



The Case of the Sparkle Crown

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

Detective: _____ Date: _____

The magic Sparkle Crown is gone! It was safe in the shell pool. Now only some shiny footprints are left. Can you help us find the sneaky purr-maid who took 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 sneaky purr-maid is _____

Possible suspects

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

NAME	MAGIC MOVE	TRICKY TRICK	BOW COLOR	MANE STYLE	TREAT WEAKNESS
Cleo	star blast	sea song	wears blue bow	pink mane	warm milk
Coco	star blast	mist jump	wears pink bow	pink mane	warm milk
Coral	horn glow	shell toss	wears pink bow	blue mane	warm milk
Daisy	purr wave	kelp spin	wears blue bow	blue mane	catnip treats
Star	star blast	sand dig	wears blue bow	blue mane	shiny mirrors
Pearl	bubble dash	kelp spin	wears blue bow	pink mane	catnip treats
Marina	bubble dash	kelp spin	wears blue bow	purple mane	shiny mirrors
Shelly	horn glow	sea song	wears pink bow	purple mane	shiny mirrors
Bella	purr wave	sea song	wears blue bow	pink mane	catnip treats
Angel	purr wave	sand dig	wears blue bow	blue mane	warm milk
Chloe	horn glow	kelp spin	wears blue bow	pink mane	shiny mirrors
Twinkle	bubble dash	shell toss	wears blue bow	purple mane	shiny mirrors
Sparkle	bubble dash	mist jump	wears blue bow	purple mane	warm milk
Princess	star blast	sand dig	wears blue bow	pink mane	warm milk
Aqua	horn glow	shell toss	wears blue bow	purple mane	shiny mirrors
Fluffy	tail splash	kelp spin	wears blue bow	purple mane	shiny mirrors
Sandy	star blast	mist jump	wears blue bow	purple mane	shiny mirrors
Sunny	purr wave	mist jump	wears blue bow	purple mane	catnip treats
Lily	tail splash	sea song	wears blue bow	purple mane	shiny mirrors
Pippa	purr wave	sand dig	wears blue bow	purple mane	catnip treats
Luna	bubble dash	shell toss	wears pink bow	purple mane	catnip treats

CLUE 1 **Addition**

We found some shells. Let us add them up to find the code.

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

T 11	17	7	6	5	7	19	8	3	T 11	17	12	7	15	13	18	7	6
5	18	T 11	T 11	18	6	6	6	17	7	14	14	6					

5 + 6 = → T	5 + 3 = → K	3 + 9 = → I	4 + 2 = → S
7 + 6 = → D	11 + 7 = → O	8 + 9 = → H	3 + 2 = → N
2 + 1 = → Y	11 + 4 = → F	2 + 5 = → E	8 + 6 = → L
14 + 5 = → A			

Scratch space:

CLUE 2 Skip counting

We see starfish on the path. Let us skip count by fives to follow them.

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

T															
90	20	130	55	27	8	8	100	27	36	24	130	100	65	15	100

45	8	42	130	45	80	24

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

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

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, __, 26, 28 → **W**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, __, 18, 21 → **S**

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

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

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 → **N**

Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 → **L**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 → **U**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33

→

Scratch space:

CLUE 3

Word problems

The ocean kittens are telling a story. Solve it to see the next clue.

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

Someone scared the villain off with

S **O** **S** .

22 10 20 40 24 6 20 12 12 12 22

Marina the Mermaid found 2 sparkle cones yesterday and 20 more today. How many sparkle cones in all?

Answer: → **S**

Marina the Mermaid found 14 rainbow pearls yesterday and 6 more today. How many rainbow pearls in all?

Answer: → **I**

There were 16 starfish. 6 were used up. How many starfish are left?

Answer: → **H**

There were 14 starfish. 8 were used up. How many starfish are left?

Answer: → **M**

Marina the Mermaid lined up 4 rows of 10 starfish. How many starfish in all?

Answer: → **N**

Marina the Mermaid lined up 2 rows of 6 sparkle cones. How many sparkle cones in all?

Answer: → **R**

There were 28 starfish. 4 were used up. How many starfish are left?

Answer: → **Y**

Scratch space:

CLUE 4

Subtraction

Some shiny pearls fell into the deep water. Take them away to see what is left.

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

W																
18	11	13	6	8	12	10	15	8	4	15	3	11	14	2	12	11

7	2	5	4	2	17	17	7	11	16	1	11	12	11

$19 - 1 =$

→

W

$12 - 1 =$

→

E

$18 - 4 =$

→

M

$19 - 2 =$

→

T

$20 - 4 =$

→

S

$20 - 5 =$

→

P

$10 - 9 =$

→

C

$19 - 6 =$

→

F

$12 - 2 =$

→

D

$11 - 9 =$

→

A

$14 - 2 =$

→

N

$15 - 8 =$

→

H

$6 - 1 =$

→

I

$16 - 8 =$

→

U

$8 - 5 =$

→

L

$10 - 6 =$

→

R

$14 - 8 =$

→

O

Scratch space:

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

We have some treats. How many more do we need to make ten?

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:

$9 + \underline{\quad} = 13$

$3 + \underline{\quad} = 14$

$3 + \underline{\quad} = 10$

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

$1 + \underline{\quad} = 10$

$4 + \underline{\quad} = 6$

$1 + \underline{\quad} = 13$

$7 + \underline{\quad} = 10$

$7 + \underline{\quad} = 8$

$3 + \underline{\quad} = 8$

$3 + \underline{\quad} = 11$

Step 2 - cross out the sentence with each answer:

1. The villain sends out a soft purr wave, then sings a sweet sea song.
2. The villain makes a giant tail splash, then starts a quick sand dig.
3. The villain uses their horn glow, then tries a fast kelp spin.
4. The villain makes a giant tail splash, then tries a fast kelp spin.
5. The villain sends out a soft purr wave, then starts a quick sand dig.
6. The villain makes a giant tail splash, then sings a sweet sea song.
7. The villain makes a big bubble dash, then tries a fast kelp spin.
8. The villain makes a big bubble dash, then sings a sweet sea song.
9. The villain makes a giant tail splash, then does a high mist jump.
10. The villain makes a big bubble dash, then starts a quick sand dig.
11. The villain fires a bright star blast, then does a high mist jump.
12. The villain sends out a soft purr wave, then tries a fast kelp spin.

Answer Key

The Case of the Sparkle Crown

Culprit: Lily

tail splash · sea song · wears blue bow · purple mane · shiny mirrors

Trail: Start 21 → Clue 1 17 → Clue 2 15 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SNEAKY THIEF DOES NOT TOSS SHELLS"

$5 + 6 = 11$ (T) · $5 + 3 = 8$ (K) · $3 + 9 = 12$ (I) · $4 + 2 = 6$ (S) · $7 + 6 = 13$ (D) · $11 + 7 = 18$ (O) · $8 + 9 = 17$ (H) · $3 + 2 = 5$ (N) · $2 + 1 = 3$ (Y) · $11 + 4 = 15$ (F) · $2 + 5 = 7$ (E) · $8 + 6 = 14$ (L) · $14 + 5 = 19$ (A)

Clue 2 (Skip counting): "THE VILLAIN WEARS A BLUE BOW"

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (T) · Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 = 20 (H) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (O) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, __, 26, 28 = 24 (W) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 = 130 (E) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, __, 18, 21 = 15 (S) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 = 55 (V) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 = 45 (B) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 = 65 (R) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 = 36 (N) · Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 = 8 (L) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (U) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (A) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 = 27 (I)

Clue 3 (Word problems): "SHINY MIRRORS"

Marina the Mermaid found 2 sparkle cones yesterday and 20 more today. How many sparkle cones in all? = 22 (S) · Marina the Mermaid found 14 rainbow pearls yesterday and 6 more today. How many rainbow pearls in all? = 20 (I) · There were 16 starfish. 6 were used up. How many starfish are left? = 10 (H) · There were 14 starfish. 8 were used up. How many starfish are left? = 6 (M) · Marina the Mermaid lined up 4 rows of 10 starfish. How many starfish in all? = 40 (N) · Marina the Mermaid lined up 2 rows of 6 sparkle cones. How many sparkle cones in all? = 12 (R) · There were 28 starfish. 4 were used up. How many starfish are left? = 24 (Y)

Clue 4 (Subtraction): "WE FOUND PURPLE MANE HAIR AT THE SCENE"

$19 - 1 = 18$ (W) · $12 - 1 = 11$ (E) · $18 - 4 = 14$ (M) · $19 - 2 = 17$ (T) · $20 - 4 = 16$ (S) · $20 - 5 = 15$ (P) · $10 - 9 = 1$ (C) · $19 - 6 = 13$ (F) · $12 - 2 = 10$ (D) · $11 - 9 = 2$ (A) · $14 - 2 = 12$ (N) · $15 - 8 = 7$ (H) · $6 - 1 = 5$ (I) · $16 - 8 = 8$ (U) · $8 - 5 = 3$ (L) · $10 - 6 = 4$ (R) · $14 - 8 = 6$ (O)

Clue 5 (Missing addends): surviving statement is box 6 → Lily

$9 + \underline{\quad} = 13 = 4$ · $3 + \underline{\quad} = 14 = 11$ · $3 + \underline{\quad} = 10 = 7$ · $10 + \underline{\quad} = 20 = 10$ · $1 + \underline{\quad} = 10 = 9$ · $4 + \underline{\quad} = 6 = 2$ · $1 + \underline{\quad} = 13 = 12$ · $7 + \underline{\quad} = 10 = 3$ · $7 + \underline{\quad} = 8 = 1$ · $3 + \underline{\quad} = 8 = 5$ · $3 + \underline{\quad} = 11 = 8$