# Case of the Comet Snatcher

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

**Detective:** _____ **Date:** _____

One quiet morning on Orbit-9, the alarm bells rang. Commander Vega was gone, and a trail of glowing comet dust led down the hall. Junior Detective, the station needs you to find the Comet Snatcher fast.

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 Comet Snatcher is** _____

## Possible suspects

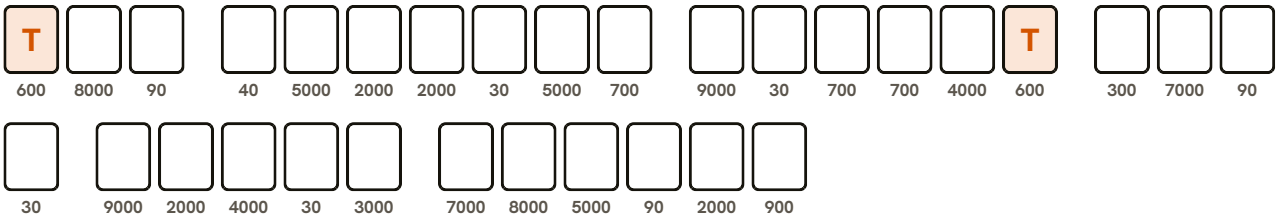
Cross off a row as each clue rules it out. The one left at the end is the culprit.

| NAME | SHIP CLASS | GADGET | PILOT TYPE | HULL COLOR | WEAKNESS |
|---|---|---|---|---|---|
| **Finn Cole** | Moon Hopper | warp jump | girl | red hull | cold air |
| **Milo Stark** | Nebula Scout | laser drill | girl | green hull | loud alarm |
| **Astra Quinn** | Rocket Cruiser | tractor beam | boy | blue hull | loud alarm |
| **Nina Vox** | Comet Racer | ion blast | boy | blue hull | cold air |
| **Iris Blake** | Nebula Scout | ion blast | girl | green hull | loud alarm |
| **Bram Hale** | Rocket Cruiser | tractor beam | girl | red hull | cold air |
| **Hugo Frost** | Nebula Scout | laser drill | girl | green hull | cold air |
| **Polly Vance** | Nebula Scout | tractor beam | boy | blue hull | cold air |
| **Theo Pike** | Comet Racer | ion blast | boy | red hull | cold air |
| **Vega Sol** | Comet Racer | cloak shield | girl | red hull | bright flashlight |
| **Captain Orla** | Star Glider | ion blast | boy | green hull | bright flashlight |
| **Mara Bell** | Nebula Scout | cloak shield | boy | blue hull | cold air |
| **Stella Mora** | Comet Racer | warp jump | boy | red hull | loud alarm |
| **Jett Marsh** | Comet Racer | cloak shield | girl | green hull | cold air |
| **Zuri Kane** | Nebula Scout | laser drill | girl | blue hull | loud alarm |
| **Nova Reyes** | Star Glider | tractor beam | boy | green hull | cold air |
| **Otis Lang** | Moon Hopper | warp jump | girl | green hull | cold air |
| **Rocco Dunn** | Comet Racer | tractor beam | girl | blue hull | cold air |
| **Cosmo Ray** | Moon Hopper | ion blast | girl | green hull | cold air |
| **Dex Calder** | Comet Racer | laser drill | girl | green hull | cold air |
| **Pilot Zane** | Comet Racer | warp jump | boy | blue hull | loud alarm |

## CLUE 1 Rounding

> You check the station's radar screen, but it only shows rounded distances. Round the readings to see which gadget the snatcher could not have used.

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



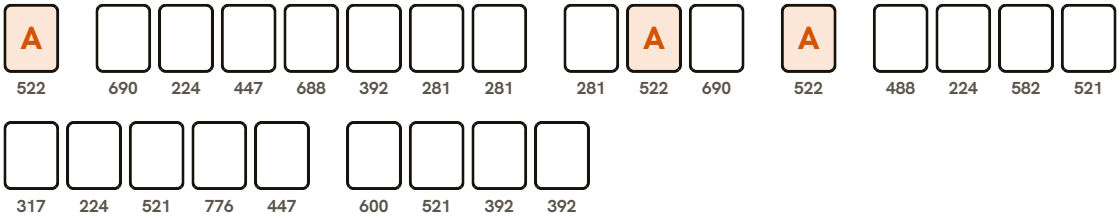

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Round 587 to the nearest hundred | | T | Round 749 to the nearest hundred | | N | Round 4,653 to the nearest thousand | | I |
| Round 2,352 to the nearest thousand | | L | Round 335 to the nearest hundred | | U | Round 2,673 to the nearest thousand | | K |
| Round 3,966 to the nearest thousand | | O | Round 8,190 to the nearest thousand | | H | Round 43 to the nearest ten | | V |
| Round 7,315 to the nearest thousand | | S | Round 32 to the nearest ten | | A | Round 851 to the nearest hundred | | D |
| Round 9,328 to the nearest thousand | | C | Round 93 to the nearest ten | | E | | | |

Scratch space:

## CLUE 2 Addition

Supplies are scattered in the launch bay. Count and add up the clues to learn if the pilot was a boy or a girl.

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



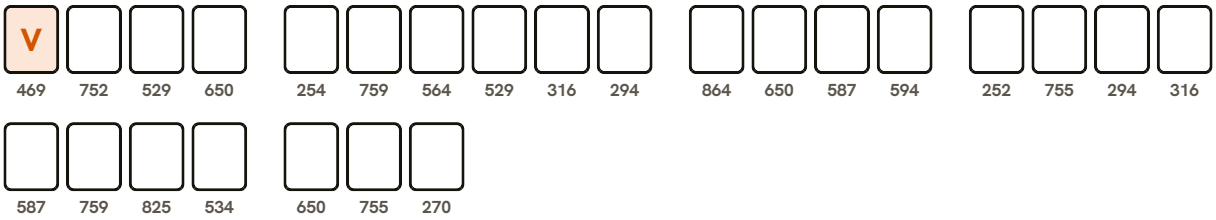

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 339 + 183 = | | A | 140 + 177 = | | P | 246 + 201 = | | T |
| 253 + 523 = | | O | 145 + 136 = | | S | 93 + 131 = | | I |
| 338 + 352 = | | W | 416 + 272 = | | N | 320 + 262 = | | R |
| 216 + 176 = | | E | 207 + 393 = | | F | 326 + 162 = | | G |
| 157 + 364 = | | L | | | | | | |

Scratch space:

## CLUE 3 Subtraction

> Commander Vega left a note about the fight. Subtract to find out which weakness she used to push the snatcher back.

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



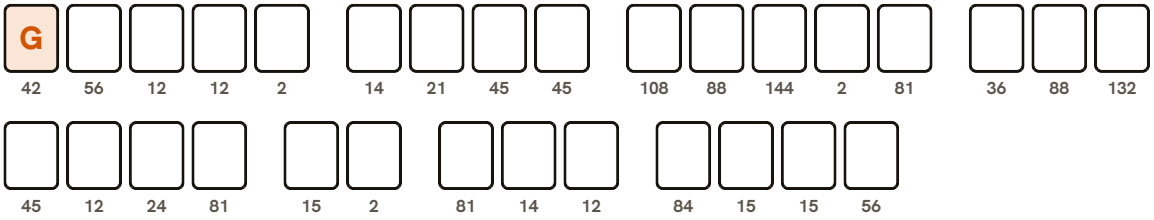

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 674 - 205 = | | V | 479 - 227 = | | W | 487 - 233 = | | F |
| 703 - 116 = | | C | 1152 - 397 = | | I | 735 - 171 = | | U |
| 1221 - 357 = | | B | 608 - 79 = | | G | 1006 - 181 = | | L |
| 717 - 123 = | | K | 1126 - 367 = | | O | 753 - 103 = | | A |
| 856 - 322 = | | D | 598 - 304 = | | T | 523 - 253 = | | R |
| 932 - 180 = | | E | 319 - 3 = | | H | | | |

Scratch space:

## CLUE 4 Multiplication facts (1-12)

Tiny chips of hull paint sit in rows on the door. Multiply the rows to match the snatcher's hull color.

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




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 6 × 7 = | | G | 7 × 12 = | | D | 1 × 2 = | | N |
| 9 × 9 = | | T | 3 × 5 = | | O | 11 × 8 = | | A |
| 7 × 3 = | | U | 9 × 5 = | | L | 7 × 2 = | | H |
| 9 × 12 = | | P | 7 × 8 = | | R | 9 × 4 = | | W |
| 12 × 12 = | | I | 4 × 3 = | | E | 12 × 11 = | | S |
| 8 × 3 = | | F | | | | | | |

Scratch space:

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

> Now you split the leftover comet dust into equal piles. Divide to lock in the snatcher's exact ship class.

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:**

| | | |
|---|---|---|
| 60 ÷ 10 = ☐ | 25 ÷ 5 = ☐ | 90 ÷ 9 = ☐ |
| 120 ÷ 10 = ☐ | 8 ÷ 8 = ☐ | 20 ÷ 10 = ☐ |
| 108 ÷ 12 = ☐ | 20 ÷ 5 = ☐ | 96 ÷ 12 = ☐ |
| 36 ÷ 12 = ☐ | 77 ÷ 7 = ☐ | |

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

1. The villain roars in on a rocket cruiser, then fires an ion blast.
2. The villain slips by on a star glider, then warp jumps away.
3. The villain slips by on a star glider, then grabs with a tractor beam.
4. The villain sneaks in on a nebula scout, then grabs with a tractor beam.
5. The villain bounces in on a moon hopper, then fires an ion blast.
6. The villain bounces in on a moon hopper, then warp jumps away.
7. The villain sneaks in on a nebula scout, then drills the door lock.
8. The villain sneaks in on a nebula scout, then fires an ion blast.
9. The villain bounces in on a moon hopper, then grabs with a tractor beam.
10. The villain zooms in on a comet racer, then drills the door lock.
11. The villain slips by on a star glider, then drills the door lock.
12. The villain roars in on a rocket cruiser, then warp jumps away.

TEACHER / PARENT

# Answer Key

Case of the Comet Snatcher

## Culprit: Hugo Frost

Nebula Scout · laser drill · girl · green hull · cold air

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 7 → Clue 4 4 → Clue 5 1

### Clue 1 (Rounding): "THE VILLAIN CANNOT USE A CLOAK SHIELD"

Round 587 to the nearest hundred = 600 (T) · Round 749 to the nearest hundred = 700 (N) · Round 4,653 to the nearest thousand = 5000 (I) · Round 2,352 to the nearest thousand = 2000 (L) · Round 335 to the nearest hundred = 300 (U) · Round 2,673 to the nearest thousand = 3000 (K) · Round 3,966 to the nearest thousand = 4000 (O) · Round 8,190 to the nearest thousand = 8000 (H) · Round 43 to the nearest ten = 40 (V) · Round 7,315 to the nearest thousand = 7000 (S) · Round 32 to the nearest ten = 30 (A) · Round 851 to the nearest hundred = 900 (D) · Round 9,328 to the nearest thousand = 9000 (C) · Round 93 to the nearest ten = 90 (E)

### Clue 2 (Addition): "A WITNESS SAW A GIRL PILOT FLEE"

339 + 183 = 522 (A) · 140 + 177 = 317 (P) · 246 + 201 = 447 (T) · 253 + 523 = 776 (O) · 145 + 136 = 281 (S) · 93 + 131 = 224 (I) · 338 + 352 = 690 (W) · 416 + 272 = 688 (N) · 320 + 262 = 582 (R) · 216 + 176 = 392 (E) · 207 + 393 = 600 (F) · 326 + 162 = 488 (G) · 157 + 364 = 521 (L)

### Clue 3 (Subtraction): "VEGA FOUGHT BACK WITH COLD AIR"

674 - 205 = 469 (V) · 479 - 227 = 252 (W) · 487 - 233 = 254 (F) · 703 - 116 = 587 (C) · 1152 - 397 = 755 (I) · 735 - 171 = 564 (U) · 1221 - 357 = 864 (B) · 608 - 79 = 529 (G) · 1006 - 181 = 825 (L) · 717 - 123 = 594 (K) · 1126 - 367 = 759 (O) · 753 - 103 = 650 (A) · 856 - 322 = 534 (D) · 598 - 304 = 294 (T) · 523 - 253 = 270 (R) · 932 - 180 = 752 (E) · 319 - 3 = 316 (H)

### Clue 4 (Multiplication facts (1-12)): "GREEN HULL PAINT WAS LEFT ON THE DOOR"

6 × 7 = 42 (G) · 7 × 12 = 84 (D) · 1 × 2 = 2 (N) · 9 × 9 = 81 (T) · 3 × 5 = 15 (O) · 11 × 8 = 88 (A) · 7 × 3 = 21 (U) · 9 × 5 = 45 (L) · 7 × 2 = 14 (H) · 9 × 12 = 108 (P) · 7 × 8 = 56 (R) · 9 × 4 = 36 (W) · 12 × 12 = 144 (I) · 4 × 3 = 12 (E) · 12 × 11 = 132 (S) · 8 × 3 = 24 (F)

### Clue 5 (Division facts (1-12)): surviving statement is box 7 → Hugo Frost

60 ÷ 10 = 6 · 25 ÷ 5 = 5 · 90 ÷ 9 = 10 · 120 ÷ 10 = 12 · 8 ÷ 8 = 1 · 20 ÷ 10 = 2 · 108 ÷ 12 = 9 · 20 ÷ 5 = 4 · 96 ÷ 12 = 8 · 36 ÷ 12 = 3 · 77 ÷ 7 = 11