



The Mystery of the Golden Bloodworm

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

Detective: _____ Date: _____

Someone snuck into the Muddy Lagoon Sanctuary and snatched the legendary Golden Bloodworm prize! Solve the math clues to uncover which axolotl committed the watery crime.

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 Axolotl is _____

Possible suspects

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

NAME	TRICK	GEAR	HABIT	GILL STYLE	FEAR
Splash	Mud Dash	Star Fin	Left Gill Twitch	Feathery Gills	Ice Cube
Bubbles	Mud Dash	Worm Whistle	Right Gill Twitch	Smooth Head	Bright Flash
Ripple	Glow Spots	Moss Armor	Left Gill Twitch	Smooth Head	Squeaky Toy
Fidget	Glow Spots	Star Fin	Right Gill Twitch	Smooth Head	Bright Flash
Noodle	Bubble Shield	Crystal Crown	Right Gill Twitch	Smooth Head	Bright Flash
Waddles	Pink Frills	Water Cannon	Right Gill Twitch	Spiky Crest	Squeaky Toy
Lotl	Pink Frills	Water Cannon	Right Gill Twitch	Feathery Gills	Ice Cube
Shelly	Mud Dash	Water Cannon	Left Gill Twitch	Spiky Crest	Ice Cube
Coral	Bubble Shield	Star Fin	Right Gill Twitch	Spiky Crest	Ice Cube
Ziggy	Pink Frills	Crystal Crown	Right Gill Twitch	Smooth Head	Ice Cube
Mossy	Glow Spots	Worm Whistle	Left Gill Twitch	Spiky Crest	Squeaky Toy
Gilly	Tail Whip	Worm Whistle	Left Gill Twitch	Smooth Head	Ice Cube
Muddy	Glow Spots	Moss Armor	Right Gill Twitch	Feathery Gills	Bright Flash
Sir Squiggles	Pink Frills	Water Cannon	Left Gill Twitch	Smooth Head	Bright Flash
Slick	Bubble Shield	Worm Whistle	Right Gill Twitch	Spiky Crest	Squeaky Toy
Pebble	Mud Dash	Water Cannon	Right Gill Twitch	Smooth Head	Bright Flash
Axel	Glow Spots	Crystal Crown	Right Gill Twitch	Feathery Gills	Bright Flash
Nibbles	Tail Whip	Worm Whistle	Left Gill Twitch	Spiky Crest	Ice Cube
Finley	Mud Dash	Water Cannon	Right Gill Twitch	Smooth Head	Ice Cube
Swirly	Pink Frills	Worm Whistle	Right Gill Twitch	Feathery Gills	Ice Cube
Pinky	Bubble Shield	Water Cannon	Right Gill Twitch	Smooth Head	Bright Flash

CLUE 1
Multiplication facts (1-12)

You find rows of glowing eggs tucked into water plants and multiply the groups to unlock the first safe.

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

T																T
35	54	7	45	44	36	36	63	44	3	9	22	7	121	3	22	35
4	121	7	63	144	22	77	14	144	54	44	121	35	36	7		

$7 \times 5 = \square \rightarrow$ T	$2 \times 11 = \square \rightarrow$ O	$4 \times 11 = \square \rightarrow$ I	
$6 \times 6 = \square \rightarrow$ L	$7 \times 11 = \square \rightarrow$ R	$5 \times 9 = \square \rightarrow$ V	$7 \times 1 = \square \rightarrow$ E
$12 \times 12 = \square \rightarrow$ W	$1 \times 4 = \square \rightarrow$ U	$11 \times 11 = \square \rightarrow$ S	
$3 \times 1 = \square \rightarrow$ N	$3 \times 3 = \square \rightarrow$ D	$9 \times 6 = \square \rightarrow$ H	$9 \times 7 = \square \rightarrow$ A
$2 \times 7 = \square \rightarrow$ M			

Scratch space:

CLUE 2 Skip counting

To track the slippery footsteps across the lakebed, you skip count along the trail of pebbles.

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

T									T							
25	30	65	70	16	70	9	65	6	25	70	30	27	35	65	21	33
				T					T			T				
20	100	18	30	25	18	100	45	45	25	35	100	25	6	30	12	22
T																
25	33	26	110													

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

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 → **R**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, __, 80, 90 → **S**

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

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

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

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

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

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

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 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 → **W**

Skip-count by 3s. Fill the blank: 3, 6, 9, __, 15, 18 → **B**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, __, 21, 24 → **G**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 → **O**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 → **A**

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

Scratch space:

CLUE 3 Rounding

The underwater sonar screen rounds the distance to the nearest ten to pinpoint the secret cavern.

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

A									A									
370	130	430	700	170	4300	1300	30	2900	370	900	4300	290	30	2900	700	170	4300	1300

		A																
900	110	370	430	230	1700	1300	4300	230	900	20	900	90	230	110	1300			

Round 372 to the nearest ten → **A**

Round 92 to the nearest ten → **P**

Round 430 to the nearest ten → **R**

Round 1,291 to the nearest hundred → **T**

Round 130 to the nearest ten → **B**

Round 292 to the nearest ten → **O**

Round 4,275 to the nearest hundred → **H**

Round 19 to the nearest ten → **U**

Round 29 to the nearest ten → **F**

Round 172 to the nearest ten → **G**

Round 231 to the nearest ten → **E**

Round 2,926 to the nearest hundred → **L**

Round 106 to the nearest ten → **C**

Round 898 to the nearest hundred → **S**

Round 748 to the nearest hundred → **I**

Round 1,747 to the nearest hundred → **D**

Scratch space:

CLUE 4 Addition

You combine all the floating worm treats found near the crime scene to total up the evidence.

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

A									A							
3274	7728	3974	4397	4397	4069	2930	2930	4715	3274	9147	2124	4715	2729	4069	3203	4397

2124	4397	4397	7728	4715	2091	4263	2124	2124	2729	4263	3382	4715	7366	7728

$1822 + 1452 = \boxed{} \rightarrow \boxed{\text{A}}$

$2888 + 1509 = \boxed{} \rightarrow \boxed{\text{O}}$

$1428 + 663 = \boxed{} \rightarrow \boxed{\text{G}}$

$1372 + 1357 = \boxed{} \rightarrow \boxed{\text{F}}$

$3745 + 3621 = \boxed{} \rightarrow \boxed{\text{R}}$

$4580 + 4567 = \boxed{} \rightarrow \boxed{\text{D}}$

$1323 + 2746 = \boxed{} \rightarrow \boxed{\text{T}}$

$2142 + 2573 = \boxed{} \rightarrow \boxed{\text{E}}$

$1394 + 2580 = \boxed{} \rightarrow \boxed{\text{M}}$

$2602 + 1661 = \boxed{} \rightarrow \boxed{\text{I}}$

$1545 + 1837 = \boxed{} \rightarrow \boxed{\text{B}}$

$1820 + 1110 = \boxed{} \rightarrow \boxed{\text{H}}$

$1913 + 1290 = \boxed{} \rightarrow \boxed{\text{N}}$

$1123 + 1001 = \boxed{} \rightarrow \boxed{\text{L}}$

$4939 + 2789 = \boxed{} \rightarrow \boxed{\text{S}}$

Scratch space:

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

To share the clues fairly among your detective squad, you divide the water samples into equal jars.

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:

$108 \div 9 = \square$

$30 \div 5 = \square$

$22 \div 2 = \square$

$80 \div 10 = \square$

$42 \div 6 = \square$

$4 \div 2 = \square$

$44 \div 11 = \square$

$36 \div 12 = \square$

$30 \div 3 = \square$

$45 \div 5 = \square$

$12 \div 12 = \square$

Step 2 - cross out the sentence with each answer:

1. The villain shimmered with glow spots, then blasted a water cannon.
2. The villain shimmered with glow spots, then blew a worm whistle.
3. The villain flashed pink frills, then showed off a star fin.
4. The villain shimmered with glow spots, then stole the crystal crown.
5. The villain raised a bubble shield, then stole the crystal crown.
6. The villain dashed through the mud, then blasted a water cannon.
7. The villain flashed pink frills, then blasted a water cannon.
8. The villain raised a bubble shield, then showed off a star fin.
9. The villain flashed pink frills, then wrapped in moss armor.
10. The villain raised a bubble shield, then blew a worm whistle.
11. The villain shimmered with glow spots, then showed off a star fin.
12. The villain raised a bubble shield, then blasted a water cannon.

Answer Key

The Mystery of the Golden Bloodworm

Culprit: Noodle

Bubble Shield · Crystal Crown · Right Gill Twitch · Smooth Head · Bright Flash

Trail: Start 21 → Clue 1 15 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT USE A WORM WHISTLE"

$7 \times 5 = 35$ (T) · $2 \times 11 = 22$ (O) · $4 \times 11 = 44$ (I) · $6 \times 6 = 36$ (L) · $7 \times 11 = 77$ (R) · $5 \times 9 = 45$ (V) · $7 \times 1 = 7$ (E) · $12 \times 12 = 144$ (W) · $1 \times 4 = 4$ (U) · $11 \times 11 = 121$ (S) · $3 \times 1 = 3$ (N) · $3 \times 3 = 9$ (D) · $9 \times 6 = 54$ (H) · $9 \times 7 = 63$ (A) · $2 \times 7 = 14$ (M)

Clue 2 (Skip counting): "THE SUSPECT SHOWED A RIGHT GILL TWITCH BY TANK"

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (T) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 = 16 (U) · Skip-count by 10s. Fill the blank: 10, 20, __, 40, 50 = 30 (H) · Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 = 20 (R) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, __, 80, 90 = 70 (S) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 = 45 (L) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 = 21 (D) · Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 = 6 (C) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 = 22 (Y) · Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 = 9 (P) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (N) · 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 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (W) · Skip-count by 3s. Fill the blank: 3, 6, 9, __, 15, 18 = 12 (B) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (K) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, __, 21, 24 = 18 (G) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 = 27 (O) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 = 33 (A) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (I)

Clue 3 (Rounding): "A BRIGHT FLASH OF LIGHT SCARED THE SUSPECT"

Round 372 to the nearest ten = 370 (A) · Round 92 to the nearest ten = 90 (P) · Round 430 to the nearest ten = 430 (R) · Round 1,291 to the nearest hundred = 1300 (T) · Round 130 to the nearest ten = 130 (B) · Round 292 to the nearest ten = 290 (O) · Round 4,275 to the nearest hundred = 4300 (H) · Round 19 to the nearest ten = 20 (U) · Round 29 to the nearest ten = 30 (F) · Round 172 to the nearest ten = 170 (G) · Round 231 to the nearest ten = 230 (E) · Round 2,926 to the nearest hundred = 2900 (L) · Round 106 to the nearest ten = 110 (C) · Round 898 to the nearest hundred = 900 (S) · Round 748 to the nearest hundred = 700 (I) · Round 1,747 to the nearest hundred = 1700 (D)

Clue 4 (Addition): "A SMOOTH HEAD LEFT NO LOOSE GILL FIBERS"

$1822 + 1452 = 3274$ (A) · $2888 + 1509 = 4397$ (O) · $1428 + 663 = 2091$ (G) · $1372 + 1357 = 2729$ (F) · $3745 + 3621 = 7366$ (R) · $4580 + 4567 = 9147$ (D) · $1323 + 2746 = 4069$ (T) · $2142 + 2573 = 4715$ (E) · $1394 + 2580 = 3974$ (M) · $2602 + 1661 = 4263$ (I) · $1545 + 1837 = 3382$ (B) · $1820 + 1110 = 2930$ (H) · $1913 + 1290 = 3203$ (N) · $1123 + 1001 = 2124$ (L) · $4939 + 2789 = 7728$ (S)

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

$108 \div 9 = 12$ · $30 \div 5 = 6$ · $22 \div 2 = 11$ · $80 \div 10 = 8$ · $42 \div 6 = 7$ · $4 \div 2 = 2$ · $44 \div 11 = 4$ · $36 \div 12 = 3$ · $30 \div 3 = 10$ · $45 \div 5 = 9$ · $12 \div 12 = 1$