



The Secret Jungle Map Mystery

Grade 10 math · Addition, Multiplication, Subtraction, Bar models, Division · Reading level grades 1-2

Detective: _____ Date: _____

Oh no! Someone took the golden map from the camp. We must help the team find it before dark. Look for the clues!

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 the sneaky map-snatcher is _____

Possible suspects

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

NAME	RANGER GEAR	CAMP BADGE	WRITING HAND	HAIR COLOR	FUNNY WEAKNESS
Noel	walkie talkie	shelter building	right handed	brown hair	scared of frogs
Pippa	night goggles	shelter building	right handed	black hair	scared of frogs
Ella	walkie talkie	knot tying	right handed	brown hair	tickled by feathers
Ben	night goggles	raft making	right handed	brown hair	startled by bubbles
Lily	pocket compass	map reading	right handed	red hair	scared of frogs
Toby	rope launcher	shelter building	right handed	brown hair	tickled by feathers
Maya	rope launcher	shelter building	left handed	black hair	startled by bubbles
Max	super magnet	fire building	right handed	brown hair	scared of frogs
Ava	walkie talkie	shelter building	right handed	red hair	scared of frogs
Luke	super magnet	knot tying	right handed	brown hair	scared of frogs
Jude	rope launcher	raft making	right handed	black hair	scared of frogs
Ruby	super magnet	knot tying	left handed	brown hair	scared of frogs
Sam	rope launcher	raft making	left handed	black hair	startled by bubbles
Owen	walkie talkie	raft making	left handed	black hair	tickled by feathers
Emma	night goggles	knot tying	right handed	brown hair	scared of frogs
Sora	rope launcher	raft making	left handed	brown hair	scared of frogs
Gale	super magnet	raft making	left handed	black hair	tickled by feathers
Mia	super magnet	map reading	left handed	black hair	tickled by feathers
Iris	rope launcher	map reading	left handed	black hair	tickled by feathers
Finn	super magnet	knot tying	left handed	black hair	tickled by feathers
Leo	super magnet	raft making	right handed	brown hair	scared of frogs

CLUE 1

We need to count our gold coins. We add the shiny coins to the dusty coins to find the total.

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

The diagram shows two rows of boxes. The top row has 15 boxes, and the bottom row has 12 boxes. The boxes are labeled with numbers below them. The top row labels are: 5571, 5391, 2392, 4929, 4231, 8049, 8049, 9890, 4231, 5520, 7390, 5939, 2392, 8370, 5520, 5939, 5571. The bottom row labels are: 4848, 5520, 5939, 4122, 2777, 9890, 7068, 5571, 2375, 9890, 4848, 4231, 5520, 8042. The boxes at (1,1), (1,17), and (2,8) are highlighted in orange and contain the letter 'T'.

$$2449 + 3122 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$3964 + 3426 = \boxed{} \rightarrow \boxed{\text{D}}$$

$978 + 1397 = \boxed{} \rightarrow \boxed{\mathbf{M}}$

$$950 + 1442 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$3520 + 4850 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$2225 + 3714 = \boxed{} \rightarrow \boxed{\mathbf{0}}$$

$$3282 + 1647 = \boxed{} \rightarrow \boxed{\mathbf{V}}$$

$$3879 + 6011 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$2132 + 1990 = \boxed{} \rightarrow \boxed{\mathbf{W}}$$

$$4906 + 2162 = \boxed{} \rightarrow \boxed{\text{F}}$$

$$1813 + 2418 = \boxed{} \rightarrow \boxed{}$$

$$2229 + 3291 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$2616 + 2775 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$5308 + 2741 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$2916 + 1932 = \boxed{} \rightarrow \boxed{\text{K}}$$

$$1860 + 917 = \boxed{} \rightarrow \boxed{\text{R}}$$

$3765 + 4277 = \boxed{} \rightarrow \boxed{\text{G}}$

Scratch space:

Multiplication facts (1-12)

We see rows of tents in the camp. Each row has the same number of tents, so we multiply them.

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

Diagram illustrating a sequence of numbers in boxes, with 'T' marking specific positions:

Row 1: 15, 50, 99, 81, 144, 5, 99, 90, 15, 50, 99, 100, 88, 88, 100, 132, 50, 15

Row 2: 50, 25, 21, 90, 15, 4, 132, 88, 25, 30, 100, 15

$5 \times 3 = \square \rightarrow \boxed{\mathbf{T}}$

$11 \times 12 = \boxed{} \rightarrow \boxed{\mathbf{G}}$

$9 \times 9 = \square \rightarrow \boxed{\mathbf{Y}}$

$5 \times 1 = \boxed{} \rightarrow \boxed{\text{S}}$

$10 \times 10 = \boxed{} \rightarrow \boxed{\text{I}}$

$11 \times 8 = \boxed{} \rightarrow \boxed{\text{R}}$

$9 \times 11 = \square \rightarrow \boxed{\mathbf{E}}$

$5 \times 10 = \boxed{} \rightarrow \boxed{\text{H}}$

$$2 \times 2 = \boxed{} \rightarrow \boxed{0}$$

$5 \times 5 = \square \rightarrow \boxed{\mathbf{A}}$

$7 \times 3 = \square \rightarrow \boxed{\text{N}}$

$5 \times 6 = \square \rightarrow \mathbf{B}$

$10 \times 9 = \boxed{} \rightarrow \boxed{\text{D}}$

$12 \times 12 = \square \rightarrow \boxed{\text{U}}$

Scratch space:

CLUE 3

Subtraction

Some wild monkeys took our bananas! We subtract the stolen bananas to see what is left.

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

A																
5646	5026	8642	8634	3792	7687	1641	6999	6999	1400	5592	5592	1641	1015	1400	5102	6999

		A										
1726	5232	5646	1400	5592	1631	7581	7603	5592	8634	5102	1015	1015

$9124 - 3478 = \square \rightarrow \text{A}$

$6938 - 3146 = \square \rightarrow \text{P}$

$4484 - 3469 = \square \rightarrow \text{F}$

$11029 - 4030 = \square \rightarrow \text{G}$

$8039 - 436 = \square \rightarrow \text{H}$

$10954 - 2320 = \square \rightarrow \text{M}$

$3143 - 1743 = \square \rightarrow \text{R}$

$11638 - 4057 = \square \rightarrow \text{T}$

$10506 - 1864 = \square \rightarrow \text{U}$

$7894 - 2792 = \square \rightarrow \text{O}$

$10712 - 3025 = \square \rightarrow \text{I}$

$7766 - 2174 = \square \rightarrow \text{E}$

$6086 - 1060 = \square \rightarrow \text{J}$

$2468 - 742 = \square \rightarrow \text{S}$

$2671 - 1040 = \square \rightarrow \text{D}$

$5985 - 4344 = \square \rightarrow \text{N}$

$8402 - 3170 = \square \rightarrow \text{C}$

Scratch space:

CLUE 4

Bar model word problems

We draw two colored blocks to compare our map pieces. The long block shows us the missing part.

Draw a bar model to solve each word problem, then write its letter in the boxes to fill in the missing word.

A strand of

B							I	
---	--	--	--	--	--	--	---	--

 hair turned up at the scene.

81 83 84 7 41 42 111 83

There were 113 ripe jungle bananas in all. 32 ripe jungle bananas were used. How many ripe jungle bananas are left?

draw a bar model

Answer: → **B**

One group collected 39 ripe jungle bananas and another group collected 2 ripe jungle bananas. How many ripe jungle bananas in all?

draw a bar model

Answer: → **N**

The brave scout has 166 wooden map pieces, packed 2 to a bag. How many bags can be filled?

draw a bar model

Answer: → **R**

The brave scout shares 222 wooden map pieces equally among 2 teams. How many wooden map pieces does each team get?

draw a bar model

Answer: → **A**

The brave scout has 42 wooden map pieces, packed 6 to a bag. How many bags can be filled?

draw a bar model

Answer: → **W**

The red team has 104 ripe jungle bananas and the blue team has 20 ripe jungle bananas. How many more ripe jungle bananas does the red team have?

draw a bar model

Answer: → **O**

The brave scout has 168 striped camp tents, packed 4 to a bag. How many bags can be filled?

draw a bar model

Answer: → **H**

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

We have a big box of juice boxes. We must share them equally among all the brave campers.

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:

$18 \div 3 = \boxed{}$

$60 \div 5 = \boxed{}$

$66 \div 6 = \boxed{}$

$96 \div 12 = \boxed{}$

$36 \div 9 = \boxed{}$

$12 \div 4 = \boxed{}$

$90 \div 9 = \boxed{}$

$6 \div 3 = \boxed{}$

$18 \div 2 = \boxed{}$

$56 \div 8 = \boxed{}$

$55 \div 11 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain talks on a walkie talkie, then builds a quick shelter.
2. The villain checks a pocket compass, then makes a wooden raft.
3. The villain checks a pocket compass, then builds a quick shelter.
4. The villain talks on a walkie talkie, then starts a campfire.
5. The villain puts on night goggles, then starts a campfire.
6. The villain pulls with a super magnet, then ties a tight knot.
7. The villain checks a pocket compass, then reads a secret map.
8. The villain talks on a walkie talkie, then reads a secret map.
9. The villain swings with a rope launcher, then reads a secret map.
10. The villain swings with a rope launcher, then builds a quick shelter.
11. The villain puts on night goggles, then ties a tight knot.
12. The villain pulls with a super magnet, then starts a campfire.

Answer Key

The Secret Jungle Map Mystery

Culprit: Noel

walkie talkie · shelter building · right handed · brown hair · scared of frogs

Trail: Start 21 → Clue 1 14 → Clue 2 9 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT KNOW RAFT MAKING"

$2449 + 3122 = 5571$ (T) · $3964 + 3426 = 7390$ (D) · $978 + 1397 = 2375$ (M) · $950 + 1442 = 2392$ (E) · $3520 + 4850 = 8370$ (S) · $2225 + 3714 = 5939$ (O) · $3282 + 1647 = 4929$ (V) · $3879 + 6011 = 9890$ (A) · $2132 + 1990 = 4122$ (W) · $4906 + 2162 = 7068$ (F) · $1813 + 2418 = 4231$ (I) · $2229 + 3291 = 5520$ (N) · $2616 + 2775 = 5391$ (H) · $5308 + 2741 = 8049$ (L) · $2916 + 1932 = 4848$ (K) · $1860 + 917 = 2777$ (R) · $3765 + 4277 = 8042$ (G)

Clue 2 (Multiplication facts (1-12)): "THEY USED THEIR RIGHT HAND TO GRAB IT"

$5 \times 3 = 15$ (T) · $11 \times 12 = 132$ (G) · $9 \times 9 = 81$ (Y) · $5 \times 1 = 5$ (S) · $10 \times 10 = 100$ (I) · $11 \times 8 = 88$ (R) · $9 \times 11 = 99$ (E) · $5 \times 10 = 50$ (H) · $2 \times 2 = 4$ (O) · $5 \times 5 = 25$ (A) · $7 \times 3 = 21$ (N) · $5 \times 6 = 30$ (B) · $10 \times 9 = 90$ (D) · $12 \times 12 = 144$ (U)

Clue 3 (Subtraction): "A JUMPING GREEN FROG SCARED THEM OFF"

$9124 - 3478 = 5646$ (A) · $6938 - 3146 = 3792$ (P) · $4484 - 3469 = 1015$ (F) · $11029 - 4030 = 6999$ (G) · $8039 - 436 = 7603$ (H) · $10954 - 2320 = 8634$ (M) · $3143 - 1743 = 1400$ (R) · $11638 - 4057 = 7581$ (T) · $10506 - 1864 = 8642$ (U) · $7894 - 2792 = 5102$ (O) · $10712 - 3025 = 7687$ (I) · $7766 - 2174 = 5592$ (E) · $6086 - 1060 = 5026$ (J) · $2468 - 742 = 1726$ (S) · $2671 - 1040 = 1631$ (D) · $5985 - 4344 = 1641$ (N) · $8402 - 3170 = 5232$ (C)

Clue 4 (Bar model word problems): "BROWN HAIR"

There were 113 ripe jungle bananas in all. 32 ripe jungle bananas were used. How many ripe jungle bananas are left? = 81 (B) · One group collected 39 ripe jungle bananas and another group collected 2 ripe jungle bananas. How many ripe jungle bananas in all? = 41 (N) · The brave scout has 166 wooden map pieces, packed 2 to a bag. How many bags can be filled? = 83 (R) · The brave scout shares 222 wooden map pieces equally among 2 teams. How many wooden map pieces does each team get? = 111 (A) · The brave scout has 42 wooden map pieces, packed 6 to a bag. How many bags can be filled? = 7 (W) · The red team has 104 ripe jungle bananas and the blue team has 20 ripe jungle bananas. How many more ripe jungle bananas does the red team have? = 84 (O) · The brave scout has 168 striped camp tents, packed 4 to a bag. How many bags can be filled? = 42 (H)

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

$18 \div 3 = 6$ · $60 \div 5 = 12$ · $66 \div 6 = 11$ · $96 \div 12 = 8$ · $36 \div 9 = 4$ · $12 \div 4 = 3$ · $90 \div 9 = 10$ · $6 \div 3 = 2$ · $18 \div 2 = 9$ · $56 \div 8 = 7$ · $55 \div 11 = 5$