



The Case of the Missing Glitter Pearl

Grade 3 math · Addition, Subtraction, Multiplication, Word problems, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

A sneaky sea thief has stolen the legendary Glitter Pearl from Coral Cove! The Royal Pearl Keeper needs your help to search the reef and track down the culprit before the coral loses its magical glow.

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 SPELL	DEEP-SEA GEAR	CLAM WATCH WRIST	OCEAN HAIR COLOR	OCEAN DISTRACTION
Attina	tidal wave blast	sea glass lens	right wrist watch	coral pink	tickly starfish
Talia	fast current glide	pearl crown	right wrist watch	ocean blue	noisy hermit crab
Nerida	whirlpool swirl	sea glass lens	left wrist watch	ocean blue	tickly starfish
Adella	jellyfish sting	coral wand	left wrist watch	ocean blue	bright lanternfish
Pearl	jellyfish sting	coral wand	left wrist watch	coral pink	tickly starfish
Coral	whirlpool swirl	coral wand	left wrist watch	seaweed green	tickly starfish
Melody	bubble shield	coral wand	left wrist watch	coral pink	tickly starfish
Ariel	jellyfish sting	kelp lasso	left wrist watch	coral pink	tickly starfish
Sirena	jellyfish sting	shell shield	left wrist watch	coral pink	tickly starfish
Triton	fast current glide	coral wand	right wrist watch	ocean blue	noisy hermit crab
Marina	whirlpool swirl	kelp lasso	left wrist watch	seaweed green	bright lanternfish
Poseidon	bubble shield	kelp lasso	left wrist watch	coral pink	bright lanternfish
Caspian	tidal wave blast	kelp lasso	right wrist watch	seaweed green	noisy hermit crab
Alana	bubble shield	kelp lasso	left wrist watch	ocean blue	bright lanternfish
Shelly	jellyfish sting	pearl crown	right wrist watch	ocean blue	tickly starfish
Muriel	fast current glide	sea glass lens	right wrist watch	coral pink	tickly starfish
Coralia	jellyfish sting	coral wand	left wrist watch	seaweed green	tickly starfish
Sandy	whirlpool swirl	coral wand	left wrist watch	coral pink	tickly starfish
Delphine	whirlpool swirl	pearl crown	left wrist watch	coral pink	noisy hermit crab
Andrina	fast current glide	shell shield	left wrist watch	seaweed green	bright lanternfish
Arista	fast current glide	kelp lasso	left wrist watch	seaweed green	noisy hermit crab

CLUE 1 Addition

We need to count all the yellow shells on the reef. Let us add the shell piles together to open this clamshell!

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

T			T															
847	658	741	847	658	610	741	416	902	339	741	297	471	339	847	805	297	741	518
560	741	313	757	313	518	297	297	339										

$538 + 309 = \square \rightarrow \text{T}$	$384 + 373 = \square \rightarrow \text{P}$	$263 + 395 = \square \rightarrow \text{H}$
$280 + 330 = \square \rightarrow \text{I}$	$148 + 268 = \square \rightarrow \text{F}$	$101 + 196 = \square \rightarrow \text{S}$
$308 + 497 = \square \rightarrow \text{U}$	$175 + 164 = \square \rightarrow \text{O}$	$284 + 234 = \square \rightarrow \text{A}$
$402 + 500 = \square \rightarrow \text{D}$	$107 + 206 = \square \rightarrow \text{L}$	$261 + 210 = \square \rightarrow \text{N}$
$298 + 262 = \square \rightarrow \text{K}$	$434 + 307 = \square \rightarrow \text{E}$	

Scratch space:

CLUE 2

Subtraction

A school of clownfish lost some friends in the seaweed. Subtract the missing fish to crack the sea chest lock.

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

A		A					A										
223	383	223	168	519	663	383	223	245	245	671	792	168	168	431	797	792	471

168	663	431	202	431	489	168	383	576	898	245	168

$413 - 190 = \square \rightarrow \boxed{\text{A}}$

$592 - 347 = \square \rightarrow \boxed{\text{S}}$

$800 - 224 = \square \rightarrow \boxed{\text{R}}$

$901 - 238 = \square \rightarrow \boxed{\text{H}}$

$697 - 314 = \square \rightarrow \boxed{\text{W}}$

$418 - 250 = \square \rightarrow \boxed{\text{T}}$

$640 - 121 = \square \rightarrow \boxed{\text{C}}$

$857 - 60 = \square \rightarrow \boxed{\text{D}}$

$831 - 360 = \square \rightarrow \boxed{\text{N}}$

$748 - 77 = \square \rightarrow \boxed{\text{P}}$

$1019 - 227 = \square \rightarrow \boxed{\text{O}}$

$1070 - 172 = \square \rightarrow \boxed{\text{I}}$

$517 - 28 = \square \rightarrow \boxed{\text{F}}$

$633 - 202 = \square \rightarrow \boxed{\text{E}}$

$297 - 95 = \square \rightarrow \boxed{\text{L}}$

Scratch space:

CLUE 3
Multiplication facts (1-12)

The royal gardens have equal rows of sea anemones. Multiply the rows to find the secret path number!

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

A									A								A			
72	120	60	49	84	77	12	42	120	72	9	90	60	42	40	64	72	84	110	42	
120	40	110	120	40	60	110	90	11	60	11	11	77	110							

$8 \times 9 = \square \rightarrow \text{A}$

$9 \times 1 = \square \rightarrow \text{R}$

$10 \times 4 = \square \rightarrow \text{H}$

$10 \times 9 = \square \rightarrow \text{F}$

$2 \times 6 = \square \rightarrow \text{Y}$

$7 \times 7 = \square \rightarrow \text{C}$

$11 \times 10 = \square \rightarrow \text{E}$

$6 \times 7 = \square \rightarrow \text{S}$

$8 \times 8 = \square \rightarrow \text{M}$

$12 \times 7 = \square \rightarrow \text{K}$

$12 \times 10 = \square \rightarrow \text{T}$

$12 \times 5 = \square \rightarrow \text{I}$

$1 \times 11 = \square \rightarrow \text{G}$

$11 \times 7 = \square \rightarrow \text{L}$

Scratch space:

CLUE 4

Word problems

The sea turtles have a word puzzle for us. Solve their tricky riddle about swimming distances to get the next clue.

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

A strand of

C							
66	31	49	22	58	42	20	

N	K
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 hair turned up at the scene.

Sandy the Seahorse lined up 6 rows of 11 starfish. How many starfish in all?

Answer: →

C

Sandy the Seahorse found 10 bubble blower yesterday and 48 more today. How many bubble blower in all?

Answer: →

L

There were 89 sea shell. 40 were used up. How many sea shell are left?

Answer: →

R

Sandy the Seahorse found 9 starfish yesterday and 22 more today. How many starfish in all?

Answer: →

O

Sandy the Seahorse lined up 2 rows of 11 kelp leaf. How many kelp leaf in all?

Answer: →

A

Sandy the Seahorse found 4 kelp leaf yesterday and 38 more today. How many kelp leaf in all?

Answer: →

P

Sandy the Seahorse found 6 sea shell yesterday and 14 more today. How many sea shell in all?

Answer: →

I

Scratch space:

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

Six hungry sea stars want to share the sparkly treats equally. Divide the treats to get 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:

$6 \div 2 = \boxed{}$

$77 \div 7 = \boxed{}$

$22 \div 11 = \boxed{}$

$8 \div 2 = \boxed{}$

$10 \div 10 = \boxed{}$

$90 \div 9 = \boxed{}$

$20 \div 4 = \boxed{}$

$80 \div 10 = \boxed{}$

$63 \div 7 = \boxed{}$

$24 \div 2 = \boxed{}$

$42 \div 7 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain activates a protective bubble shield, then polishes a stolen pearl crown.
2. The villain fires a zapping jellyfish sting, then blocks the path with a shell shield.
3. The villain activates a protective bubble shield, then waves a glowing coral wand.
4. The villain rides a fast current glide, then looks through a sea glass lens.
5. The villain fires a zapping jellyfish sting, then polishes a stolen pearl crown.
6. The villain creates a massive tidal wave blast, then blocks the path with a shell shield.
7. The villain summons a wild whirlpool swirl, then waves a glowing coral wand.
8. The villain summons a wild whirlpool swirl, then blocks the path with a shell shield.
9. The villain activates a protective bubble shield, then looks through a sea glass lens.
10. The villain rides a fast current glide, then swings a long kelp lasso.
11. The villain fires a zapping jellyfish sting, then waves a glowing coral wand.
12. The villain creates a massive tidal wave blast, then looks through a sea glass lens.

Answer Key

The Case of the Missing Glitter Pearl

Culprit: Sandy

whirlpool swirl · coral wand · left wrist watch · coral pink · tickly starfish

Trail: Start 21 → Clue 1 15 → Clue 2 10 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE THIEF DOES NOT USE A KELP LASSO"

$538 + 309 = 847$ (T) · $384 + 373 = 757$ (P) · $263 + 395 = 658$ (H) · $280 + 330 = 610$ (I) · $148 + 268 = 416$ (F) · $101 + 196 = 297$ (S) · $308 + 497 = 805$ (U) · $175 + 164 = 339$ (O) · $284 + 234 = 518$ (A) · $402 + 500 = 902$ (D) · $107 + 206 = 313$ (L) · $261 + 210 = 471$ (N) · $298 + 262 = 560$ (K) · $434 + 307 = 741$ (E)

Clue 2 (Subtraction): "A WATCH WAS SPOTTED ON THE LEFT WRIST"

$413 - 190 = 223$ (A) · $592 - 347 = 245$ (S) · $800 - 224 = 576$ (R) · $901 - 238 = 663$ (H) · $697 - 314 = 383$ (W) · $418 - 250 = 168$ (T) · $640 - 121 = 519$ (C) · $857 - 60 = 797$ (D) · $831 - 360 = 471$ (N) · $748 - 77 = 671$ (P) · $1019 - 227 = 792$ (O) · $1070 - 172 = 898$ (I) · $517 - 28 = 489$ (F) · $633 - 202 = 431$ (E) · $297 - 95 = 202$ (L)

Clue 3 (Multiplication facts (1-12)): "A TICKLY STARFISH MAKES THE THIEF GIGGLE"

$8 \times 9 = 72$ (A) · $9 \times 1 = 9$ (R) · $10 \times 4 = 40$ (H) · $10 \times 9 = 90$ (F) · $2 \times 6 = 12$ (Y) · $7 \times 7 = 49$ (C) · $11 \times 10 = 110$ (E) · $6 \times 7 = 42$ (S) · $8 \times 8 = 64$ (M) · $12 \times 7 = 84$ (K) · $12 \times 10 = 120$ (T) · $12 \times 5 = 60$ (I) · $1 \times 11 = 11$ (G) · $11 \times 7 = 77$ (L)

Clue 4 (Word problems): "CORAL PINK"

Sandy the Seahorse lined up 6 rows of 11 starfish. How many starfish in all? = 66 (C) · Sandy the Seahorse found 10 bubble blower yesterday and 48 more today. How many bubble blower in all? = 58 (L) · There were 89 sea shell. 40 were used up. How many sea shell are left? = 49 (R) · Sandy the Seahorse found 9 starfish yesterday and 22 more today. How many starfish in all? = 31 (O) · Sandy the Seahorse lined up 2 rows of 11 kelp leaf. How many kelp leaf in all? = 22 (A) · Sandy the Seahorse found 4 kelp leaf yesterday and 38 more today. How many kelp leaf in all? = 42 (P) · Sandy the Seahorse found 6 sea shell yesterday and 14 more today. How many sea shell in all? = 20 (I)

Clue 5 (Division facts (1-12)): surviving statement is box 7 → Sandy

$6 \div 2 = 3$ · $77 \div 7 = 11$ · $22 \div 11 = 2$ · $8 \div 2 = 4$ · $10 \div 10 = 1$ · $90 \div 9 = 10$ · $20 \div 4 = 5$ · $80 \div 10 = 8$ · $63 \div 7 = 9$ · $24 \div 2 = 12$ · $42 \div 7 = 6$