



The Cyber-Reef Caper

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

Detective: _____ Date: _____

A sneaky Robo-Raider stole the Golden Pearl!! We must track them down in the Cyber-Reef before the power goes out.

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-Raider is _____

Possible suspects

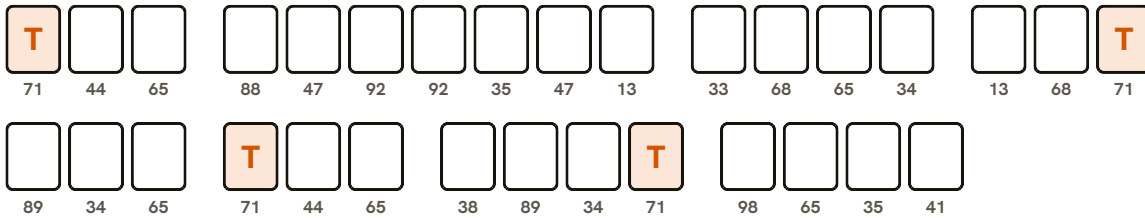
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	MAIN POWER	EXTRA TOOL	SIGHTING	HEAD GEAR	WEAKNESS
Raptor-Wave	rocket stomp	mega drill	left claw	seaweed wig	bubbly soap
Aqua-Bolts	sonar scream	mega drill	right claw	wire braid	bubbly soap
Coral-Claw	turbo tail-fin	rust beam	right claw	coral crown	lemon juice
Deep-Drive	laser breath	mega drill	right claw	seaweed wig	giant magnet
Wave-Walker	sonar scream	rust beam	right claw	wire braid	giant magnet
Steel-Shell	electric bite	oil splash	left claw	seaweed wig	giant magnet
Fin-Tin	electric bite	glow net	left claw	coral crown	bubbly soap
Dino-Drip	laser breath	oil splash	right claw	seaweed wig	giant magnet
Gizmo-Gator	laser breath	bubble shield	left claw	wire braid	giant magnet
Glimmer-Byte	laser breath	oil splash	right claw	seaweed wig	bubbly soap
Bubbles-9000	electric bite	oil splash	left claw	coral crown	bubbly soap
Shell-Shock	turbo tail-fin	bubble shield	left claw	seaweed wig	bubbly soap
Rex-Bot	laser breath	bubble shield	left claw	seaweed wig	lemon juice
Pearl-Plug	electric bite	oil splash	left claw	seaweed wig	bubbly soap
Tricera-Splash	electric bite	bubble shield	left claw	seaweed wig	lemon juice
Rusty-Scales	rocket stomp	glow net	left claw	seaweed wig	lemon juice
Siren-Circuit	laser breath	glow net	left claw	coral crown	bubbly soap
Sparky-Shark	electric bite	rust beam	right claw	wire braid	lemon juice
T-Reef	turbo tail-fin	rust beam	left claw	seaweed wig	bubbly soap
Marina-Gear	sonar scream	oil splash	left claw	wire braid	giant magnet
Mega-Mouth	rocket stomp	glow net	left claw	seaweed wig	bubbly soap

CLUE 1 Place value

We find a locked computer screen. To open it, we must count the tens and ones blocks.

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



What number has 7 tens and 1 one? → **T**

What number has 3 tens and 4 ones? → **S**

What number has 4 tens and 4 ones? → **H**

What number has 3 tens and 5 ones? → **A**

What number has 4 tens and 7 ones? → **I**

What number has 4 tens and 1 one? → **M**

What number has 9 tens and 2 ones? → **L**

What number has 8 tens and 9 ones? → **U**

What number has 9 tens and 8 ones? → **B**

What number has 6 tens and 8 ones? → **O**

What number has 3 tens and 3 ones? → **D**

What number has 3 tens and 8 ones? → **R**

What number has 1 ten and 3 ones? → **N**

What number has 6 tens and 5 ones? → **E**

What number has 8 tens and 8 ones? → **V**

Scratch space:

CLUE 2 Addition

A friendly robotic sea turtle needs help. We add two piles of shiny shells together to get his map.

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

T							T									T
19	7	5	12	17	14	17	19	4	11	5	3	6	13	5	20	19

				T			T						T
9	13	6	2	19	17	11	19	5	6	13	18	19	

$11 + 8 = \square \rightarrow$ T	$3 + 1 = \square \rightarrow$ U	$1 + 2 = \square \rightarrow$ D	$3 + 2 = \square \rightarrow$ E
$9 + 9 = \square \rightarrow$ I	$2 + 4 = \square \rightarrow$ A	$4 + 10 = \square \rightarrow$ B	$4 + 7 = \square \rightarrow$ S
$1 + 1 = \square \rightarrow$ W	$8 + 4 = \square \rightarrow$ R	$13 + 7 = \square \rightarrow$ F	
$6 + 11 = \square \rightarrow$ O	$4 + 3 = \square \rightarrow$ H	$6 + 3 = \square \rightarrow$ C	$5 + 8 = \square \rightarrow$ L

Scratch space:

CLUE 3

Subtraction

Some rusty gears fell out of our bag. We subtract the lost gears to see how many are left.

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

B		B	B														
1	3	1	1	10	18	16	2	8	12	7	13	10	10	7	8	16	5
						B											
15	5	13	16	1	8	4	19	3	18	8	7	8	18				

$4 - 3 = \square \rightarrow \text{B}$

$10 - 7 = \square \rightarrow \text{U}$

$10 - 3 = \square \rightarrow \text{W}$

$17 - 7 = \square \rightarrow \text{L}$

$9 - 4 = \square \rightarrow \text{H}$

$20 - 2 = \square \rightarrow \text{Y}$

$20 - 4 = \square \rightarrow \text{S}$

$14 - 2 = \square \rightarrow \text{P}$

$20 - 1 = \square \rightarrow \text{G}$

$3 - 1 = \square \rightarrow \text{O}$

$14 - 1 = \square \rightarrow \text{I}$

$17 - 2 = \square \rightarrow \text{T}$

$16 - 8 = \square \rightarrow \text{A}$

$9 - 5 = \square \rightarrow \text{D}$

Scratch space:

CLUE 4

We follow a trail of footprints. We count them by twos to jump across the wet seaweed.

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

Diagram illustrating the sequence of numbers and the position of the 'W' marker across three rows:

- Row 1: 21 (W), 15, 110, 12, 140, 40, 35, 50, 25, 15, 15, 40, 24, 15, 65, 21 (W), 15, 15, 35
- Row 2: 21 (W), 60, 50, 6, 60, 15, 26, 15, 24

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 → **W**

Skip-count by 10s. Fill the blank: 10, 20, 30, __, 50, 60 → **N**

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 → **D**

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

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

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

Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 → **P**

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 → **C**

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

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

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, __, 70, 80 →

Scratch space:

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

We need ten fuel bolts to turn on the radar. We have seven. How many more do we need?

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:

$7 + \underline{\quad} = 10$

$8 + \underline{\quad} = 16$

$7 + \underline{\quad} = 11$

$7 + \underline{\quad} = 13$

$5 + \underline{\quad} = 7$

$6 + \underline{\quad} = 16$

$10 + \underline{\quad} = 15$

$7 + \underline{\quad} = 19$

$4 + \underline{\quad} = 15$

$7 + \underline{\quad} = 8$

$9 + \underline{\quad} = 16$

Step 2 - cross out the sentence with each answer:

1. The villain blasts a trail with laser breath, then escapes through the floor with a mega drill.
2. The villain shatters the glass with a sonar scream, then traps the helpers with a glow net.
3. The villain shakes the ocean floor with a rocket stomp, then escapes through the floor with a mega drill.
4. The villain speeds away with a turbo tail-fin, then blocks the exits with a bubble shield.
5. The villain zaps the guards with an electric bite, then breaks the lock with a rust beam.
6. The villain shakes the ocean floor with a rocket stomp, then blinds the cameras with an oil splash.
7. The villain blasts a trail with laser breath, then blocks the exits with a bubble shield.
8. The villain zaps the guards with an electric bite, then blinds the cameras with an oil splash.
9. The villain shakes the ocean floor with a rocket stomp, then traps the helpers with a glow net.
10. The villain zaps the guards with an electric bite, then traps the helpers with a glow net.
11. The villain speeds away with a turbo tail-fin, then blinds the cameras with an oil splash.
12. The villain blasts a trail with laser breath, then traps the helpers with a glow net.

Answer Key

The Cyber-Reef Caper

Culprit: Mega-Mouth

rocket stomp · glow net · left claw · seaweed wig · bubbly soap

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

Clue 1 (Place value): "THE VILLAIN DOES NOT USE THE RUST BEAM"

What number has 7 tens and 1 one? = 71 (T) · What number has 3 tens and 4 ones? = 34 (S) · What number has 4 tens and 4 ones? = 44 (H) · What number has 3 tens and 5 ones? = 35 (A) · What number has 4 tens and 7 ones? = 47 (I) · What number has 4 tens and 1 one? = 41 (M) · What number has 9 tens and 2 ones? = 92 (L) · What number has 8 tens and 9 ones? = 89 (U) · What number has 9 tens and 8 ones? = 98 (B) · What number has 6 tens and 8 ones? = 68 (O) · What number has 3 tens and 3 ones? = 33 (D) · What number has 3 tens and 8 ones? = 38 (R) · What number has 1 ten and 3 ones? = 13 (N) · What number has 6 tens and 5 ones? = 65 (E) · What number has 8 tens and 8 ones? = 88 (V)

Clue 2 (Addition): "THE ROBOT USED A LEFT CLAW TO STEAL IT"

$11 + 8 = 19$ (T) · $3 + 1 = 4$ (U) · $1 + 2 = 3$ (D) · $3 + 2 = 5$ (E) · $9 + 9 = 18$ (I) · $2 + 4 = 6$ (A) · $4 + 10 = 14$ (B) · $4 + 7 = 11$ (S) · $1 + 1 = 2$ (W) · $8 + 4 = 12$ (R) · $13 + 7 = 20$ (F) · $6 + 11 = 17$ (O) · $4 + 3 = 7$ (H) · $6 + 3 = 9$ (C) · $5 + 8 = 13$ (L)

Clue 3 (Subtraction): "BUBBLY SOAP WILL WASH THIS BAD GUY AWAY"

$4 - 3 = 1$ (B) · $10 - 7 = 3$ (U) · $10 - 3 = 7$ (W) · $17 - 7 = 10$ (L) · $9 - 4 = 5$ (H) · $20 - 2 = 18$ (Y) · $20 - 4 = 16$ (S) · $14 - 2 = 12$ (P) · $20 - 1 = 19$ (G) · $3 - 1 = 2$ (O) · $14 - 1 = 13$ (I) · $17 - 2 = 15$ (T) · $16 - 8 = 8$ (A) · $9 - 5 = 4$ (D)

Clue 4 (Skip counting): "WE FOUND GREEN SEAWEED WIG PIECES"

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 = 21 (W) · Skip-count by 10s. Fill the blank: 10, 20, 30, __, 50, 60 = 40 (N) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 = 65 (A) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (D) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (F) · Skip-count by 5s. Fill the blank: 5, 10, __, 20, 25 = 15 (E) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, __, 55, 60 = 50 (G) · Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 = 6 (P) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, __, 27, 30 = 24 (S) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (C) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (R) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 = 12 (O) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 = 140 (U) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, __, 70, 80 = 60 (I)

Clue 5 (Missing addends): surviving statement is box 9 → Mega-Mouth

$7 + \underline{\quad} = 10 = 3$ · $8 + \underline{\quad} = 16 = 8$ · $7 + \underline{\quad} = 11 = 4$ · $7 + \underline{\quad} = 13 = 6$ · $5 + \underline{\quad} = 7 = 2$ · $6 + \underline{\quad} = 16 = 10$ · $10 + \underline{\quad} = 15 = 5$ · $7 + \underline{\quad} = 19 = 12$ · $4 + \underline{\quad} = 15 = 11$ · $7 + \underline{\quad} = 8 = 1$ · $9 + \underline{\quad} = 16 = 7$