Case of the Comet Thief

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

Detective: _____ **Date:** _____

Someone snuck onto Orbit-9 and took Captain Vega right out of the control room. The only clues left behind are floating in zero gravity. It is up to you to scan the suspects and find 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 CLASS	GADGET	CREW TYPE	HULL COLOR	WEAKNESS
Milo Star	Moon Glider	Shield Bubble	Human	Silver Hull	Bright Lights
Luna Drake	Star Cruiser	Tractor Beam	Robot	Blue Hull	Bright Lights
Captain Nova	Solar Skiff	Shield Bubble	Human	Blue Hull	Bright Lights
Kit Stardust	Moon Glider	Tractor Beam	Robot	Red Hull	Cold Air
Dax Pulsar	Comet Racer	Tractor Beam	Robot	Silver Hull	Cold Air
Tally Orbit	Moon Glider	Cloaking Field	Robot	Silver Hull	Bright Lights
Jett Corona	Star Cruiser	Warp Jump	Human	Blue Hull	Cold Air
Pip Galaxy	Asteroid Hopper	Tractor Beam	Human	Blue Hull	Loud Alarms
Pilot Orion	Asteroid Hopper	Tractor Beam	Human	Red Hull	Bright Lights
Echo Lune	Star Cruiser	Laser Drill	Human	Blue Hull	Bright Lights
Zara Comet	Moon Glider	Cloaking Field	Human	Blue Hull	Bright Lights
Bo Saturn	Star Cruiser	Warp Jump	Human	Blue Hull	Bright Lights
Wren Eclipse	Moon Glider	Tractor Beam	Robot	Silver Hull	Cold Air
Cosmo Reed	Moon Glider	Tractor Beam	Human	Blue Hull	Loud Alarms
Nova Kade	Star Cruiser	Shield Bubble	Robot	Red Hull	Loud Alarms
Sol Brightly	Moon Glider	Cloaking Field	Human	Blue Hull	Cold Air
Astra Bloom	Comet Racer	Laser Drill	Robot	Blue Hull	Loud Alarms
Bren Nebula	Asteroid Hopper	Cloaking Field	Robot	Blue Hull	Bright Lights
Iris Halley	Star Cruiser	Cloaking Field	Human	Red Hull	Cold Air
Mira Solis	Solar Skiff	Tractor Beam	Human	Blue Hull	Bright Lights
Vesper Sky	Asteroid Hopper	Laser Drill	Robot	Red Hull	Loud Alarms

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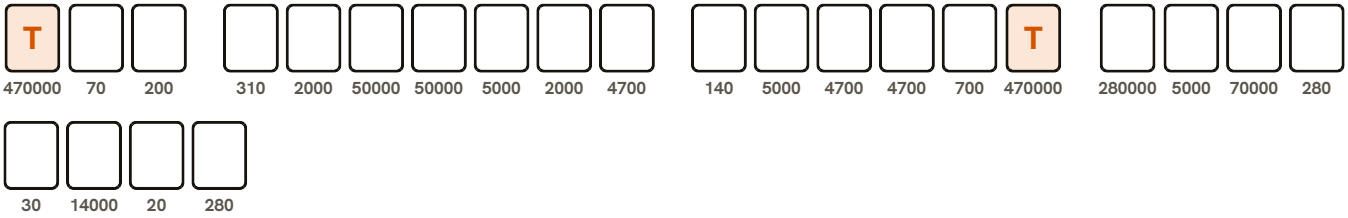
CLUE 1 Rounding

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

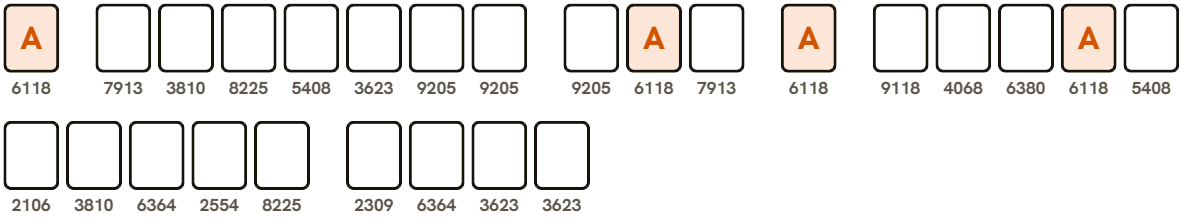


Round 469,748 to the nearest ten thousand		T	Round 68 to the nearest ten		H	Round 218 to the nearest hundred		E
Round 307 to the nearest ten		V	Round 1,816 to the nearest thousand		I	Round 54,041 to the nearest ten thousand		L
Round 4,971 to the nearest thousand		A	Round 4,730 to the nearest hundred		N	Round 137 to the nearest ten		C
Round 698 to the nearest hundred		O	Round 277,255 to the nearest ten thousand		W	Round 65,334 to the nearest ten thousand		R
Round 278 to the nearest ten		P	Round 26 to the nearest ten		J	Round 14,493 to the nearest thousand		U
Round 24 to the nearest ten		M						

Scratch space:

CLUE 2 Addition

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

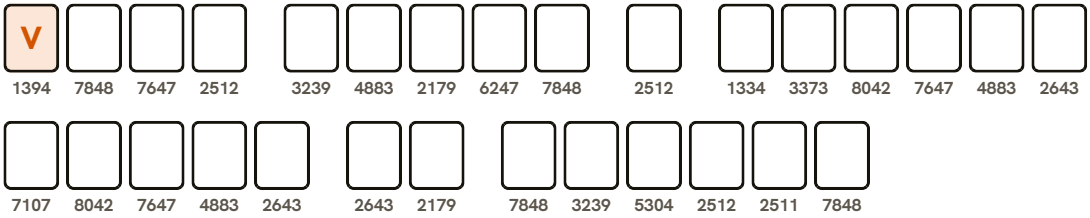


3774 + 2344 =		A	4666 + 3247 =		W	2413 + 1397 =		I
2578 + 5647 =		T	2253 + 3155 =		N	1791 + 1832 =		E
5445 + 3760 =		S	3500 + 5618 =		H	2364 + 1704 =		U
1983 + 4397 =		M	1340 + 766 =		P	4008 + 2356 =		L
997 + 1557 =		O	959 + 1350 =		F			

Scratch space:

CLUE 3 Subtraction

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

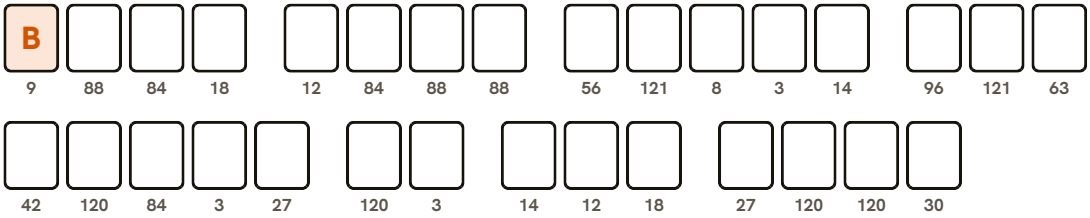


3545 - 2151 =		V	9824 - 1976 =		E	10236 - 2589 =		G
4864 - 2352 =		A	7629 - 4390 =		S	6098 - 1215 =		H
4300 - 2121 =		O	7723 - 1476 =		N	6080 - 4746 =		B
7837 - 4464 =		R	12993 - 4951 =		I	3734 - 1091 =		T
11985 - 4878 =		L	5880 - 576 =		C	6984 - 4473 =		P

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 × 3 =		B	11 × 8 =		L	7 × 12 =		U
6 × 3 =		E	4 × 3 =		H	8 × 7 =		P
11 × 11 =		A	4 × 2 =		I	1 × 3 =		N
2 × 7 =		T	8 × 12 =		W	7 × 9 =		S
6 × 7 =		F	12 × 10 =		O	9 × 3 =		D
10 × 3 =		R						

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:

9 ÷ 3 = ☐

80 ÷ 8 = ☐

60 ÷ 12 = ☐

2 ÷ 1 = ☐

132 ÷ 12 = ☐

70 ÷ 10 = ☐

18 ÷ 3 = ☐

72 ÷ 8 = ☐

16 ÷ 2 = ☐

144 ÷ 12 = ☐

3 ÷ 3 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain swoops in on a star cruiser, then vanishes with a cloaking field.
2. The villain sails over on a solar skiff, then traps the room in a shield bubble.
3. The villain sails over on a solar skiff, then grabs the captain with a tractor beam.
4. The villain swoops in on a star cruiser, then traps the room in a shield bubble.
5. The villain sails over on a solar skiff, then jams the airlock controls.
6. The villain streaks past on a comet racer, then blasts through with a laser drill.
7. The villain swoops in on a star cruiser, then jams the airlock controls.
8. The villain streaks past on a comet racer, then grabs the captain with a tractor beam.
9. The villain bounces close on an asteroid hopper, then jams the airlock controls.
10. The villain drifts down on a moon glider, then vanishes with a cloaking field.
11. The villain drifts down on a moon glider, then traps the room in a shield bubble.
12. The villain streaks past on a comet racer, then jams the airlock controls.

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TEACHER / PARENT

Answer Key

Case of the Comet Thief

Culprit: Echo Lune

Star Cruiser · Laser Drill · Human · Blue Hull · Bright Lights

Trail: Start 21 → Clue 1 19 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN CANNOT WARP JUMP"

Round 469,748 to the nearest ten thousand = 470000 (T) · Round 68 to the nearest ten = 70 (H) · Round 218 to the nearest hundred = 200 (E) · Round 307 to the nearest ten = 310 (V) · Round 1,816 to the nearest thousand = 2000 (I) · Round 54,041 to the nearest ten thousand = 50000 (L) · Round 4,971 to the nearest thousand = 5000 (A) · Round 4,730 to the nearest hundred = 4700 (N) · Round 137 to the nearest ten = 140 (C) · Round 698 to the nearest hundred = 700 (O) · Round 277,255 to the nearest ten thousand = 280000 (W) · Round 65,334 to the nearest ten thousand = 70000 (R) · Round 278 to the nearest ten = 280 (P) · Round 26 to the nearest ten = 30 (J) · Round 14,493 to the nearest thousand = 14000 (U) · Round 24 to the nearest ten = 20 (M)

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

3774 + 2344 = 6118 (A) · 4666 + 3247 = 7913 (W) · 2413 + 1397 = 3810 (I) · 2578 + 5647 = 8225 (T) · 2253 + 3155 = 5408 (N) · 1791 + 1832 = 3623 (E) · 5445 + 3760 = 9205 (S) · 3500 + 5618 = 9118 (H) · 2364 + 1704 = 4068 (U) · 1983 + 4397 = 6380 (M) · 1340 + 766 = 2106 (P) · 4008 + 2356 = 6364 (L) · 997 + 1557 = 2554 (O) · 959 + 1350 = 2309 (F)

Clue 3 (Subtraction): "VEGA SHONE A BRIGHT LIGHT TO ESCAPE"

3545 - 2151 = 1394 (V) · 9824 - 1976 = 7848 (E) · 10236 - 2589 = 7647 (G) · 4864 - 2352 = 2512 (A) · 7629 - 4390 = 3239 (S) · 6098 - 1215 = 4883 (H) · 4300 - 2121 = 2179 (O) · 7723 - 1476 = 6247 (N) · 6080 - 4746 = 1334 (B) · 7837 - 4464 = 3373 (R) · 12993 - 4951 = 8042 (I) · 3734 - 1091 = 2643 (T) · 11985 - 4878 = 7107 (L) · 5880 - 576 = 5304 (C) · 6984 - 4473 = 2511 (P)

Clue 4 (Multiplication facts (1-12)): "BLUE HULL PAINT WAS FOUND ON THE DOOR"

3 × 3 = 9 (B) · 11 × 8 = 88 (L) · 7 × 12 = 84 (U) · 6 × 3 = 18 (E) · 4 × 3 = 12 (H) · 8 × 7 = 56 (P) · 11 × 11 = 121 (A) · 4 × 2 = 8 (I) · 1 × 3 = 3 (N) · 2 × 7 = 14 (T) · 8 × 12 = 96 (W) · 7 × 9 = 63 (S) · 6 × 7 = 42 (F) · 12 × 10 = 120 (O) · 9 × 3 = 27 (D) · 10 × 3 = 30 (R)

Clue 5 (Division facts (1-12)): surviving statement is box 4 → Echo Lune

9 ÷ 3 = 3 · 80 ÷ 8 = 10 · 60 ÷ 12 = 5 · 2 ÷ 1 = 2 · 132 ÷ 12 = 11 · 70 ÷ 10 = 7 · 18 ÷ 3 = 6 · 72 ÷ 8 = 9 · 16 ÷ 2 = 8 · 144 ÷ 12 = 12 · 3 ÷ 3 = 1