



The Nebula Station Theft

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

Detective: _____ Date: _____

Oh no! A rogue astronaut has broken into the main control deck of Nebula Station Seven and stolen the golden star-chart! Chief Astronomer Leo needs your help. Look at the clues, solve the math, and find the thief before they escape into deep space!

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 rogue astronaut is _____

Possible suspects

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

NAME	MAIN SPACE POWER	EXTRA GEAR	HELMET PATCH	ASTRONAUT HAIR	SPACE HAZARD WEAKNESS
Tim	gravity control	starlight cloak	right sleeve patch	cosmic purple	cosmic dust
Peggy	laser welding	freeze beam	left sleeve patch	cosmic purple	cosmic dust
Mae	gravity control	starlight cloak	left sleeve patch	star silver	cosmic dust
Kalpana	solar flight	force fields	right sleeve patch	star silver	black holes
Alex	gravity control	magnet boots	left sleeve patch	cosmic purple	cosmic dust
Samantha	solar flight	starlight cloak	left sleeve patch	star silver	solar flares
Anousheh	warp speed	starlight cloak	left sleeve patch	star silver	black holes
Yi	solar flight	freeze beam	right sleeve patch	star silver	solar flares
Gennady	gravity control	freeze beam	left sleeve patch	cosmic purple	black holes
Buzz	warp speed	starlight cloak	left sleeve patch	star silver	solar flares
Yuri	asteroid blasting	freeze beam	left sleeve patch	star silver	solar flares
Rodolfo	warp speed	starlight cloak	left sleeve patch	cosmic purple	solar flares
Guion	laser welding	robot helper	left sleeve patch	star silver	cosmic dust
Valery	warp speed	force fields	right sleeve patch	neon blue	solar flares
Helen	warp speed	starlight cloak	left sleeve patch	cosmic purple	cosmic dust
Elena	gravity control	magnet boots	left sleeve patch	star silver	black holes
Sunita	gravity control	force fields	right sleeve patch	cosmic purple	cosmic dust
Wubbo	warp speed	robot helper	left sleeve patch	cosmic purple	cosmic dust
Jordan	gravity control	freeze beam	left sleeve patch	star silver	solar flares
Neil	laser welding	force fields	left sleeve patch	cosmic purple	cosmic dust
Sally	gravity control	force fields	left sleeve patch	cosmic purple	solar flares

CLUE 1 Skip counting

We need to count the emergency oxygen canisters. They are stacked in rows on the supply shelf. Skip count the canisters to find the total and unlock the first clue file.

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

T			T											T				
28	30	24	28	30	25	24	14	100	6	24	65	45	6	28	10	24	120	9
					T				T									
12	120	27	45	24	28	35	6	6	28	65								

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

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 → **B**

Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 → **O**

Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 → **R**

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, 100, 110, __, 130, 140 → **A**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 → **S**

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, __, 26, 28 → **E**

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

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

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 → **F**

Scratch space:

CLUE 2 Addition

The robot helper gathered energy batteries from the solar dock. Add the dock batteries to the reserve batteries to see if we have enough power to run the scanner.

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

T															T
257	638	942	562	547	942	408	942	638	749	562	749	897	942	366	257
								T							T
562	897	942	942	635	942	504	749	257	547	638	504	643	721	408	257

$144 + 113 = \square \rightarrow$ T	$369 + 269 = \square \rightarrow$ H	$259 + 288 = \square \rightarrow$ C
$420 + 477 = \square \rightarrow$ L	$244 + 122 = \square \rightarrow$ F	$281 + 223 = \square \rightarrow$ P
$350 + 285 = \square \rightarrow$ V	$214 + 348 = \square \rightarrow$ S	$337 + 306 = \square \rightarrow$ R
$500 + 221 = \square \rightarrow$ I	$458 + 291 = \square \rightarrow$ A	$184 + 224 = \square \rightarrow$ N
$317 + 625 = \square \rightarrow$ E		

Scratch space:

CLUE 3 Subtraction

Our fuel levels are dropping fast. Subtract the leaked rocket fuel from the starting tank amount to find how much fuel we have left to chase the suspect.

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

T			T															
651	732	229	651	732	776	229	184	441	797	285	797	673	797	248	184	441	618	340
238	618	780	340	776	238	291	171	780	651									

$922 - 271 = \square \rightarrow \boxed{\text{T}}$	$883 - 210 = \square \rightarrow \boxed{\text{W}}$	$527 - 298 = \square \rightarrow \boxed{\text{E}}$
$1152 - 355 = \square \rightarrow \boxed{\text{A}}$	$619 - 334 = \square \rightarrow \boxed{\text{N}}$	$516 - 332 = \square \rightarrow \boxed{\text{F}}$
$934 - 316 = \square \rightarrow \boxed{\text{O}}$	$247 - 76 = \square \rightarrow \boxed{\text{U}}$	$1002 - 270 = \square \rightarrow \boxed{\text{H}}$
$625 - 377 = \square \rightarrow \boxed{\text{Y}}$	$543 - 305 = \square \rightarrow \boxed{\text{C}}$	$919 - 143 = \square \rightarrow \boxed{\text{I}}$
$698 - 257 = \square \rightarrow \boxed{\text{R}}$	$537 - 246 = \square \rightarrow \boxed{\text{D}}$	$632 - 292 = \square \rightarrow \boxed{\text{M}}$
$938 - 158 = \square \rightarrow \boxed{\text{S}}$		

Scratch space:

CLUE 4 Rounding

The long-range radar is blurry because of space dust. It can only show rounded numbers. Round the distance of the escaping pod to the nearest ten to clear up the screen.

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

A				A										
5000	700	60	50	5000	300	30	600	400	500	600	700	3000	70	500

							A				A				
800	6000	50	800	8000	900	9000	5000	70	50	80	5000	700	400	600	6000

Round 5,092 to the nearest thousand → **A**

Round 8,687 to the nearest thousand → **H**

Round 31 to the nearest ten → **D**

Round 81 to the nearest ten → **W**

Round 252 to the nearest hundred → **N**

Round 70 to the nearest ten → **I**

Round 604 to the nearest hundred → **O**

Round 507 to the nearest hundred → **C**

Round 49 to the nearest ten → **R**

Round 5,796 to the nearest thousand → **U**

Round 7,754 to the nearest thousand → **L**

Round 795 to the nearest hundred → **P**

Round 3,359 to the nearest thousand → **M**

Round 709 to the nearest hundred → **S**

Round 60 to the nearest ten → **T**

Round 389 to the nearest hundred → **F**

Round 896 to the nearest hundred → **E**

Scratch space:

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

We have a crate of moon rocks to analyze. If we share them equally among the science teams, how many rocks does each team get? Solve this to unlock the final file.

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:

$55 \div 11 = \boxed{}$

$10 \div 10 = \boxed{}$

$4 \div 1 = \boxed{}$

$44 \div 4 = \boxed{}$

$108 \div 9 = \boxed{}$

$96 \div 12 = \boxed{}$

$15 \div 5 = \boxed{}$

$12 \div 2 = \boxed{}$

$24 \div 12 = \boxed{}$

$99 \div 11 = \boxed{}$

$7 \div 1 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain scrambles the radar, then escapes through the waste chute.
2. The villain hacks the main terminal, then escapes through the waste chute.
3. The villain scrambles the radar, then slips into the dark nebula.
4. The villain disables the solar shield, then flees in a mini shuttle.
5. The villain scrambles the radar, then jumps into the hyperdrive pod.
6. The villain blocks the airlock, then slips into the dark nebula.
7. The villain blocks the airlock, then zooms away on a space jetpack.
8. The villain scrambles the radar, then zooms away on a space jetpack.
9. The villain zaps the control panel, then flees in a mini shuttle.
10. The villain disables the solar shield, then zooms away on a space jetpack.
11. The villain scrambles the radar, then flees in a mini shuttle.
12. The villain disables the solar shield, then escapes through the waste chute.

Answer Key

The Nebula Station Theft

Culprit: Peggy

laser welding · freeze beam · left sleeve patch · cosmic purple · cosmic dust

Trail: Start 21 → Clue 1 19 → Clue 2 14 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Skip counting): "THE THIEF DOES NOT WEAR MAGNET BOOTS"

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 = 28 (T) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (I) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, __, 30, 33 = 27 (G) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (B) · Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 = 6 (O) · Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 = 9 (R) · 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, 100, 110, __, 130, 140 = 120 (A) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, __, 70, 75 = 65 (S) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, __, 12, 14 = 10 (W) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, __, 26, 28 = 24 (E) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, __, 35, 40 = 30 (H) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (D) · Skip-count by 3s. Fill the blank: 3, 6, 9, __, 15, 18 = 12 (M) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 = 14 (F)

Clue 2 (Addition): "THE SCENE HAS A LEFT SLEEVE PATCH PRINT"

$144 + 113 = 257$ (T) · $369 + 269 = 638$ (H) · $259 + 288 = 547$ (C) · $420 + 477 = 897$ (L) · $244 + 122 = 366$ (F) · $281 + 223 = 504$ (P) · $350 + 285 = 635$ (V) · $214 + 348 = 562$ (S) · $337 + 306 = 643$ (R) · $500 + 221 = 721$ (I) · $458 + 291 = 749$ (A) · $184 + 224 = 408$ (N) · $317 + 625 = 942$ (E)

Clue 3 (Subtraction): "THE THIEF RAN AWAY FROM COSMIC DUST"

$922 - 271 = 651$ (T) · $883 - 210 = 673$ (W) · $527 - 298 = 229$ (E) · $1152 - 355 = 797$ (A) · $619 - 334 = 285$ (N) · $516 - 332 = 184$ (F) · $934 - 316 = 618$ (O) · $247 - 76 = 171$ (U) · $1002 - 270 = 732$ (H) · $625 - 377 = 248$ (Y) · $543 - 305 = 238$ (C) · $919 - 143 = 776$ (I) · $698 - 257 = 441$ (R) · $537 - 246 = 291$ (D) · $632 - 292 = 340$ (M) · $938 - 158 = 780$ (S)

Clue 4 (Rounding): "A STRAND OF COSMIC PURPLE HAIR WAS FOUND"

Round 5,092 to the nearest thousand = 5000 (A) · Round 8,687 to the nearest thousand = 9000 (H) · Round 31 to the nearest ten = 30 (D) · Round 81 to the nearest ten = 80 (W) · Round 252 to the nearest hundred = 300 (N) · Round 70 to the nearest ten = 70 (I) · Round 604 to the nearest hundred = 600 (O) · Round 507 to the nearest hundred = 500 (C) · Round 49 to the nearest ten = 50 (R) · Round 5,796 to the nearest thousand = 6000 (U) · Round 7,754 to the nearest thousand = 8000 (L) · Round 795 to the nearest hundred = 800 (P) · Round 3,359 to the nearest thousand = 3000 (M) · Round 709 to the nearest hundred = 700 (S) · Round 60 to the nearest ten = 60 (T) · Round 389 to the nearest hundred = 400 (F) · Round 896 to the nearest hundred = 900 (E)

Clue 5 (Division facts (1-12)): surviving statement is box 10 → Peggy

$55 \div 11 = 5$ · $10 \div 10 = 1$ · $4 \div 1 = 4$ · $44 \div 4 = 11$ · $108 \div 9 = 12$ · $96 \div 12 = 8$ · $15 \div 5 = 3$ · $12 \div 2 = 6$ · $24 \div 12 = 2$ · $99 \div 11 = 9$ · $7 \div 1 = 7$