



# The Secret Island Mystery

Grade 2 math · Skip counting, Addition, Subtraction, Multiplication, Missing addends · Reading level grades 1-2

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

The Golden Coconut is gone from the Treehouse Club! The Pineapple Bandit left a trail of clues deep in the jungle. We need to crack the codes and find who took 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 Pineapple Bandit is** \_\_\_\_\_

## Possible suspects

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

| NAME | SPECIAL GEAR     | MAP SKILLS      | DOMINANT HAND | HEADWEAR OR HAIR | FEAR          |
|------|------------------|-----------------|---------------|------------------|---------------|
| Dan  | bubble shield    | swamp jumping   | right handed  | green bandana    | silly jokes   |
| Dot  | laser flashlight | cave diving     | left handed   | blue cap         | loud whistles |
| Lily | bubble shield    | river rafting   | right handed  | red hair         | silly jokes   |
| Amy  | sticky boots     | jungle climbing | left handed   | green bandana    | bright lights |
| Sam  | sticky boots     | bridge crossing | right handed  | green bandana    | loud whistles |
| Pip  | laser flashlight | river rafting   | right handed  | blue cap         | loud whistles |
| Ben  | laser flashlight | jungle climbing | right handed  | green bandana    | silly jokes   |
| Mia  | grappling hook   | swamp jumping   | right handed  | red hair         | loud whistles |
| Ned  | bubble shield    | bridge crossing | left handed   | red hair         | bright lights |
| Eli  | grappling hook   | bridge crossing | right handed  | red hair         | bright lights |
| Rex  | sticky boots     | bridge crossing | right handed  | green bandana    | silly jokes   |
| Toby | bubble shield    | cave diving     | right handed  | green bandana    | silly jokes   |
| Joy  | laser flashlight | river rafting   | left handed   | blue cap         | silly jokes   |
| Ella | super glider     | swamp jumping   | right handed  | green bandana    | silly jokes   |
| Finn | sticky boots     | bridge crossing | right handed  | blue cap         | loud whistles |
| Jake | laser flashlight | swamp jumping   | right handed  | red hair         | silly jokes   |
| Leo  | laser flashlight | jungle climbing | right handed  | green bandana    | loud whistles |
| Luke | super glider     | swamp jumping   | left handed   | blue cap         | loud whistles |
| Gus  | grappling hook   | swamp jumping   | right handed  | blue cap         | loud whistles |
| Zoe  | super glider     | cave diving     | right handed  | red hair         | loud whistles |
| Abby | grappling hook   | river rafting   | left handed   | green bandana    | silly jokes   |

### CLUE 1

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

Diagram illustrating the arrangement of boxes and numbers:

Top row (15 boxes):

- Box 1: T
- Box 2: 120
- Box 3: 25
- Box 4: 9
- Box 5: 20
- Box 6: 140
- Box 7: 33
- Box 8: 45
- Box 9: 70
- Box 10: T
- Box 11: 120
- Box 12: 45
- Box 13: 90
- Box 14: 9
- Box 15: 35

Bottom row (8 boxes):

- Box 1: 33
- Box 2: 90
- Box 3: 120
- Box 4: 55
- Box 5: 140
- Box 6: 110
- Box 7: 9
- Box 8: 45
- Box 9: 70
- Box 10: 110
- Box 11: 9

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, \_\_, 100, 110  → **0**

Skip-count by 5s. Fill the blank: 5, 10, 15, \_\_, 25, 30  → **B**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, \_\_, 150, 160  → **A**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, \_\_, 120, 130  → **V**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, \_\_, 30, 35  → **H**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, \_\_, 36, 39  → **N**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, \_\_, 50, 55  → **D**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, \_\_, 75, 80  →

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, \_\_, 60, 65  → **C**

Skip-count by 3s. Fill the blank: 3, 6, \_\_, 12, 15  → **E**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30,     , 40, 45  → **S**

Scratch space:

**CLUE 2** **Addition**

We find a stash of map pieces. We add them together to see the whole map.

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

Diagram illustrating a sequence of numbers and their corresponding status (True/False) across two rows.

Row 1 (Top):

|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| T  |    |    |    |    |    |    | T  |    |    |    |    |    |    |    |    | T  |    |    |    |
| 98 | 65 | 78 | 90 | 79 | 64 | 65 | 98 | 65 | 35 | 81 | 82 | 91 | 90 | 79 | 81 | 98 | 38 | 35 | 73 |

Row 2 (Bottom):

|    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|
|    |    | T  |    |    |    |    |    |    |
| 25 | 81 | 98 | 65 | 78 | 38 | 35 | 93 | 93 |

$35 + 63 = \boxed{\phantom{00}} \rightarrow \boxed{\text{T}}$

$$26 + 12 = \boxed{\phantom{00}} \rightarrow \boxed{\mathbf{W}}$$

$$26 + 39 = \boxed{\phantom{00}} \rightarrow \boxed{\text{H}}$$

$29 + 62 = \boxed{\phantom{000}} \rightarrow \boxed{\text{P}}$

$27 + 46 = \boxed{\phantom{00}} \rightarrow \boxed{\text{S}}$

$20 + 44 = \boxed{\phantom{00}} \rightarrow \boxed{\text{G}}$

$$28 + 51 = \boxed{\phantom{00}} \rightarrow \boxed{\text{I}}$$

$35 + 46 = \boxed{\phantom{00}} \rightarrow \boxed{\text{N}}$

$$60 + 30 = \boxed{\phantom{00}} \rightarrow \boxed{\text{R}}$$

$$7 + 18 = \boxed{\phantom{00}} \rightarrow \boxed{0}$$

$$41 + 37 = \boxed{\phantom{00}} \rightarrow \boxed{\text{E}}$$

$$50 + 32 = \boxed{\phantom{00}} \rightarrow \boxed{\mathbf{D}}$$

$22 + 13 = \boxed{\phantom{00}} \rightarrow \boxed{\mathbf{A}}$

$39 + 54 = \boxed{\phantom{00}} \rightarrow \boxed{\text{L}}$

Scratch space:

## CLUE 3

The bandit dropped some gold coins. We take away the fake coins to count the real ones.

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 4 boxes. Some boxes are shaded orange and contain the letter 'T'. Below each box is a number.

| Box | Number | Shaded | Letter |
|-----|--------|--------|--------|
| 1   | 87     | Yes    | T      |
| 2   | 63     | No     |        |
| 3   | 56     | No     |        |
| 4   | 43     | No     |        |
| 5   | 26     | No     |        |
| 6   | 58     | No     |        |
| 7   | 51     | No     |        |
| 8   | 27     | No     |        |
| 9   | 87     | Yes    | T      |
| 10  | 61     | No     |        |
| 11  | 26     | No     |        |
| 12  | 32     | No     |        |
| 13  | 86     | No     |        |
| 14  | 63     | No     |        |
| 15  | 56     | No     |        |
| 16  | 51     | No     |        |
| 17  | 26     | No     |        |
| 18  | 87     | Yes    | T      |
| 19  | 26     | No     |        |
| 20  | 64     | No     |        |
| 21  | 34     | No     |        |
| 22  | 67     | No     |        |
| 23  | 56     | No     |        |

$$107 - 20 = \boxed{\phantom{00}} \rightarrow \boxed{\text{T}}$$

45 - 19 =  → **A**

83 - 19 =  → **J**

$$49 - 15 = \boxed{\phantom{00}} \rightarrow \boxed{0}$$

$$91 - 33 = \boxed{\phantom{00}} \rightarrow \boxed{\text{N}}$$

$$90 - 23 = \boxed{\phantom{00}} \rightarrow \boxed{\text{K}}$$

$$80 - 37 = \boxed{\phantom{00}} \rightarrow \boxed{\mathbf{B}}$$

$98 - 12 = \boxed{\phantom{000}} \rightarrow \boxed{\text{G}}$

$$98 - 37 = \boxed{\phantom{00}} \rightarrow \boxed{\text{L}}$$

$$52 - 25 = \boxed{\phantom{00}} \rightarrow \boxed{\text{I}}$$

$103 - 40 = \boxed{\phantom{00}} \rightarrow \boxed{\text{H}}$

$61 - 5 = \boxed{\phantom{00}} \rightarrow \boxed{\text{E}}$

$$54 - 3 = \boxed{\phantom{00}} \rightarrow \boxed{\text{D}}$$

$$61 - 29 = \boxed{\phantom{00}} \rightarrow \boxed{\text{U}}$$

Scratch space:

## CLUE 4

## Multiplication facts (1-12)

We see boxes of sweet pineapples in rows. We multiply the rows to count the fruit.

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

|    |    |    |    |    |     |    |    |     |     |    |     |    |    |     |    |    |    |    |     |
|----|----|----|----|----|-----|----|----|-----|-----|----|-----|----|----|-----|----|----|----|----|-----|
| A  |    |    |    |    |     |    | A  |     |     | A  |     | A  |    |     | A  |    |    |    |     |
| 72 | 77 | 64 | 56 | 56 | 121 | 14 | 72 | 121 | 110 | 72 | 121 | 72 | 12 | 121 | 72 | 77 | 77 | 56 | 110 |

  

|   |     |    |     |    |   |    |     |  |
|---|-----|----|-----|----|---|----|-----|--|
|   |     | A  |     |    |   |    |     |  |
| 3 | 121 | 72 | 120 | 16 | 3 | 64 | 121 |  |

$12 \times 6 = \square \rightarrow \boxed{\text{A}}$

$12 \times 1 = \square \rightarrow \boxed{\text{S}}$

$11 \times 11 = \square \rightarrow \boxed{\text{N}}$

$2 \times 8 = \square \rightarrow \boxed{\text{H}}$

$7 \times 2 = \square \rightarrow \boxed{\text{B}}$

$7 \times 11 = \square \rightarrow \boxed{\text{G}}$

$1 \times 3 = \square \rightarrow \boxed{\text{O}}$

$10 \times 12 = \square \rightarrow \boxed{\text{T}}$

$11 \times 10 = \square \rightarrow \boxed{\text{D}}$

$8 \times 7 = \square \rightarrow \boxed{\text{E}}$

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

Scratch space:

**CLUE 5****Missing addends - the last clue**

We need ten keys to unlock the chest. We have some keys and must find the rest.

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:**

$3 + \underline{\quad} = 13$

$2 + \underline{\quad} = 6$

$1 + \underline{\quad} = 8$

$6 + \underline{\quad} = 17$

$4 + \underline{\quad} = 10$

$9 + \underline{\quad} = 17$

$8 + \underline{\quad} = 13$

$7 + \underline{\quad} = 10$

$1 + \underline{\quad} = 10$

$3 + \underline{\quad} = 15$

$10 + \underline{\quad} = 11$

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

1. The villain zoomed off the cliff, then crossed the shaky rope bridge.
2. The villain blocked the mud balls, then leaped over the muddy swamp.
3. The villain zoomed off the cliff, then swam into the dark cavern.
4. The villain walked up a steep wall, then crossed the shaky rope bridge.
5. The villain shined a bright light, then leaped over the muddy swamp.
6. The villain swung on a vine, then leaped over the muddy swamp.
7. The villain zoomed off the cliff, then leaped over the muddy swamp.
8. The villain walked up a steep wall, then splashed down the rushing river.
9. The villain blocked the mud balls, then splashed down the rushing river.
10. The villain shined a bright light, then climbed up the tall palm tree.
11. The villain blocked the mud balls, then crossed the shaky rope bridge.
12. The villain zoomed off the cliff, then climbed up the tall palm tree.

# Answer Key

## The Secret Island Mystery

### Culprit: Dan

bubble shield · swamp jumping · right handed · green bandana · silly jokes

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

### Clue 1 (Skip counting): "THE BANDIT DOES NOT CAVE DIVE"

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, \_\_, 130, 140 = 120 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, \_\_, 100, 110 = 90 (O) · Skip-count by 5s. Fill the blank: 5, 10, 15, \_\_, 25, 30 = 20 (B) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, \_\_, 150, 160 = 140 (A) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, \_\_, 120, 130 = 110 (V) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, \_\_, 30, 35 = 25 (H) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, \_\_, 36, 39 = 33 (N) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, \_\_, 50, 55 = 45 (D) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, \_\_, 75, 80 = 70 (I) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, \_\_, 60, 65 = 55 (C) · Skip-count by 3s. Fill the blank: 3, 6, \_\_, 12, 15 = 9 (E) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, \_\_, 40, 45 = 35 (S)

### Clue 2 (Addition): "THE RIGHT HANDPRINT WAS ON THE WALL"

$35 + 63 = 98$  (T) ·  $26 + 12 = 38$  (W) ·  $26 + 39 = 65$  (H) ·  $29 + 62 = 91$  (P) ·  $27 + 46 = 73$  (S) ·  $20 + 44 = 64$  (G) ·  $28 + 51 = 79$  (I) ·  $35 + 46 = 81$  (N) ·  $60 + 30 = 90$  (R) ·  $7 + 18 = 25$  (O) ·  $41 + 37 = 78$  (E) ·  $50 + 32 = 82$  (D) ·  $22 + 13 = 35$  (A) ·  $39 + 54 = 93$  (L)

### Clue 3 (Subtraction): "THE BANDIT LAUGHED AT A JOKE"

$107 - 20 = 87$  (T) ·  $45 - 19 = 26$  (A) ·  $83 - 19 = 64$  (J) ·  $49 - 15 = 34$  (O) ·  $91 - 33 = 58$  (N) ·  $90 - 23 = 67$  (K) ·  $80 - 37 = 43$  (B) ·  $98 - 12 = 86$  (G) ·  $98 - 37 = 61$  (L) ·  $52 - 25 = 27$  (I) ·  $103 - 40 = 63$  (H) ·  $61 - 5 = 56$  (E) ·  $54 - 3 = 51$  (D) ·  $61 - 29 = 32$  (U)

### Clue 4 (Multiplication facts (1-12)): "A GREEN BANDANA SNAGGED ON A THORN"

$12 \times 6 = 72$  (A) ·  $12 \times 1 = 12$  (S) ·  $11 \times 11 = 121$  (N) ·  $2 \times 8 = 16$  (H) ·  $7 \times 2 = 14$  (B) ·  $7 \times 11 = 77$  (G) ·  $1 \times 3 = 3$  (O) ·  $10 \times 12 = 120$  (T) ·  $11 \times 10 = 110$  (D) ·  $8 \times 7 = 56$  (E) ·  $8 \times 8 = 64$  (R)

### Clue 5 (Missing addends): surviving statement is box 2 → Dan

$3 + \underline{\quad} = 13 = 10$  ·  $2 + \underline{\quad} = 6 = 4$  ·  $1 + \underline{\quad} = 8 = 7$  ·  $6 + \underline{\quad} = 17 = 11$  ·  $4 + \underline{\quad} = 10 = 6$  ·  $9 + \underline{\quad} = 17 = 8$  ·  $8 + \underline{\quad} = 13 = 5$  ·  $7 + \underline{\quad} = 10 = 3$  ·  $1 + \underline{\quad} = 10 = 9$  ·  $3 + \underline{\quad} = 15 = 12$  ·  $10 + \underline{\quad} = 11 = 1$