



# The Great Sky-Island Chase

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

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

A sneaky Sky Bandit has stolen the Golden Compass from the Chief Cartographer! We must search the floating docks, solve the math clues, and find the bandit before they sail their airship into the storm.

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 Sky Bandit is** \_\_\_\_\_

## Possible suspects

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

| NAME        | ESCAPE STYLE     | SPECIAL GEAR    | HAND SIGN    | HAIR COLOR         | FUNNY WEAKNESS |
|-------------|------------------|-----------------|--------------|--------------------|----------------|
| Kira        | cloud leaping    | magnetic gloves | left handed  | bright orange hair | silly whistles |
| Tucker      | gear climbing    | magnetic gloves | left handed  | cloud white hair   | sweet bananas  |
| Sallie      | propeller flying | gravity boots   | right handed | bright orange hair | shiny bubbles  |
| Ulysses     | gear climbing    | glowing goggles | right handed | bright orange hair | sweet bananas  |
| Marco       | wind gliding     | magnetic gloves | left handed  | bright orange hair | silly whistles |
| Amelia      | cloud leaping    | magnetic gloves | right handed | ocean blue hair    | sweet bananas  |
| Captain Kid | propeller flying | sparking boots  | left handed  | bright orange hair | silly whistles |
| Piper       | wind gliding     | copper spyglass | right handed | cloud white hair   | shiny bubbles  |
| Drake       | rope swinging    | copper spyglass | left handed  | ocean blue hair    | sweet bananas  |
| Ella        | rope swinging    | glowing goggles | left handed  | cloud white hair   | silly whistles |
| Zelda       | wind gliding     | copper spyglass | left handed  | bright orange hair | sweet bananas  |
| Flynn       | rope swinging    | magnetic gloves | left handed  | cloud white hair   | shiny bubbles  |
| Quincy      | cloud leaping    | sparking boots  | right handed | cloud white hair   | shiny bubbles  |
| Ranger      | gear climbing    | glowing goggles | right handed | cloud white hair   | sweet bananas  |
| Nellie      | wind gliding     | magnetic gloves | left handed  | bright orange hair | sweet bananas  |
| Jack        | rope swinging    | copper spyglass | right handed | cloud white hair   | shiny bubbles  |
| Val         | rope swinging    | magnetic gloves | left handed  | cloud white hair   | sweet bananas  |
| Gulliver    | gear climbing    | gravity boots   | left handed  | cloud white hair   | shiny bubbles  |
| Leo         | cloud leaping    | glowing goggles | right handed | bright orange hair | silly whistles |
| Wyatt       | rope swinging    | glowing goggles | right handed | cloud white hair   | shiny bubbles  |
| Otis        | propeller flying | gravity boots   | right handed | cloud white hair   | shiny bubbles  |

## CLUE 1 Rounding

An old wind-radar caught a fuzzy signal of the escape route. The radar only shows numbers rounded to the nearest ten.

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

|      |    |     |      |      |     |     |      |      |    |      |    |      |      |      |      |      |      |   |
|------|----|-----|------|------|-----|-----|------|------|----|------|----|------|------|------|------|------|------|---|
| T    |    |     |      |      |     |     |      |      | T  |      |    |      |      |      |      |      |      | T |
| 4000 | 70 | 90  | 2000 | 900  | 200 | 30  | 60   | 4000 | 30 | 8000 | 90 | 9000 | 200  | 8000 | 4000 |      |      |   |
|      |    |     |      |      |     |     |      |      |    |      |    |      |      |      |      |      |      |   |
| 7000 | 90 | 900 | 3000 | 9000 | 700 | 900 | 3000 | 6000 | 60 | 200  | 80 | 2000 | 8000 | 8000 | T    | 4000 | 9000 |   |

Round 3,573 to the nearest thousand  → **T**

Round 8,553 to the nearest thousand  → **S**

Round 67 to the nearest ten  → **H**

Round 215 to the nearest hundred  → **N**

Round 8,317 to the nearest thousand  → **O**

Round 90 to the nearest ten  → **E**

Round 921 to the nearest hundred  → **A**

Round 27 to the nearest ten  → **D**

Round 84 to the nearest ten  → **G**

Round 58 to the nearest ten  → **I**

Round 7,053 to the nearest thousand  → **W**

Round 748 to the nearest hundred  → **P**

Round 2,290 to the nearest thousand  → **B**

Round 3,327 to the nearest thousand  → **R**

Round 6,253 to the nearest thousand  → **K**

Scratch space:

## CLUE 2 Addition

We found a pile of dropped gear on the wooden dock. Let us add up all the brass bolts we found to see where they came from.

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

|                             |                            |                             |                            |                             |                            |                            |                            |                            |                            |                            |                             |                             |                            |                            |                            |                            |                            |                            |
|-----------------------------|----------------------------|-----------------------------|----------------------------|-----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------------------|-----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <div>T</div> <div>475</div> | <div></div> <div>621</div> | <div></div> <div>555</div>  | <div></div> <div>227</div> | <div></div> <div>256</div>  | <div></div> <div>984</div> | <div></div> <div>529</div> | <div></div> <div>555</div> | <div></div> <div>555</div> | <div></div> <div>255</div> | <div></div> <div>555</div> | <div></div> <div>534</div>  | <div>T</div> <div>475</div> | <div></div> <div>621</div> | <div></div> <div>555</div> | <div></div> <div>719</div> | <div></div> <div>377</div> | <div></div> <div>590</div> | <div></div> <div>555</div> |
| <div></div> <div>672</div>  | <div></div> <div>547</div> | <div>T</div> <div>475</div> | <div></div> <div>621</div> | <div>T</div> <div>475</div> | <div></div> <div>621</div> | <div></div> <div>555</div> | <div></div> <div>719</div> | <div></div> <div>547</div> | <div></div> <div>792</div> | <div></div> <div>621</div> | <div>T</div> <div>475</div> | <div></div> <div>621</div>  | <div></div> <div>816</div> | <div></div> <div>808</div> | <div></div> <div>534</div> |                            |                            |                            |

|                                              |                                              |                                              |
|----------------------------------------------|----------------------------------------------|----------------------------------------------|
| $166 + 309 = \square \rightarrow \text{[T]}$ | $539 + 269 = \square \rightarrow \text{[N]}$ | $493 + 226 = \square \rightarrow \text{[R]}$ |
| $258 + 534 = \square \rightarrow \text{[G]}$ | $322 + 662 = \square \rightarrow \text{[Q]}$ | $336 + 254 = \square \rightarrow \text{[P]}$ |
| $236 + 436 = \square \rightarrow \text{[W]}$ | $421 + 200 = \square \rightarrow \text{[H]}$ | $157 + 70 = \square \rightarrow \text{[Y]}$  |
| $215 + 314 = \square \rightarrow \text{[U]}$ | $146 + 110 = \square \rightarrow \text{[S]}$ | $167 + 210 = \square \rightarrow \text{[O]}$ |
| $477 + 339 = \square \rightarrow \text{[A]}$ | $232 + 315 = \square \rightarrow \text{[I]}$ | $189 + 345 = \square \rightarrow \text{[D]}$ |
| $85 + 170 = \square \rightarrow \text{[Z]}$  | $301 + 254 = \square \rightarrow \text{[E]}$ |                                              |

Scratch space:

## CLUE 3

## Subtraction

The cartographer has a secret lock on the chest. To open it, we must find the difference between the wind speeds on our map.

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

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| T   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 388 | 585 | 289 | 364 | 650 | 253 | 289 | 289 | 133 | 289 | 708 | 462 | 585 | 289 | 253 | 462 | 289 |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 465 | 542 | 289 | 462 | 650 | 585 | 563 | 253 | 364 | 465 | 866 | 465 | 465 | 542 | 289 | 650 |     |

$533 - 145 = \square \rightarrow \boxed{\text{T}}$

$759 - 51 = \square \rightarrow \boxed{\text{D}}$

$598 - 56 = \square \rightarrow \boxed{\text{L}}$

$584 - 119 = \square \rightarrow \boxed{\text{B}}$

$494 - 241 = \square \rightarrow \boxed{\text{N}}$

$310 - 21 = \square \rightarrow \boxed{\text{E}}$

$654 - 290 = \square \rightarrow \boxed{\text{Y}}$

$956 - 371 = \square \rightarrow \boxed{\text{H}}$

$828 - 366 = \square \rightarrow \boxed{\text{W}}$

$503 - 370 = \square \rightarrow \boxed{\text{Z}}$

$869 - 219 = \square \rightarrow \boxed{\text{S}}$

$900 - 34 = \square \rightarrow \boxed{\text{U}}$

$702 - 139 = \square \rightarrow \boxed{\text{I}}$

Scratch space:

## CLUE 4

## Multiplication facts (1-12)

The airship hangar has several rows of flying machines. We need to multiply the rows to count the total wings.

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

|     |   |    |    |    |     |    |     |     |    |    |     |    |    |   |    |   |    |    |
|-----|---|----|----|----|-----|----|-----|-----|----|----|-----|----|----|---|----|---|----|----|
| W   |   |    |    |    |     |    |     |     |    |    |     |    |    |   |    |   |    |    |
| 120 | 5 | 56 | 48 | 96 | 25  | 84 | 132 | 7   | 48 | 25 | 8   | 14 | 45 | 5 | 30 | 5 | 48 | 56 |
|     |   |    |    |    | W   |    |     |     |    |    |     |    |    |   |    |   |    |    |
| 30  | 7 | 48 | 96 | 84 | 120 | 42 | 45  | 121 | 5  | 42 | 132 | 45 | 16 |   |    |   |    |    |

$12 \times 10 = \square \rightarrow \boxed{W}$

$7 \times 6 = \square \rightarrow \boxed{H}$

$3 \times 10 = \square \rightarrow \boxed{C}$

$11 \times 12 = \square \rightarrow \boxed{A}$

$1 \times 5 = \square \rightarrow \boxed{E}$

$8 \times 1 = \square \rightarrow \boxed{G}$

$5 \times 9 = \square \rightarrow \boxed{I}$

$2 \times 7 = \square \rightarrow \boxed{P}$

$8 \times 12 = \square \rightarrow \boxed{U}$

$2 \times 8 = \square \rightarrow \boxed{R}$

$6 \times 8 = \square \rightarrow \boxed{O}$

$11 \times 11 = \square \rightarrow \boxed{T}$

$5 \times 5 = \square \rightarrow \boxed{N}$

$12 \times 7 = \square \rightarrow \boxed{D}$

$7 \times 8 = \square \rightarrow \boxed{F}$

$7 \times 1 = \square \rightarrow \boxed{L}$

Scratch space:

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

We have a box of energy crystals to share among our crew. We must divide them equally to power up our tracker.

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:**

$30 \div 5 = \boxed{\phantom{00}}$

$50 \div 10 = \boxed{\phantom{00}}$

$18 \div 2 = \boxed{\phantom{00}}$

$60 \div 6 = \boxed{\phantom{00}}$

$40 \div 5 = \boxed{\phantom{00}}$

$84 \div 7 = \boxed{\phantom{00}}$

$44 \div 11 = \boxed{\phantom{00}}$

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

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

$15 \div 5 = \boxed{\phantom{00}}$

$56 \div 8 = \boxed{\phantom{00}}$

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

1. The villain glides through the wind, then climbs with magnetic gloves.
2. The villain flies with a mini propeller, then activates heavy gravity boots.
3. The villain leaps from cloud to cloud, then peers through a copper spyglass.
4. The villain swings on a long rope, then activates heavy gravity boots.
5. The villain glides through the wind, then peers through a copper spyglass.
6. The villain swings on a long rope, then peers through a copper spyglass.
7. The villain leaps from cloud to cloud, then turns on the sparking boots.
8. The villain flies with a mini propeller, then climbs with magnetic gloves.
9. The villain swings on a long rope, then uses glowing goggles to see.
10. The villain glides through the wind, then turns on the sparking boots.
11. The villain leaps from cloud to cloud, then activates heavy gravity boots.
12. The villain climbs up the brass gears, then peers through a copper spyglass.

# Answer Key

## The Great Sky-Island Chase

### Culprit: Otis

propeller flying · gravity boots · right handed · cloud white hair · shiny bubbles

Trail: Start 21 → Clue 1 19 → Clue 2 9 → Clue 3 5 → Clue 4 4 → Clue 5 1

### Clue 1 (Rounding): "THE BANDIT DOES NOT WEAR SPARKING BOOTS"

Round 3,573 to the nearest thousand = 4000 (T) · Round 8,553 to the nearest thousand = 9000 (S) · Round 67 to the nearest ten = 70 (H) · Round 215 to the nearest hundred = 200 (N) · Round 8,317 to the nearest thousand = 8000 (O) · Round 90 to the nearest ten = 90 (E) · Round 921 to the nearest hundred = 900 (A) · Round 27 to the nearest ten = 30 (D) · Round 84 to the nearest ten = 80 (G) · Round 58 to the nearest ten = 60 (I) · Round 7,053 to the nearest thousand = 7000 (W) · Round 748 to the nearest hundred = 700 (P) · Round 2,290 to the nearest thousand = 2000 (B) · Round 3,327 to the nearest thousand = 3000 (R) · Round 6,253 to the nearest thousand = 6000 (K)

### Clue 2 (Addition): "THEY SQUEEZED THE ROPE WITH THE RIGHT HAND"

$166 + 309 = 475$  (T) ·  $539 + 269 = 808$  (N) ·  $493 + 226 = 719$  (R) ·  $258 + 534 = 792$  (G) ·  $322 + 662 = 984$  (Q) ·  $336 + 254 = 590$  (P) ·  $236 + 436 = 672$  (W) ·  $421 + 200 = 621$  (H) ·  $157 + 70 = 227$  (Y) ·  $215 + 314 = 529$  (U) ·  $146 + 110 = 256$  (S) ·  $167 + 210 = 377$  (O) ·  $477 + 339 = 816$  (A) ·  $232 + 315 = 547$  (I) ·  $189 + 345 = 534$  (D) ·  $85 + 170 = 255$  (Z) ·  $301 + 254 = 555$  (E)

### Clue 3 (Subtraction): "THEY SNEEZED WHEN WE BLEW SHINY BUBBLES"

$533 - 145 = 388$  (T) ·  $759 - 51 = 708$  (D) ·  $598 - 56 = 542$  (L) ·  $584 - 119 = 465$  (B) ·  $494 - 241 = 253$  (N) ·  $310 - 21 = 289$  (E) ·  $654 - 290 = 364$  (Y) ·  $956 - 371 = 585$  (H) ·  $828 - 366 = 462$  (W) ·  $503 - 370 = 133$  (Z) ·  $869 - 219 = 650$  (S) ·  $900 - 34 = 866$  (U) ·  $702 - 139 = 563$  (I)

### Clue 4 (Multiplication facts (1-12)): "WE FOUND A LONG PIECE OF CLOUD WHITE HAIR"

$12 \times 10 = 120$  (W) ·  $7 \times 6 = 42$  (H) ·  $3 \times 10 = 30$  (C) ·  $11 \times 12 = 132$  (A) ·  $1 \times 5 = 5$  (E) ·  $8 \times 1 = 8$  (G) ·  $5 \times 9 = 45$  (I) ·  $2 \times 7 = 14$  (P) ·  $8 \times 12 = 96$  (U) ·  $2 \times 8 = 16$  (R) ·  $6 \times 8 = 48$  (O) ·  $11 \times 11 = 121$  (T) ·  $5 \times 5 = 25$  (N) ·  $12 \times 7 = 84$  (D) ·  $7 \times 8 = 56$  (F) ·  $7 \times 1 = 7$  (L)

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

$30 \div 5 = 6$  ·  $50 \div 10 = 5$  ·  $18 \div 2 = 9$  ·  $60 \div 6 = 10$  ·  $40 \div 5 = 8$  ·  $84 \div 7 = 12$  ·  $44 \div 11 = 4$  ·  $11 \div 1 = 11$  ·  $7 \div 7 = 1$  ·  $15 \div 5 = 3$  ·  $56 \div 8 = 7$