

The Mystery of the Coral Crown

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

Detective: _____ Date: _____

Someone took the shiny Coral Crown from the Pearl Keeper! The deep blue sea needs your help. We must find the tide thief before the big ocean party tonight.

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 tide thief is _____

Possible suspects

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

NAME	SWIM MAGIC	SEA COMPANION	SWIM STYLE	SHELL CROWN	AURA WEAKNESS
Marina	Wave speed	Octopus scout	Left-handed swimmer	Pink kelp bows	Bright warm sand
Ariel	Tide jump	Seahorse pal	Right-handed swimmer	Starfish clips	Bright warm sand
River	Wave speed	Dolphin guide	Right-handed swimmer	Pink kelp bows	Noisy clam snaps
Melody	Whirlpool spin	Crab helper	Left-handed swimmer	Pink kelp bows	Tickly sea grass
Cleo	Whirlpool spin	Crab helper	Right-handed swimmer	Starfish clips	Noisy clam snaps
Gemma	Wave speed	Turtle friend	Right-handed swimmer	Starfish clips	Tickly sea grass
Brooke	Current glide	Dolphin guide	Right-handed swimmer	Starfish clips	Bright warm sand
Aqua	Bubble shield	Crab helper	Right-handed swimmer	Pink kelp bows	Noisy clam snaps
Opal	Current glide	Crab helper	Right-handed swimmer	Starfish clips	Bright warm sand
Blue	Wave speed	Crab helper	Right-handed swimmer	Starfish clips	Noisy clam snaps
Nerida	Whirlpool spin	Dolphin guide	Left-handed swimmer	Starfish clips	Noisy clam snaps
Shelly	Whirlpool spin	Octopus scout	Left-handed swimmer	Purple sea lace	Noisy clam snaps
Star	Whirlpool spin	Octopus scout	Right-handed swimmer	Starfish clips	Noisy clam snaps
Delta	Tide jump	Crab helper	Right-handed swimmer	Starfish clips	Tickly sea grass
Wave	Current glide	Turtle friend	Left-handed swimmer	Starfish clips	Tickly sea grass
Lana	Bubble shield	Dolphin guide	Left-handed swimmer	Starfish clips	Tickly sea grass
Coral	Bubble shield	Seahorse pal	Right-handed swimmer	Starfish clips	Tickly sea grass
Misty	Current glide	Turtle friend	Right-handed swimmer	Starfish clips	Noisy clam snaps
Talia	Tide jump	Turtle friend	Right-handed swimmer	Pink kelp bows	Tickly sea grass
Pearl	Whirlpool spin	Octopus scout	Right-handed swimmer	Pink kelp bows	Bright warm sand
Sunny	Current glide	Crab helper	Right-handed swimmer	Starfish clips	Noisy clam snaps

CLUE 1 Addition

We found a pile of shiny pearls dropped on the sea floor. Let us add them all up to see how many the thief dropped.

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

T			T											T				
87	50	91	87	50	34	91	67	84	63	91	21	75	63	87	50	52	59	91
				T										T				
52	75	63	48	87	63	24	40	21	21	48	63	40	87					

$55 + 32 = \square \rightarrow$ T	$28 + 12 = \square \rightarrow$ U	$27 + 48 = \square \rightarrow$ N
$22 + 12 = \square \rightarrow$ I	$28 + 31 = \square \rightarrow$ V	$50 + 34 = \square \rightarrow$ D
$33 + 58 = \square \rightarrow$ E	$24 + 24 = \square \rightarrow$ C	$7 + 14 = \square \rightarrow$ S
$13 + 11 = \square \rightarrow$ P	$35 + 17 = \square \rightarrow$ A	$25 + 42 = \square \rightarrow$ F
$20 + 30 = \square \rightarrow$ H	$30 + 33 = \square \rightarrow$ O	

Scratch space:

CLUE 2 Subtraction

The thief fed some fish from a basket to make them stay still. Subtract the fish that are left to see how many were eaten.

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

T			T															
77	45	43	77	45	87	43	40	71	86	87	32	71	32	53	87	55	66	26

		T		T							T				
86	87	77	45	77	45	43	88	87	11	45	77	45	53	55	21

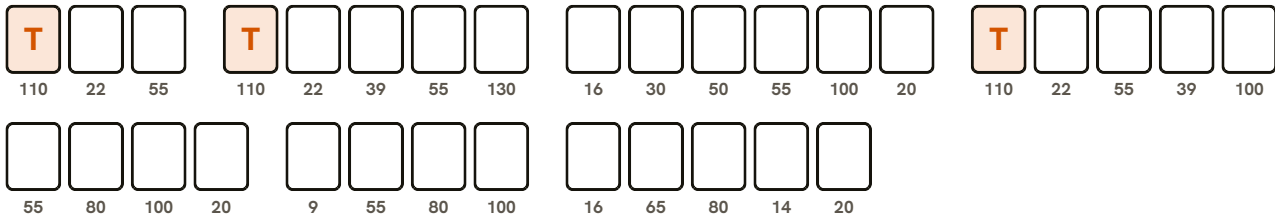
$84 - 7 = \square \rightarrow \text{T}$	$61 - 21 = \square \rightarrow \text{F}$	$65 - 33 = \square \rightarrow \text{M}$
$22 - 11 = \square \rightarrow \text{G}$	$82 - 39 = \square \rightarrow \text{E}$	$83 - 12 = \square \rightarrow \text{S}$
$94 - 6 = \square \rightarrow \text{R}$	$29 - 8 = \square \rightarrow \text{D}$	$85 - 19 = \square \rightarrow \text{L}$
$65 - 20 = \square \rightarrow \text{H}$	$87 - 1 = \square \rightarrow \text{W}$	$86 - 33 = \square \rightarrow \text{A}$
$65 - 39 = \square \rightarrow \text{Y}$	$95 - 8 = \square \rightarrow \text{I}$	$62 - 7 = \square \rightarrow \text{N}$

Scratch space:

CLUE 3 Skip counting

Look at these starfish tracks in the sand. They form groups of five. Let us skip count the legs to find the path.

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



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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 → **F**

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 → **M**

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

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 → **I**

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

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

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

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

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65



E

Scratch space:

CLUE 4 Place value

A secret box has a lock with tens and ones. Count the big clams and little shells to find the code.

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

A			A														
73	47	29	73	82	44	18	47	40	25	46	18	86	83	73	47		
43	82	92	86	86	99	43	18	74	29	40	99	52	31	43			

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

What number has 5 tens and 2 ones? → **M**

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

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

What number has 1 ten and 8 ones? → **I**

What number has 9 tens and 9 ones? → **E**

What number has 3 tens and 1 one? → **U**

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

What number has 2 tens and 5 ones? → **C**

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

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

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

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

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

What number has 4 tens and 0 ones? → **H**

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

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

Scratch space:

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

The thief needs ten glowing jellyfish to light the dark cave. They only have six. Find how many more they must catch.

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:

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

$6 + \underline{\quad} = 17$

$2 + \underline{\quad} = 14$

$9 + \underline{\quad} = 15$

$10 + \underline{\quad} = 20$

$6 + \underline{\quad} = 11$

$6 + \underline{\quad} = 7$

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

$4 + \underline{\quad} = 8$

$10 + \underline{\quad} = 12$

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

Step 2 - cross out the sentence with each answer:

1. The villain creates a whirlpool spin, then whistles for a seahorse pal.
2. The villain rides the fast wave speed, then signals an octopus scout.
3. The villain rides the fast wave speed, then asks a crab helper to dig a hole.
4. The villain slides on the current glide, then signals an octopus scout.
5. The villain swims through the bubble shield, then rides a turtle friend away.
6. The villain performs a high tide jump, then calls a dolphin guide to escape.
7. The villain slides on the current glide, then rides a turtle friend away.
8. The villain slides on the current glide, then whistles for a seahorse pal.
9. The villain swims through the bubble shield, then calls a dolphin guide to escape.
10. The villain creates a whirlpool spin, then calls a dolphin guide to escape.
11. The villain slides on the current glide, then asks a crab helper to dig a hole.
12. The villain creates a whirlpool spin, then asks a crab helper to dig a hole.

Answer Key

The Mystery of the Coral Crown

Culprit: Blue

Wave speed · Crab helper · Right-handed swimmer · Starfish clips · Noisy clam snaps

Trail: Start 21 → Clue 1 17 → Clue 2 13 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE THIEF DOES NOT HAVE AN OCTOPUS SCOUT"

$55 + 32 = 87$ (T) · $28 + 12 = 40$ (U) · $27 + 48 = 75$ (N) · $22 + 12 = 34$ (I) · $28 + 31 = 59$ (V) · $50 + 34 = 84$ (D) · $33 + 58 = 91$ (E) · $24 + 24 = 48$ (C) · $7 + 14 = 21$ (S) · $13 + 11 = 24$ (P) · $35 + 17 = 52$ (A) · $25 + 42 = 67$ (F) · $20 + 30 = 50$ (H) · $30 + 33 = 63$ (O)

Clue 2 (Subtraction): "THE THIEF SWIMS MAINLY WITH THE RIGHT HAND"

$84 - 7 = 77$ (T) · $61 - 21 = 40$ (F) · $65 - 33 = 32$ (M) · $22 - 11 = 11$ (G) · $82 - 39 = 43$ (E) · $83 - 12 = 71$ (S) · $94 - 6 = 88$ (R) · $29 - 8 = 21$ (D) · $85 - 19 = 66$ (L) · $65 - 20 = 45$ (H) · $87 - 1 = 86$ (W) · $86 - 33 = 53$ (A) · $65 - 39 = 26$ (Y) · $95 - 8 = 87$ (I) · $62 - 7 = 55$ (N)

Clue 3 (Skip counting): "THE THIEF COVERS THEIR EARS NEAR CLAMS"

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 = 130 (F) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (R) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 = 14 (M) · Skip-count by 10s. Fill the blank: 10, 20, __, 40, 50 = 30 (O) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 = 22 (H) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (I) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, __, 55, 60 = 50 (V) · Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 = 9 (N) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 = 16 (C) · Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 = 20 (S) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (A) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 = 65 (L) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 = 55 (E)

Clue 4 (Place value): "A STARFISH CLIP WAS DROPPED IN THE MUD"

What number has 7 tens and 3 ones? = 73 (A) · What number has 5 tens and 2 ones? = 52 (M) · What number has 7 tens and 4 ones? = 74 (N) · What number has 4 tens and 4 ones? = 44 (F) · What number has 1 ten and 8 ones? = 18 (I) · What number has 9 tens and 9 ones? = 99 (E) · What number has 3 tens and 1 one? = 31 (U) · What number has 4 tens and 3 ones? = 43 (D) · What number has 2 tens and 5 ones? = 25 (C) · What number has 8 tens and 6 ones? = 86 (P) · What number has 4 tens and 7 ones? = 47 (S) · What number has 4 tens and 6 ones? = 46 (L) · What number has 2 tens and 9 ones? = 29 (T) · What number has 8 tens and 2 ones? = 82 (R) · What number has 4 tens and 0 ones? = 40 (H) · What number has 8 tens and 3 ones? = 83 (W) · What number has 9 tens and 2 ones? = 92 (O)

Clue 5 (Missing addends): surviving statement is box 3 → Blue

$9 + \underline{\quad} = 16 = 7$ · $6 + \underline{\quad} = 17 = 11$ · $2 + \underline{\quad} = 14 = 12$ · $9 + \underline{\quad} = 15 = 6$ · $10 + \underline{\quad} = 20 = 10$ · $6 + \underline{\quad} = 11 = 5$ · $6 + \underline{\quad} = 7 = 1$ · $9 + \underline{\quad} = 18 = 9$ · $4 + \underline{\quad} = 8 = 4$ · $10 + \underline{\quad} = 12 = 2$ · $9 + \underline{\quad} = 17 = 8$