



The Mystery of the Starlight Moon Base

Grade 1 math · Addition, Subtraction, Skip counting, Place value, Missing addends · Reading level grades 1-2

Detective: _____ Date: _____

Someone snuck into the Starlight Moon Base dome and took the master energy Crystal! Cadet Nova from the Starlight Patrol is on the case. Solve the math clues to cross off suspects and catch the sneaky Space Bandit!

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 Bandit is _____

Possible suspects

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

NAME	MAIN TOOL	EXTRA GEAR	DOMINANT HAND	HAIR STYLE	WEAKNESS
Yuri	Robot Arm	Moon Rover	Left Handed	Neon Blue Hair	Scared Of Space Worms
Tim	Gravity Boots	Cosmic Shield	Right Handed	Neon Blue Hair	Magnet Trap
Valentina	Jet Pack	Star Map	Left Handed	Neon Blue Hair	Magnet Trap
Guion	Space Scooter	Solar Scanner	Left Handed	Neon Blue Hair	Stardust Sneezes
Ellen	Laser Torch	Star Map	Left Handed	Neon Blue Hair	Scared Of Space Worms
Buzz	Robot Arm	Star Map	Left Handed	Neon Blue Hair	Scared Of Space Worms
Kalpana	Gravity Boots	Cosmic Shield	Left Handed	Spiky Purple Hair	Scared Of Space Worms
Sally	Jet Pack	Star Map	Right Handed	Neon Blue Hair	Scared Of Space Worms
Samantha	Jet Pack	Star Map	Left Handed	Neon Blue Hair	Scared Of Space Worms
Anousheh	Laser Torch	Comet Beacon	Left Handed	Spiky Purple Hair	Magnet Trap
Sultan	Jet Pack	Cosmic Shield	Left Handed	Silver Astro Cut	Magnet Trap
Bernard	Laser Torch	Star Map	Right Handed	Spiky Purple Hair	Stardust Sneezes
Christina	Space Scooter	Solar Scanner	Right Handed	Spiky Purple Hair	Stardust Sneezes
Victor	Gravity Boots	Comet Beacon	Left Handed	Silver Astro Cut	Scared Of Space Worms
Jessica	Laser Torch	Moon Rover	Right Handed	Silver Astro Cut	Magnet Trap
Mae	Robot Arm	Solar Scanner	Right Handed	Spiky Purple Hair	Scared Of Space Worms
Aki	Laser Torch	Star Map	Right Handed	Silver Astro Cut	Scared Of Space Worms
Leland	Jet Pack	Comet Beacon	Left Handed	Spiky Purple Hair	Stardust Sneezes
Chris	Jet Pack	Comet Beacon	Left Handed	Neon Blue Hair	Stardust Sneezes
Sunita	Laser Torch	Comet Beacon	Left Handed	Neon Blue Hair	Scared Of Space Worms
Serena	Robot Arm	Moon Rover	Right Handed	Spiky Purple Hair	Scared Of Space Worms

CLUE 1

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

Diagram illustrating a sequence of numbers arranged in two rows of boxes. The top row contains 18 boxes, with the first and last boxes labeled 'T'. The bottom row contains 15 boxes. The numbers below the boxes are:

Top row: 3, 15, 13, 18, 5, 7, 7, 8, 5, 19, 20, 17, 13, 4, 19, 17, 3

Bottom row: 15, 8, 18, 13, 8, 2, 17, 17, 19, 9, 17, 18, 13, 9

$2 + 1 = \boxed{} \rightarrow \boxed{\text{T}}$

$10 + 5 = \boxed{} \rightarrow \boxed{\text{H}}$

$5 + 2 = \boxed{} \rightarrow \boxed{\text{L}}$

$1 + 4 = \square \rightarrow \boxed{I}$

$8 + 5 = \boxed{} \rightarrow \boxed{\text{E}}$

$$3 + 1 = \boxed{} \rightarrow \boxed{\mathbf{S}}$$

$10 + 9 = \boxed{} \rightarrow \boxed{\text{N}}$

$11 + 6 = \square \rightarrow \boxed{\text{O}}$

$6 + 14 = \square \rightarrow \boxed{\text{D}}$

$$5 + 4 = \boxed{} \rightarrow \boxed{\mathbf{R}}$$

$2 + 6 = \square \rightarrow \boxed{\mathbf{A}}$

$7 + 11 = \square \rightarrow \boxed{\mathbf{V}}$

$1 + 1 = \square \rightarrow \boxed{\mathbf{M}}$

Scratch space:

CLUE 2

Subtraction

The team checked the supply chest to see how many glow badges were taken away.

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

T									T				T					T
16	12	5	2	14	2	10	5	15	16	9	5	17	16	19	9	5	17	16
									T									
12	19	4	3	10	8	18	4	16	13	4	1	9	19	2	2			

$19 - 3 = \square \rightarrow \boxed{\text{T}}$

$12 - 2 = \square \rightarrow \boxed{\text{P}}$

$3 - 2 = \square \rightarrow \boxed{\text{G}}$

$13 - 8 = \square \rightarrow \boxed{\text{E}}$

$14 - 2 = \square \rightarrow \boxed{\text{H}}$

$18 - 1 = \square \rightarrow \boxed{\text{F}}$

$6 - 4 = \square \rightarrow \boxed{\text{S}}$

$11 - 8 = \square \rightarrow \boxed{\text{D}}$

$20 - 1 = \square \rightarrow \boxed{\text{A}}$

$11 - 7 = \square \rightarrow \boxed{\text{N}}$

$20 - 2 = \square \rightarrow \boxed{\text{I}}$

$13 - 4 = \square \rightarrow \boxed{\text{L}}$

$18 - 5 = \square \rightarrow \boxed{\text{O}}$

$20 - 5 = \square \rightarrow \boxed{\text{C}}$

$15 - 1 = \square \rightarrow \boxed{\text{U}}$

$11 - 3 = \square \rightarrow \boxed{\text{R}}$

Scratch space:

CLUE 3 Skip counting

Nova counted rocket boots by twos along the moon station hall.

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

A								A							
140	28	27	33	8	130	8	28	140	26	42	40	10	120	21	
		A										A			
8	26	140	120	42	20	90	130	42	100	22	27	27	140	22	45
													A		A
													140	40	140
															55

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 → **A**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 → **C**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 → **U**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 → **T**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 → **R**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 → **H**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 → **I**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 → **O**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 → **P**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 → **E**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 → **L**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 → **Y**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 → **N**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 → **V**

Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 → **S**

Skip-count by 10s. Fill the blank: 10, 20, 30, __, 50, 60 → **W**

Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 → **D**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 → **M**

Scratch space:

CLUE 4 Place value

The rover screen shows tens and ones to unlock the mystery signal.

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

A										A					A			
79	97	84	39	97	91	94	40	84	76	79	31	82	19	73	82	79	97	32
	A									A								
66	79	19	39	97	73	76	84	19	84	79	73							

What number has 7 tens and 9 ones? → **A**

What number has 7 tens and 3 ones? → **T**

What number has 8 tens and 4 ones? → **E**

What number has 9 tens and 4 ones? → **L**

What number has 4 tens and 0 ones? → **U**

What number has 7 tens and 6 ones? → **H**

What number has 3 tens and 9 ones? → **O**

What number has 6 tens and 6 ones? → **W**

What number has 9 tens and 1 one? → **B**

What number has 3 tens and 2 ones? → **D**

What number has 8 tens and 2 ones? → **R**

What number has 3 tens and 1 one? → **I**

What number has 1 ten and 9 ones? → **S**

What number has 9 tens and 7 ones? → **N**

Scratch space:

CLUE 5**Missing addends - the last clue**

Nova found a launch panel with a missing energy number to fill in.

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:

$7 + \underline{\quad} = 16$

$3 + \underline{\quad} = 10$

$5 + \underline{\quad} = 11$

$4 + \underline{\quad} = 15$

$7 + \underline{\quad} = 9$

$7 + \underline{\quad} = 8$

$10 + \underline{\quad} = 22$

$8 + \underline{\quad} = 11$

$4 + \underline{\quad} = 9$

$2 + \underline{\quad} = 6$

$1 + \underline{\quad} = 9$

Step 2 - cross out the sentence with each answer:

1. The villain zipped down the space corridor, then turned on the comet beacon signal.
2. The villain zipped down the space corridor, then drove off across the dark craters.
3. The villain grabbed the glowing crystal, then scanned the room with a solar beam.
4. The villain grabbed the glowing crystal, then turned on the comet beacon signal.
5. The villain stomped across the moon dust, then scanned the room with a solar beam.
6. The villain blasted through the vault lock, then turned on the comet beacon signal.
7. The villain blasted through the vault lock, then checked the star map for a route.
8. The villain flew up to the ceiling hatch, then raised the cosmic shield to block lasers.
9. The villain flew up to the ceiling hatch, then checked the star map for a route.
10. The villain grabbed the glowing crystal, then checked the star map for a route.
11. The villain flew up to the ceiling hatch, then turned on the comet beacon signal.
12. The villain stomped across the moon dust, then raised the cosmic shield to block lasers.

Answer Key

The Mystery of the Starlight Moon Base

Culprit: Buzz

Robot Arm · Star Map · Left Handed · Neon Blue Hair · Scared Of Space Worms

Trail: Start 21 → Clue 1 18 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT HAVE A MOON ROVER"

$2 + 1 = 3$ (T) · $10 + 5 = 15$ (H) · $5 + 2 = 7$ (L) · $1 + 4 = 5$ (I) · $8 + 5 = 13$ (E) · $3 + 1 = 4$ (S) · $10 + 9 = 19$ (N) · $11 + 6 = 17$ (O) · $6 + 14 = 20$ (D) · $5 + 4 = 9$ (R) · $2 + 6 = 8$ (A) · $7 + 11 = 18$ (V) · $1 + 1 = 2$ (M)

Clue 2 (Subtraction): "THE SUSPECT LEFT A LEFT HAND PRINT ON GLASS"

$19 - 3 = 16$ (T) · $12 - 2 = 10$ (P) · $3 - 2 = 1$ (G) · $13 - 8 = 5$ (E) · $14 - 2 = 12$ (H) · $18 - 1 = 17$ (F) · $6 - 4 = 2$ (S) · $11 - 8 = 3$ (D) · $20 - 1 = 19$ (A) · $11 - 7 = 4$ (N) · $20 - 2 = 18$ (I) · $13 - 4 = 9$ (L) · $18 - 5 = 13$ (O) · $20 - 5 = 15$ (C) · $15 - 1 = 14$ (U) · $11 - 3 = 8$ (R)

Clue 3 (Skip counting): "A PLUSH SPACE WORM SCARED THE VILLAIN AWAY"

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 = 140 (A) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (C) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, __, 36, 39 = 33 (U) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, __, 100, 110 = 90 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 = 130 (H) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 = 22 (I) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 = 10 (O) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 = 28 (P) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (E) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 = 27 (L) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 = 55 (Y) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 = 45 (N) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (V) · Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 = 8 (S) · Skip-count by 10s. Fill the blank: 10, 20, 30, __, 50, 60 = 40 (W) · Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 = 20 (D) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 = 21 (M)

Clue 4 (Place value): "A NEON BLUE HAIR STRAND WAS ON THE SEAT"

What number has 7 tens and 9 ones? = 79 (A) · What number has 7 tens and 3 ones? = 73 (T) · What number has 8 tens and 4 ones? = 84 (E) · What number has 9 tens and 4 ones? = 94 (L) · What number has 4 tens and 0 ones? = 40 (U) · What number has 7 tens and 6 ones? = 76 (H) · What number has 3 tens and 9 ones? = 39 (O) · What number has 6 tens and 6 ones? = 66 (W) · What number has 9 tens and 1 one? = 91 (B) · What number has 3 tens and 2 ones? = 32 (D) · What number has 8 tens and 2 ones? = 82 (R) · What number has 3 tens and 1 one? = 31 (I) · What number has 1 ten and 9 ones? = 19 (S) · What number has 9 tens and 7 ones? = 97 (N)

Clue 5 (Missing addends): surviving statement is box 10 → Buzz

$7 + \underline{\quad} = 16 = 9$ · $3 + \underline{\quad} = 10 = 7$ · $5 + \underline{\quad} = 11 = 6$ · $4 + \underline{\quad} = 15 = 11$ · $7 + \underline{\quad} = 9 = 2$ · $7 + \underline{\quad} = 8 = 1$ · $10 + \underline{\quad} = 22 = 12$ · $8 + \underline{\quad} = 11 = 3$ · $4 + \underline{\quad} = 9 = 5$ · $2 + \underline{\quad} = 6 = 4$ · $1 + \underline{\quad} = 9 = 8$