



# The Case of the Lost Obsidian Anchor

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

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

A rogue pirate captain has raided the docks of Crafty Cove! They stole the legendary Obsidian Anchor and sailed off into the blocky ocean. As a new recruit of the Square Fleet, you must follow the pixelated clues to find the thief.

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 rogue pirate captain is** \_\_\_\_\_

# Possible suspects

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

| NAME           | MINECRAFT SKILL         | PIRATE GEAR      | STEERING HAND      | HAIR COLOR        | WEAKNESS               |
|----------------|-------------------------|------------------|--------------------|-------------------|------------------------|
| Captain Spark  | Fast Bridge Building    | Parrot Companion | Left-handed swing  | Sunken Gold Locks | Splash Water Potions   |
| Ender Emma     | TNT Cannon Blasting     | Firework Rocket  | Left-handed swing  | Sunken Gold Locks | Splash Water Potions   |
| Salty Sally    | Ender Pearl Teleporting | Firework Rocket  | Right-handed swing | Coal Black Braids | Glowing Pufferfish     |
| Alex           | Elytra Gliding          | Parrot Companion | Left-handed swing  | Coal Black Braids | Glowing Pufferfish     |
| Patchy Pete    | TNT Cannon Blasting     | Spyglass         | Right-handed swing | Sunken Gold Locks | Glowing Pufferfish     |
| Scurvy Sid     | Elytra Gliding          | Firework Rocket  | Left-handed swing  | Sunken Gold Locks | Splash Water Potions   |
| Barnaby Block  | TNT Cannon Blasting     | Firework Rocket  | Right-handed swing | Bright Red Curls  | Glowing Pufferfish     |
| Jeb            | Ender Pearl Teleporting | Firework Rocket  | Left-handed swing  | Bright Red Curls  | Glowing Pufferfish     |
| Captain Roger  | Elytra Gliding          | Enchanted Map    | Left-handed swing  | Sunken Gold Locks | Splash Water Potions   |
| Crafty Carla   | Ender Pearl Teleporting | Golden Apple     | Left-handed swing  | Sunken Gold Locks | Splash Water Potions   |
| Captain Cobble | Ender Pearl Teleporting | Firework Rocket  | Right-handed swing | Sunken Gold Locks | Splash Water Potions   |
| Pegleg Pete    | Elytra Gliding          | Golden Apple     | Left-handed swing  | Bright Red Curls  | Splash Water Potions   |
| Captain Creep  | Ender Pearl Teleporting | Spyglass         | Right-handed swing | Sunken Gold Locks | Sparkling Milk Buckets |
| Scurvy Sam     | Fast Bridge Building    | Parrot Companion | Left-handed swing  | Sunken Gold Locks | Glowing Pufferfish     |
| Coral Chris    | Fast Bridge Building    | Parrot Companion | Right-handed swing | Bright Red Curls  | Splash Water Potions   |
| Jolly Roger    | Ender Pearl Teleporting | Parrot Companion | Right-handed swing | Coal Black Braids | Splash Water Potions   |
| Notch          | Ender Pearl Teleporting | Enchanted Map    | Left-handed swing  | Sunken Gold Locks | Sparkling Milk Buckets |
| Scurvy Dan     | Fast Bridge Building    | Enchanted Map    | Left-handed swing  | Coal Black Braids | Glowing Pufferfish     |
| Stampy         | TNT Cannon Blasting     | Firework Rocket  | Left-handed swing  | Bright Red Curls  | Glowing Pufferfish     |
| Steve          | Fast Bridge Building    | Firework Rocket  | Left-handed swing  | Coal Black Braids | Sparkling Milk Buckets |
| Salty Sean     | TNT Cannon Blasting     | Enchanted Map    | Left-handed swing  | Sunken Gold Locks | Sparkling Milk Buckets |

### CLUE 1

Your blocky ship radar can only show rounded numbers. Round the distance to the pirate fleet to find the first clue.

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

Diagram illustrating a sequence of numbers and a specific value 'T' (highlighted in orange) across two rows of boxes.

Row 1 (Top):

- Box 1: T
- Box 2: 110
- Box 3: 130
- Box 4: 500
- Box 5: 430
- Box 6: 4300
- Box 7: 430
- Box 8: 700
- Box 9: 500
- Box 10: 2300
- Box 11: T
- Box 12: 110
- Box 13: 2900
- Box 14: 370
- Box 15: 500
- Box 16: 430
- Box 17: 20
- Box 18: 370
- Box 19: 110

Row 2 (Bottom):

- Box 1: 130
- Box 2: 1100
- Box 3: 1700
- Box 4: 500
- Box 5: 1100
- Box 6: 700
- Box 7: 1100
- Box 8: 2000
- Box 9: 2000
- Box 10: 370
- Box 11: T

Round 107 to the nearest ten   $\rightarrow$  **T**

Round 2,301 to the nearest hundred  → **C**

Round 4,296 to the nearest hundred  → **U**

Round 1,664 to the nearest hundred  → **V**

Round 1,082 to the nearest hundred  → **A**

|                                     |   |          |
|-------------------------------------|---|----------|
| Round 2,276 to the nearest thousand | → | <b>R</b> |
|-------------------------------------|---|----------|

Round 536 to the nearest hundred  → **E**

Round 2,906 to the nearest hundred   $\rightarrow$  **D**

Round 24 to the nearest ten   $\rightarrow$  **N**

Round 366 to the nearest ten   $\rightarrow$

Round 427 to the nearest ten   $\rightarrow$  **S**

Round 130 to the nearest ten   $\rightarrow$  **H**

Round 677 to the nearest hundred   $\rightarrow$  **P**

Scratch space:

## CLUE 2

## Addition

You count the total iron blocks stolen from the ship dock. Add the piles together to reveal the next lead.

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

|              |      |      |      |      |      |      |              |      |      |      |      |      |              |      |      |      |  |
|--------------|------|------|------|------|------|------|--------------|------|------|------|------|------|--------------|------|------|------|--|
| <div>T</div> |      |      |      |      |      |      | <div>T</div> |      |      |      |      |      | <div>T</div> |      |      |      |  |
| 9275         | 6001 | 8487 | 6847 | 4530 | 4530 | 9275 | 4160         | 8201 | 9158 | 2200 | 9275 | 7736 | 3483         | 8487 | 2746 | 2200 |  |

  

|      |      |      |      |      |      |      |              |      |              |      |      |      |      |      |      |              |
|------|------|------|------|------|------|------|--------------|------|--------------|------|------|------|------|------|------|--------------|
|      |      |      |      |      |      |      | <div>T</div> |      | <div>T</div> |      |      |      |      |      |      | <div>T</div> |
| 6001 | 8487 | 2746 | 2719 | 9158 | 3483 | 2045 | 9275         | 4530 | 9275         | 6001 | 8487 | 3483 | 8487 | 6847 | 9275 |              |

$6093 + 3182 = \square \rightarrow \text{[T]}$

$4437 + 3764 = \square \rightarrow \text{[R]}$

$1197 + 1003 = \square \rightarrow \text{[N]}$

$1136 + 1610 = \square \rightarrow \text{[A]}$

$1815 + 904 = \square \rightarrow \text{[V]}$

$1955 + 1528 = \square \rightarrow \text{[L]}$

$3123 + 6035 = \square \rightarrow \text{[I]}$

$627 + 1418 = \square \rightarrow \text{[Y]}$

$2040 + 2490 = \square \rightarrow \text{[O]}$

$2007 + 3994 = \square \rightarrow \text{[H]}$

$2907 + 4829 = \square \rightarrow \text{[S]}$

$3433 + 3414 = \square \rightarrow \text{[F]}$

$2090 + 2070 = \square \rightarrow \text{[P]}$

$3147 + 5340 = \square \rightarrow \text{[E]}$

Scratch space:

## CLUE 3

## Subtraction

The villain used up some of your healing potions during the raid. Subtract the remaining potions to find where they went.

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

|              |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| <div>T</div> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| 8736         | 5826 | 4362 | 3848 | 7082 | 8534 | 8534 | 4332 | 7082 | 5228 | 2509 | 4332 | 7419 | 5826 | 2838 | 5758 | 8736 | 5722 | 8311 |  |

  

|      |      |      |      |      |      |      |      |      |      |      |  |
|------|------|------|------|------|------|------|------|------|------|------|--|
|      |      |      |      |      |      |      |      |      |      |      |  |
| 7419 | 8100 | 8534 | 4332 | 7419 | 5826 | 2509 | 4332 | 8736 | 4362 | 5758 |  |

$10897 - 2161 = \square \rightarrow \text{[T]}$

$7170 - 4661 = \square \rightarrow \text{[W]}$

$9000 - 466 = \square \rightarrow \text{[L]}$

$9281 - 3455 = \square \rightarrow \text{[H]}$

$7675 - 3343 = \square \rightarrow \text{[A]}$

$11565 - 3465 = \square \rightarrow \text{[P]}$

$7673 - 3311 = \square \rightarrow \text{[E]}$

$8022 - 2300 = \square \rightarrow \text{[B]}$

$4896 - 1048 = \square \rightarrow \text{[V]}$

$10641 - 2330 = \square \rightarrow \text{[Y]}$

$6005 - 3167 = \square \rightarrow \text{[U]}$

$11758 - 4339 = \square \rightarrow \text{[S]}$

$8999 - 3771 = \square \rightarrow \text{[N]}$

$10836 - 3754 = \square \rightarrow \text{[I]}$

$10032 - 4274 = \square \rightarrow \text{[R]}$

Scratch space:

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

You find rows of suspicious crop farms planted on the secret island. Multiply the rows and columns to crack the code.

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

|          |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
|----------|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|
| <b>G</b> |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 35       | 7 | 84 | 27 | 8  | 55 | 16 | 14 | 27 | 14 | 16 | 77 | 56 | 36 | 27 | 16 | 25 |  |
|          |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |  |
| 56       | 8 | 36 | 44 | 55 | 56 | 36 | 14 |    |    |    |    |    |    |    |    |    |  |

|                                                |                                                |                                                |                                               |
|------------------------------------------------|------------------------------------------------|------------------------------------------------|-----------------------------------------------|
| $7 \times 5 = \square \rightarrow \mathbf{G}$  | $7 \times 12 = \square \rightarrow \mathbf{L}$ | $2 \times 7 = \square \rightarrow \mathbf{R}$  |                                               |
| $5 \times 11 = \square \rightarrow \mathbf{A}$ | $7 \times 1 = \square \rightarrow \mathbf{O}$  | $3 \times 9 = \square \rightarrow \mathbf{D}$  | $8 \times 7 = \square \rightarrow \mathbf{T}$ |
| $4 \times 4 = \square \rightarrow \mathbf{I}$  | $2 \times 4 = \square \rightarrow \mathbf{H}$  | $3 \times 12 = \square \rightarrow \mathbf{E}$ |                                               |
| $11 \times 7 = \square \rightarrow \mathbf{F}$ | $5 \times 5 = \square \rightarrow \mathbf{N}$  | $4 \times 11 = \square \rightarrow \mathbf{W}$ |                                               |

Scratch space:

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

The pirate crew wants to split their emerald loot equally. Divide the gems to find the villain's final hideout.

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:**

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

$8 \div 8 = \boxed{\phantom{00}}$

$10 \div 2 = \boxed{\phantom{00}}$

$12 \div 1 = \boxed{\phantom{00}}$

$64 \div 8 = \boxed{\phantom{00}}$

$24 \div 8 = \boxed{\phantom{00}}$

$49 \div 7 = \boxed{\phantom{00}}$

$6 \div 1 = \boxed{\phantom{00}}$

$110 \div 11 = \boxed{\phantom{00}}$

$77 \div 7 = \boxed{\phantom{00}}$

$108 \div 12 = \boxed{\phantom{00}}$

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

1. The villain soars through the clouds on an elytra, then scribbling on an enchanted map.
2. The villain soars through the clouds on an elytra, then boosting away with a firework rocket.
3. The villain attacks with a sharp diamond sword, then munching on a rare golden apple.
4. The villain teleports with a shiny ender pearl, then munching on a rare golden apple.
5. The villain fires a massive TNT cannon, then boosting away with a firework rocket.
6. The villain attacks with a sharp diamond sword, then talking to a colorful parrot companion.
7. The villain teleports with a shiny ender pearl, then talking to a colorful parrot companion.
8. The villain bridges across the ocean blocks, then boosting away with a firework rocket.
9. The villain bridges across the ocean blocks, then peers through a heavy brass spyglass.
10. The villain teleports with a shiny ender pearl, then scribbling on an enchanted map.
11. The villain attacks with a sharp diamond sword, then boosting away with a firework rocket.
12. The villain fires a massive TNT cannon, then peers through a heavy brass spyglass.

# Answer Key

## The Case of the Lost Obsidian Anchor

### Culprit: Crafty Carla

Ender Pearl Teleporting · Golden Apple · Left-handed swing · Sunken Gold Locks · Splash Water Potions

Trail: Start 21 → Clue 1 16 → Clue 2 11 → Clue 3 5 → Clue 4 4 → Clue 5 1

#### Clue 1 (Rounding): "THE SUSPECT DOES NOT HAVE A PARROT"

Round 107 to the nearest ten = 110 (T) · Round 2,301 to the nearest hundred = 2300 (C) · Round 4,296 to the nearest hundred = 4300 (U) · Round 1,664 to the nearest hundred = 1700 (V) · Round 1,082 to the nearest hundred = 1100 (A) · Round 2,276 to the nearest thousand = 2000 (R) · Round 536 to the nearest hundred = 500 (E) · Round 2,906 to the nearest hundred = 2900 (D) · Round 24 to the nearest ten = 20 (N) · Round 366 to the nearest ten = 370 (O) · Round 427 to the nearest ten = 430 (S) · Round 130 to the nearest ten = 130 (H) · Round 677 to the nearest hundred = 700 (P)

#### Clue 2 (Addition): "THE FOOTPRINTS LEAN HEAVILY TO THE LEFT"

$6093 + 3182 = 9275$  (T) ·  $4437 + 3764 = 8201$  (R) ·  $1197 + 1003 = 2200$  (N) ·  $1136 + 1610 = 2746$  (A) ·  $1815 + 904 = 2719$  (V) ·  $1955 + 1528 = 3483$  (L) ·  $3123 + 6035 = 9158$  (I) ·  $627 + 1418 = 2045$  (Y) ·  $2040 + 2490 = 4530$  (O) ·  $2007 + 3994 = 6001$  (H) ·  $2907 + 4829 = 7736$  (S) ·  $3433 + 3414 = 6847$  (F) ·  $2090 + 2070 = 4160$  (P) ·  $3147 + 5340 = 8487$  (E)

#### Clue 3 (Subtraction): "THE VILLAIN WAS HURT BY SPLASH WATER"

$10897 - 2161 = 8736$  (T) ·  $7170 - 4661 = 2509$  (W) ·  $9000 - 466 = 8534$  (L) ·  $9281 - 3455 = 5826$  (H) ·  $7675 - 3343 = 4332$  (A) ·  $11565 - 3465 = 8100$  (P) ·  $7673 - 3311 = 4362$  (E) ·  $8022 - 2300 = 5722$  (B) ·  $4896 - 1048 = 3848$  (V) ·  $10641 - 2330 = 8311$  (Y) ·  $6005 - 3167 = 2838$  (U) ·  $11758 - 4339 = 7419$  (S) ·  $8999 - 3771 = 5228$  (N) ·  $10836 - 3754 = 7082$  (I) ·  $10032 - 4274 = 5758$  (R)

#### Clue 4 (Multiplication facts (1-12)): "GOLD HAIR DRIFTED IN THE WATER"

$7 \times 5 = 35$  (G) ·  $7 \times 12 = 84$  (L) ·  $2 \times 7 = 14$  (R) ·  $5 \times 11 = 55$  (A) ·  $7 \times 1 = 7$  (O) ·  $3 \times 9 = 27$  (D) ·  $8 \times 7 = 56$  (T) ·  $4 \times 4 = 16$  (I) ·  $2 \times 4 = 8$  (H) ·  $3 \times 12 = 36$  (E) ·  $11 \times 7 = 77$  (F) ·  $5 \times 5 = 25$  (N) ·  $4 \times 11 = 44$  (W)

#### Clue 5 (Division facts (1-12)): surviving statement is box 4 → Crafty Carla

$18 \div 9 = 2$  ·  $8 \div 8 = 1$  ·  $10 \div 2 = 5$  ·  $12 \div 1 = 12$  ·  $64 \div 8 = 8$  ·  $24 \div 8 = 3$  ·  $49 \div 7 = 7$  ·  $6 \div 1 = 6$  ·  $110 \div 11 = 10$  ·  $77 \div 7 = 11$  ·  $108 \div 12 = 9$