



The Pearl of Coral Cove

Grade 2 math · Place value, Addition, Subtraction, Multiplication, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

The legendary Pearl of Tide Control has been taken from the Royal Mermaid Guardian! If the sneaky pirate who took it escapes Coral Cove, the tides will run wild forever. It is up to you to follow the clues, track the culprit, and save the ocean!

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 sneaky pirate is _____

Possible suspects

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

NAME	SIGNATURE MOVE	SPECIAL GEAR	DOMINANT HAND	HAIR COLOR	DISTRACTION
Salty Sam	sword spin	golden compass	left handed	shell white	sweet coconut
Captain Redbeard	tidal wave blast	parrot helper	right handed	coral pink	sweet coconut
Scurvy Pete	tidal wave blast	parrot helper	right handed	shell white	sweet coconut
Barnacle Bill	coral trap	parrot helper	left handed	coral pink	sweet coconut
Sharktooth Sally	fog whistle	golden compass	left handed	seaweed green	loud whistle
Captain Cutlass	coral trap	shark whistle	right handed	seaweed green	sweet coconut
Captain Bluegill	tidal wave blast	golden compass	left handed	coral pink	sweet coconut
Finny McFin	sword spin	parrot helper	right handed	seaweed green	shiny pearls
Captain Hook	coral trap	parrot helper	left handed	seaweed green	loud whistle
Mermaid Serena	fog whistle	speed swimming	left handed	shell white	loud whistle
Captain Blackbeard	coral trap	spyglass zoom	right handed	coral pink	sweet coconut
Mermaid Melody	coral trap	shark whistle	right handed	coral pink	sweet coconut
Sailor Shelly	anchor drop	shark whistle	right handed	coral pink	sweet coconut
Calico Jack	sword spin	speed swimming	right handed	seaweed green	shiny pearls
Patchy Paul	tidal wave blast	golden compass	right handed	seaweed green	sweet coconut
Coral Pearl	coral trap	golden compass	right handed	coral pink	sweet coconut
Mermaid Adella	fog whistle	parrot helper	right handed	seaweed green	loud whistle
Anne Bonny	anchor drop	speed swimming	left handed	shell white	loud whistle
Mary Read	sword spin	parrot helper	right handed	coral pink	loud whistle
Mermaid Coral	fog whistle	parrot helper	right handed	shell white	shiny pearls
Siren Marina	coral trap	spyglass zoom	right handed	seaweed green	sweet coconut

CLUE 1 Place value

The guard found a locked pirate chest. Look at the value of the digit in the tens place of the code to unlock the first clue.

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

T																T
90	65	88	85	33	69	69	81	33	63	83	73	88	56	63	73	90
35	56	88	81	56	32	94	68	69	81	56	56	50	73	73	93	

What number has 9 tens and 0 ones? → **T**

What number has 8 tens and 5 ones? → **V**

What number has 6 tens and 9 ones? → **L**

What number has 7 tens and 3 ones? → **O**

What number has 5 tens and 0 ones? → **Z**

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

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

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

What number has 9 tens and 3 ones? → **M**

What number has 8 tens and 1 one? → **A**

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

What number has 6 tens and 3 ones? → **N**

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

What number has 3 tens and 2 ones? → **P**

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

What number has 9 tens and 4 ones? → **Y**

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

Scratch space:

CLUE 2 Addition

Mermaid Melody is counting the glowing starfish washed up on the beach. Add them all together to find the second clue.

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

T								T									T					
95	52	54	66	70	86	52	95	52	77	84	32	54	32	95	52	70	54	40				

			T					T	
65	66	24	95	54	77	84	24	95	54

$67 + 28 = \square \rightarrow$ T	$26 + 28 = \square \rightarrow$ E	$15 + 9 = \square \rightarrow$ O
$16 + 36 = \square \rightarrow$ H	$54 + 32 = \square \rightarrow$ G	$54 + 23 = \square \rightarrow$ A
$22 + 43 = \square \rightarrow$ W	$25 + 15 = \square \rightarrow$ F	$28 + 42 = \square \rightarrow$ I
$13 + 19 = \square \rightarrow$ D	$37 + 47 = \square \rightarrow$ N	$46 + 20 = \square \rightarrow$ R

Scratch space:

Subtraction

A flock of seagulls swooped down and stole some of our shiny gold coins. Subtract the stolen coins to reveal the third clue.

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

Diagram illustrating a sequence of boxes and their associated values:

Row 1: $\boxed{T}$ 23 15 47 40 50 47 16 47 54 45 39 $\boxed{T}$ 23 16 55 34 $\boxed{T}$ 23 47 54 35 40

Row 2: 39 50 47 47 $\boxed{T}$ 23 34 87 34 87 71 68 $\boxed{T}$ 23

$46 - 23 = \boxed{} \rightarrow \boxed{\text{T}}$

$62 - 22 = \boxed{} \rightarrow \boxed{\text{Y}}$

$70 - 15 = \boxed{} \rightarrow \boxed{\text{A}}$

$48 - 33 = \boxed{} \rightarrow \boxed{\text{H}}$

$94 - 26 = \boxed{} \rightarrow \boxed{\text{U}}$

$43 - 8 = \boxed{} \rightarrow \boxed{\mathbf{B}}$

$$109 - 22 = \boxed{} \rightarrow \boxed{0}$$

$52 - 2 = \boxed{} \rightarrow \boxed{\text{W}}$

$$53 - 14 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$74 - 27 = \boxed{} \rightarrow \boxed{\text{E}}$$

$63 - 9 = \boxed{} \rightarrow \boxed{\text{D}}$

$$73 - 28 = \boxed{} \rightarrow \boxed{\text{I}}$$

47 - 13 = → **C**

$80 - 9 = \boxed{} \rightarrow \boxed{\text{N}}$

$$17 - 1 = \boxed{} \rightarrow \boxed{\text{R}}$$

Scratch space:

CLUE 4

Multiplication facts (1-12)

Our scouts spotted rows of coconut barrels lined up on the pirate ship deck. Multiply the rows to get the fourth clue.

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

A				A							A							
4	56	32	66	4	21	144	1	12	9	1	66	4	88	24	25	21	14	

	A				A						
7	4	25	66	35	4	56	88	72	12	32	

$1 \times 4 = \square \rightarrow \boxed{\text{A}}$

$6 \times 12 = \square \rightarrow \boxed{\text{E}}$

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

$6 \times 2 = \square \rightarrow \boxed{\text{F}}$

$7 \times 8 = \square \rightarrow \boxed{\text{S}}$

$7 \times 5 = \square \rightarrow \boxed{\text{W}}$

$12 \times 2 = \square \rightarrow \boxed{\text{P}}$

$9 \times 1 = \square \rightarrow \boxed{\text{C}}$

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

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

$2 \times 7 = \square \rightarrow \boxed{\text{K}}$

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

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

$11 \times 6 = \square \rightarrow \boxed{\text{R}}$

$11 \times 8 = \square \rightarrow \boxed{\text{L}}$

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

Scratch space:

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

The friendly sea turtles want to share their sweet kelp treats equally. Divide the treats to unlock the final clue.

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:

$30 \div 5 = \boxed{}$

$33 \div 11 = \boxed{}$

$12 \div 1 = \boxed{}$

$88 \div 8 = \boxed{}$

$6 \div 6 = \boxed{}$

$24 \div 6 = \boxed{}$

$120 \div 12 = \boxed{}$

$54 \div 6 = \boxed{}$

$42 \div 6 = \boxed{}$

$16 \div 2 = \boxed{}$

$6 \div 3 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain spins a rusty cutlass, then looks through their spyglass.
2. The villain spins a rusty cutlass, then checks their golden compass.
3. The villain blasts a tidal wave, then sends their parrot helper.
4. The villain blasts a tidal wave, then starts speed swimming away.
5. The villain throws a coral trap, then checks their golden compass.
6. The villain throws a coral trap, then blows a shark whistle.
7. The villain blasts a tidal wave, then blows a shark whistle.
8. The villain throws a coral trap, then looks through their spyglass.
9. The villain blows a spooky fog whistle, then starts speed swimming away.
10. The villain blows a spooky fog whistle, then checks their golden compass.
11. The villain throws a coral trap, then starts speed swimming away.
12. The villain drops a heavy anchor, then blows a shark whistle.

Answer Key

The Pearl of Coral Cove

Culprit: Coral Pearl

coral trap · golden compass · right handed · coral pink · sweet coconut

Trail: Start 21 → Clue 1 19 → Clue 2 12 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT USE A SPYGLASS ZOOM"

What number has 9 tens and 0 ones? = 90 (T) · What number has 8 tens and 5 ones? = 85 (V) · What number has 6 tens and 9 ones? = 69 (L) · What number has 7 tens and 3 ones? = 73 (O) · What number has 5 tens and 0 ones? = 50 (Z) · What number has 3 tens and 3 ones? = 33 (I) · What number has 8 tens and 8 ones? = 88 (E) · What number has 8 tens and 3 ones? = 83 (D) · What number has 9 tens and 3 ones? = 93 (M) · What number has 8 tens and 1 one? = 81 (A) · What number has 5 tens and 6 ones? = 56 (S) · What number has 6 tens and 3 ones? = 63 (N) · What number has 6 tens and 8 ones? = 68 (G) · What number has 3 tens and 2 ones? = 32 (P) · What number has 3 tens and 5 ones? = 35 (U) · What number has 9 tens and 4 ones? = 94 (Y) · What number has 6 tens and 5 ones? = 65 (H)

Clue 2 (Addition): "THE RIGHT HANDED THIEF WROTE A NOTE"

$67 + 28 = 95$ (T) · $26 + 28 = 54$ (E) · $15 + 9 = 24$ (O) · $16 + 36 = 52$ (H) · $54 + 32 = 86$ (G) · $54 + 23 = 77$ (A) · $22 + 43 = 65$ (W) · $25 + 15 = 40$ (F) · $28 + 42 = 70$ (I) · $13 + 19 = 32$ (D) · $37 + 47 = 84$ (N) · $46 + 20 = 66$ (R)

Clue 3 (Subtraction): "THEY WERE DISTRACTED BY SWEET COCONUT"

$46 - 23 = 23$ (T) · $62 - 22 = 40$ (Y) · $70 - 15 = 55$ (A) · $48 - 33 = 15$ (H) · $94 - 26 = 68$ (U) · $43 - 8 = 35$ (B) · $109 - 22 = 87$ (O) · $52 - 2 = 50$ (W) · $53 - 14 = 39$ (S) · $74 - 27 = 47$ (E) · $63 - 9 = 54$ (D) · $73 - 28 = 45$ (I) · $47 - 13 = 34$ (C) · $80 - 9 = 71$ (N) · $17 - 1 = 16$ (R)

Clue 4 (Multiplication facts (1-12)): "A STRAND OF CORAL PINK HAIR WAS LEFT"

$1 \times 4 = 4$ (A) · $6 \times 12 = 72$ (E) · $1 \times 7 = 7$ (H) · $6 \times 2 = 12$ (F) · $7 \times 8 = 56$ (S) · $7 \times 5 = 35$ (W) · $12 \times 2 = 24$ (P) · $9 \times 1 = 9$ (C) · $1 \times 1 = 1$ (O) · $4 \times 8 = 32$ (T) · $2 \times 7 = 14$ (K) · $3 \times 7 = 21$ (N) · $5 \times 5 = 25$ (I) · $11 \times 6 = 66$ (R) · $11 \times 8 = 88$ (L) · $12 \times 12 = 144$ (D)

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

$30 \div 5 = 6$ · $33 \div 11 = 3$ · $12 \div 1 = 12$ · $88 \div 8 = 11$ · $6 \div 6 = 1$ · $24 \div 6 = 4$ · $120 \div 12 = 10$ · $54 \div 6 = 9$ · $42 \div 6 = 7$ · $16 \div 2 = 8$ · $6 \div 3 = 2$