The Mystery of the Missing Pearl Crown

Grade 6 math · Multiplication, Word problems, Addition, Percentages, Division · Reading level grades 1-2

Detective: _____ **Date:** _____

A sneaky sea bandit swiped the Royal Pearl Crown from the underwater meadow. Detective, use your clues to find out who did it!

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 Bandit is _____

Possible suspects

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

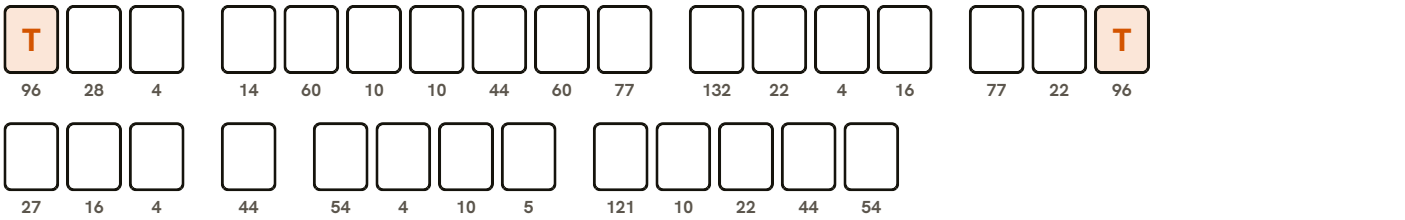
NAME	MAGIC SPELL	OCEAN GEAR	WAND HAND	TAIL COLOR	WEAKNESS
Sandy	Bubble Blast	Prism Ring	Right Wand	Purple Tail	Bright Light
Marina	Pearl Glow	Kelp Cloak	Right Wand	Pink Tail	Bright Light
Misty	Wave Whistle	Golden Net	Left Wand	Pink Tail	Bright Light
Siren	Tide Twirl	Coral Wand	Right Wand	Pink Tail	Bright Light
Coral	Wave Whistle	Golden Net	Left Wand	Pink Tail	Glitter Dust
Cascada	Wave Whistle	Coral Wand	Right Wand	Purple Tail	Bright Light
Triton	Bubble Blast	Coral Wand	Left Wand	Purple Tail	Glitter Dust
Bubbles	Star Sparkle	Prism Ring	Left Wand	Pink Tail	Glitter Dust
Oceanus	Wave Whistle	Prism Ring	Right Wand	Blue Tail	Tickle Weed
Ripple	Tide Twirl	Coral Wand	Left Wand	Pink Tail	Tickle Weed
Wave	Bubble Blast	Kelp Cloak	Right Wand	Pink Tail	Tickle Weed
Glimmer	Bubble Blast	Shell Shield	Left Wand	Purple Tail	Tickle Weed
Starla	Bubble Blast	Shell Shield	Left Wand	Pink Tail	Tickle Weed
Kelp	Wave Whistle	Prism Ring	Right Wand	Blue Tail	Glitter Dust
Ariel	Bubble Blast	Prism Ring	Right Wand	Pink Tail	Glitter Dust
Shelly	Tide Twirl	Shell Shield	Right Wand	Pink Tail	Bright Light
Delphina	Tide Twirl	Coral Wand	Right Wand	Blue Tail	Tickle Weed
Nautica	Bubble Blast	Golden Net	Right Wand	Purple Tail	Bright Light
Coraline	Pearl Glow	Prism Ring	Left Wand	Purple Tail	Tickle Weed
Splash	Pearl Glow	Coral Wand	Right Wand	Pink Tail	Bright Light
Finley	Pearl Glow	Shell Shield	Right Wand	Pink Tail	Bright Light

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CLUE 1 Multiplication facts (1-12)

> The sea pony guard saw rows of shiny clam shells on the reef floor. Multiply to count the total shells and get Clue 1!

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



8 × 12 = ☐ → T

7 × 2 = ☐ → V

11 × 4 = ☐ → A

1 × 10 = ☐ → L

2 × 2 = ☐ → E

11 × 11 = ☐ → C

11 × 2 = ☐ → O

2 × 8 = ☐ → S

7 × 4 = ☐ → H

3 × 9 = ☐ → U

5 × 1 = ☐ → P

6 × 9 = ☐ → K

11 × 7 = ☐ → N

12 × 11 = ☐ → D

6 × 10 = ☐ → I

Scratch space:

CLUE 2 Word problems

Detective Starla reads the sea turtle report about missing pearls. Solve the story problem to uncover Clue 2!

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

A witness saw the villain was

R							N	D
45	14	95	12	15	86	99		

.

Guppy lined up 5 rows of 9 unicorn horns. How many unicorn horns in all?

Answer: ☐ → R

There were 108 glitter shells. 13 were used up. How many glitter shells are left?

Answer: ☐ → G

Guppy lined up 9 rows of 11 magic pearls. How many magic pearls in all?

Answer: ☐ → A

There were 20 magic pearls. 8 were used up. How many magic pearls are left?

Answer: ☐ → H

Guppy lined up 7 rows of 2 unicorn horns. How many unicorn horns in all?

Answer: ☐ → I

There were 117 magic pearls. 31 were used up. How many magic pearls are left?

Answer: ☐ → W

There were 19 magic pearls. 4 were used up. How many magic pearls are left?

Answer: ☐ → T

Scratch space:

CLUE 3 Addition

You tally up all the glowing starfish collected along the kelp bed. Add them together to unlock Clue 3!

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



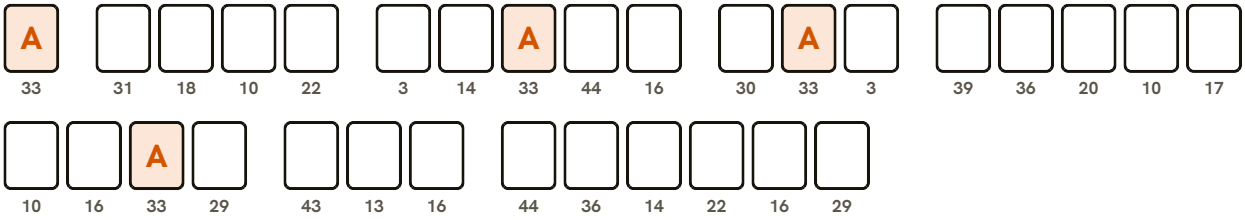
2549 + 5050 = ☐ → B	1232 + 2711 = ☐ → L	1795 + 879 = ☐ → G
3035 + 2962 = ☐ → H	5397 + 4070 = ☐ → F	5938 + 3192 = ☐ → I
6071 + 3507 = ☐ → N	4754 + 4478 = ☐ → V	6274 + 2877 = ☐ → E
5436 + 3090 = ☐ → R	1440 + 1035 = ☐ → D	3167 + 5209 = ☐ → T

Scratch space:

CLUE 4 Percentages

The magical water meter shows how much coral magic is left. Calculate the percentage to reveal Clue 4!

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



50% of 66 = ☐ → A

25% of 80 = ☐ → U

10% of 440 = ☐ → L

50% of 58 = ☐ → R

20% of 180 = ☐ → O

40% of 45 = ☐ → I

10% of 130 = ☐ → H

60% of 5 = ☐ → S

25% of 120 = ☐ → W

50% of 78 = ☐ → F

25% of 124 = ☐ → P

20% of 80 = ☐ → E

10% of 170 = ☐ → D

25% of 40 = ☐ → N

5% of 280 = ☐ → C

50% of 86 = ☐ → T

5% of 440 = ☐ → K

Scratch space:

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

> The mermaids share the rescue snacks into equal seashell bowls. Divide the treats evenly to find Clue 5!

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:

21 ÷ 7 = ☐	120 ÷ 12 = ☐	36 ÷ 3 = ☐	18 ÷ 3 = ☐	5 ÷ 1 = ☐
8 ÷ 1 = ☐	20 ÷ 10 = ☐	22 ÷ 2 = ☐	63 ÷ 9 = ☐	90 ÷ 10 = ☐
48 ÷ 12 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain made a pearl glow, then waved a coral wand.
2. The villain spun a tide twirl, then flashed a prism ring.
3. The villain spun a tide twirl, then raised a shell shield.
4. The villain shot a bubble blast, then swung a golden net.
5. The villain shot a bubble blast, then raised a shell shield.
6. The villain shone a star sparkle, then flashed a prism ring.
7. The villain blew a wave whistle, then hid in a kelp cloak.
8. The villain shone a star sparkle, then waved a coral wand.
9. The villain shot a bubble blast, then hid in a kelp cloak.
10. The villain spun a tide twirl, then waved a coral wand.
11. The villain made a pearl glow, then flashed a prism ring.
12. The villain made a pearl glow, then raised a shell shield.

TEACHER / PARENT

Answer Key

The Mystery of the Missing Pearl Crown

Culprit: Splash

Pearl Glow · Coral Wand · Right Wand · Pink Tail · Bright Light

Trail: Start 21 → Clue 1 19 → Clue 2 11 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT USE A KELP CLOAK"

8 × 12 = 96 (T) · 7 × 2 = 14 (V) · 11 × 4 = 44 (A) · 1 × 10 = 10 (L) · 2 × 2 = 4 (E) · 11 × 11 = 121 (C) · 11 × 2 = 22 (O) · 2 × 8 = 16 (S) · 7 × 4 = 28 (H) · 3 × 9 = 27 (U) · 5 × 1 = 5 (P) · 6 × 9 = 54 (K) · 11 × 7 = 77 (N) · 12 × 11 = 132 (D) · 6 × 10 = 60 (I)

Clue 2 (Word problems): "RIGHT WAND"

Guppy lined up 5 rows of 9 unicorn horns. How many unicorn horns in all? = 45 (R) · There were 108 glitter shells. 13 were used up. How many glitter shells are left? = 95 (G) · Guppy lined up 9 rows of 11 magic pearls. How many magic pearls in all? = 99 (A) · There were 20 magic pearls. 8 were used up. How many magic pearls are left? = 12 (H) · Guppy lined up 7 rows of 2 unicorn horns. How many unicorn horns in all? = 14 (I) · There were 117 magic pearls. 31 were used up. How many magic pearls are left? = 86 (W) · There were 19 magic pearls. 4 were used up. How many magic pearls are left? = 15 (T)

Clue 3 (Addition): "BRIGHT LIGHT BLINDED THE EVIL THIEF"

2549 + 5050 = 7599 (B) · 1232 + 2711 = 3943 (L) · 1795 + 879 = 2674 (G) · 3035 + 2962 = 5997 (H) · 5397 + 4070 = 9467 (F) · 5938 + 3192 = 9130 (I) · 6071 + 3507 = 9578 (N) · 4754 + 4478 = 9232 (V) · 6274 + 2877 = 9151 (E) · 5436 + 3090 = 8526 (R) · 1440 + 1035 = 2475 (D) · 3167 + 5209 = 8376 (T)

Clue 4 (Percentages): "A PINK SCALE WAS FOUND NEAR THE LOCKER"

50% of 66 = 33 (A) · 25% of 80 = 20 (U) · 10% of 440 = 44 (L) · 50% of 58 = 29 (R) · 20% of 180 = 36 (O) · 40% of 45 = 18 (I) · 10% of 130 = 13 (H) · 60% of 5 = 3 (S) · 25% of 120 = 30 (W) · 50% of 78 = 39 (F) · 25% of 124 = 31 (P) · 20% of 80 = 16 (E) · 10% of 170 = 17 (D) · 25% of 40 = 10 (N) · 5% of 280 = 14 (C) · 50% of 86 = 43 (T) · 5% of 440 = 22 (K)

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

21 ÷ 7 = 3 · 120 ÷ 12 = 10 · 36 ÷ 3 = 12 · 18 ÷ 3 = 6 · 5 ÷ 1 = 5 · 8 ÷ 1 = 8 · 20 ÷ 10 = 2 · 22 ÷ 2 = 11 · 63 ÷ 9 = 7 · 90 ÷ 10 = 9 · 48 ÷ 12 = 4