



# The Lost Island Map Mystery

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

Detective: \_\_\_\_\_ Date: \_\_\_\_\_

Oh no! Someone took the Head Mapmaker's golden compass. Without it, the ships cannot find their way home. A clever thief left footprints in the sand. Let us follow the clues and find the culprit!

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 Swashbuckler is** \_\_\_\_\_

## Possible suspects

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

| NAME          | ADVENTURE GEAR  | SECRET GADGET  | MAP HAND     | BANDANA COLOR | SILLY FEAR        |
|---------------|-----------------|----------------|--------------|---------------|-------------------|
| Bella Hook    | golden spyglass | bubble blaster | right handed | red bandana   | scared of spiders |
| Gulliver Gray | golden spyglass | bubble blaster | left handed  | green bandana | scared of spiders |
| Nelly Net     | pocket compass  | smoke bomb     | right handed | red bandana   | dislikes tickles  |
| Tommy Flint   | decoder ring    | laser watch    | right handed | red bandana   | dislikes tickles  |
| Molly Map     | golden spyglass | glow boots     | right handed | blue bandana  | dislikes tickles  |
| Toby Tide     | decoder ring    | bubble blaster | right handed | green bandana | afraid of frogs   |
| Barnaby Blue  | pocket compass  | bubble blaster | right handed | red bandana   | afraid of frogs   |
| Mary Read     | golden spyglass | laser watch    | right handed | red bandana   | scared of spiders |
| Finbar Fish   | decoder ring    | smoke bomb     | right handed | green bandana | scared of spiders |
| Benny Boot    | golden spyglass | smoke bomb     | right handed | red bandana   | scared of spiders |
| Willa Wave    | decoder ring    | slingshot      | right handed | blue bandana  | scared of spiders |
| Pip Squeak    | decoder ring    | smoke bomb     | left handed  | red bandana   | scared of spiders |
| Captain Sam   | pocket compass  | slingshot      | right handed | red bandana   | scared of spiders |
| Sandy Shore   | golden spyglass | glow boots     | right handed | green bandana | afraid of frogs   |
| Roger Red     | golden spyglass | laser watch    | left handed  | blue bandana  | afraid of frogs   |
| Jack Bones    | decoder ring    | glow boots     | right handed | blue bandana  | scared of spiders |
| Dolly Dock    | golden spyglass | laser watch    | right handed | red bandana   | afraid of frogs   |
| Arty Anchor   | bamboo snorkel  | bubble blaster | right handed | green bandana | dislikes tickles  |
| Peggy Plank   | bamboo snorkel  | glow boots     | right handed | red bandana   | afraid of frogs   |
| Scurvy Sally  | golden spyglass | laser watch    | left handed  | red bandana   | dislikes tickles  |
| Peter Patch   | decoder ring    | glow boots     | right handed | red bandana   | scared of spiders |

### CLUE 1

To find the next path, we look through a foggy spyglass. The map distances are blurry, so we must round the numbers to the nearest ten to read them.

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

3000 200 80 90 2000 500 500 600 2000 7000 20 6000 80 60 7000 6000 3000

200 600 90 80 700 500 6000 300 30 6000 6000 3000 60

Round 3,206 to the nearest thousand   $\rightarrow$  **T**

Round 748 to the nearest hundred   $\rightarrow$  **G**

Round 22 to the nearest ten   $\rightarrow$  **D**

Round 89 to the nearest ten   $\rightarrow$  **V**

Round 64 to the nearest ten   $\rightarrow$  **S**

Round 459 to the nearest hundred  → **L**

Round 313 to the nearest hundred  → **W**

Round 621 to the nearest hundred   $\rightarrow$  **A**

Round 5,564 to the nearest thousand   $\rightarrow$

Round 200 to the nearest hundred   $\rightarrow$  **H**

Round 26 to the nearest ten  → **B**

Round 82 to the nearest ten  → **E**

Round 7,393 to the nearest thousand  → **N**

Round 2,492 to the nearest thousand   $\rightarrow$

Scratch space:

**CLUE 2**

We found a pile of dropped supplies on the beach. If we add up all the lost water canteens and biscuit boxes, we will find a secret message.

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

The diagram consists of three groups of boxes, each with a number below it. The first group has 10 boxes, the second has 8 boxes, and the third has 8 boxes. Some boxes are shaded orange and contain the letter 'T'.

| Group   | Box 1 | Box 2 | Box 3 | Box 4 | Box 5 | Box 6 | Box 7 | Box 8 | Box 9 | Box 10 |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Group 1 | T     |       |       |       |       |       |       |       | T     |        |
| Group 2 |       |       |       |       |       |       |       | T     |       |        |
| Group 3 |       |       |       |       |       |       |       | T     |       |        |

Numbers below the boxes:

Group 1: 445, 299, 623, 706, 796, 706, 832, 623, 735, 445

Group 2: 853, 951, 535, 445, 623, 706

Group 3: 853, 535, 445, 299

Group 4 (shaded): 445, 299, 623, 535, 951

Group 5 (shaded): 951, 535, 692, 299, 445

Group 6 (shaded): 299, 676, 656, 260

$305 + 140 = \boxed{\phantom{000}} \rightarrow \boxed{\text{T}}$

$329 + 294 = \boxed{\phantom{000}} \rightarrow \boxed{\text{E}}$

$$295 + 558 = \boxed{\phantom{000}} \rightarrow \boxed{\text{W}}$$

$$249 + 547 = \boxed{\phantom{000}} \rightarrow \boxed{\text{U}}$$

$$285 + 371 = \boxed{\phantom{000}} \rightarrow \boxed{\text{N}}$$

$$413 + 263 = \boxed{\phantom{000}} \rightarrow \boxed{\text{A}}$$

$$485 + 221 = \boxed{\phantom{000}} \rightarrow \boxed{\text{S}}$$

$306 + 229 = \boxed{\phantom{000}} \rightarrow \boxed{\text{I}}$

$$518 + 433 = \boxed{\phantom{000}} \rightarrow \boxed{\mathbf{R}}$$

$$421 + 271 = \boxed{\phantom{000}} \rightarrow \boxed{\text{G}}$$

$$307 + 525 = \boxed{\phantom{000}} \rightarrow \boxed{\text{P}}$$

$$386 + 349 = \boxed{\phantom{000}} \rightarrow \boxed{\text{C}}$$

$$147 + 152 = \boxed{\phantom{000}} \rightarrow \boxed{\text{H}}$$

$106 + 154 = \boxed{\phantom{000}} \rightarrow \boxed{\mathbf{D}}$

Scratch space:

### CLUE 3 Subtraction

The crew checks the main supply chest to see what is missing. Subtracting the taken bananas from our starting total reveals a hidden clue.

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

|                                                                                 |                                                                         |                                                                         |                                                                         |                                                                         |                                                                         |                                                                         |                                                                         |                                                                         |                                                                         |                                                                         |                                                                         |                                                                         |                                                                         |                                                                         |                                                                         |
|---------------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|
| <div style="border: 1px solid black; padding: 2px; text-align: center;">A</div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> |
| 486                                                                             | 328                                                                     | 544                                                                     | 199                                                                     | 331                                                                     | 687                                                                     | 899                                                                     | 544                                                                     | 821                                                                     | 766                                                                     | 864                                                                     | 885                                                                     | 544                                                                     | 251                                                                     | 251                                                                     |                                                                         |

  

|                                                                         |                                                                         |                                                                                 |                                                                         |                                                                         |                                                                         |                                                                         |                                                                         |                                                                                 |                                                                         |                                                                                 |                                                                         |     |
|-------------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------|-----|
| <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; padding: 2px; text-align: center;">A</div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; padding: 2px; text-align: center;">A</div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> | <div style="border: 1px solid black; padding: 2px; text-align: center;">A</div> | <div style="border: 1px solid black; width: 30px; height: 30px;"></div> |     |
| 687                                                                     | 124                                                                     | 486                                                                             | 864                                                                     | 766                                                                     | 328                                                                     | 489                                                                     | 766                                                                     | 552                                                                             | 486                                                                     | 885                                                                             | 486                                                                     | 331 |

$752 - 266 = \boxed{\phantom{00}} \rightarrow \boxed{\text{A}}$

$824 - 280 = \boxed{\phantom{00}} \rightarrow \boxed{\text{I}}$

$864 - 375 = \boxed{\phantom{00}} \rightarrow \boxed{\text{H}}$

$844 - 23 = \boxed{\phantom{00}} \rightarrow \boxed{\text{D}}$

$345 - 17 = \boxed{\phantom{00}} \rightarrow \boxed{\text{T}}$

$1069 - 170 = \boxed{\phantom{00}} \rightarrow \boxed{\text{P}}$

$489 - 158 = \boxed{\phantom{00}} \rightarrow \boxed{\text{Y}}$

$946 - 82 = \boxed{\phantom{00}} \rightarrow \boxed{\text{R}}$

$783 - 96 = \boxed{\phantom{00}} \rightarrow \boxed{\text{S}}$

$1068 - 302 = \boxed{\phantom{00}} \rightarrow \boxed{\text{E}}$

$928 - 376 = \boxed{\phantom{00}} \rightarrow \boxed{\text{M}}$

$387 - 136 = \boxed{\phantom{00}} \rightarrow \boxed{\text{L}}$

$1054 - 169 = \boxed{\phantom{00}} \rightarrow \boxed{\text{W}}$

$351 - 152 = \boxed{\phantom{00}} \rightarrow \boxed{\text{N}}$

$435 - 311 = \boxed{\phantom{00}} \rightarrow \boxed{\text{C}}$

Scratch space:

**CLUE 4**
**Multiplication facts (1-12)**

We reach a wall of locked treasure boxes lined up in even rows. Multiplying the rows of chests helps us unlock the code to the next clue.

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

|    |    |    |    |    |    |    |     |    |    |    |   |    |    |    |    |    |    |   |
|----|----|----|----|----|----|----|-----|----|----|----|---|----|----|----|----|----|----|---|
| A  |    |    |    |    | A  |    |     | A  |    | A  |   |    |    | A  |    |    | A  |   |
| 28 | 22 | 6  | 10 | 33 | 28 | 11 | 10  | 28 | 11 | 28 | 4 | 14 | 22 | 28 | 60 | 32 | 28 | 4 |
|    |    |    |    |    |    |    |     |    |    |    |   |    |    |    |    |    |    |   |
| 16 | 6  | 88 | 14 | 33 | 6  | 66 | 132 | 11 | 10 |    |   |    |    |    |    |    |    |   |

|                                               |                                              |                                              |
|-----------------------------------------------|----------------------------------------------|----------------------------------------------|
| $4 \times 7 = \square \rightarrow \text{A}$   | $2 \times 7 = \square \rightarrow \text{T}$  | $1 \times 10 = \square \rightarrow \text{D}$ |
| $11 \times 1 = \square \rightarrow \text{N}$  | $11 \times 3 = \square \rightarrow \text{B}$ | $8 \times 11 = \square \rightarrow \text{F}$ |
| $6 \times 11 = \square \rightarrow \text{H}$  | $6 \times 10 = \square \rightarrow \text{P}$ | $2 \times 3 = \square \rightarrow \text{E}$  |
| $4 \times 4 = \square \rightarrow \text{L}$   | $8 \times 4 = \square \rightarrow \text{W}$  | $4 \times 1 = \square \rightarrow \text{S}$  |
| $11 \times 12 = \square \rightarrow \text{I}$ | $2 \times 11 = \square \rightarrow \text{R}$ |                                              |

Scratch space:

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

We must share the found sea crystals equally among our scout team. Dividing the crystals tells us exactly which trail the suspect took.

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:**

$36 \div 3 = \boxed{\phantom{00}}$

$11 \div 1 = \boxed{\phantom{00}}$

$36 \div 9 = \boxed{\phantom{00}}$

$14 \div 2 = \boxed{\phantom{00}}$

$45 \div 9 = \boxed{\phantom{00}}$

$30 \div 3 = \boxed{\phantom{00}}$

$63 \div 7 = \boxed{\phantom{00}}$

$10 \div 10 = \boxed{\phantom{00}}$

$72 \div 12 = \boxed{\phantom{00}}$

$12 \div 4 = \boxed{\phantom{00}}$

$18 \div 9 = \boxed{\phantom{00}}$

**Step 2 - cross out the sentence with each answer:**

1. The villain scaled the rocky cliff using a grappling hook, then fired a walnut with a slingshot as a distraction.
2. The villain scaled the rocky cliff using a grappling hook, then shot a giant bubble blaster to block the path.
3. The villain cracked the treasure vault with a decoder ring, then shined a bright laser watch to escape.
4. The villain swung across the deck with a golden spyglass, then shot a giant bubble blaster to block the path.
5. The villain escaped through the lagoon with a bamboo snorkel, then shot a giant bubble blaster to block the path.
6. The villain cracked the treasure vault with a decoder ring, then fired a walnut with a slingshot as a distraction.
7. The villain scaled the rocky cliff using a grappling hook, then lit up the dark cave with glow boots.
8. The villain swung across the deck with a golden spyglass, then shined a bright laser watch to escape.
9. The villain navigated the dark jungle with a pocket compass, then shined a bright laser watch to escape.
10. The villain cracked the treasure vault with a decoder ring, then vanished in a cloud from a smoke bomb.
11. The villain navigated the dark jungle with a pocket compass, then fired a walnut with a slingshot as a distraction.
12. The villain swung across the deck with a golden spyglass, then vanished in a cloud from a smoke bomb.

# Answer Key

## The Lost Island Map Mystery

### Culprit: Mary Read

golden spyglass · laser watch · right handed · red bandana · scared of spiders

Trail: Start 21 → Clue 1 16 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

### Clue 1 (Rounding): "THE VILLAIN DOES NOT HAVE GLOW BOOTS"

Round 3,206 to the nearest thousand = 3000 (T) · Round 748 to the nearest hundred = 700 (G) · Round 22 to the nearest ten = 20 (D) · Round 89 to the nearest ten = 90 (V) · Round 64 to the nearest ten = 60 (S) · Round 459 to the nearest hundred = 500 (L) · Round 313 to the nearest hundred = 300 (W) · Round 621 to the nearest hundred = 600 (A) · Round 5,564 to the nearest thousand = 6000 (O) · Round 200 to the nearest hundred = 200 (H) · Round 26 to the nearest ten = 30 (B) · Round 82 to the nearest ten = 80 (E) · Round 7,393 to the nearest thousand = 7000 (N) · Round 2,492 to the nearest thousand = 2000 (I)

### Clue 2 (Addition): "THE SUSPECT WRITES WITH THEIR RIGHT HAND"

$305 + 140 = 445$  (T) ·  $329 + 294 = 623$  (E) ·  $295 + 558 = 853$  (W) ·  $249 + 547 = 796$  (U) ·  $285 + 371 = 656$  (N) ·  $413 + 263 = 676$  (A) ·  $485 + 221 = 706$  (S) ·  $306 + 229 = 535$  (I) ·  $518 + 433 = 951$  (R) ·  $421 + 271 = 692$  (G) ·  $307 + 525 = 832$  (P) ·  $386 + 349 = 735$  (C) ·  $147 + 152 = 299$  (H) ·  $106 + 154 = 260$  (D)

### Clue 3 (Subtraction): "A TINY SPIDER WILL SCARE THEM AWAY"

$752 - 266 = 486$  (A) ·  $824 - 280 = 544$  (I) ·  $864 - 375 = 489$  (H) ·  $844 - 23 = 821$  (D) ·  $345 - 17 = 328$  (T) ·  $1069 - 170 = 899$  (P) ·  $489 - 158 = 331$  (Y) ·  $946 - 82 = 864$  (R) ·  $783 - 96 = 687$  (S) ·  $1068 - 302 = 766$  (E) ·  $928 - 376 = 552$  (M) ·  $387 - 136 = 251$  (L) ·  $1054 - 169 = 885$  (W) ·  $351 - 152 = 199$  (N) ·  $435 - 311 = 124$  (C)

### Clue 4 (Multiplication facts (1-12)): "A RED BANDANA STRAP WAS LEFT BEHIND"

$4 \times 7 = 28$  (A) ·  $2 \times 7 = 14$  (T) ·  $1 \times 10 = 10$  (D) ·  $11 \times 1 = 11$  (N) ·  $11 \times 3 = 33$  (B) ·  $8 \times 11 = 88$  (F) ·  $6 \times 11 = 66$  (H) ·  $6 \times 10 = 60$  (P) ·  $2 \times 3 = 6$  (E) ·  $4 \times 4 = 16$  (L) ·  $8 \times 4 = 32$  (W) ·  $4 \times 1 = 4$  (S) ·  $11 \times 12 = 132$  (I) ·  $2 \times 11 = 22$  (R)

### Clue 5 (Division facts (1-12)): surviving statement is box 8 → Mary Read

$36 \div 3 = 12$  ·  $11 \div 1 = 11$  ·  $36 \div 9 = 4$  ·  $14 \div 2 = 7$  ·  $45 \div 9 = 5$  ·  $30 \div 3 = 10$  ·  $63 \div 7 = 9$  ·  $10 \div 10 = 1$  ·  $72 \div 12 = 6$  ·  $12 \div 4 = 3$  ·  $18 \div 9 = 2$