



The Starlight Meadow Mystery

Grade 5 math · Rounding, Skip counting, Word problems, Fractions of a number, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

Someone snuck into the Crystal Sanctuary at midnight and snatched the legendary Prism Heart! High Warden Orion called upon the finest detectives in Starlight Meadow to examine the enchanted evidence and catch the thief before the meadow loses its 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 sparkle snatcher is _____

Possible suspects

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

NAME	GLITTER MAGIC	ENCHANTED GEAR	HOOF TRAIT	MANE COLOR	WEAKNESS
Ulysses Amber	CRYSTAL SHIELD	MAGIC HALTER	LEFTHOOFED	SILVER MANE	MOONLIGHT MIRROR
Quentin Quartz	SHIMMER DASH	PRISM SHIELD	RIGHTHOOFED	RAINBOW MANE	MOONLIGHT MIRROR
Xander Xenon	MOONLIGHT WAVE	PRISM SHIELD	LEFTHOOFED	GOLDEN MANE	SUN FLOWER
Yara Yarn	SHIMMER DASH	MAGIC HALTER	RIGHTHOOFED	RAINBOW MANE	MOONLIGHT MIRROR
Milo Meadow	MOONLIGHT WAVE	STARDUST BAG	RIGHTHOOFED	GOLDEN MANE	SUN FLOWER
Fiona Frost	MOONLIGHT WAVE	MAGIC HALTER	RIGHTHOOFED	RAINBOW MANE	MOONLIGHT MIRROR
Penelope Pearl	MOONLIGHT WAVE	STARDUST BAG	RIGHTHOOFED	RAINBOW MANE	SUN FLOWER
Elora Sparkle	SHIMMER DASH	SILVER SADDLE	RIGHTHOOFED	SILVER MANE	STORM WHISTLE
Hazel Hoof	CRYSTAL SHIELD	GLOWING REINS	RIGHTHOOFED	SILVER MANE	MOONLIGHT MIRROR
Nora Nova	SHIMMER DASH	SILVER SADDLE	LEFTHOOFED	SILVER MANE	SUN FLOWER
Jasper Jewel	RAINBOW BURST	SILVER SADDLE	RIGHTHOOFED	GOLDEN MANE	SUN FLOWER
Luna Light	RAINBOW BURST	GLOWING REINS	RIGHTHOOFED	RAINBOW MANE	SUN FLOWER
Dion Diamond	SHIMMER DASH	STARDUST BAG	RIGHTHOOFED	SILVER MANE	STORM WHISTLE
Rosie Ribbon	CRYSTAL SHIELD	MAGIC HALTER	RIGHTHOOFED	RAINBOW MANE	STORM WHISTLE
Orion Oat	CRYSTAL SHIELD	SILVER SADDLE	RIGHTHOOFED	RAINBOW MANE	MOONLIGHT MIRROR
Silas Shimmer	SHIMMER DASH	GLOWING REINS	LEFTHOOFED	RAINBOW MANE	MOONLIGHT MIRROR
Talia Twinkle	STARBEAM FLARE	GLOWING REINS	LEFTHOOFED	GOLDEN MANE	STORM WHISTLE
Ignatius Prism	CRYSTAL SHIELD	STARDUST BAG	RIGHTHOOFED	SILVER MANE	MOONLIGHT MIRROR
Gideon Glow	MOONLIGHT WAVE	SILVER SADDLE	LEFTHOOFED	RAINBOW MANE	MOONLIGHT MIRROR
Willa Whistle	CRYSTAL SHIELD	PRISM SHIELD	RIGHTHOOFED	GOLDEN MANE	STORM WHISTLE
Celeste Starling	STARBEAM FLARE	STARDUST BAG	RIGHTHOOFED	RAINBOW MANE	MOONLIGHT MIRROR

CLUE 1 Rounding

The crystal magic detector rounds all energy readings to the nearest hundred. Solve this to learn about the villain gear.

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

T																T
900	3700	70	7000	700	130	130	3000	700	2900	200	4300	70	5000	2900	4300	900
430	3000	50	50	500	3000	370	50	700	5000	2000	5000	3700	700	70	130	200

Round 943 to the nearest hundred → **T**

Round 3,698 to the nearest hundred → **H**

Round 1,851 to the nearest thousand → **M**

Round 2,865 to the nearest thousand → **A**

Round 4,341 to the nearest hundred → **O**

Round 6,944 to the nearest thousand → **V**

Round 499 to the nearest hundred → **Y**

Round 53 to the nearest ten → **R**

Round 5,326 to the nearest thousand → **S**

Round 428 to the nearest ten → **C**

Round 717 to the nearest hundred → **I**

Round 2,857 to the nearest hundred → **N**

Round 367 to the nearest ten → **P**

Round 72 to the nearest ten → **E**

Round 183 to the nearest hundred → **D**

Round 132 to the nearest ten → **L**

Scratch space:

CLUE 2 Skip counting

Stepping across the glowing river requires skip counting on the enchanted stones. Follow the pattern to reveal a clue about the villain movement.

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

T									T				T			
26	42	120	22	15	22	24	120	50	26	8	120	12	26			
				T								T				
28	39	20	42	26	42	21	21	12	24	28	39	80	26	22	21	80
T																
26	39	8	120													

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 → **T**

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 → **R**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 → **O**

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

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, __, 22, 24 → **G**

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 → **F**

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

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

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

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

Scratch space:

CLUE 3

Word problems

The starlight patrol needs exact calculations for their supply haul. Work through this problem to discover what item works against the culprit.

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

Someone scared the villain off with

M

T
M

R
R

R
.

11 40 40 17 63 70 56 81 11 70 40

Glade runner found 2 glitter acorns yesterday and 9 more today. How many glitter acorns in all?

Answer: → M

There were 43 moonstones. 3 were used up. How many moonstones are left?

Answer: → O

There were 103 glitter acorns. 22 were used up. How many glitter acorns are left?

Answer: → H

There were 35 starberries. 18 were used up. How many starberries are left?

Answer: → N

There were 92 moonstones. 29 were used up. How many moonstones are left?

Answer: → L

Glade runner found 21 glitter acorns yesterday and 35 more today. How many glitter acorns in all?

Answer: → G

Glade runner lined up 10 rows of 7 glitter acorns. How many glitter acorns in all?

Answer: → I

Scratch space:

CLUE 4

Fractions of a number

A fraction of the glimmering moonstones in the vault were turned to glass. Calculate the fraction to find hair evidence left at the scene.

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

B										B									
34	40	27	37	14	5	40	3	27	8	34	12	33	19	3	8	24			
													B						
14	3	27	40	33	3	20	12	8	5	14	24	34	24	8	29	14			

$2/6 \text{ of } 102 = \boxed{} \rightarrow \boxed{\text{B}}$

$1/2 \text{ of } 74 = \boxed{} \rightarrow \boxed{\text{G}}$

$4/8 \text{ of } 24 = \boxed{} \rightarrow \boxed{\text{O}}$

$5/10 \text{ of } 80 = \boxed{} \rightarrow \boxed{\text{R}}$

$4/8 \text{ of } 10 = \boxed{} \rightarrow \boxed{\text{T}}$

$2/10 \text{ of } 145 = \boxed{} \rightarrow \boxed{\text{C}}$

$6/8 \text{ of } 44 = \boxed{} \rightarrow \boxed{\text{W}}$

$4/8 \text{ of } 6 = \boxed{} \rightarrow \boxed{\text{A}}$

$1/8 \text{ of } 160 = \boxed{} \rightarrow \boxed{\text{S}}$

$7/8 \text{ of } 16 = \boxed{} \rightarrow \boxed{\text{H}}$

$1/5 \text{ of } 120 = \boxed{} \rightarrow \boxed{\text{E}}$

$2/6 \text{ of } 57 = \boxed{} \rightarrow \boxed{\text{M}}$

$1/3 \text{ of } 81 = \boxed{} \rightarrow \boxed{\text{I}}$

$4/10 \text{ of } 20 = \boxed{} \rightarrow \boxed{\text{N}}$

Scratch space:

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

To split the remaining magic powder into equal jars, you must use division. Complete the math to discover the villain final trait.

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:

$90 \div 9 = \boxed{}$

$9 \div 9 = \boxed{}$

$6 \div 3 = \boxed{}$

$60 \div 10 = \boxed{}$

$81 \div 9 = \boxed{}$

$72 \div 6 = \boxed{}$

$10 \div 2 = \boxed{}$

$8 \div 2 = \boxed{}$

$12 \div 4 = \boxed{}$

$22 \div 2 = \boxed{}$

$8 \div 1 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain raised a crystal shield, then adjusted a silver saddle.
2. The villain shot a bright starbeam flare, then opened a stardust bag.
3. The villain shot a bright starbeam flare, then adjusted a silver saddle.
4. The villain created a rainbow burst, then adjusted a silver saddle.
5. The villain created a rainbow burst, then fastened a magic halter.
6. The villain raised a crystal shield, then flashed glowing reins.
7. The villain used a quick shimmer dash, then fastened a magic halter.
8. The villain sent out a moonlight wave, then adjusted a silver saddle.
9. The villain created a rainbow burst, then opened a stardust bag.
10. The villain sent out a moonlight wave, then fastened a magic halter.
11. The villain shot a bright starbeam flare, then held a prism shield high.
12. The villain sent out a moonlight wave, then opened a stardust bag.

Answer Key

The Starlight Meadow Mystery

Culprit: Yara Yarn

SHIMMER DASH · MAGIC HALTER · RIGHTHOOFED · RAINBOW MANE · MOONLIGHT MIRROR

Trail: Start 21 → Clue 1 18 → Clue 2 13 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN DOES NOT CARRY A PRISM SHIELD"

Round 943 to the nearest hundred = 900 (T) · Round 3,698 to the nearest hundred = 3700 (H) · Round 1,851 to the nearest thousand = 2000 (M) · Round 2,865 to the nearest thousand = 3000 (A) · Round 4,341 to the nearest hundred = 4300 (O) · Round 6,944 to the nearest thousand = 7000 (V) · Round 499 to the nearest hundred = 500 (Y) · Round 53 to the nearest ten = 50 (R) · Round 5,326 to the nearest thousand = 5000 (S) · Round 428 to the nearest ten = 430 (C) · Round 717 to the nearest hundred = 700 (I) · Round 2,857 to the nearest hundred = 2900 (N) · Round 367 to the nearest ten = 370 (P) · Round 72 to the nearest ten = 70 (E) · Round 183 to the nearest hundred = 200 (D) · Round 132 to the nearest ten = 130 (L)

Clue 2 (Skip counting): "THE SUSPECT LEFT RIGHTHOOF PRINTS ON TILE"

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (T) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 = 22 (S) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 = 28 (R) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (I) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 = 21 (O) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, __, 26, 28 = 24 (P) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (N) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, __, 22, 24 = 20 (G) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (H) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, __, 14, 16 = 12 (F) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, __, 55, 60 = 50 (C) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 = 120 (E) · Skip-count by 5s. Fill the blank: 5, 10, __, 20, 25 = 15 (U) · Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 = 8 (L)

Clue 3 (Word problems): "MOONLIGHT MIRROR"

Glade runner found 2 glitter acorns yesterday and 9 more today. How many glitter acorns in all? = 11 (M) · There were 43 moonstones. 3 were used up. How many moonstones are left? = 40 (O) · There were 103 glitter acorns. 22 were used up. How many glitter acorns are left? = 81 (H) · There were 35 starberries. 18 were used up. How many starberries are left? = 17 (N) · There were 92 moonstones. 29 were used up. How many moonstones are left? = 63 (L) · Glade runner found 21 glitter acorns yesterday and 35 more today. How many glitter acorns in all? = 56 (G) · Glade runner lined up 10 rows of 7 glitter acorns. How many glitter acorns in all? = 70 (I)

Clue 4 (Fractions of a number): "BRIGHT RAINBOW MANE HAIR WAS ON THE BENCH"

$\frac{2}{6}$ of 102 = 34 (B) · $\frac{1}{2}$ of 74 = 37 (G) · $\frac{4}{8}$ of 24 = 12 (O) · $\frac{5}{10}$ of 80 = 40 (R) · $\frac{4}{8}$ of 10 = 5 (T) · $\frac{2}{10}$ of 145 = 29 (C) · $\frac{6}{8}$ of 44 = 33 (W) · $\frac{4}{8}$ of 6 = 3 (A) · $\frac{1}{8}$ of 160 = 20 (S) · $\frac{7}{8}$ of 16 = 14 (H) · $\frac{1}{5}$ of 120 = 24 (E) · $\frac{2}{6}$ of 57 = 19 (M) · $\frac{1}{3}$ of 81 = 27 (I) · $\frac{4}{10}$ of 20 = 8 (N)

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

$90 \div 9 = 10$ · $9 \div 9 = 1$ · $6 \div 3 = 2$ · $60 \div 10 = 6$ · $81 \div 9 = 9$ · $72 \div 6 = 12$ · $10 \div 2 = 5$ · $8 \div 2 = 4$ · $12 \div 4 = 3$ · $22 \div 2 = 11$ · $8 \div 1 = 8$