The Coral Cove Mystery

Grade 6 math · Addition, Subtraction, Multiplication, Fractions of a number, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

Someone swiped the Golden Sea Pearl from the Royal Reef Vault! Help the Ocean Patrol decode the evidence and catch the sneaky thief.

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 Sea Thief is _____

Possible suspects

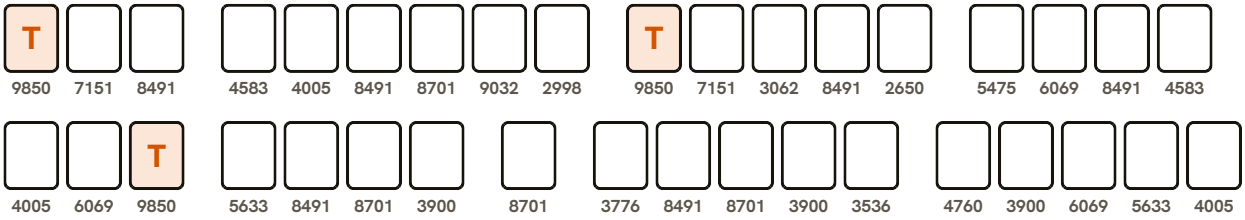
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	SEA MAGIC	OCEAN GEAR	HANDEDNESS	FIN COLOR	WEAKNESS
Ariel	Dolphin Talk	Coral Trident	Right Handed	Emerald Green	Ticklish Fins
Bubbles	Bioluminescence	Starfish Compass	Left Handed	Ruby Pink	Bright Lights
Kelp	Bioluminescence	Coral Trident	Left Handed	Emerald Green	Loud Conch Calls
Delphine	Dolphin Talk	Starfish Compass	Left Handed	Ruby Pink	Bright Lights
Shelly	Tide Control	Coral Trident	Right Handed	Emerald Green	Loud Conch Calls
Pearl	Whirlpool Spin	Shell Shield	Left Handed	Sapphire Blue	Ticklish Fins
Finn	Bioluminescence	Kelp Lasso	Right Handed	Sapphire Blue	Bright Lights
Wave	Bioluminescence	Pearl Crown	Left Handed	Emerald Green	Bright Lights
Triton	Dolphin Talk	Shell Shield	Left Handed	Emerald Green	Bright Lights
Caspian	Bioluminescence	Kelp Lasso	Left Handed	Ruby Pink	Ticklish Fins
Calypso	Bioluminescence	Kelp Lasso	Right Handed	Ruby Pink	Ticklish Fins
Sandy	Dolphin Talk	Shell Shield	Right Handed	Sapphire Blue	Bright Lights
Ray	Whirlpool Spin	Pearl Crown	Right Handed	Ruby Pink	Ticklish Fins
Nautilus	Tide Control	Kelp Lasso	Left Handed	Ruby Pink	Ticklish Fins
Cascade	Dolphin Talk	Kelp Lasso	Left Handed	Ruby Pink	Bright Lights
Mako	Current Glide	Shell Shield	Left Handed	Emerald Green	Bright Lights
Nereus	Bioluminescence	Pearl Crown	Right Handed	Sapphire Blue	Ticklish Fins
Coralia	Bioluminescence	Coral Trident	Left Handed	Emerald Green	Bright Lights
Briny	Tide Control	Coral Trident	Right Handed	Ruby Pink	Bright Lights
Scylla	Dolphin Talk	Coral Trident	Left Handed	Emerald Green	Bright Lights
Marina	Tide Control	Coral Trident	Right Handed	Emerald Green	Bright Lights

CLUE 1 Addition

Guard dolphins tallied all the missing sea sponges around the vault to find the first clue.

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



5427 + 4423 = ☐ → T	2409 + 1367 = ☐ → P	5497 + 3535 = ☐ → K
2224 + 1312 = ☐ → L	5401 + 3090 = ☐ → E	2107 + 955 = ☐ → I
2639 + 2836 = ☐ → D	3583 + 2486 = ☐ → O	1814 + 2086 = ☐ → R
1528 + 3055 = ☐ → S	3471 + 2162 = ☐ → W	1503 + 3257 = ☐ → C
1129 + 1521 = ☐ → F	1299 + 1699 = ☐ → Y	2724 + 1281 = ☐ → N
4702 + 2449 = ☐ → H	5382 + 3319 = ☐ → A	

Scratch space:

CLUE 2 Subtraction

The patrol subtracted damaged coral reefs from the safe ones to narrow down the path.

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



5490 - 2815 = ☐ → W

11718 - 2954 = ☐ → M

4028 - 2132 = ☐ → L

9086 - 1618 = ☐ → D

3529 - 784 = ☐ → F

5771 - 2824 = ☐ → A

6376 - 4418 = ☐ → R

5436 - 1613 = ☐ → T

2447 - 34 = ☐ → H

11155 - 4731 = ☐ → I

1454 - 261 = ☐ → N

7059 - 3092 = ☐ → E

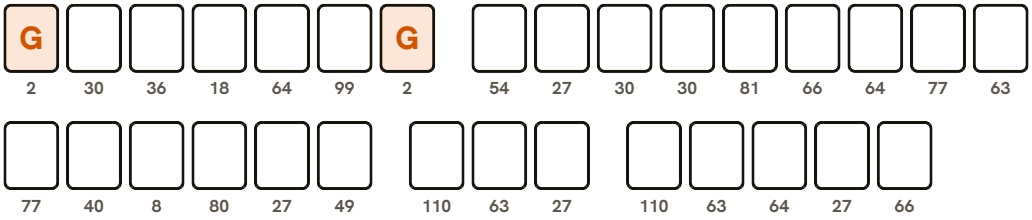
5962 - 1700 = ☐ → S

Scratch space:

CLUE 3 Multiplication facts (1-12)

> Ocean scouts counted rows of giant clam shells to find a hidden secret message.

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



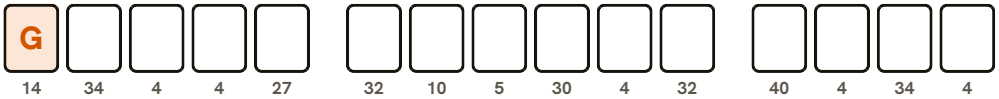
2 × 1 = ☐ → G	9 × 9 = ☐ → Y	6 × 11 = ☐ → F	6 × 5 = ☐ → L
10 × 11 = ☐ → T	3 × 6 = ☐ → W	3 × 9 = ☐ → E	
8 × 8 = ☐ → I	3 × 12 = ☐ → O	8 × 1 = ☐ → A	
10 × 4 = ☐ → C	8 × 10 = ☐ → R	9 × 11 = ☐ → N	
6 × 9 = ☐ → J	7 × 7 = ☐ → D	9 × 7 = ☐ → H	11 × 7 = ☐ → S

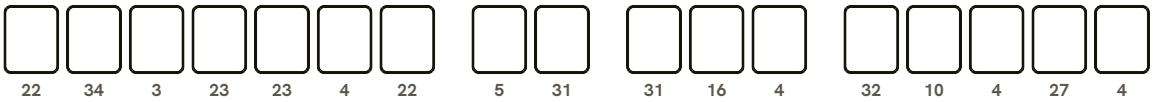
Scratch space:

CLUE 4 Fractions of a number

> The royal tidekeeper calculated a fraction of the shining pearls left in the chest.

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





2/3 of 21 = ☐ → G	5/6 of 6 = ☐ → A	2/10 of 50 = ☐ → C
1/5 of 80 = ☐ → H	1/4 of 12 = ☐ → O	1/6 of 24 = ☐ → E
1/2 of 44 = ☐ → D	1/4 of 160 = ☐ → W	2/8 of 108 = ☐ → N
3/4 of 40 = ☐ → L	1/6 of 138 = ☐ → P	4/6 of 51 = ☐ → R
2/6 of 96 = ☐ → S	5/10 of 62 = ☐ → T	

Scratch space:

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

> The kelp guards divided the deep sea sectors evenly to locate the final hideout.

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:

32 ÷ 8 = ☐	56 ÷ 7 = ☐	42 ÷ 7 = ☐	84 ÷ 12 = ☐	36 ÷ 12 = ☐
54 ÷ 6 = ☐	35 ÷ 7 = ☐	8 ÷ 4 = ☐	110 ÷ 10 = ☐	10 ÷ 10 = ☐
80 ÷ 8 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain surged ahead on swift currents, then snagged the pearl using a kelp lasso.
2. The villain summoned a giant whirlpool, then slashed the vault ropes with a coral trident.
3. The villain lit up the dark ocean cave, then navigated the maze with a starfish compass.
4. The villain spoke to the guard dolphins, then slashed the vault ropes with a coral trident.
5. The villain bent the tidal waters, then blocked the sea guards with a shell shield.
6. The villain lit up the dark ocean cave, then slashed the vault ropes with a coral trident.
7. The villain bent the tidal waters, then navigated the maze with a starfish compass.
8. The villain spoke to the guard dolphins, then blocked the sea guards with a shell shield.
9. The villain lit up the dark ocean cave, then blocked the sea guards with a shell shield.
10. The villain spoke to the guard dolphins, then snagged the pearl using a kelp lasso.
11. The villain spoke to the guard dolphins, then navigated the maze with a starfish compass.
12. The villain surged ahead on swift currents, then blocked the sea guards with a shell shield.

TEACHER / PARENT

Answer Key

The Coral Cove Mystery

Culprit: Mako

Current Glide · Shell Shield · Left Handed · Emerald Green · Bright Lights

Trail: Start 21 → Clue 1 18 → Clue 2 11 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SNEAKY THIEF DOES NOT WEAR A PEARL CROWN"

5427 + 4423 = 9850 (T) · 2409 + 1367 = 3776 (P) · 5497 + 3535 = 9032 (K) · 2224 + 1312 = 3536 (L) · 5401 + 3090 = 8491 (E) · 2107 + 955 = 3062 (I) · 2639 + 2836 = 5475 (D) · 3583 + 2486 = 6069 (O) · 1814 + 2086 = 3900 (R) · 1528 + 3055 = 4583 (S) · 3471 + 2162 = 5633 (W) · 1503 + 3257 = 4760 (C) · 1129 + 1521 = 2650 (F) · 1299 + 1699 = 2998 (Y) · 2724 + 1281 = 4005 (N) · 4702 + 2449 = 7151 (H) · 5382 + 3319 = 8701 (A)

Clue 2 (Subtraction): "WITNESS SAW A LEFT HANDED MERMAID FLEE"

5490 - 2815 = 2675 (W) · 11718 - 2954 = 8764 (M) · 4028 - 2132 = 1896 (L) · 9086 - 1618 = 7468 (D) · 3529 - 784 = 2745 (F) · 5771 - 2824 = 2947 (A) · 6376 - 4418 = 1958 (R) · 5436 - 1613 = 3823 (T) · 2447 - 34 = 2413 (H) · 11155 - 4731 = 6424 (I) · 1454 - 261 = 1193 (N) · 7059 - 3092 = 3967 (E) · 5962 - 1700 = 4262 (S)

Clue 3 (Multiplication facts (1-12)): "GLOWING JELLYFISH SCARED THE THIEF"

2 × 1 = 2 (G) · 9 × 9 = 81 (Y) · 6 × 11 = 66 (F) · 6 × 5 = 30 (L) · 10 × 11 = 110 (T) · 3 × 6 = 18 (W) · 3 × 9 = 27 (E) · 8 × 8 = 64 (I) · 3 × 12 = 36 (O) · 8 × 1 = 8 (A) · 10 × 4 = 40 (C) · 8 × 10 = 80 (R) · 9 × 11 = 99 (N) · 6 × 9 = 54 (J) · 7 × 7 = 49 (D) · 9 × 7 = 63 (H) · 11 × 7 = 77 (S)

Clue 4 (Fractions of a number): "GREEN SCALES WERE DROPPED AT THE SCENE"

2/3 of 21 = 14 (G) · 5/6 of 6 = 5 (A) · 2/10 of 50 = 10 (C) · 1/5 of 80 = 16 (H) · 1/4 of 12 = 3 (O) · 1/6 of 24 = 4 (E) · 1/2 of 44 = 22 (D) · 1/4 of 160 = 40 (W) · 2/8 of 108 = 27 (N) · 3/4 of 40 = 30 (L) · 1/6 of 138 = 23 (P) · 4/6 of 51 = 34 (R) · 2/6 of 96 = 32 (S) · 5/10 of 62 = 31 (T)

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

32 ÷ 8 = 4 · 56 ÷ 7 = 8 · 42 ÷ 7 = 6 · 84 ÷ 12 = 7 · 36 ÷ 12 = 3 · 54 ÷ 6 = 9 · 35 ÷ 7 = 5 · 8 ÷ 4 = 2 · 110 ÷ 10 = 11 · 10 ÷ 10 = 1 · 80 ÷ 8 = 10