



The Great Space Hangar Mystery

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

Detective: _____ Date: _____

Someone snuck into Starlight Air Base and took the super rocket engine! Solve the clues to catch the villain.

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 Sky 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 GEAR	SPACE GADGET	DOMINANT HAND	HELMET COLOR	WEAKNESS
Sally Ride	SOLAR SHIELD	ORBIT RAY	RIGHT HANDED	GOLD HELMET	BRIGHT FLASH
Valeria Vance	SOLAR SHIELD	MOON RAKE	RIGHT HANDED	RED HELMET	BRIGHT FLASH
Sky Walker	TURBO WINGS	SPACE SCOOP	RIGHT HANDED	GOLD HELMET	STRONG WIND
Comet Chris	GRAVITY BOOTS	ORBIT RAY	LEFT HANDED	RED HELMET	BRIGHT FLASH
Nova Jet	JET PACK	COMET DASH	RIGHT HANDED	RED HELMET	BRIGHT FLASH
Piper Plane	TURBO WINGS	SPACE SCOOP	LEFT HANDED	GOLD HELMET	BRIGHT FLASH
Penny Pilot	JET PACK	ORBIT RAY	LEFT HANDED	GOLD HELMET	BRIGHT FLASH
Buzz Starling	TURBO WINGS	ORBIT RAY	RIGHT HANDED	GOLD HELMET	BRIGHT FLASH
Wilbur Wright	GRAVITY BOOTS	MOON RAKE	LEFT HANDED	BLUE HELMET	LOUD BEEP
Ray Rocket	STAR LASER	COMET DASH	RIGHT HANDED	GOLD HELMET	BRIGHT FLASH
Gus Glenn	JET PACK	ORBIT RAY	RIGHT HANDED	BLUE HELMET	STRONG WIND
Orion Otto	TURBO WINGS	MOON RAKE	LEFT HANDED	RED HELMET	LOUD BEEP
Cosmo Clara	STAR LASER	SPACE SCOOP	RIGHT HANDED	GOLD HELMET	STRONG WIND
Orville Wright	SOLAR SHIELD	ORBIT RAY	LEFT HANDED	GOLD HELMET	BRIGHT FLASH
Hunter Hopper	TURBO WINGS	ORBIT RAY	LEFT HANDED	BLUE HELMET	BRIGHT FLASH
Astro Artie	GRAVITY BOOTS	COMET DASH	RIGHT HANDED	GOLD HELMET	BRIGHT FLASH
Daisy Orbit	GRAVITY BOOTS	ASTEROID NET	LEFT HANDED	RED HELMET	BRIGHT FLASH
Hank Hangar	STAR LASER	ORBIT RAY	LEFT HANDED	BLUE HELMET	LOUD BEEP
Stella Jet	JET PACK	ORBIT RAY	RIGHT HANDED	BLUE HELMET	BRIGHT FLASH
Leo Lunar	TURBO WINGS	ASTEROID NET	RIGHT HANDED	GOLD HELMET	BRIGHT FLASH
Tess Turbo	STAR LASER	SPACE SCOOP	RIGHT HANDED	RED HELMET	STRONG WIND

CLUE 1 Addition

Captain Sky adds up all the rocket badges found near the runway to open the first locker.

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

T																			
7	15	13	16	10	13	18	11	12	14	18	10	8	6	7	8	20	13	16	
		T						T									T		
10	20	7	9	16	13	18	16	7	13	2	20	6	8	10	13	7			

$4 + 3 = \square \rightarrow$ T	$5 + 1 = \square \rightarrow$ I	$4 + 7 = \square \rightarrow$ K	$7 + 8 = \square \rightarrow$ H
$4 + 4 = \square \rightarrow$ D	$3 + 7 = \square \rightarrow$ N	$7 + 7 = \square \rightarrow$ B	$11 + 7 = \square \rightarrow$ A
$6 + 10 = \square \rightarrow$ S	$8 + 5 = \square \rightarrow$ E	$1 + 1 = \square \rightarrow$ R	
$6 + 14 = \square \rightarrow$ O	$6 + 6 = \square \rightarrow$ Y	$4 + 5 = \square \rightarrow$ U	

Scratch space:

CLUE 2 Skip counting

The crew skip counts by twos down the long space hall to track the sneaky footsteps.

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

Diagram illustrating the sequence of numbers and 'T' markers across two rows:

Row 1: [T, 100, 26, 120, 20, 42, 60, 8, 50, T, 100, 110, 30, 120, 8, 42, 39, 50, 70, 26, T, 100]

Row 2: [26, 42, 60, 8, 25, 60, T, 100, 26, 120, 55, 120, 12, 120, 39]

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 → **0**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, __, 55, 60 → |

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

Skip-count by 3s. Fill the blank: 3, 6, 9, __, 15, 18 → **V**

Skip-count by 10s. Fill the blank: 10, 20, __, 40, 50 → **S**

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

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, __, 75, 80 → **G**

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

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, , 42, 45 → **R**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, __, 65, 70 → **N**

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

Scratch space:

CLUE 3

Subtraction

The detective subtracts the missing star maps from the shelf to find a hidden code.

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

A									A									
10	4	6	12	7	2	5	15	18	10	8	2	8	5	19	3	3	1	14

						A				A					
5	2	1	8	16	1	10	9	17	4	10	16	14	12	5	

$17 - 7 = \square \rightarrow \boxed{\text{A}}$

$15 - 7 = \square \rightarrow \boxed{\text{S}}$

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

$17 - 2 = \square \rightarrow \boxed{\text{F}}$

$6 - 3 = \square \rightarrow \boxed{\text{P}}$

$2 - 1 = \square \rightarrow \boxed{\text{E}}$

$7 - 1 = \square \rightarrow \boxed{\text{R}}$

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

$20 - 8 = \square \rightarrow \boxed{\text{I}}$

$16 - 2 = \square \rightarrow \boxed{\text{D}}$

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

$20 - 3 = \square \rightarrow \boxed{\text{Y}}$

$12 - 5 = \square \rightarrow \boxed{\text{G}}$

$17 - 1 = \square \rightarrow \boxed{\text{N}}$

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

$12 - 3 = \square \rightarrow \boxed{\text{K}}$

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

Scratch space:

CLUE 4 Place value

The chief looks at tens and ones on the flight deck screen to unlock the computer.

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

T					T			T									
85	93	16	67	16	85	16	48	85	40	45	16	35	25	15	80	67	20
								T		T							
66	25	84	67	93	16	84	91	16	85	64	85	11	20	65			

What number has 8 tens and 5 ones? → **T**

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

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

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

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

What number has 1 ten and 1 one? → **R**

What number has 2 tens and 5 ones? → **O**

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

What number has 8 tens and 0 ones? → **N**

What number has 4 tens and 5 ones? → **V**

What number has 1 ten and 6 ones? → **E**

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

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

What number has 2 tens and 0 ones? → **A**

What number has 3 tens and 5 ones? → **F**

What number has 1 ten and 5 ones? → **U**

What number has 6 tens and 4 ones? → **S**

What number has 6 tens and 5 ones? → **P**

Scratch space:

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

The team finds how many more fuel cells are needed to finish filling the rocket engine.

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:

$6 + \underline{\quad} = 13$

$2 + \underline{\quad} = 12$

$2 + \underline{\quad} = 3$

$8 + \underline{\quad} = 16$

$9 + \underline{\quad} = 15$

$5 + \underline{\quad} = 16$

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

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

$7 + \underline{\quad} = 12$

$4 + \underline{\quad} = 13$

$4 + \underline{\quad} = 6$

Step 2 - cross out the sentence with each answer:

1. The villain glided through the clouds, then stole the pilot goggles.
2. The villain glided through the clouds, then grabbed the star map.
3. The villain zoomed around the station, then grabbed the star map.
4. The villain hovered near the launchpad, then snagged the space radio.
5. The villain flew past the moon, then took the golden wrench.
6. The villain glided through the clouds, then took the golden wrench.
7. The villain flew past the moon, then snagged the space radio.
8. The villain hovered near the launchpad, then grabbed the star map.
9. The villain hovered near the launchpad, then stole the pilot goggles.
10. The villain zoomed around the station, then stole the pilot goggles.
11. The villain sparked the thrusters, then took the golden wrench.
12. The villain sparked the thrusters, then grabbed the star map.

Answer Key

The Great Space Hangar Mystery

Culprit: Ray Rocket

STAR LASER · COMET DASH · RIGHT HANDED · GOLD HELMET · BRIGHT FLASH

Trail: Start 21 → Clue 1 19 → Clue 2 11 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SNEAKY BANDIT DOES NOT USE ASTEROID NET"

$4 + 3 = 7$ (T) · $5 + 1 = 6$ (I) · $4 + 7 = 11$ (K) · $7 + 8 = 15$ (H) · $4 + 4 = 8$ (D) · $3 + 7 = 10$ (N) · $7 + 7 = 14$ (B) · $11 + 7 = 18$ (A) · $6 + 10 = 16$ (S) · $8 + 5 = 13$ (E) · $1 + 1 = 2$ (R) · $6 + 14 = 20$ (O) · $6 + 6 = 12$ (Y) · $4 + 5 = 9$ (U)

Clue 2 (Skip counting): "THE BANDIT USED A RIGHT HAND ON THE LEVER"

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (T) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (O) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, __, 55, 60 = 50 (I) · Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 = 20 (B) · Skip-count by 3s. Fill the blank: 3, 6, 9, __, 15, 18 = 12 (V) · Skip-count by 10s. Fill the blank: 10, 20, __, 40, 50 = 30 (S) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 = 55 (L) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (A) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, __, 130, 140 = 120 (E) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, __, 75, 80 = 70 (G) · Skip-count by 2s. Fill the blank: 2, 4, 6, __, 10, 12 = 8 (D) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (U) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (R) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, __, 65, 70 = 60 (N) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, __, 28, 30 = 26 (H)

Clue 3 (Subtraction): "A BRIGHT FLASH STOPPED THE SNEAKY BANDIT"

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

Clue 4 (Place value): "THE DETECTIVE FOUND A GOLD HELMET STRAP"

What number has 8 tens and 5 ones? = 85 (T) · What number has 6 tens and 6 ones? = 66 (G) · What number has 9 tens and 3 ones? = 93 (H) · What number has 4 tens and 8 ones? = 48 (C) · What number has 4 tens and 0 ones? = 40 (I) · What number has 1 ten and 1 one? = 11 (R) · What number has 2 tens and 5 ones? = 25 (O) · What number has 9 tens and 1 one? = 91 (M) · What number has 8 tens and 0 ones? = 80 (N) · What number has 4 tens and 5 ones? = 45 (V) · What number has 1 ten and 6 ones? = 16 (E) · What number has 6 tens and 7 ones? = 67 (D) · What number has 8 tens and 4 ones? = 84 (L) · What number has 2 tens and 0 ones? = 20 (A) · What number has 3 tens and 5 ones? = 35 (F) · What number has 1 ten and 5 ones? = 15 (U) · What number has 6 tens and 4 ones? = 64 (S) · What number has 6 tens and 5 ones? = 65 (P)

Clue 5 (Missing addends): surviving statement is box 4 → Ray Rocket

$6 + \underline{\quad} = 13 = 7$ · $2 + \underline{\quad} = 12 = 10$ · $2 + \underline{\quad} = 3 = 1$ · $8 + \underline{\quad} = 16 = 8$ · $9 + \underline{\quad} = 15 = 6$ · $5 + \underline{\quad} = 16 = 11$ · $8 + \underline{\quad} = 11 = 3$ · $10 + \underline{\quad} = 22 = 12$ · $7 + \underline{\quad} = 12 = 5$ · $4 + \underline{\quad} = 13 = 9$ · $4 + \underline{\quad} = 6 = 2$