Case of the Comet Thief

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

Detective: _____ **Date:** _____

Last night someone snuck aboard Orbit-9 and stole Captain Vega right out of the control room. The alarms never beeped, and the only clue left behind was a trail of frozen comet dust. It's up to you, junior detective, to track down the Comet Thief before their ship jumps away.

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 Thief is _____

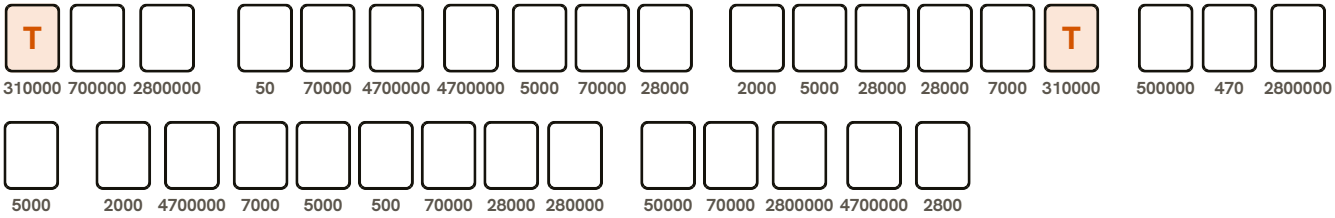
Possible suspects

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

NAME	SHIP TYPE	GADGET	PILOT TYPE	HULL COLOR	WEAKNESS
Polaris Kim	saucer scout	laser drill	robot pilot	silver hull	bright flashlights
Mira Stone	ice runner	laser drill	robot pilot	red hull	loud alarms
Jett Solis	saucer scout	laser drill	robot pilot	green hull	sticky foam
Pilot Zara	cargo hauler	star map	human pilot	silver hull	loud alarms
Quill Ramos	ice runner	laser drill	robot pilot	silver hull	bright flashlights
Dusty Reyes	stealth glider	laser drill	human pilot	silver hull	bright flashlights
Nebula Joy	rocket cruiser	cloaking field	robot pilot	red hull	sticky foam
Major Orion	cargo hauler	gravity boots	robot pilot	silver hull	sticky foam
Cosmo Dale	ice runner	gravity boots	human pilot	red hull	sticky foam
Captain Nova	cargo hauler	cloaking field	human pilot	red hull	sticky foam
Luna Park	cargo hauler	gravity boots	robot pilot	red hull	loud alarms
Echo Vance	saucer scout	star map	robot pilot	green hull	loud alarms
Rocket Tam	stealth glider	laser drill	robot pilot	red hull	bright flashlights
Commander Rex	rocket cruiser	laser drill	robot pilot	green hull	bright flashlights
Astra Hale	ice runner	cloaking field	human pilot	silver hull	sticky foam
Sky Bellow	stealth glider	cloaking field	robot pilot	silver hull	bright flashlights
Finn Glow	saucer scout	gravity boots	robot pilot	red hull	bright flashlights
Vega Lin	cargo hauler	star map	robot pilot	silver hull	bright flashlights
Stella Pax	cargo hauler	cloaking field	robot pilot	silver hull	sticky foam
Comet Cole	stealth glider	laser drill	human pilot	red hull	bright flashlights
Buzz Calder	saucer scout	tractor beam	robot pilot	silver hull	bright flashlights

CLUE 1 Rounding

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

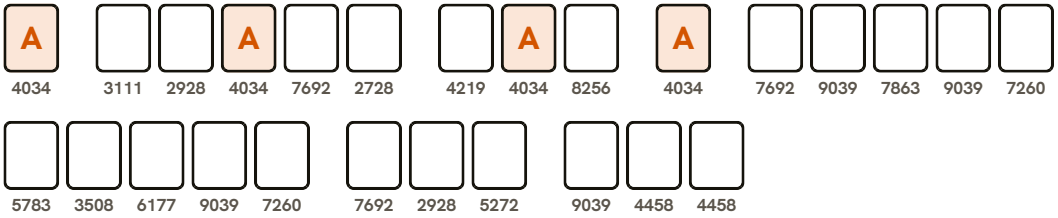


Round 309,260 to the nearest ten thousand		T	Round 51 to the nearest ten		V	Round 5,257 to the nearest thousand		A
Round 462 to the nearest hundred		K	Round 714,258 to the nearest hundred thousand		H	Round 6,978 to the nearest thousand		O
Round 66,525 to the nearest ten thousand		I	Round 4,675,985 to the nearest hundred thousand		L	Round 2,838 to the nearest hundred		D
Round 28,135 to the nearest thousand		N	Round 2,766,546 to the nearest hundred thousand		E	Round 46,542 to the nearest ten thousand		F
Round 2,331 to the nearest thousand		C	Round 526,718 to the nearest hundred thousand		U	Round 468 to the nearest ten		S
Round 277,923 to the nearest ten thousand		G						

Scratch space:

CLUE 2 Addition

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



1287 + 2747 =		A	5221 + 2471 =		R	1138 + 1790 =		U
2714 + 3069 =		P	1513 + 1995 =		I	3453 + 4803 =		W
1743 + 985 =		D	3759 + 5280 =		O	3827 + 2350 =		L
5109 + 2754 =		B	1923 + 2296 =		S	2132 + 979 =		G
2816 + 2456 =		N	2614 + 1844 =		F	3865 + 3395 =		T

Scratch space:

CLUE 3 Subtraction

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

8040 - 1430 = ☐ **A**

8827 - 4765 = ☐ **F**

9653 - 2030 = ☐ **T**

6682 - 2757 = ☐ **G**

5107 - 2426 = ☐ **M**

8622 - 442 = ☐ **R**

8586 - 989 = ☐ **I**

10051 - 4922 = ☐ **S**

2319 - 1019 = ☐ **D**

9070 - 3359 = ☐ **L**

10044 - 2769 = ☐ **H**

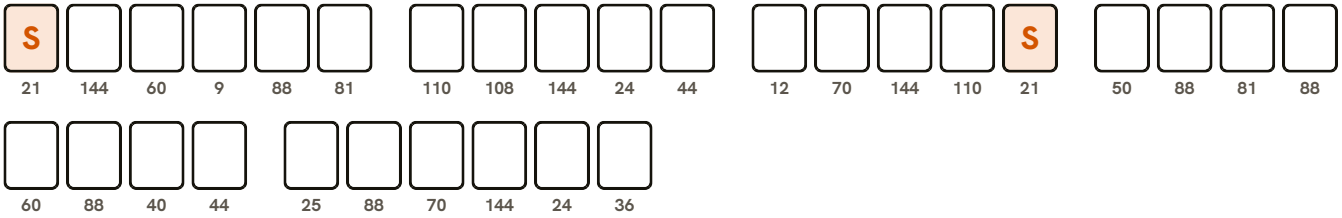
9611 - 2607 = ☐ **B**

8512 - 1497 = ☐ **E**

Scratch space:

CLUE 4 Multiplication facts (1-12)

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



3 × 7 =		S	12 × 12 =		I	6 × 6 =		D
12 × 9 =		A	11 × 4 =		T	5 × 5 =		B
9 × 9 =		R	8 × 5 =		F	8 × 11 =		E
4 × 6 =		N	11 × 10 =		P	10 × 5 =		W
9 × 1 =		V	3 × 4 =		C	5 × 12 =		L
7 × 10 =		H						

Scratch space:

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

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:

42 ÷ 7 = ☐

50 ÷ 10 = ☐

99 ÷ 9 = ☐

12 ÷ 6 = ☐

40 ÷ 10 = ☐

15 ÷ 5 = ☐

110 ÷ 11 = ☐

45 ÷ 5 = ☐

80 ÷ 10 = ☐

5 ÷ 5 = ☐

132 ÷ 11 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain rolls up in a cargo hauler, then grabs the captain with a tractor beam.
2. The villain sneaks up in a stealth glider, then plots an escape with a star map.
3. The villain drifts down in a saucer scout, then plots an escape with a star map.
4. The villain blasts in on a rocket cruiser, then vanishes behind a cloaking field.
5. The villain drifts down in a saucer scout, then grabs the captain with a tractor beam.
6. The villain slides in on an ice runner, then cuts the hatch with a laser drill.
7. The villain drifts down in a saucer scout, then cuts the hatch with a laser drill.
8. The villain sneaks up in a stealth glider, then grabs the captain with a tractor beam.
9. The villain blasts in on a rocket cruiser, then grabs the captain with a tractor beam.
10. The villain blasts in on a rocket cruiser, then plots an escape with a star map.
11. The villain rolls up in a cargo hauler, then plots an escape with a star map.
12. The villain rolls up in a cargo hauler, then vanishes behind a cloaking field.

TEACHER / PARENT

Answer Key

Case of the Comet Thief

Culprit: Polaris Kim

saucer scout · laser drill · robot pilot · silver hull · bright flashlights

Trail: Start 21 → Clue 1 16 → Clue 2 12 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN CANNOT USE A CLOAKING FIELD"

Round 309,260 to the nearest ten thousand = 310000 (T) · Round 51 to the nearest ten = 50 (V) · Round 5,257 to the nearest thousand = 5000 (A) · Round 462 to the nearest hundred = 500 (K) · Round 714,258 to the nearest hundred thousand = 700000 (H) · Round 6,978 to the nearest thousand = 7000 (O) · Round 66,525 to the nearest ten thousand = 70000 (I) · Round 4,675,985 to the nearest hundred thousand = 4700000 (L) · Round 2,838 to the nearest hundred = 2800 (D) · Round 28,135 to the nearest thousand = 28000 (N) · Round 2,766,546 to the nearest hundred thousand = 2800000 (E) · Round 46,542 to the nearest ten thousand = 50000 (F) · Round 2,331 to the nearest thousand = 2000 (C) · Round 526,718 to the nearest hundred thousand = 500000 (U) · Round 468 to the nearest ten = 470 (S) · Round 277,923 to the nearest ten thousand = 280000 (G)

Clue 2 (Addition): "A GUARD SAW A ROBOT PILOT RUN OFF"

1287 + 2747 = 4034 (A) · 5221 + 2471 = 7692 (R) · 1138 + 1790 = 2928 (U) · 2714 + 3069 = 5783 (P) · 1513 + 1995 = 3508 (I) · 3453 + 4803 = 8256 (W) · 1743 + 985 = 2728 (D) · 3759 + 5280 = 9039 (O) · 3827 + 2350 = 6177 (L) · 5109 + 2754 = 7863 (B) · 1923 + 2296 = 4219 (S) · 2132 + 979 = 3111 (G) · 2816 + 2456 = 5272 (N) · 2614 + 1844 = 4458 (F) · 3865 + 3395 = 7260 (T)

Clue 3 (Subtraction): "A BRIGHT FLASHLIGHT MADE THE THIEF FLEE"

8040 - 1430 = 6610 (A) · 8827 - 4765 = 4062 (F) · 9653 - 2030 = 7623 (T) · 6682 - 2757 = 3925 (G) · 5107 - 2426 = 2681 (M) · 8622 - 442 = 8180 (R) · 8586 - 989 = 7597 (I) · 10051 - 4922 = 5129 (S) · 2319 - 1019 = 1300 (D) · 9070 - 3359 = 5711 (L) · 10044 - 2769 = 7275 (H) · 9611 - 2607 = 7004 (B) · 8512 - 1497 = 7015 (E)

Clue 4 (Multiplication facts (1-12)): "SILVER PAINT CHIPS WERE LEFT BEHIND"

3 × 7 = 21 (S) · 12 × 12 = 144 (I) · 6 × 6 = 36 (D) · 12 × 9 = 108 (A) · 11 × 4 = 44 (T) · 5 × 5 = 25 (B) · 9 × 9 = 81 (R) · 8 × 5 = 40 (F) · 8 × 11 = 88 (E) · 4 × 6 = 24 (N) · 11 × 10 = 110 (P) · 10 × 5 = 50 (W) · 9 × 1 = 9 (V) · 3 × 4 = 12 (C) · 5 × 12 = 60 (L) · 7 × 10 = 70 (H)

Clue 5 (Division facts (1-12)): surviving statement is box 7 → Polaris Kim

42 ÷ 7 = 6 · 50 ÷ 10 = 5 · 99 ÷ 9 = 11 · 12 ÷ 6 = 2 · 40 ÷ 10 = 4 · 15 ÷ 5 = 3 · 110 ÷ 11 = 10 · 45 ÷ 5 = 9 · 80 ÷ 10 = 8 · 5 ÷ 5 = 1 · 132 ÷ 11 = 12