	8000	200	500	40	80	30	700	200	20	3000	

Round 44 to the nearest ten → **T**

Round 79 to the nearest ten → **O**

Round 458 to the nearest hundred → **N**

Round 64 to the nearest ten → **R**

Round 5,523 to the nearest thousand → **H**

Round 23 to the nearest ten → **P**

Round 34 to the nearest ten → **S**

Round 718 to the nearest hundred → **W**

Round 8,106 to the nearest thousand → **F**

Round 71 to the nearest ten → **D**

Round 86 to the nearest ten → **U**

Round 2,678 to the nearest thousand → **E**

Round 231 to the nearest hundred → **I**

Round 259 to the nearest hundred → **L**

Round 3,617 to the nearest thousand → **C**

Scratch space:

CLUE 3 Addition

The detectives combined the total counts of sparkle batteries found at both watchtowers.

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

T																			
567	818	457	618	344	457	547	708	688	618	941	618	660	457	241	567	326	547	618	

	T																		
618	567	596	660	660	457	940	672	688	618	457	547	618	547	737	567				

$338 + 229 = \square \rightarrow \mathbf{T}$	$170 + 174 = \square \rightarrow \mathbf{N}$	$349 + 339 = \square \rightarrow \mathbf{Y}$
$295 + 523 = \square \rightarrow \mathbf{H}$	$364 + 373 = \square \rightarrow \mathbf{L}$	$212 + 335 = \square \rightarrow \mathbf{A}$
$129 + 197 = \square \rightarrow \mathbf{W}$	$445 + 215 = \square \rightarrow \mathbf{P}$	$389 + 551 = \square \rightarrow \mathbf{D}$
$417 + 524 = \square \rightarrow \mathbf{U}$	$139 + 102 = \square \rightarrow \mathbf{C}$	$315 + 357 = \square \rightarrow \mathbf{B}$
$308 + 310 = \square \rightarrow \mathbf{S}$	$267 + 329 = \square \rightarrow \mathbf{O}$	$379 + 329 = \square \rightarrow \mathbf{K}$
$318 + 139 = \square \rightarrow \mathbf{E}$		

Scratch space:

CLUE 4 Subtraction

The guards compared the starting gear stock with the leftover supply to find the difference.

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

836 263 281 888 885 281 804 281 263 637 429 888 836 236 637 804 429 888

210 491 838 210 806 429 281 804 522 637 804 281 885 637 856 806 281 888

$1125 - 289 = \boxed{} \rightarrow \boxed{\text{T}}$

$$597 - 75 = \boxed{} \rightarrow \boxed{\text{M}}$$

$1005 - 117 = \boxed{} \rightarrow \boxed{\text{S}}$

$$273 - 10 = \boxed{} \rightarrow \boxed{\text{H}}$$

$818 - 389 = \boxed{} \rightarrow \boxed{\text{D}}$

$962 - 158 = \boxed{} \rightarrow \boxed{\text{N}}$

$863 - 7 = \boxed{} \rightarrow \boxed{\mathbf{B}}$

$890 - 52 = \boxed{} \rightarrow \boxed{\text{G}}$

$874 - 68 = \boxed{} \rightarrow \boxed{\text{L}}$

$$331 - 121 = \boxed{} \rightarrow \boxed{0}$$

$495 - 214 = \boxed{} \rightarrow \boxed{\text{E}}$

$$534 - 298 = \boxed{} \rightarrow \boxed{\text{R}}$$

$900 - 263 = \boxed{} \rightarrow \boxed{\text{A}}$

$810 - 319 = \boxed{} \rightarrow \boxed{\text{F}}$

$1094 - 209 = \boxed{} \rightarrow \boxed{\text{C}}$

Scratch space:

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

The patrol split the recovered laser tokens equally among the detective squads.

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:

$90 \div 10 = \boxed{}$

$60 \div 12 = \boxed{}$

$132 \div 12 = \boxed{}$

$96 \div 12 = \boxed{}$

$14 \div 7 = \boxed{}$

$12 \div 4 = \boxed{}$

$100 \div 10 = \boxed{}$

$5 \div 5 = \boxed{}$

$84 \div 7 = \boxed{}$

$35 \div 5 = \boxed{}$

$54 \div 9 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain flashed a horn spark, then lit up the ocean with starlight glow.
2. The villain spun into a laser tail spin, then powered up a cyber horn surge.
3. The villain raised a bubble shield, then lit up the ocean with starlight glow.
4. The villain raised a bubble shield, then zipped away with a turbo hydro dash.
5. The villain fired a rainbow beam blast, then zipped away with a turbo hydro dash.
6. The villain blasted a sonic wave, then powered up a cyber horn surge.
7. The villain fired a rainbow beam blast, then vanished inside a digital wave surge.
8. The villain raised a bubble shield, then vanished inside a digital wave surge.
9. The villain fired a rainbow beam blast, then swept past using a neon tail sweep.
10. The villain fired a rainbow beam blast, then lit up the ocean with starlight glow.
11. The villain spun into a laser tail spin, then swept past using a neon tail sweep.
12. The villain blasted a sonic wave, then swept past using a neon tail sweep.

Answer Key

The Cyber Reef Mystery

Culprit: Glitch Star

Bubble Shield Pulse · Turbo Hydro Dash · Left Fin Dominant · Golden Mane Cables · Rusting Sea Salt

Trail: Start 21 → Clue 1 17 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DID NOT USE CYBER HORN SURGE"

$7 \times 12 = 84$ (T) · $6 \times 7 = 42$ (A) · $1 \times 12 = 12$ (L) · $3 \times 10 = 30$ (E) · $7 \times 1 = 7$ (Y) · $1 \times 1 = 1$ (N) · $7 \times 7 = 49$ (U) · $11 \times 12 = 132$ (D) · $12 \times 9 = 108$ (G) · $4 \times 7 = 28$ (O) · $1 \times 11 = 11$ (C) · $9 \times 5 = 45$ (R) · $6 \times 10 = 60$ (I) · $11 \times 3 = 33$ (S) · $7 \times 3 = 21$ (H) · $9 \times 11 = 99$ (V) · $1 \times 5 = 5$ (B)

Clue 2 (Rounding): "THE SUSPECT USED THEIR LEFT FIN TO SWIPE"

Round 44 to the nearest ten = 40 (T) · Round 79 to the nearest ten = 80 (O) · Round 458 to the nearest hundred = 500 (N) · Round 64 to the nearest ten = 60 (R) · Round 5,523 to the nearest thousand = 6000 (H) · Round 23 to the nearest ten = 20 (P) · Round 34 to the nearest ten = 30 (S) · Round 718 to the nearest hundred = 700 (W) · Round 8,106 to the nearest thousand = 8000 (F) · Round 71 to the nearest ten = 70 (D) · Round 86 to the nearest ten = 90 (U) · Round 2,678 to the nearest thousand = 3000 (E) · Round 231 to the nearest hundred = 200 (I) · Round 259 to the nearest hundred = 300 (L) · Round 3,617 to the nearest thousand = 4000 (C)

Clue 3 (Addition): "THE SNEAKY SUSPECT WAS STOPPED BY SEA SALT"

$338 + 229 = 567$ (T) · $170 + 174 = 344$ (N) · $349 + 339 = 688$ (Y) · $295 + 523 = 818$ (H) · $364 + 373 = 737$ (L) · $212 + 335 = 547$ (A) · $129 + 197 = 326$ (W) · $445 + 215 = 660$ (P) · $389 + 551 = 940$ (D) · $417 + 524 = 941$ (U) · $139 + 102 = 241$ (C) · $315 + 357 = 672$ (B) · $308 + 310 = 618$ (S) · $267 + 329 = 596$ (O) · $379 + 329 = 708$ (K) · $318 + 139 = 457$ (E)

Clue 4 (Subtraction): "THE SCENE HAD STRANDS OF GOLDEN MANE CABLES"

$1125 - 289 = 836$ (T) · $597 - 75 = 522$ (M) · $1005 - 117 = 888$ (S) · $273 - 10 = 263$ (H) · $818 - 389 = 429$ (D) · $962 - 158 = 804$ (N) · $863 - 7 = 856$ (B) · $890 - 52 = 838$ (G) · $874 - 68 = 806$ (L) · $331 - 121 = 210$ (O) · $495 - 214 = 281$ (E) · $534 - 298 = 236$ (R) · $900 - 263 = 637$ (A) · $810 - 319 = 491$ (F) · $1094 - 209 = 885$ (C)

Clue 5 (Division facts (1-12)): surviving statement is box 4 → Glitch Star

$90 \div 10 = 9$ · $60 \div 12 = 5$ · $132 \div 12 = 11$ · $96 \div 12 = 8$ · $14 \div 7 = 2$ · $12 \div 4 = 3$ · $100 \div 10 = 10$ · $5 \div 5 = 1$ · $84 \div 7 = 12$ · $35 \div 5 = 7$ · $54 \div 9 = 6$