The Case of the Missing Star Pearl

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

Detective: _____ **Date:** _____

Someone snatched the Royal Star Pearl right before the Sunken Festival! Detective Bubbles needs your help to decode the clues, check the suspect roster, and catch the sneaky mermaid 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 Pearl Thief is _____

Possible suspects

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

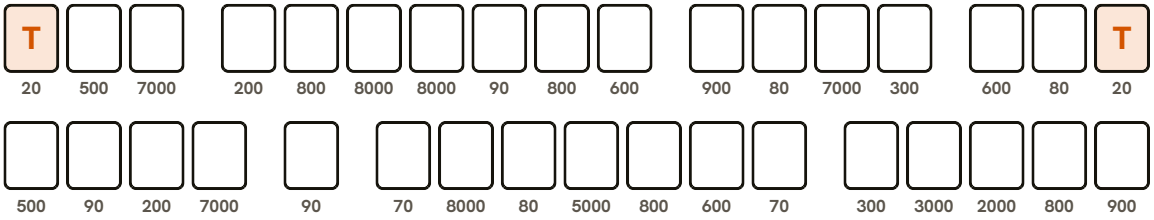
NAME	TRIDENT SKILL	SEA COMPANION	FLIPPERS	FIN COLOR	WEAKNESS
Thalia Harbor	Glow Sparkle	Sea Turtle	Left Finned	Deep Blue	Sticky Kelp
Delphine Shell	Song Magic	Glowing Squid	Left Finned	Deep Blue	Sticky Kelp
Calypso Trench	Bubble Shields	Hermit Crab	Left Finned	Deep Blue	Bright Flash
Cordelia Bay	Wave Calling	Glowing Squid	Left Finned	Aqua Green	Bright Flash
Nereus Swell	Current Control	Sea Turtle	Left Finned	Coral Pink	Bright Flash
Triton Tide	Current Control	Glowing Squid	Right Finned	Aqua Green	Loud Shells
Pearl Wave	Wave Calling	Sea Turtle	Right Finned	Coral Pink	Bright Flash
Shelly Lagoon	Glow Sparkle	Dolphin Pal	Left Finned	Aqua Green	Sticky Kelp
Kai Current	Bubble Shields	Dolphin Pal	Right Finned	Aqua Green	Sticky Kelp
Oceanus Blue	Song Magic	Dolphin Pal	Right Finned	Coral Pink	Sticky Kelp
Caspian Kelp	Song Magic	Hermit Crab	Left Finned	Coral Pink	Bright Flash
Maren Deep	Current Control	Sea Turtle	Left Finned	Deep Blue	Sticky Kelp
Marina Pearl	Bubble Shields	Glowing Squid	Left Finned	Deep Blue	Loud Shells
Nerida Splash	Wave Calling	Hermit Crab	Left Finned	Aqua Green	Sticky Kelp
Coral Reef	Song Magic	Dolphin Pal	Left Finned	Deep Blue	Sticky Kelp
Pearl Ripple	Current Control	Dolphin Pal	Left Finned	Coral Pink	Loud Shells
Finnegan Grotto	Glow Sparkle	Hermit Crab	Left Finned	Aqua Green	Loud Shells
Siren Drift	Current Control	Hermit Crab	Left Finned	Deep Blue	Loud Shells
Azure Abyss	Current Control	Hermit Crab	Left Finned	Deep Blue	Sticky Kelp
Sandy Shoal	Current Control	Sea Turtle	Right Finned	Deep Blue	Sticky Kelp
Muriel Star	Glow Sparkle	Dolphin Pal	Left Finned	Coral Pink	Sticky Kelp

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CLUE 1 Rounding

The grotto sonar radar rounded the blips to the nearest hundred to track the thief.

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



Round 17 to the nearest ten ☐ → T

Round 7,389 to the nearest thousand ☐ → E

Round 7,617 to the nearest thousand ☐ → L

Round 899 to the nearest hundred ☐ → D

Round 1,878 to the nearest thousand ☐ → U

Round 581 to the nearest hundred ☐ → N

Round 755 to the nearest hundred ☐ → I

Round 83 to the nearest ten ☐ → O

Round 86 to the nearest ten ☐ → A

Round 455 to the nearest hundred ☐ → H

Round 170 to the nearest hundred ☐ → V

Round 4,538 to the nearest thousand ☐ → W

Round 297 to the nearest hundred ☐ → S

Round 2,517 to the nearest thousand ☐ → Q

Round 70 to the nearest ten ☐ → G

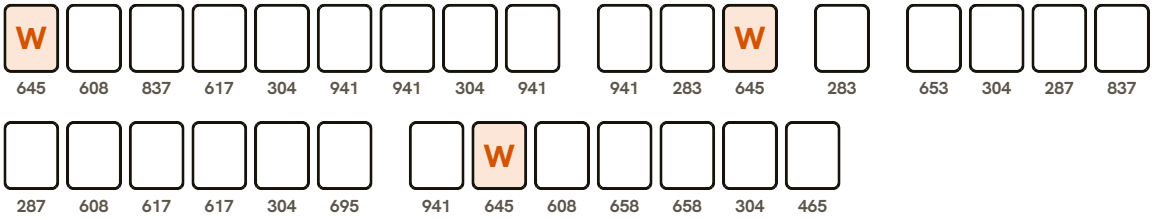
Scratch space:

CLUE 2

Addition

Detective Bubbles added up all the scattered shell coins left behind on the ocean floor.

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



216 + 429 = ☐ → W

551 + 390 = ☐ → S

151 + 136 = ☐ → F

92 + 191 = ☐ → A

230 + 423 = ☐ → L

322 + 373 = ☐ → D

387 + 450 = ☐ → T

314 + 294 = ☐ → I

120 + 184 = ☐ → E

316 + 149 = ☐ → R

317 + 341 = ☐ → M

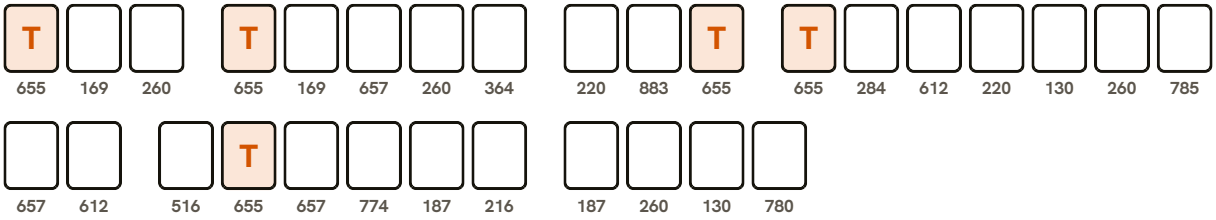
270 + 347 = ☐ → N

Scratch space:

CLUE 3 Subtraction

The guards subtracted the missing glowing pearls from the vault inventory total.

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



867 - 212 = ☐ → T

707 - 191 = ☐ → S

824 - 39 = ☐ → D

433 - 173 = ☐ → E

385 - 21 = ☐ → F

1001 - 344 = ☐ → I

1073 - 190 = ☐ → O

374 - 158 = ☐ → Y

887 - 107 = ☐ → P

376 - 246 = ☐ → L

208 - 21 = ☐ → K

838 - 226 = ☐ → N

524 - 355 = ☐ → H

343 - 59 = ☐ → A

933 - 159 = ☐ → C

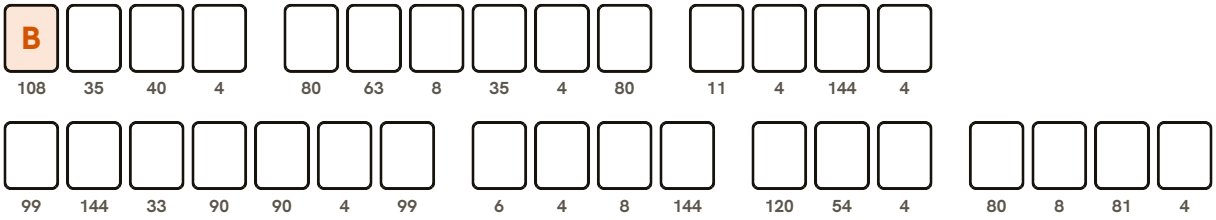
563 - 343 = ☐ → G

Scratch space:

CLUE 4 Multiplication facts (1-12)

> The sea turtles swam in equal rows to search the coral reef grids.

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



9 × 12 = ☐ → B	11 × 3 = ☐ → O	12 × 10 = ☐ → T	
10 × 4 = ☐ → U	9 × 10 = ☐ → P	12 × 12 = ☐ → R	
10 × 8 = ☐ → S	9 × 6 = ☐ → H	1 × 6 = ☐ → N	8 × 1 = ☐ → A
11 × 9 = ☐ → D	9 × 9 = ☐ → F	4 × 1 = ☐ → E	
1 × 11 = ☐ → W	9 × 7 = ☐ → C	5 × 7 = ☐ → L	

Scratch space:

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

> The clam guards split the recovered kelp snacks evenly among their patrol groups.

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:

33 ÷ 11 = ☐	15 ÷ 3 = ☐	70 ÷ 10 = ☐	10 ÷ 1 = ☐	64 ÷ 8 = ☐
32 ÷ 8 = ☐	66 ÷ 11 = ☐	2 ÷ 1 = ☐	27 ÷ 3 = ☐	3 ÷ 3 = ☐
66 ÷ 6 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain blasted bubble shields, then lit the way with a glowing squid.
2. The villain called up a giant wave, then lit the way with a glowing squid.
3. The villain steered the ocean currents, then hitched a ride on a sea turtle.
4. The villain steered the ocean currents, then lit the way with a glowing squid.
5. The villain flashed a blinding glow, then hitched a ride on a sea turtle.
6. The villain steered the ocean currents, then whistled for a dolphin pal.
7. The villain sang a dizzying song, then whistled for a dolphin pal.
8. The villain sang a dizzying song, then hitched a ride on a sea turtle.
9. The villain sang a dizzying song, then lit the way with a glowing squid.
10. The villain blasted bubble shields, then whistled for a dolphin pal.
11. The villain called up a giant wave, then whistled for a dolphin pal.
12. The villain steered the ocean currents, then hid inside a hermit crab shell.

TEACHER / PARENT

Answer Key

The Case of the Missing Star Pearl

Culprit: Azure Abyss

Current Control · Hermit Crab · Left Finned · Deep Blue · Sticky Kelp

Trail: Start 21 → Clue 1 17 → Clue 2 13 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN DOES NOT HAVE A GLOWING SQUID"

Round 17 to the nearest ten = 20 (T) · Round 7,389 to the nearest thousand = 7000 (E) · Round 7,617 to the nearest thousand = 8000 (L) · Round 899 to the nearest hundred = 900 (D) · Round 1,878 to the nearest thousand = 2000 (U) · Round 581 to the nearest hundred = 600 (N) · Round 755 to the nearest hundred = 800 (I) · Round 83 to the nearest ten = 80 (O) · Round 86 to the nearest ten = 90 (A) · Round 455 to the nearest hundred = 500 (H) · Round 170 to the nearest hundred = 200 (V) · Round 4,538 to the nearest thousand = 5000 (W) · Round 297 to the nearest hundred = 300 (S) · Round 2,517 to the nearest thousand = 3000 (Q) · Round 70 to the nearest ten = 70 (G)

Clue 2 (Addition): "WITNESSES SAW A LEFT FINNED SWIMMER"

216 + 429 = 645 (W) · 551 + 390 = 941 (S) · 151 + 136 = 287 (F) · 92 + 191 = 283 (A) · 230 + 423 = 653 (L) · 322 + 373 = 695 (D) · 387 + 450 = 837 (T) · 314 + 294 = 608 (I) · 120 + 184 = 304 (E) · 316 + 149 = 465 (R) · 317 + 341 = 658 (M) · 270 + 347 = 617 (N)

Clue 3 (Subtraction): "THE THIEF GOT TANGLED IN STICKY KELP"

867 - 212 = 655 (T) · 707 - 191 = 516 (S) · 824 - 39 = 785 (D) · 433 - 173 = 260 (E) · 385 - 21 = 364 (F) · 1001 - 344 = 657 (I) · 1073 - 190 = 883 (O) · 374 - 158 = 216 (Y) · 887 - 107 = 780 (P) · 376 - 246 = 130 (L) · 208 - 21 = 187 (K) · 838 - 226 = 612 (N) · 524 - 355 = 169 (H) · 343 - 59 = 284 (A) · 933 - 159 = 774 (C) · 563 - 343 = 220 (G)

Clue 4 (Multiplication facts (1-12)): "BLUE SCALES WERE DROPPED NEAR THE SAFE"

9 × 12 = 108 (B) · 11 × 3 = 33 (O) · 12 × 10 = 120 (T) · 10 × 4 = 40 (U) · 9 × 10 = 90 (P) · 12 × 12 = 144 (R) · 10 × 8 = 80 (S) · 9 × 6 = 54 (H) · 1 × 6 = 6 (N) · 8 × 1 = 8 (A) · 11 × 9 = 99 (D) · 9 × 9 = 81 (F) · 4 × 1 = 4 (E) · 1 × 11 = 11 (W) · 9 × 7 = 63 (C) · 5 × 7 = 35 (L)

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

33 ÷ 11 = 3 · 15 ÷ 3 = 5 · 70 ÷ 10 = 7 · 10 ÷ 1 = 10 · 64 ÷ 8 = 8 · 32 ÷ 8 = 4 · 66 ÷ 11 = 6 · 2 ÷ 1 = 2 · 27 ÷ 3 = 9 · 3 ÷ 3 = 1 · 66 ÷ 6 = 11