The Case of the Missing Magic Pearl

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

Detective: _____ **Date:** _____

Someone snatched the Great Magic Pearl from Coral Cove Lagoon! Help Detective Starfish solve the clues and save the day.

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

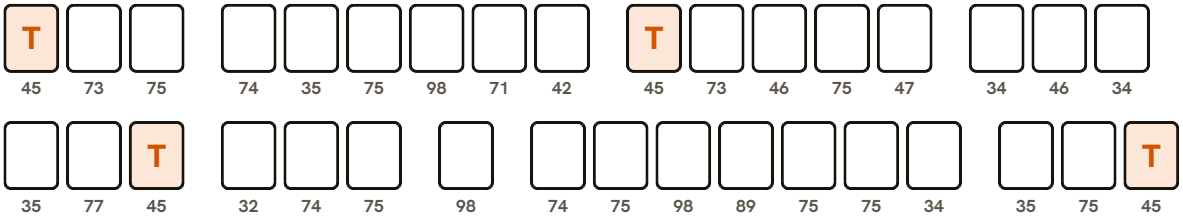
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	MAIN POWER	EXTRA POWER	DOMINANT HAND	TRAIT	WEAKNESS
Amber Wave	Horn Flash	Seaweed Net	Right-handed	Pink Mane	Loud Whistles
Nova Splash	Bubble Blast	Glow Wand	Right-handed	Aqua Tail	Shiny Mirrors
Ruby Reef	Bubble Blast	Glow Wand	Right-handed	Pink Mane	Loud Whistles
Jasper Jewel	Horn Flash	Coral Lasso	Left-handed	Pink Mane	Loud Whistles
Coral Sky	Star Sparkle	Seaweed Net	Right-handed	Pink Mane	Shiny Mirrors
Cleo Coast	Bubble Blast	Shell Prism	Right-handed	Pink Mane	Loud Whistles
Finn Flash	Rainbow Wave	Shell Prism	Right-handed	Silver Curls	Loud Whistles
Bubbles Blue	Bubble Blast	Tide Whistle	Left-handed	Silver Curls	Shiny Mirrors
Piper Pebble	Rainbow Wave	Coral Lasso	Right-handed	Aqua Tail	Loud Whistles
Pearl Bright	Rainbow Wave	Glow Wand	Right-handed	Silver Curls	Loud Whistles
Orion Shell	Horn Flash	Seaweed Net	Right-handed	Silver Curls	Shiny Mirrors
Milo Marine	Horn Flash	Glow Wand	Left-handed	Pink Mane	Loud Whistles
Willow Water	Horn Flash	Shell Prism	Right-handed	Aqua Tail	Loud Whistles
Sparkle Fin	Star Sparkle	Coral Lasso	Left-handed	Aqua Tail	Shiny Mirrors
Glimmer Horn	Rainbow Wave	Seaweed Net	Left-handed	Aqua Tail	Loud Whistles
Sienna Sea	Rainbow Wave	Coral Lasso	Right-handed	Pink Mane	Loud Whistles
Crystal Tide	Horn Flash	Seaweed Net	Left-handed	Aqua Tail	Loud Whistles
Sunny Mane	Pearl Shield	Glow Wand	Right-handed	Pink Mane	Loud Whistles
Poppy Prism	Star Sparkle	Shell Prism	Right-handed	Pink Mane	Shiny Mirrors
Marina Star	Pearl Shield	Shell Prism	Left-handed	Aqua Tail	Loud Whistles
Skye Glitter	Bubble Blast	Tide Whistle	Right-handed	Pink Mane	Sweet Berries

CLUE 1 Place value

Detective Starfish counts the tens and ones blocks of power crystals to read the first clue.

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



What number has 4 tens and 5 ones? ☐ → T

What number has 7 tens and 7 ones? ☐ → O

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

What number has 9 tens and 8 ones? ☐ → A

What number has 7 tens and 1 one? ☐ → K

What number has 4 tens and 6 ones? ☐ → I

What number has 7 tens and 3 ones? ☐ → H

What number has 4 tens and 2 ones? ☐ → Y

What number has 3 tens and 2 ones? ☐ → U

What number has 4 tens and 7 ones? ☐ → F

What number has 8 tens and 9 ones? ☐ → W

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

What number has 7 tens and 5 ones? ☐ → E

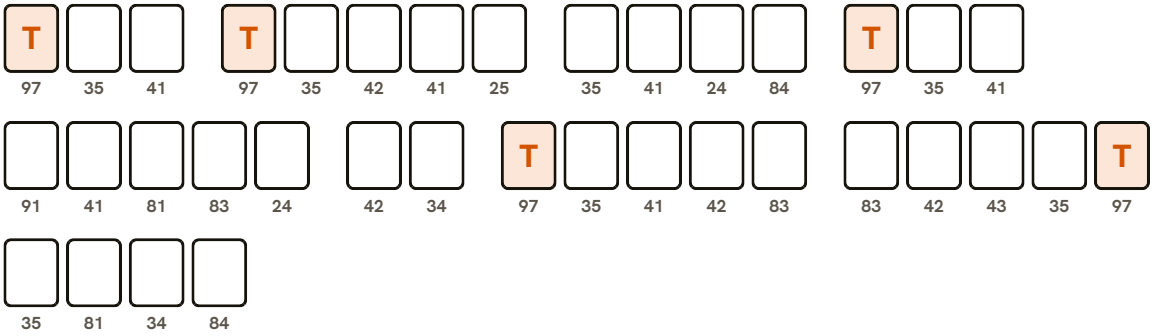
What number has 3 tens and 5 ones? ☐ → N

Scratch space:

CLUE 2 Addition

To open the lagoon gates, we must add together all the shiny shells found on the sand.

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



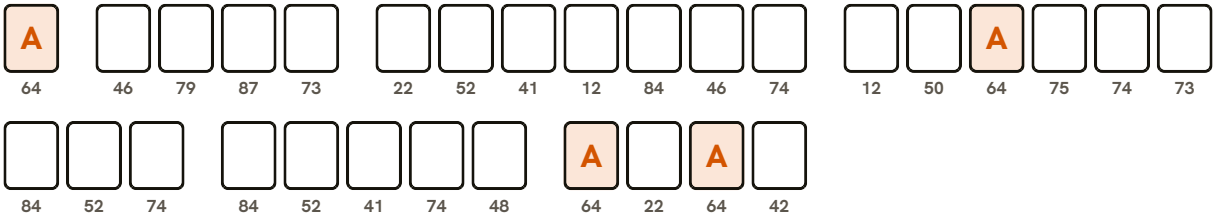
56 + 41 = ☐ → T	23 + 12 = ☐ → H	28 + 55 = ☐ → R
44 + 47 = ☐ → P	10 + 14 = ☐ → L	38 + 43 = ☐ → A
27 + 15 = ☐ → I	16 + 27 = ☐ → G	29 + 12 = ☐ → E
11 + 23 = ☐ → N	10 + 15 = ☐ → F	43 + 41 = ☐ → D

Scratch space:

CLUE 3 Subtraction

The thief left dark ink bubbles behind. Subtract the popped ones to reveal a secret clue.

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



67 - 3 = ☐ → A

78 - 32 = ☐ → L

44 - 3 = ☐ → I

72 - 30 = ☐ → Y

78 - 28 = ☐ → C

90 - 11 = ☐ → O

24 - 2 = ☐ → W

81 - 29 = ☐ → H

99 - 15 = ☐ → T

79 - 6 = ☐ → D

119 - 32 = ☐ → U

23 - 11 = ☐ → S

95 - 21 = ☐ → E

81 - 33 = ☐ → F

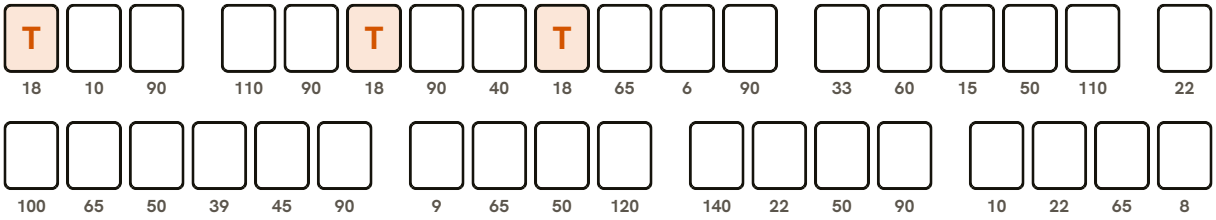
102 - 27 = ☐ → R

Scratch space:

CLUE 4 Skip counting

We follow a trail of sparkling gems by skip counting by twos across the coral reef.

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



Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, ___, 21, 24 ☐ → **T**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, ___, 130, 140 ☐ → **K**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, ___, 45, 50 ☐ → **C**

Skip-count by 5s. Fill the blank: 5, 10, ___, 20, 25 ☐ → **U**

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, ___, 65, 70 ☐ → **O**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, ___, 12, 14 ☐ → **H**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, ___, 50, 55 ☐ → **L**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, ___, 100, 110 ☐ → **E**

Skip-count by 2s. Fill the blank: 2, 4, 6, ___, 10, 12 ☐ → **R**

Skip-count by 3s. Fill the blank: 3, 6, ___, 12, 15 ☐ → **P**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, ___, 36, 39 ☐ → F

Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 ☐ → V

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

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

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, ___, 150, 160 ☐ → M

Scratch space:

CLUE 5 Missing addends - the last clue

The vault needs twelve sea crystals to open. Solve the missing addend to find the last hint.

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 + ___ = 11 ☐	7 + ___ = 17 ☐	1 + ___ = 2 ☐	1 + ___ = 4 ☐
5 + ___ = 10 ☐	6 + ___ = 12 ☐	10 + ___ = 14 ☐	10 + ___ = 22 ☐
8 + ___ = 17 ☐	7 + ___ = 18 ☐	8 + ___ = 15 ☐	

Step 2 - cross out the sentence with each answer:

1. The villain made a rainbow wave, then threw a coral lasso.
2. The villain raised a pearl shield, then waved a glow wand.
3. The villain made a rainbow wave, then blew a tide whistle.
4. The villain flashed a magic horn, then blew a tide whistle.
5. The villain shot a bubble blast, then threw a coral lasso.
6. The villain created a star sparkle, then threw a coral lasso.
7. The villain raised a pearl shield, then blew a tide whistle.
8. The villain shot a bubble blast, then shined a shell prism.
9. The villain raised a pearl shield, then cast a seaweed net.
10. The villain shot a bubble blast, then waved a glow wand.
11. The villain flashed a magic horn, then threw a coral lasso.
12. The villain created a star sparkle, then shined a shell prism.

TEACHER / PARENT

Answer Key

The Case of the Missing Magic Pearl

Culprit: Cleo Coast

Bubble Blast · Shell Prism · Right-handed · Pink Mane · Loud Whistles

Trail: Start 21 → Clue 1 16 → Clue 2 11 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE SNEAKY THIEF DID NOT USE A SEAWEED NET"

What number has 4 tens and 5 ones? = 45 (T) · What number has 7 tens and 7 ones? = 77 (O) · What number has 3 tens and 4 ones? = 34 (D) · What number has 9 tens and 8 ones? = 98 (A) · What number has 7 tens and 1 one? = 71 (K) · What number has 4 tens and 6 ones? = 46 (I) · What number has 7 tens and 3 ones? = 73 (H) · What number has 4 tens and 2 ones? = 42 (Y) · What number has 3 tens and 2 ones? = 32 (U) · What number has 4 tens and 7 ones? = 47 (F) · What number has 8 tens and 9 ones? = 89 (W) · What number has 7 tens and 4 ones? = 74 (S) · What number has 7 tens and 5 ones? = 75 (E) · What number has 3 tens and 5 ones? = 35 (N)

Clue 2 (Addition): "THE THIEF HELD THE PEARL IN THEIR RIGHT HAND"

56 + 41 = 97 (T) · 23 + 12 = 35 (H) · 28 + 55 = 83 (R) · 44 + 47 = 91 (P) · 10 + 14 = 24 (L) · 38 + 43 = 81 (A) · 27 + 15 = 42 (I) · 16 + 27 = 43 (G) · 29 + 12 = 41 (E) · 11 + 23 = 34 (N) · 10 + 15 = 25 (F) · 43 + 41 = 84 (D)

Clue 3 (Subtraction): "A LOUD WHISTLE SCARED THE THIEF AWAY"

67 - 3 = 64 (A) · 78 - 32 = 46 (L) · 44 - 3 = 41 (I) · 72 - 30 = 42 (Y) · 78 - 28 = 50 (C) · 90 - 11 = 79 (O) · 24 - 2 = 22 (W) · 81 - 29 = 52 (H) · 99 - 15 = 84 (T) · 79 - 6 = 73 (D) · 119 - 32 = 87 (U) · 23 - 11 = 12 (S) · 95 - 21 = 74 (E) · 81 - 33 = 48 (F) · 102 - 27 = 75 (R)

Clue 4 (Skip counting): "THE DETECTIVE FOUND A SINGLE PINK MANE HAIR"

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, ___, 21, 24 = 18 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, ___, 130, 140 = 120 (K) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, ___, 45, 50 = 40 (C) · Skip-count by 5s. Fill the blank: 5, 10, ___, 20, 25 = 15 (U) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, ___, 42, 45 = 39 (G) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, ___, 110, 120 = 100 (S) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, ___, 65, 70 = 60 (O) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, ___, 12, 14 = 10 (H) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, ___, 50, 55 = 45 (L) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, ___, 100, 110 = 90 (E) · Skip-count by 2s. Fill the blank: 2, 4, 6, ___, 10, 12 = 8 (R) · Skip-count by 3s. Fill the blank: 3, 6, ___, 12, 15 = 9 (P) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, ___, 55, 60 = 50 (N) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, ___, 36, 39 = 33 (F) · Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 = 6 (V) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, ___, 70, 75 = 65 (I) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, ___, 120, 130 = 110 (D) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, ___, 24, 26 = 22 (A) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, ___, 150, 160 = 140 (M)

Clue 5 (Missing addends): surviving statement is box 8 → Cleo Coast

9 + ___ = 11 = 2 · 7 + ___ = 17 = 10 · 1 + ___ = 2 = 1 · 1 + ___ = 4 = 3 · 5 + ___ = 10 = 5 · 6 + ___ = 12 = 6 · 10 + ___ = 14 = 4 · 10 + ___ = 22 = 12 · 8 + ___ = 17 = 9 · 7 + ___ = 18 = 11 · 8 + ___ = 15 = 7