



# The Case of the Missing Hover-Drive

Grade 6 math · Multiplication, Rounding, Multi-step word problems, Percentages, Division · Reading level grades 5-6

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

Someone bypassed the lasers and swiped the experimental Hover-Drive from the Academy vault. The Head Gadget Master needs our best recruits to analyze the clues and catch the Rogue Agent before they escape the island!

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 Agent is** \_\_\_\_\_

# Possible suspects

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

| NAME        | PRIMARY GADGET | SPECIAL TOOL         | WRITING HAND        | DISGUISE TRACE  | SECRET FOIL      |
|-------------|----------------|----------------------|---------------------|-----------------|------------------|
| Agent Finn  | Rocket Boots   | Night Vision Goggles | Left-handed writer  | Neon Blue Wig   | Spicy Jalapenos  |
| Indiana     | Grapple Gun    | Hacker USB           | Right-handed writer | Spiky Green Gel | Slippery Bananas |
| Agent Ben   | Spy Drone      | Decoy Hologram       | Right-handed writer | Silver Glitter  | Slippery Bananas |
| Agent Leo   | Laser Watch    | Hacker USB           | Right-handed writer | Spiky Green Gel | Squeaky Toys     |
| Agent Chloe | Laser Watch    | Hacker USB           | Right-handed writer | Neon Blue Wig   | Squeaky Toys     |
| Agent Mia   | Laser Watch    | Sonic Whistle        | Right-handed writer | Spiky Green Gel | Slippery Bananas |
| Watson      | Spy Drone      | Decoy Hologram       | Left-handed writer  | Spiky Green Gel | Slippery Bananas |
| Agent Ava   | Laser Watch    | Vault Keycard        | Left-handed writer  | Spiky Green Gel | Squeaky Toys     |
| Lara        | Rocket Boots   | Night Vision Goggles | Right-handed writer | Spiky Green Gel | Squeaky Toys     |
| Agent Max   | Stealth Cloak  | Night Vision Goggles | Right-handed writer | Neon Blue Wig   | Spicy Jalapenos  |
| Agent Jack  | Spy Drone      | Decoy Hologram       | Left-handed writer  | Spiky Green Gel | Spicy Jalapenos  |
| Agent Noah  | Grapple Gun    | Sonic Whistle        | Left-handed writer  | Spiky Green Gel | Squeaky Toys     |
| Agent Maya  | Laser Watch    | Sonic Whistle        | Right-handed writer | Neon Blue Wig   | Squeaky Toys     |
| Agent Ella  | Rocket Boots   | Decoy Hologram       | Right-handed writer | Spiky Green Gel | Squeaky Toys     |
| Sherlock    | Spy Drone      | Night Vision Goggles | Right-handed writer | Neon Blue Wig   | Spicy Jalapenos  |
| Agent Sam   | Spy Drone      | Hacker USB           | Left-handed writer  | Neon Blue Wig   | Spicy Jalapenos  |
| Agent Zoe   | Rocket Boots   | Hacker USB           | Left-handed writer  | Spiky Green Gel | Squeaky Toys     |
| Carmen      | Spy Drone      | Hacker USB           | Right-handed writer | Spiky Green Gel | Squeaky Toys     |
| Agent Lily  | Stealth Cloak  | Vault Keycard        | Right-handed writer | Spiky Green Gel | Squeaky Toys     |
| Agent Toby  | Rocket Boots   | Night Vision Goggles | Left-handed writer  | Neon Blue Wig   | Squeaky Toys     |
| Agent Luke  | Rocket Boots   | Sonic Whistle        | Right-handed writer | Spiky Green Gel | Slippery Bananas |

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

We found crates of tracking devices stacked in equal rows in the warehouse. Multiply the rows to count the total devices and unlock the first clue.

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

|     |    |    |    |    |    |    |    |    |    |    |    |    |   |    |   |   |    |    |    |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|---|---|----|----|----|
| N   |    | N  |    |    |    |    |    |    |    |    | N  |    |   |    |   |   |    |    |    |
| 96  | 84 | 96 | 40 | 9  | 64 | 33 | 54 | 40 | 20 | 40 | 84 | 96 | 9 | 84 | 9 | 9 | 28 | 24 | 20 |
|     |    |    |    |    |    |    |    |    |    |    |    |    |   |    |   |   |    |    |    |
| 110 | 24 | 72 | 24 | 30 | 20 | 24 | 56 |    |    |    |    |    |   |    |   |   |    |    |    |

|                                               |                                             |                                              |                                             |
|-----------------------------------------------|---------------------------------------------|----------------------------------------------|---------------------------------------------|
| $8 \times 12 = \square \rightarrow$ <b>N</b>  | $8 \times 7 = \square \rightarrow$ <b>D</b> | $12 \times 7 = \square \rightarrow$ <b>O</b> |                                             |
| $4 \times 5 = \square \rightarrow$ <b>S</b>   | $9 \times 8 = \square \rightarrow$ <b>R</b> | $3 \times 10 = \square \rightarrow$ <b>U</b> |                                             |
| $11 \times 10 = \square \rightarrow$ <b>W</b> | $4 \times 6 = \square \rightarrow$ <b>E</b> | $1 \times 9 = \square \rightarrow$ <b>G</b>  |                                             |
| $10 \times 4 = \square \rightarrow$ <b>I</b>  | $8 \times 8 = \square \rightarrow$ <b>H</b> | $7 \times 4 = \square \rightarrow$ <b>L</b>  | $9 \times 6 = \square \rightarrow$ <b>V</b> |
| $11 \times 3 = \square \rightarrow$ <b>T</b>  |                                             |                                              |                                             |

Scratch space:

## CLUE 2 Rounding

The infrared heat scanner is fuzzy and only displays temperature readings rounded to the nearest ten. Round the scanner values to pinpoint the runaway's trail.

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

|     |      |      |    |     |    |    |    |      |     |      |      |     |      |      |     |    |  |  |
|-----|------|------|----|-----|----|----|----|------|-----|------|------|-----|------|------|-----|----|--|--|
| R   |      |      |    |     |    |    |    |      |     |      |      |     | R    |      |     |    |  |  |
| 900 | 1700 | 2000 | 90 | 430 | 90 | 20 | 30 | 3000 | 300 | 3000 | 2000 | 900 | 1700 | 4300 | 110 | 30 |  |  |

  

|     |    |     |      |     |     |     |
|-----|----|-----|------|-----|-----|-----|
|     |    |     |      |     |     | R   |
| 430 | 90 | 300 | 3000 | 110 | 110 | 900 |

Round 886 to the nearest hundred  → **R**

Round 93 to the nearest ten  → **H**

Round 1,741 to the nearest hundred  → **I**

Round 4,273 to the nearest hundred  → **P**

Round 33 to the nearest ten  → **N**

Round 2,328 to the nearest thousand  → **G**

Round 110 to the nearest ten  → **O**

Round 2,633 to the nearest thousand  → **D**

Round 428 to the nearest ten  → **T**

Round 305 to the nearest hundred  → **E**

Round 23 to the nearest ten  → **A**

Scratch space:

## CLUE 3

## Multi-step word problems

To unlock the encrypted server room, we must calculate the exact battery drain across several testing stages. Solve this multi-step energy puzzle to retrieve the next file.

Solve each problem, then write its letter in the boxes to fill in the missing word.

Someone scared the villain off with S       T O  S .

54      78      38      66      57      76      8           8      54

There were 109 decoder rings in all. 1 decoder rings were set aside. The rest were shared equally among 2 Academy Squad. How many decoder rings did each get?

Answer:  → S

There were 466 decoder rings in all. 4 decoder rings were set aside. The rest were shared equally among 7 Academy Squad. How many decoder rings did each get?

Answer:  → E

Agent filled 4 boxes with 6 laser pens each, then found 33 more laser pens. How many laser pens are there in all?

Answer:  → A

There were 197 laser pens in all. 1 Academy Squad used 7 laser pens each. The other 5 Academy Squad shared the rest equally. How many laser pens did each of the other Academy Squad get?

Answer:  → U

There were 57 laser pens in all. 1 Academy Squad used 9 laser pens each. The other 6 Academy Squad shared the rest equally. How many laser pens did each of the other Academy Squad get?

Answer:  → Y

There were 326 decoder rings in all. 14 decoder rings were set aside. The rest were shared equally among 4 Academy Squad. How many decoder rings did each get?

Answer:  → Q

Agent earned 4 decoder rings in each of 4 rounds, plus 66 bonus decoder rings. Then 6 decoder rings were lost. How many decoder rings are left?

Answer:  → K

Scratch space:

### CLUE 4

The recovery program has restored a partial image of the suspect, but we need to compute the remaining battery percentage of the backup generator first.

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

10% of 450 =  → **S**

50% of 40 =  → **P**

5% of 220 =  →

25% of 84 =  → **G**

25% of 88 =  → ☐

10% of 190 =  → **Y**

75% of 8 =  → **C**

25% of 116 =  → **R**

40% of 20 =  → **E**

25% of 104 =  → **D**

10% of 30 =  → **H**

10% of 150 =  →

10% of 230 =  → **K**

50% of 56 =  → **T**

20% of 135 =  → **N**

Scratch space:

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

We must distribute the recovered decoder badges equally among our field agents. Divide the badges to find the final clue hidden in the locker.

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:

$24 \div 3 = \boxed{\phantom{00}}$

$15 \div 3 = \boxed{\phantom{00}}$

$72 \div 6 = \boxed{\phantom{00}}$

$6 \div 2 = \boxed{\phantom{00}}$

$81 \div 9 = \boxed{\phantom{00}}$

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

$80 \div 8 = \boxed{\phantom{00}}$

$4 \div 2 = \boxed{\phantom{00}}$

$66 \div 6 = \boxed{\phantom{00}}$

$70 \div 10 = \boxed{\phantom{00}}$

$8 \div 2 = \boxed{\phantom{00}}$

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

1. The villain blasted over the security gate using rocket boots, then uploaded a virus to the security feed using a hacker usb.
2. The villain blasted over the security gate using rocket boots, then shattered the glass alarms using a sonic whistle.
3. The villain slipped past the cameras using a stealth cloak, then navigated the pitch-black ventilation system with night vision goggles.
4. The villain cut through the window using a laser watch, then navigated the pitch-black ventilation system with night vision goggles.
5. The villain mapped out the ventilation shafts using a spy drone, then uploaded a virus to the security feed using a hacker usb.
6. The villain blasted over the security gate using rocket boots, then tricked the hallway guards with a decoy hologram.
7. The villain slipped past the cameras using a stealth cloak, then shattered the glass alarms using a sonic whistle.
8. The villain cut through the window using a laser watch, then uploaded a virus to the security feed using a hacker usb.
9. The villain mapped out the ventilation shafts using a spy drone, then navigated the pitch-black ventilation system with night vision goggles.
10. The villain mapped out the ventilation shafts using a spy drone, then tricked the hallway guards with a decoy hologram.
11. The villain scaled the elevator shaft using a grapple gun, then bypassed the secure door lock using a vault keycard.
12. The villain slipped past the cameras using a stealth cloak, then bypassed the secure door lock using a vault keycard.

# Answer Key

## The Case of the Missing Hover-Drive

### Culprit: Agent Ella

Rocket Boots · Decoy Hologram · Right-handed writer · Spiky Green Gel · Squeaky Toys

Trail: Start 21 → Clue 1 16 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

### Clue 1 (Multiplication facts (1-12)): "NO NIGHT VISION GOGGLES WERE USED"

$8 \times 12 = 96$  (N) ·  $8 \times 7 = 56$  (D) ·  $12 \times 7 = 84$  (O) ·  $4 \times 5 = 20$  (S) ·  $9 \times 8 = 72$  (R) ·  $3 \times 10 = 30$  (U) ·  $11 \times 10 = 110$  (W) ·  $4 \times 6 = 24$  (E) ·  $1 \times 9 = 9$  (G) ·  $10 \times 4 = 40$  (I) ·  $8 \times 8 = 64$  (H) ·  $7 \times 4 = 28$  (L) ·  $9 \times 6 = 54$  (V) ·  $11 \times 3 = 33$  (T)

### Clue 2 (Rounding): "RIGHT HANDED GRIP ON THE DOOR"

Round 886 to the nearest hundred = 900 (R) · Round 93 to the nearest ten = 90 (H) · Round 1,741 to the nearest hundred = 1700 (I) · Round 4,273 to the nearest hundred = 4300 (P) · Round 33 to the nearest ten = 30 (N) · Round 2,328 to the nearest thousand = 2000 (G) · Round 110 to the nearest ten = 110 (O) · Round 2,633 to the nearest thousand = 3000 (D) · Round 428 to the nearest ten = 430 (T) · Round 305 to the nearest hundred = 300 (E) · Round 23 to the nearest ten = 20 (A)

### Clue 3 (Multi-step word problems): "SQUEAKY TOYS"

There were 109 decoder rings in all. 1 decoder rings were set aside. The rest were shared equally among 2 Academy Squad. How many decoder rings did each get? = 54 (S) · There were 466 decoder rings in all. 4 decoder rings were set aside. The rest were shared equally among 7 Academy Squad. How many decoder rings did each get? = 66 (E) · Agent filled 4 boxes with 6 laser pens each, then found 33 more laser pens. How many laser pens are there in all? = 57 (A) · There were 197 laser pens in all. 1 Academy Squad used 7 laser pens each. The other 5 Academy Squad shared the rest equally. How many laser pens did each of the other Academy Squad get? = 38 (U) · There were 57 laser pens in all. 1 Academy Squad used 9 laser pens each. The other 6 Academy Squad shared the rest equally. How many laser pens did each of the other Academy Squad get? = 8 (Y) · There were 326 decoder rings in all. 14 decoder rings were set aside. The rest were shared equally among 4 Academy Squad. How many decoder rings did each get? = 78 (Q) · Agent earned 4 decoder rings in each of 4 rounds, plus 66 bonus decoder rings. Then 6 decoder rings were lost. How many decoder rings are left? = 76 (K)

### Clue 4 (Percentages): "SPIKY GREEN GEL SPECKS ON THE DESK"

10% of 450 = 45 (S) · 50% of 40 = 20 (P) · 5% of 220 = 11 (I) · 25% of 84 = 21 (G) · 25% of 88 = 22 (O) · 10% of 190 = 19 (Y) · 75% of 8 = 6 (C) · 25% of 116 = 29 (R) · 40% of 20 = 8 (E) · 25% of 104 = 26 (D) · 10% of 30 = 3 (H) · 10% of 150 = 15 (L) · 10% of 230 = 23 (K) · 50% of 56 = 28 (T) · 20% of 135 = 27 (N)

### Clue 5 (Division facts (1-12)): surviving statement is box 6 → Agent Ella

$24 \div 3 = 8$  ·  $15 \div 3 = 5$  ·  $72 \div 6 = 12$  ·  $6 \div 2 = 3$  ·  $81 \div 9 = 9$  ·  $8 \div 8 = 1$  ·  $80 \div 8 = 10$  ·  $4 \div 2 = 2$  ·  $66 \div 6 = 11$  ·  $70 \div 10 = 7$  ·  $8 \div 2 = 4$