



The Golden Spigot Mystery

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

Detective: _____ **Date:** _____

The Golden Spigot is missing! Without it, we cannot have our giant treehouse waffle feast. A mysterious adventurer sneaked into the high syrup vault and snatched it. We need to follow the clues up in the branches 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 Maple Bandit is _____

Possible suspects

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

NAME	SPECIALIST GEAR	POCKET TOOL	LAUNCHER HAND	HEADWEAR STYLE	FOIL WEAPON
Finn	Glider Wings	Pocket Compass	Left-handed launcher	Feathered cap	Sparkler burst
Sam	Rope Dart	Brass Whistle	Right-handed launcher	Feathered cap	Sparkler burst
Leo	Glider Wings	Spyglass	Left-handed launcher	Goggles on forehead	Sparkler burst
Zoe	Rope Dart	Spyglass	Left-handed launcher	Feathered cap	Sparkler burst
Clara	Rope Dart	Pocket Compass	Right-handed launcher	Feathered cap	Squeaky toy noise
Ella	Super Slingshot	Glow Stone	Left-handed launcher	Feathered cap	Squeaky toy noise
Ivy	Bounce Boots	Glow Stone	Left-handed launcher	Feathered cap	Squeaky toy noise
Lily	Rope Dart	Brass Whistle	Right-handed launcher	Goggles on forehead	Splash of water
Ruby	Rope Dart	Secret Map	Right-handed launcher	Goggles on forehead	Sparkler burst
Abby	Bounce Boots	Brass Whistle	Left-handed launcher	Goggles on forehead	Sparkler burst
Maya	Grappling Hook	Spyglass	Left-handed launcher	Feathered cap	Squeaky toy noise
Sasha	Rope Dart	Secret Map	Left-handed launcher	Feathered cap	Sparkler burst
Jake	Glider Wings	Secret Map	Left-handed launcher	Feathered cap	Sparkler burst
Alex	Grappling Hook	Secret Map	Right-handed launcher	Goggles on forehead	Splash of water
Mia	Super Slingshot	Secret Map	Left-handed launcher	Feathered cap	Sparkler burst
Toby	Rope Dart	Glow Stone	Left-handed launcher	Goggles on forehead	Squeaky toy noise
Max	Bounce Boots	Spyglass	Right-handed launcher	Feathered cap	Squeaky toy noise
Ben	Grappling Hook	Glow Stone	Left-handed launcher	Leather helmet	Squeaky toy noise
Nora	Rope Dart	Secret Map	Right-handed launcher	Feathered cap	Splash of water
Luke	Super Slingshot	Brass Whistle	Right-handed launcher	Feathered cap	Squeaky toy noise
Jack	Bounce Boots	Spyglass	Right-handed launcher	Goggles on forehead	Splash of water

CLUE 1 Rounding

We need to count the missing syrup bottles in the pantry. Solve this word problem to find out where the thief ran!

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

T																	T
700	230	90	1100	1700	500	500	20	1700	2900	290	300	90	1300	2900	300	700	

230	20	1100	90	20	1300	110	200	2300	500	20	1300	1300	

Round 719 to the nearest hundred → **T**

Round 1,069 to the nearest hundred → **V**

Round 109 to the nearest ten → **P**

Round 490 to the nearest hundred → **L**

Round 1,279 to the nearest hundred → **S**

Round 2,294 to the nearest hundred → **G**

Round 197 to the nearest hundred → **Y**

Round 286 to the nearest ten → **D**

Round 1,737 to the nearest hundred → **I**

Round 279 to the nearest hundred → **O**

Round 232 to the nearest ten → **H**

Round 20 to the nearest ten → **A**

Round 91 to the nearest ten → **E**

Round 2,929 to the nearest hundred → **N**

Scratch space:

CLUE 2

Word problems

The scout radar screen only shows estimated distances rounded to the nearest ten. Round these numbers to unlock the next clue!

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

A witness saw the villain was

L							D		D	L		U		C			R
62	46	47	38	41	79	63		46		62	79		63		41	46	

There were 66 bucket. 4 were used up. How many bucket are left?

Answer: → **L**

Scout found 16 acorn yesterday and 63 more today. How many acorn in all?

Answer: → **A**

There were 83 bucket. 37 were used up. How many bucket are left?

Answer: → **E**

There were 65 pinecone. 2 were used up. How many pinecone are left?

Answer: → **N**

Scout found 18 pinecone yesterday and 20 more today. How many pinecone in all?

Answer: → **T**

Scout found 2 bucket yesterday and 39 more today. How many bucket in all?

Answer: → **H**

Scout found 41 maple leaf yesterday and 6 more today. How many maple leaf in all?

Answer: → **F**

Scratch space:

CLUE 3

To build a climbing ladder, we must pile up all our treehouse building blocks. Add these piles together to find the total height!

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



 9295 9211 6579 9295 5450 9030 5175 5776 5450 2743 8547 5450 9211 4296 9211 5375 9295 5450 5776 4200



 4296 3141 5776 5686 9372 5175 5175 9295 9372 9358

$$1739 + 3711 = \boxed{} \rightarrow \boxed{\text{R}}$$

Scratch space:

CLUE 4

Subtraction

The thief dropped several supplies while escaping. Subtract the dropped gear from our total inventory to see what is missing!

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

A			A									A			A	
5159	2058	7345	5159	6796	5271	7345	6217	7345	8382	6495	5159	8989	8485	5159	6884	
					A											
2058	4593	6658	8232	8382	5159	6796	6796	5271	7345	6884	6495	7345	8232	7345		

$6110 - 951 = \square \rightarrow \boxed{\text{A}}$

$13436 - 4447 = \square \rightarrow \boxed{\text{P}}$

$10538 - 2053 = \square \rightarrow \boxed{\text{W}}$

$4676 - 83 = \square \rightarrow \boxed{\text{O}}$

$9876 - 3080 = \square \rightarrow \boxed{\text{T}}$

$11634 - 4750 = \square \rightarrow \boxed{\text{S}}$

$2612 - 554 = \square \rightarrow \boxed{\text{F}}$

$9954 - 1722 = \square \rightarrow \boxed{\text{N}}$

$9469 - 3252 = \square \rightarrow \boxed{\text{R}}$

$8090 - 1595 = \square \rightarrow \boxed{\text{C}}$

$8847 - 465 = \square \rightarrow \boxed{\text{D}}$

$7907 - 1249 = \square \rightarrow \boxed{\text{U}}$

$9152 - 1807 = \square \rightarrow \boxed{\text{E}}$

$8960 - 3689 = \square \rightarrow \boxed{\text{H}}$

Scratch space:

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

We need to divide our scout team into equal groups to search the forest floor. Divide these numbers to plan the search!

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:

$96 \div 8 = \boxed{}$

$110 \div 11 = \boxed{}$

$11 \div 11 = \boxed{}$

$70 \div 10 = \boxed{}$

$20 \div 5 = \boxed{}$

$4 \div 2 = \boxed{}$

$32 \div 4 = \boxed{}$

$50 \div 10 = \boxed{}$

$77 \div 7 = \boxed{}$

$36 \div 12 = \boxed{}$

$30 \div 5 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain soared down from the high branch with glider wings, then checked a pocket compass to escape.
2. The villain slid down the zipline with a rope dart, then lit up the dark hollow with a glow stone.
3. The villain bounced over the safety nets using bounce boots, then traced a path on a secret map.
4. The villain slid down the zipline with a rope dart, then scanned the canopy with a spyglass.
5. The villain bounced over the safety nets using bounce boots, then scanned the canopy with a spyglass.
6. The villain blasted a path through the leaves with a super slingshot, then alerted their crew with a brass whistle.
7. The villain slid down the zipline with a rope dart, then checked a pocket compass to escape.
8. The villain swung across the rope bridge using a grappling hook, then traced a path on a secret map.
9. The villain blasted a path through the leaves with a super slingshot, then traced a path on a secret map.
10. The villain soared down from the high branch with glider wings, then traced a path on a secret map.
11. The villain soared down from the high branch with glider wings, then lit up the dark hollow with a glow stone.
12. The villain slid down the zipline with a rope dart, then traced a path on a secret map.

Answer Key

The Golden Spigot Mystery

Culprit: Mia

Super Slingshot · Secret Map · Left-handed launcher · Feathered cap · Sparkler burst

Trail: Start 21 → Clue 1 16 → Clue 2 9 → Clue 3 5 → Clue 4 4 → Clue 5 1

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

Round 719 to the nearest hundred = 700 (T) · Round 1,069 to the nearest hundred = 1100 (V) · Round 109 to the nearest ten = 110 (P) · Round 490 to the nearest hundred = 500 (L) · Round 1,279 to the nearest hundred = 1300 (S) · Round 2,294 to the nearest hundred = 2300 (G) · Round 197 to the nearest hundred = 200 (Y) · Round 286 to the nearest ten = 290 (D) · Round 1,737 to the nearest hundred = 1700 (I) · Round 279 to the nearest hundred = 300 (O) · Round 232 to the nearest ten = 230 (H) · Round 20 to the nearest ten = 20 (A) · Round 91 to the nearest ten = 90 (E) · Round 2,929 to the nearest hundred = 2900 (N)

Clue 2 (Word problems): "LEFT HANDED LAUNCHER"

There were 66 bucket. 4 were used up. How many bucket are left? = 62 (L) · Scout found 16 acorn yesterday and 63 more today. How many acorn in all? = 79 (A) · There were 83 bucket. 37 were used up. How many bucket are left? = 46 (E) · There were 65 pinecone. 2 were used up. How many pinecone are left? = 63 (N) · Scout found 18 pinecone yesterday and 20 more today. How many pinecone in all? = 38 (T) · Scout found 2 bucket yesterday and 39 more today. How many bucket in all? = 41 (H) · Scout found 41 maple leaf yesterday and 6 more today. How many maple leaf in all? = 47 (F)

Clue 3 (Addition): "A SPARKLER BURST SCARED THE VILLAIN"

$3833 + 5462 = 9295$ (A) · $4870 + 3677 = 8547$ (U) · $1183 + 1958 = 3141$ (H) · $3048 + 2728 = 5776$ (E) · $2979 + 6051 = 9030$ (K) · $5426 + 3785 = 9211$ (S) · $1794 + 949 = 2743$ (B) · $2619 + 1581 = 4200$ (D) · $6487 + 2885 = 9372$ (I) · $4154 + 2425 = 6579$ (P) · $3591 + 5767 = 9358$ (N) · $1755 + 3620 = 5375$ (C) · $2509 + 2666 = 5175$ (L) · $3508 + 2178 = 5686$ (V) · $2050 + 2246 = 4296$ (T) · $1739 + 3711 = 5450$ (R)

Clue 4 (Subtraction): "A FEATHERED CAP WAS FOUND AT THE SCENE"

$6110 - 951 = 5159$ (A) · $13436 - 4447 = 8989$ (P) · $10538 - 2053 = 8485$ (W) · $4676 - 83 = 4593$ (O) · $9876 - 3080 = 6796$ (T) · $11634 - 4750 = 6884$ (S) · $2612 - 554 = 2058$ (F) · $9954 - 1722 = 8232$ (N) · $9469 - 3252 = 6217$ (R) · $8090 - 1595 = 6495$ (C) · $8847 - 465 = 8382$ (D) · $7907 - 1249 = 6658$ (U) · $9152 - 1807 = 7345$ (E) · $8960 - 3689 = 5271$ (H)

Clue 5 (Division facts (1-12)): surviving statement is box 9 → Mia

$96 \div 8 = 12$ · $110 \div 11 = 10$ · $11 \div 11 = 1$ · $70 \div 10 = 7$ · $20 \div 5 = 4$ · $4 \div 2 = 2$ · $32 \div 4 = 8$ · $50 \div 10 = 5$ · $77 \div 7 = 11$ · $36 \div 12 = 3$ · $30 \div 5 = 6$