



The Case of the Golden Pineapple

Grade 5 math · Subtraction, Multiplication, Rounding, Addition, Division · Reading level grades 1-2

Detective: _____ Date: _____

Someone slipped into the camp cabin and took the rare Golden Pineapple! Ranger Dan needs your help. Look at the clues and find the sneaky camper!

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 mischievous camp raider is _____

Possible suspects

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

NAME	CAMP BADGE	POCKET GEAR	COMPASS GRIP	GEAR THREAD	BEST DEFENSE
Roy	Boating Badge	whistle	right handed	green cotton	banana peel
Ned	Boating Badge	magnifier	right handed	green cotton	banana peel
Tad	Tracking Badge	canteen	right handed	blue wool	shiny light
Gus	Hiking Badge	spyglass	right handed	blue wool	loud whistle
Max	Boating Badge	canteen	left handed	green cotton	banana peel
Leo	Mapping Badge	rope	right handed	red silk	loud whistle
Eva	Mapping Badge	whistle	right handed	green cotton	shiny light
Ian	Tracking Badge	spyglass	right handed	green cotton	loud whistle
Ben	Boating Badge	rope	left handed	blue wool	shiny light
Ava	Climbing Badge	canteen	left handed	blue wool	loud whistle
Sam	Mapping Badge	spyglass	right handed	blue wool	banana peel
Eli	Boating Badge	whistle	left handed	red silk	banana peel
Ivy	Mapping Badge	canteen	right handed	green cotton	banana peel
Mia	Mapping Badge	canteen	right handed	blue wool	banana peel
Mae	Boating Badge	canteen	right handed	blue wool	loud whistle
Dan	Hiking Badge	whistle	left handed	green cotton	loud whistle
Jan	Hiking Badge	whistle	right handed	green cotton	banana peel
Jax	Tracking Badge	canteen	right handed	green cotton	loud whistle
Joy	Climbing Badge	spyglass	right handed	green cotton	banana peel
Zoe	Hiking Badge	whistle	right handed	green cotton	shiny light
Sky	Hiking Badge	canteen	left handed	red silk	shiny light

CLUE 1 Subtraction

Ranger Dan had twenty camp badges. Now some are gone. Subtract the left badges from the start to find the missing ones.

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

T 6063	1799	5029	T 6063	1799	7457	5029	5217	7316	1381	5029	2546	1017	1381	T 6063	2207	2546	5029
T 6063	1799	5029	2546	2215	2314	1763	3700	3233	2546	2546							

$10060 - 3997 = \square \rightarrow \text{T}$	$1705 - 688 = \square \rightarrow \text{N}$	$3390 - 1175 = \square \rightarrow \text{P}$
$6722 - 4923 = \square \rightarrow \text{H}$	$2459 - 252 = \square \rightarrow \text{U}$	$4193 - 493 = \square \rightarrow \text{L}$
$2912 - 1149 = \square \rightarrow \text{G}$	$5402 - 3088 = \square \rightarrow \text{Y}$	$4930 - 1697 = \square \rightarrow \text{A}$
$7336 - 4790 = \square \rightarrow \text{S}$	$3027 - 1646 = \square \rightarrow \text{O}$	$10050 - 4833 = \square \rightarrow \text{F}$
$10406 - 2949 = \square \rightarrow \text{I}$	$8276 - 3247 = \square \rightarrow \text{E}$	$10098 - 2782 = \square \rightarrow \text{D}$

Scratch space:

CLUE 2
Multiplication facts (1-12)

We found rows of footprints near the mud. Each row has the same number. Multiply them to count the total steps.

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

T			T														T
8	9	45	8	9	27	45	84	20	5	45	5	3	33	27	2	9	8
9	3	48	55	132	28	64	44	3	5	5							

$2 \times 4 = \square \rightarrow$ T	$11 \times 4 = \square \rightarrow$ P	$5 \times 9 = \square \rightarrow$ E	
$12 \times 11 = \square \rightarrow$ C	$8 \times 6 = \square \rightarrow$ N	$5 \times 4 = \square \rightarrow$ U	
$7 \times 12 = \square \rightarrow$ F	$1 \times 9 = \square \rightarrow$ H	$8 \times 8 = \square \rightarrow$ M	
$5 \times 11 = \square \rightarrow$ D	$1 \times 2 = \square \rightarrow$ G	$3 \times 11 = \square \rightarrow$ R	
$3 \times 9 = \square \rightarrow$ I	$1 \times 3 = \square \rightarrow$ A	$4 \times 7 = \square \rightarrow$ O	$5 \times 1 = \square \rightarrow$ S

Scratch space:

CLUE 3 Rounding

Our radio signal is weak. The distance scale only shows rounded numbers. Round the number to find where the signal came from.

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

T			T					T									
500	7000	1100	500	7000	230	1100	4300	500	290	230	2900	2900	1100	90	1700	200	2000

370	2000	200	2000	200	2000	2900	1100	1100	70

Round 544 to the nearest hundred → **T**

Round 229 to the nearest ten → **I**

Round 374 to the nearest ten → **B**

Round 2,904 to the nearest hundred → **P**

Round 4,348 to the nearest hundred → **F**

Round 7,287 to the nearest thousand → **H**

Round 202 to the nearest hundred → **N**

Round 93 to the nearest ten → **D**

Round 1,710 to the nearest hundred → **O**

Round 2,029 to the nearest thousand → **A**

Round 294 to the nearest ten → **R**

Round 1,060 to the nearest hundred → **E**

Round 70 to the nearest ten → **L**

Scratch space:

CLUE 4 Addition

Let's count the gear pieces found in the grass. Add the two small piles together to get the total clue count.

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

G																
3625	7156	6184	6184	6605	4340	4397	7151	7151	4397	6605	7151	5871	7156	6184	2062	3585

				G									
4340	7007	2188	6605	3625	7151	4397	2062	7151	5871	4397	7156	6605	

$1867 + 1758 = \square \rightarrow \boxed{\text{G}}$

$2202 + 4949 = \square \rightarrow \boxed{\text{T}}$

$917 + 1271 = \square \rightarrow \boxed{\text{U}}$

$1903 + 2437 = \square \rightarrow \boxed{\text{C}}$

$2650 + 1747 = \square \rightarrow \boxed{\text{O}}$

$3592 + 3013 = \square \rightarrow \boxed{\text{N}}$

$1077 + 985 = \square \rightarrow \boxed{\text{A}}$

$2321 + 4835 = \square \rightarrow \boxed{\text{R}}$

$2373 + 4634 = \square \rightarrow \boxed{\text{L}}$

$3336 + 2535 = \square \rightarrow \boxed{\text{H}}$

$2374 + 1211 = \square \rightarrow \boxed{\text{D}}$

$3217 + 2967 = \square \rightarrow \boxed{\text{E}}$

Scratch space:

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

We need to share these trail markers equally among the five search groups. Divide them up so everyone has a fair share.

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:

$4 \div 1 = \boxed{}$

$90 \div 9 = \boxed{}$

$12 \div 1 = \boxed{}$

$99 \div 11 = \boxed{}$

$50 \div 10 = \boxed{}$

$6 \div 6 = \boxed{}$

$36 \div 6 = \boxed{}$

$80 \div 10 = \boxed{}$

$55 \div 5 = \boxed{}$

$3 \div 1 = \boxed{}$

$49 \div 7 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain crosses the rope bridge, then steals the ruby coin.
2. The villain paddles the fast kayak, then grabs the silver compass.
3. The villain paddles the fast kayak, then snatches the golden map.
4. The villain crosses the rope bridge, then grabs the silver compass.
5. The villain climbs the tall vine, then grabs the silver compass.
6. The villain digs in the soft mud, then pockets the ancient map.
7. The villain digs in the soft mud, then steals the ruby coin.
8. The villain climbs the tall vine, then steals the ruby coin.
9. The villain digs in the soft mud, then grabs the silver compass.
10. The villain crosses the rope bridge, then pockets the ancient map.
11. The villain digs in the soft mud, then takes the crystal key.
12. The villain unlocks the wooden gate, then takes the crystal key.

Answer Key

The Case of the Golden Pineapple

Culprit: Jan

Hiking Badge · whistle · right handed · green cotton · banana peel

Trail: Start 21 → Clue 1 17 → Clue 2 11 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Subtraction): "THE THIEF DOES NOT USE THE SPYGLASS"

$10060 - 3997 = 6063$ (T) · $1705 - 688 = 1017$ (N) · $3390 - 1175 = 2215$ (P) · $6722 - 4923 = 1799$ (H) · $2459 - 252 = 2207$ (U) · $4193 - 493 = 3700$ (L) · $2912 - 1149 = 1763$ (G) · $5402 - 3088 = 2314$ (Y) · $4930 - 1697 = 3233$ (A) · $7336 - 4790 = 2546$ (S) · $3027 - 1646 = 1381$ (O) · $10050 - 4833 = 5217$ (F) · $10406 - 2949 = 7457$ (I) · $8276 - 3247 = 5029$ (E) · $10098 - 2782 = 7316$ (D)

Clue 2 (Multiplication facts (1-12)): "THE THIEF USES A RIGHT HAND COMPASS"

$2 \times 4 = 8$ (T) · $11 \times 4 = 44$ (P) · $5 \times 9 = 45$ (E) · $12 \times 11 = 132$ (C) · $8 \times 6 = 48$ (N) · $5 \times 4 = 20$ (U) · $7 \times 12 = 84$ (F) · $1 \times 9 = 9$ (H) · $8 \times 8 = 64$ (M) · $5 \times 11 = 55$ (D) · $1 \times 2 = 2$ (G) · $3 \times 11 = 33$ (R) · $3 \times 9 = 27$ (I) · $1 \times 3 = 3$ (A) · $4 \times 7 = 28$ (O) · $5 \times 1 = 5$ (S)

Clue 3 (Rounding): "THE THIEF TRIPPED ON A BANANA PEEL"

Round 544 to the nearest hundred = 500 (T) · Round 229 to the nearest ten = 230 (I) · Round 374 to the nearest ten = 370 (B) · Round 2,904 to the nearest hundred = 2900 (P) · Round 4,348 to the nearest hundred = 4300 (F) · Round 7,287 to the nearest thousand = 7000 (H) · Round 202 to the nearest hundred = 200 (N) · Round 93 to the nearest ten = 90 (D) · Round 1,710 to the nearest hundred = 1700 (O) · Round 2,029 to the nearest thousand = 2000 (A) · Round 294 to the nearest ten = 290 (R) · Round 1,060 to the nearest hundred = 1100 (E) · Round 70 to the nearest ten = 70 (L)

Clue 4 (Addition): "GREEN COTTON THREAD CLUNG TO A THORN"

$1867 + 1758 = 3625$ (G) · $2202 + 4949 = 7151$ (T) · $917 + 1271 = 2188$ (U) · $1903 + 2437 = 4340$ (C) · $2650 + 1747 = 4397$ (O) · $3592 + 3013 = 6605$ (N) · $1077 + 985 = 2062$ (A) · $2321 + 4835 = 7156$ (R) · $2373 + 4634 = 7007$ (L) · $3336 + 2535 = 5871$ (H) · $2374 + 1211 = 3585$ (D) · $3217 + 2967 = 6184$ (E)

Clue 5 (Division facts (1-12)): surviving statement is box 2 → Jan

$4 \div 1 = 4$ · $90 \div 9 = 10$ · $12 \div 1 = 12$ · $99 \div 11 = 9$ · $50 \div 10 = 5$ · $6 \div 6 = 1$ · $36 \div 6 = 6$ · $80 \div 10 = 8$ · $55 \div 5 = 11$ · $3 \div 1 = 3$ · $49 \div 7 = 7$