



The Case of the Golden Spatula

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

Detective: _____ Date: _____

The Golden Space-Spatula has disappeared from the Astro-Kitchen! A sneaky space pirate took it. We need to find out who did it before they escape the Nebula Sector.

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 space pirate thief is _____

Possible suspects

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

NAME	STEERING SKILL	SPACE GEAR	PIRATE TYPE	SPACE HAIR COLOR	ASTRO WEAKNESS
Astro Anna	engine fixing	gravity boots	Space Boy	Neon Purple	giant magnets
Orbiting Olga	stew stirring	rocket jetpack	Space Girl	Solar Orange	space sickness
Pulsar Pete	stew stirring	gravity boots	Space Boy	Cosmic Green	giant magnets
Rusty Rocket	engine fixing	laser lasso	Space Boy	Cosmic Green	giant magnets
Sputnik Sally	laser piloting	bubble shield	Space Boy	Cosmic Green	space sickness
Barnacle Bob	engine fixing	rocket jetpack	Space Boy	Neon Purple	giant magnets
Cosmic Carla	map reading	glow belt	Space Boy	Neon Purple	giant magnets
Shadow Sid	blaster aiming	bubble shield	Space Boy	Solar Orange	sticky honey
Nova Ned	laser piloting	glow belt	Space Girl	Cosmic Green	sticky honey
Galaxy Gwen	stew stirring	bubble shield	Space Boy	Solar Orange	space sickness
Nebula Nick	stew stirring	glow belt	Space Boy	Neon Purple	giant magnets
Starlight Sam	stew stirring	laser lasso	Space Girl	Neon Purple	giant magnets
Laser Lucy	engine fixing	laser lasso	Space Boy	Neon Purple	giant magnets
Orion Orbit	map reading	bubble shield	Space Girl	Neon Purple	sticky honey
Jetpack Jack	laser piloting	rocket jetpack	Space Girl	Solar Orange	space sickness
Meteor Molly	blaster aiming	rocket jetpack	Space Boy	Neon Purple	sticky honey
Comet Chris	map reading	laser lasso	Space Boy	Solar Orange	giant magnets
Warp-Drive Will	stew stirring	glow belt	Space Boy	Cosmic Green	giant magnets
Zippy Zoe	engine fixing	glow belt	Space Boy	Solar Orange	giant magnets
Star-Dust Sue	engine fixing	bubble shield	Space Boy	Neon Purple	sticky honey
Gravity Greg	stew stirring	rocket jetpack	Space Girl	Neon Purple	space sickness

CLUE 1 Rounding

Your radar scanner shows the target coordinates. The screen rounds the distance to the nearest ten to keep it simple. Let us round the numbers to read the first clue.

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

T			T											T				
90	50	400	90	50	600	400	2000	800	70	400	900	20	70	90	80	400	200	8000
200	4000	400	T															
200	4000	400	90	7000	200	3000	300											

Round 89 to the nearest ten → **T**

Round 3,308 to the nearest thousand → **C**

Round 570 to the nearest hundred → **I**

Round 894 to the nearest hundred → **S**

Round 21 to the nearest ten → **N**

Round 281 to the nearest hundred → **K**

Round 67 to the nearest ten → **O**

Round 80 to the nearest ten → **W**

Round 779 to the nearest hundred → **D**

Round 50 to the nearest ten → **H**

Round 448 to the nearest hundred → **E**

Round 7,970 to the nearest thousand → **R**

Round 4,242 to the nearest thousand → **J**

Round 194 to the nearest hundred → **A**

Round 2,111 to the nearest thousand → **F**

Round 7,080 to the nearest thousand → **P**

Scratch space:

CLUE 2 Addition

The Astro-Chef counts his missing golden pots. He adds the pans and the kettles together on his notepad. This sum reveals a new clue about the thief.

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

A										A		A			
793	975	513	424	839	316	966	966	966	966	793	975	793	844	920	901

			A									
586	513	949	793	424	316	949	568	839	839	513	839	318

238 + 555 = → A	194 + 374 = → U	335 + 631 = → S
183 + 241 = → T	310 + 610 = → O	360 + 541 = → Y
125 + 193 = → G	360 + 153 = → I	214 + 102 = → E
404 + 545 = → R	431 + 408 = → N	283 + 303 = → P
292 + 552 = → B	389 + 586 = → W	

Scratch space:

CLUE 3

The ship fuel tank is leaking purple liquid into space. If we subtract the spilled fuel from the full tank, we can find the hidden clue left behind.

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

334 304 617 326 264 828 776 232 334 776 828 244 617 617 326 334 814 814 244 471

617 500 244 723 857 495 495 334 857 828

$423 - 89 = \boxed{} \rightarrow \boxed{\mathbf{A}}$

$$430 - 198 = \boxed{} \rightarrow \boxed{\text{M}}$$

$$928 - 311 = \boxed{} \rightarrow \boxed{\text{T}}$$

$833 - 19 = \boxed{} \rightarrow \boxed{\text{P}}$

$681 - 210 = \boxed{} \rightarrow \boxed{\text{D}}$

$$609 - 345 = \boxed{} \rightarrow \boxed{0}$$

$$469 - 225 = \boxed{} \rightarrow \boxed{\text{E}}$$

$723 - 228 = \boxed{} \rightarrow \boxed{}$

$836 - 8 = \boxed{} \rightarrow \boxed{\text{N}}$

$955 - 179 = \boxed{} \rightarrow \boxed{\text{G}}$

$916 - 193 = \boxed{} \rightarrow \boxed{\text{V}}$

$825 - 325 = \boxed{} \rightarrow \boxed{\text{H}}$

$684 - 358 = \boxed{} \rightarrow \boxed{\text{R}}$

$625 - 321 = \boxed{} \rightarrow \boxed{\text{S}}$

$918 - 61 = \boxed{} \rightarrow \boxed{}$

Scratch space:

CLUE 4

Multiplication facts (1-12)

We find rows of storage crates stacked in the cargo hold. By multiplying the rows of crates by the columns, we can unlock the security safe.

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

W									W										
5	108	60	72	96	81	80	100	90	72	5	32	81	100	56	96	11	56	90	108
70	144	32	11																

$5 \times 1 = \square \rightarrow \boxed{\text{W}}$

$9 \times 9 = \square \rightarrow \boxed{\text{N}}$

$9 \times 10 = \square \rightarrow \boxed{\text{L}}$

$10 \times 7 = \square \rightarrow \boxed{\text{H}}$

$10 \times 6 = \square \rightarrow \boxed{\text{F}}$

$10 \times 8 = \square \rightarrow \boxed{\text{D}}$

$7 \times 8 = \square \rightarrow \boxed{\text{P}}$

$11 \times 1 = \square \rightarrow \boxed{\text{R}}$

$4 \times 8 = \square \rightarrow \boxed{\text{I}}$

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

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

$10 \times 10 = \square \rightarrow \boxed{\text{G}}$

$12 \times 6 = \square \rightarrow \boxed{\text{O}}$

$12 \times 9 = \square \rightarrow \boxed{\text{E}}$

Scratch space:

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

The crew needs to share the energy cells equally among the crew cabins. When we divide the cells, we find the last clue written on the box.

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:

$6 \div 2 = \boxed{}$

$12 \div 1 = \boxed{}$

$110 \div 10 = \boxed{}$

$2 \div 2 = \boxed{}$

$16 \div 4 = \boxed{}$

$40 \div 5 = \boxed{}$

$55 \div 11 = \boxed{}$

$2 \div 1 = \boxed{}$

$110 \div 11 = \boxed{}$

$84 \div 12 = \boxed{}$

$42 \div 7 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain points the ship toward the secret base, then blasts away using a rocket jetpack.
2. The villain fires the ship lasers at a target, then blasts away using a rocket jetpack.
3. The villain fixes the broken warp drive, then walks on the ceiling with gravity boots.
4. The villain fixes the broken warp drive, then hides inside a bouncy bubble shield.
5. The villain points the ship toward the secret base, then snatches loot with a laser lasso.
6. The villain steers the pirate ship through asteroids, then snatches loot with a laser lasso.
7. The villain steers the pirate ship through asteroids, then hides inside a bouncy bubble shield.
8. The villain points the ship toward the secret base, then walks on the ceiling with gravity boots.
9. The villain fixes the broken warp drive, then snatches loot with a laser lasso.
10. The villain fires the ship lasers at a target, then walks on the ceiling with gravity boots.
11. The villain cooks smelly cabbage space soup, then lights up the dark corridor with a glow belt.
12. The villain points the ship toward the secret base, then lights up the dark corridor with a glow belt.

Answer Key

The Case of the Golden Spatula

Culprit: Laser Lucy

engine fixing · laser lasso · Space Boy · Neon Purple · giant magnets

Trail: Start 21 → Clue 1 16 → Clue 2 13 → Clue 3 9 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE THIEF DOES NOT WEAR A JETPACK"

Round 89 to the nearest ten = 90 (T) · Round 3,308 to the nearest thousand = 3000 (C) · Round 570 to the nearest hundred = 600 (I) · Round 894 to the nearest hundred = 900 (S) · Round 21 to the nearest ten = 20 (N) · Round 281 to the nearest hundred = 300 (K) · Round 67 to the nearest ten = 70 (O) · Round 80 to the nearest ten = 80 (W) · Round 779 to the nearest hundred = 800 (D) · Round 50 to the nearest ten = 50 (H) · Round 448 to the nearest hundred = 400 (E) · Round 7,970 to the nearest thousand = 8000 (R) · Round 4,242 to the nearest thousand = 4000 (J) · Round 194 to the nearest hundred = 200 (A) · Round 2,111 to the nearest thousand = 2000 (F) · Round 7,080 to the nearest thousand = 7000 (P)

Clue 2 (Addition): "A WITNESS SAW A BOY PIRATE RUNNING"

$238 + 555 = 793$ (A) · $194 + 374 = 568$ (U) · $335 + 631 = 966$ (S) · $183 + 241 = 424$ (T) · $310 + 610 = 920$ (O) · $360 + 541 = 901$ (Y) · $125 + 193 = 318$ (G) · $360 + 153 = 513$ (I) · $214 + 102 = 316$ (E) · $404 + 545 = 949$ (R) · $431 + 408 = 839$ (N) · $283 + 303 = 586$ (P) · $292 + 552 = 844$ (B) · $389 + 586 = 975$ (W)

Clue 3 (Subtraction): "A STRONG MAGNET TRAPPED THE VILLAIN"

$423 - 89 = 334$ (A) · $430 - 198 = 232$ (M) · $928 - 311 = 617$ (T) · $833 - 19 = 814$ (P) · $681 - 210 = 471$ (D) · $609 - 345 = 264$ (O) · $469 - 225 = 244$ (E) · $723 - 228 = 495$ (L) · $836 - 8 = 828$ (N) · $955 - 179 = 776$ (G) · $916 - 193 = 723$ (V) · $825 - 325 = 500$ (H) · $684 - 358 = 326$ (R) · $625 - 321 = 304$ (S) · $918 - 61 = 857$ (I)

Clue 4 (Multiplication facts (1-12)): "WE FOUND GLOWING PURPLE HAIR"

$5 \times 1 = 5$ (W) · $9 \times 9 = 81$ (N) · $9 \times 10 = 90$ (L) · $10 \times 7 = 70$ (H) · $10 \times 6 = 60$ (F) · $10 \times 8 = 80$ (D) · $7 \times 8 = 56$ (P) · $11 \times 1 = 11$ (R) · $4 \times 8 = 32$ (I) · $12 \times 12 = 144$ (A) · $8 \times 12 = 96$ (U) · $10 \times 10 = 100$ (G) · $12 \times 6 = 72$ (O) · $12 \times 9 = 108$ (E)

Clue 5 (Division facts (1-12)): surviving statement is box 9 → Laser Lucy

$6 \div 2 = 3$ · $12 \div 1 = 12$ · $110 \div 10 = 11$ · $2 \div 2 = 1$ · $16 \div 4 = 4$ · $40 \div 5 = 8$ · $55 \div 11 = 5$ · $2 \div 1 = 2$ · $110 \div 11 = 10$ · $84 \div 12 = 7$ · $42 \div 7 = 6$