



The Mystery of the Coral Cove Pearl

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

Detective: _____ Date: _____

The shiny Star Pearl is missing from Coral Cove! A sneaky sea-thief took it. We must find the thief and save the reef!

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	REEF SKILL	WAVING STYLE	HAIR ACCESSORY	FEAR
Jewel	makes giant bubbles	grows kelp shields	uses right hand to wave	pink sea-shell crown	scared of tickly seaweed
Nixie	makes giant bubbles	finds shiny coins	uses left hand to wave	pink sea-shell crown	scared of tickly seaweed
Splash	swims super fast	sings sleepy tunes	uses right hand to wave	blue kelp ribbon	scared of noisy gulls
Tide	glows in the dark	spins sand whirlpools	uses left hand to wave	pink sea-shell crown	scared of bright flashlights
Stormy	swims super fast	grows kelp shields	uses right hand to wave	pink sea-shell crown	scared of tickly seaweed
Blue	glows in the dark	sings sleepy tunes	uses right hand to wave	blue kelp ribbon	scared of noisy gulls
Sunny	glows in the dark	spins sand whirlpools	uses right hand to wave	blue kelp ribbon	scared of noisy gulls
Opal	freezes water	finds shiny coins	uses left hand to wave	pink sea-shell crown	scared of bright flashlights
Wave	freezes water	spins sand whirlpools	uses left hand to wave	yellow starfish clip	scared of tickly seaweed
Bubbles	glows in the dark	finds shiny coins	uses left hand to wave	blue kelp ribbon	scared of noisy gulls
Ocean	talks to whales	summons baby crabs	uses left hand to wave	pink sea-shell crown	scared of tickly seaweed
Marina	makes giant bubbles	sings sleepy tunes	uses left hand to wave	pink sea-shell crown	scared of noisy gulls
Misty	freezes water	finds shiny coins	uses right hand to wave	pink sea-shell crown	scared of bright flashlights
Pearl	makes giant bubbles	grows kelp shields	uses left hand to wave	yellow starfish clip	scared of tickly seaweed
Finn	swims super fast	finds shiny coins	uses left hand to wave	pink sea-shell crown	scared of tickly seaweed
Star	swims super fast	summons baby crabs	uses left hand to wave	pink sea-shell crown	scared of tickly seaweed
Sandy	glows in the dark	sings sleepy tunes	uses right hand to wave	pink sea-shell crown	scared of tickly seaweed
Shimmer	swims super fast	finds shiny coins	uses right hand to wave	yellow starfish clip	scared of tickly seaweed
River	freezes water	summons baby crabs	uses left hand to wave	blue kelp ribbon	scared of noisy gulls
Shelly	swims super fast	grows kelp shields	uses left hand to wave	yellow starfish clip	scared of bright flashlights
Aqua	glows in the dark	sings sleepy tunes	uses left hand to wave	pink sea-shell crown	scared of tickly seaweed

CLUE 1
Place value

We need to count the stolen pearls. Let us solve these quick stories to find our first big clue.

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

T			T											T				
66	67	36	66	67	19	36	56	64	51	36	33	35	51	66	33	19	35	82

						T				
33	61	36	36	73	45	66	38	35	36	33

What number has 6 tens and 6 ones? → **T**

What number has 8 tens and 2 ones? → **G**

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

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

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

What number has 6 tens and 4 ones? → **D**

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

What number has 1 ten and 9 ones? → **I**

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

What number has 4 tens and 5 ones? → **Y**

What number has 6 tens and 1 one? → **L**

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

What number has 5 tens and 1 one? → **O**

What number has 6 tens and 7 ones? → **H**

Scratch space:

CLUE 2

Word problems

The thief left a code on a treasure chest. Count the tens and ones blocks to unlock it.

Solve each problem, then write its letter in the boxes to fill in the missing word.

A witness saw the villain was

U									A	N	D		O	W	A	V	
28	21	38	21	20	38	40	6	10				6					38

There were 37 kelp cookies. 9 were used up. How many kelp cookies are left?

Answer: → **U**

There were 25 starfish toys. 5 were used up. How many starfish toys are left?

Answer: → **L**

There were 19 shiny pearls. 9 were used up. How many shiny pearls are left?

Answer: → **H**

The royal dolphin found 2 starfish toys yesterday and 4 more today. How many starfish toys in all?

Answer: → **T**

The royal dolphin lined up 4 rows of 10 blue bubbles. How many blue bubbles in all?

Answer: → **F**

There were 46 pink seashells. 8 were used up. How many pink seashells are left?

Answer: → **E**

The royal dolphin found 2 starfish toys yesterday and 19 more today. How many starfish toys in all?

Answer: → **S**

Scratch space:

CLUE 3 Addition

Let us add all these shiny shells together. The total sum will give us another clue.

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

T			T														
53	48	30	53	48	67	30	66	91	48	81	49	86	77	66	81	55	44

T												
53	67	43	77	40	51	91	30	49	27	30	30	98

$20 + 33 = \square \rightarrow$ T	$32 + 49 = \square \rightarrow$ R	$9 + 18 = \square \rightarrow$ W
$22 + 33 = \square \rightarrow$ O	$20 + 10 = \square \rightarrow$ E	$33 + 44 = \square \rightarrow$ K
$57 + 29 = \square \rightarrow$ N	$23 + 17 = \square \rightarrow$ L	$41 + 25 = \square \rightarrow$ F
$23 + 21 = \square \rightarrow$ M	$52 + 39 = \square \rightarrow$ S	$19 + 30 = \square \rightarrow$ A
$40 + 58 = \square \rightarrow$ D	$15 + 28 = \square \rightarrow$ C	$32 + 16 = \square \rightarrow$ H
$16 + 35 = \square \rightarrow$ Y	$43 + 24 = \square \rightarrow$ I	

Scratch space:

CLUE 4

Subtraction

The thief dropped some sea-glass. If we take away the broken pieces, we can read the next clue.

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

W												
76	69	45	36	47	30	34	73	14	12	30	55	

											W	
82	69	73	82	52	69	16	16	67	37	36	76	30

$101 - 25 = \square \rightarrow \boxed{W}$

$35 - 5 = \square \rightarrow \boxed{N}$

$68 - 34 = \square \rightarrow \boxed{D}$

$57 - 21 = \square \rightarrow \boxed{O}$

$43 - 31 = \square \rightarrow \boxed{I}$

$85 - 12 = \square \rightarrow \boxed{A}$

$19 - 5 = \square \rightarrow \boxed{P}$

$35 - 19 = \square \rightarrow \boxed{L}$

$98 - 31 = \square \rightarrow \boxed{C}$

$113 - 31 = \square \rightarrow \boxed{S}$

$50 - 5 = \square \rightarrow \boxed{F}$

$100 - 31 = \square \rightarrow \boxed{E}$

$65 - 10 = \square \rightarrow \boxed{K}$

$86 - 34 = \square \rightarrow \boxed{H}$

$49 - 12 = \square \rightarrow \boxed{R}$

$69 - 22 = \square \rightarrow \boxed{U}$

Scratch space:

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

We have some empty clam shells. Fill in the missing numbers to open them and find the last 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:

$4 + \underline{\quad} = 10$

$1 + \underline{\quad} = 3$

$9 + \underline{\quad} = 17$

$10 + \underline{\quad} = 21$

$1 + \underline{\quad} = 13$

$7 + \underline{\quad} = 12$

$5 + \underline{\quad} = 8$

$1 + \underline{\quad} = 5$

$10 + \underline{\quad} = 17$

$2 + \underline{\quad} = 3$

$9 + \underline{\quad} = 18$

Step 2 - cross out the sentence with each answer:

1. The villain dives into the deep reef, then hides behind the pink coral.
2. The villain giggles behind a rock, then tosses sand into the air.
3. The villain splashes the shiny water, then hides behind the pink coral.
4. The villain giggles behind a rock, then snatches the shiny star pearl.
5. The villain swishes their glittery tail, then rides a big sea turtle.
6. The villain swishes their glittery tail, then tosses sand into the air.
7. The villain giggles behind a rock, then rides a big sea turtle.
8. The villain splashes the shiny water, then snatches the shiny star pearl.
9. The villain dives into the deep reef, then zips away into a dark cave.
10. The villain swishes their glittery tail, then snatches the shiny star pearl.
11. The villain dives into the deep reef, then tosses sand into the air.
12. The villain surprises a friendly fish, then hides behind the pink coral.

Answer Key

The Mystery of the Coral Cove Pearl

Culprit: Finn

swims super fast · finds shiny coins · uses left hand to wave · pink sea-shell crown · scared of tickly seaweed

Trail: Start 21 → Clue 1 16 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE THIEF DOES NOT SING SLEEPY TUNES"

What number has 6 tens and 6 ones? = 66 (T) · What number has 8 tens and 2 ones? = 82 (G) · What number has 3 tens and 3 ones? = 33 (S) · What number has 7 tens and 3 ones? = 73 (P) · What number has 5 tens and 6 ones? = 56 (F) · What number has 6 tens and 4 ones? = 64 (D) · What number has 3 tens and 6 ones? = 36 (E) · What number has 1 ten and 9 ones? = 19 (I) · What number has 3 tens and 8 ones? = 38 (U) · What number has 4 tens and 5 ones? = 45 (Y) · What number has 6 tens and 1 one? = 61 (L) · What number has 3 tens and 5 ones? = 35 (N) · What number has 5 tens and 1 one? = 51 (O) · What number has 6 tens and 7 ones? = 67 (H)

Clue 2 (Word problems): "USES LEFT HAND TO WAVE"

There were 37 kelp cookies. 9 were used up. How many kelp cookies are left? = 28 (U) · There were 25 starfish toys. 5 were used up. How many starfish toys are left? = 20 (L) · There were 19 shiny pearls. 9 were used up. How many shiny pearls are left? = 10 (H) · The royal dolphin found 2 starfish toys yesterday and 4 more today. How many starfish toys in all? = 6 (T) · The royal dolphin lined up 4 rows of 10 blue bubbles. How many blue bubbles in all? = 40 (F) · There were 46 pink seashells. 8 were used up. How many pink seashells are left? = 38 (E) · The royal dolphin found 2 starfish toys yesterday and 19 more today. How many starfish toys in all? = 21 (S)

Clue 3 (Addition): "THE THIEF SHRANK FROM TICKLY SEAWEED"

$20 + 33 = 53$ (T) · $32 + 49 = 81$ (R) · $9 + 18 = 27$ (W) · $22 + 33 = 55$ (O) · $20 + 10 = 30$ (E) · $33 + 44 = 77$ (K) · $57 + 29 = 86$ (N) · $23 + 17 = 40$ (L) · $41 + 25 = 66$ (F) · $23 + 21 = 44$ (M) · $52 + 39 = 91$ (S) · $19 + 30 = 49$ (A) · $40 + 58 = 98$ (D) · $15 + 28 = 43$ (C) · $32 + 16 = 48$ (H) · $16 + 35 = 51$ (Y) · $43 + 24 = 67$ (I)

Clue 4 (Subtraction): "WE FOUND A PINK SEASHELL CROWN"

$101 - 25 = 76$ (W) · $35 - 5 = 30$ (N) · $68 - 34 = 34$ (D) · $57 - 21 = 36$ (O) · $43 - 31 = 12$ (I) · $85 - 12 = 73$ (A) · $19 - 5 = 14$ (P) · $35 - 19 = 16$ (L) · $98 - 31 = 67$ (C) · $113 - 31 = 82$ (S) · $50 - 5 = 45$ (F) · $100 - 31 = 69$ (E) · $65 - 10 = 55$ (K) · $86 - 34 = 52$ (H) · $49 - 12 = 37$ (R) · $69 - 22 = 47$ (U)

Clue 5 (Missing addends): surviving statement is box 10 → Finn

$4 + \underline{\quad} = 10 = 6$ · $1 + \underline{\quad} = 3 = 2$ · $9 + \underline{\quad} = 17 = 8$ · $10 + \underline{\quad} = 21 = 11$ · $1 + \underline{\quad} = 13 = 12$ · $7 + \underline{\quad} = 12 = 5$ · $5 + \underline{\quad} = 8 = 3$ · $1 + \underline{\quad} = 5 = 4$ · $10 + \underline{\quad} = 17 = 7$ · $2 + \underline{\quad} = 3 = 1$ · $9 + \underline{\quad} = 18 = 9$