



The Great Cosmic Egg Heist

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

Detective: _____ **Date:** _____

Someone has stolen the glowing Star-Egg from the Dino-Space Hatchery! The zero-gravity dome was left wide open, and the footprints lead straight to the launchpad. We must track down the thief before they blast off 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 cosmic culprit is _____

Possible suspects

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

NAME	MAIN SUIT POWER	GLOVE UPGRADE	FOOTPRINT ANGLE	ASTRONAUT CREST	SENSING FLAW
Valentina Rex	Jetpack Blast	Magnet Skin	Right-clawed	Glowing Blue Crest	Shiny Meteors
Dino Lovell	Force Shield	Freeze Ray	Left-clawed	Neon Green Scales	Loud Static
Yuri Raptor	Gravity Jump	Freeze Ray	Left-clawed	Glowing Blue Crest	Shiny Meteors
Guion Giga	Jetpack Blast	Plasma Claw	Right-clawed	Silver Space Helmet	Astro-dust
Sally Scales	Force Shield	Solar Sight	Left-clawed	Silver Space Helmet	Shiny Meteors
Mae Ptero	Force Shield	Freeze Ray	Left-clawed	Glowing Blue Crest	Astro-dust
Spino Kelly	Laser Tail	Solar Sight	Left-clawed	Silver Space Helmet	Loud Static
Barney Nebula	Jetpack Blast	Plasma Claw	Right-clawed	Silver Space Helmet	Loud Static
Rex Aldrin	Gravity Jump	Sonic Roar	Left-clawed	Neon Green Scales	Astro-dust
Hadro Jemison	Force Shield	Magnet Skin	Right-clawed	Neon Green Scales	Shiny Meteors
Neil Stego	Comet Dash	Magnet Skin	Left-clawed	Silver Space Helmet	Loud Static
Comet Clara	Gravity Jump	Plasma Claw	Right-clawed	Glowing Blue Crest	Shiny Meteors
Buzz Tricera	Force Shield	Solar Sight	Left-clawed	Silver Space Helmet	Loud Static
Astro Archie	Laser Tail	Sonic Roar	Left-clawed	Glowing Blue Crest	Shiny Meteors
Bucky Bronto	Force Shield	Plasma Claw	Left-clawed	Glowing Blue Crest	Shiny Meteors
Raptor Collins	Force Shield	Solar Sight	Left-clawed	Glowing Blue Crest	Shiny Meteors
Trixie Ride	Jetpack Blast	Plasma Claw	Left-clawed	Silver Space Helmet	Shiny Meteors
Alan Orbit	Laser Tail	Magnet Skin	Right-clawed	Silver Space Helmet	Astro-dust
Rexy Shepard	Force Shield	Plasma Claw	Left-clawed	Silver Space Helmet	Shiny Meteors
Titan Terry	Gravity Jump	Sonic Roar	Left-clawed	Glowing Blue Crest	Shiny Meteors
Drake Raptor	Laser Tail	Freeze Ray	Right-clawed	Neon Green Scales	Astro-dust

CLUE 1

We are counting the rocket fuel tanks by fives to see how far the thief flew. Let us find the missing number in the sequence.

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

10 90 12 60 110 26 26 140 110 18 22 28 12 16 18 28 10

33 16 12 42 26 140 16 50 140 55 26 140 25

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

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, , 21, 24 → **N**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, __, 60, 70 → **M**

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

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

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

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

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

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

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

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

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

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 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 → **W**

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

Scratch space:

CLUE 2 Rounding

The main space radar only shows rounded numbers. We must round the star coordinate to the nearest ten to clear up the fuzzy screen.

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

T						T						T						
2900	30	2000	5000	370	370	2900	900	1300	20	300	2900	50	50	30	370	200	500	
			T									T						
3700	2000	5000	2900	170	3700	500	200	2000	7000	50	2900	2000	900					

Round 2,883 to the nearest hundred → **T**

Round 2,089 to the nearest thousand → **E**

Round 366 to the nearest ten → **O**

Round 4,511 to the nearest thousand → **F**

Round 52 to the nearest ten → **S**

Round 169 to the nearest ten → **C**

Round 3,674 to the nearest hundred → **L**

Round 510 to the nearest hundred → **A**

Round 31 to the nearest ten → **H**

Round 18 to the nearest ten → **I**

Round 7,163 to the nearest thousand → **D**

Round 1,275 to the nearest hundred → **R**

Round 927 to the nearest hundred → **P**

Round 348 to the nearest hundred → **N**

Round 181 to the nearest hundred → **W**

Scratch space:

CLUE 3 Addition

A friendly Brontosaurus is tallying up the broken solar panels on the dock. We need to add the two groups together to fix the grid.

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

T					T							T			T			
8599	9658	7130	3941	3885	8599	2099	3658	3658	7130	9094	8599	2099	3885	8599	4569	8531	7130	

	T								T				
4569	8599	3885	9658	8492	2490	3941	7715	7130	8599	7130	2099	8531	3885

$$3162 + 5437 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$2549 + 1392 = \boxed{} \rightarrow \boxed{\text{Y}}$$

$$1396 + 1094 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$2433 + 2136 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$2160 + 1725 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$2803 + 6291 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$4736 + 4922 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$1070 + 1029 = \boxed{} \rightarrow \boxed{\text{O}}$$

$$5464 + 3067 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$3231 + 5261 = \boxed{} \rightarrow \boxed{\text{I}}$$

$$1988 + 1670 = \boxed{} \rightarrow \boxed{\text{P}}$$

$$3334 + 4381 = \boxed{} \rightarrow \boxed{\text{M}}$$

$$2676 + 4454 = \boxed{} \rightarrow \boxed{\text{E}}$$

Scratch space:

CLUE 4 Subtraction

The thief dropped some space rations along the zero-gravity trail. Subtract the eaten snacks from the total to find out how many are left.

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

A																
1883	7197	6827	4504	3154	8341	1131	7197	1273	6827	8384	2967	2257	8203	2967	8161	6001

	A										A				
3154	1883	8161	8161	3139	4504	6001	6001	2967	6150	1131	2967	1883	8203	1273	7676

$6139 - 4256 = \square \rightarrow \mathbf{A}$	$8868 - 2718 = \square \rightarrow \mathbf{D}$	$5893 - 2754 = \square \rightarrow \mathbf{P}$
$9549 - 1346 = \square \rightarrow \mathbf{R}$	$13110 - 4769 = \square \rightarrow \mathbf{I}$	$12071 - 4395 = \square \rightarrow \mathbf{Y}$
$10196 - 1812 = \square \rightarrow \mathbf{U}$	$10729 - 3532 = \square \rightarrow \mathbf{G}$	$9096 - 3095 = \square \rightarrow \mathbf{T}$
$8976 - 4472 = \square \rightarrow \mathbf{O}$	$6059 - 4786 = \square \rightarrow \mathbf{B}$	$4110 - 1143 = \square \rightarrow \mathbf{E}$
$3316 - 162 = \square \rightarrow \mathbf{W}$	$4809 - 3678 = \square \rightarrow \mathbf{N}$	$5313 - 3056 = \square \rightarrow \mathbf{C}$
$9690 - 1529 = \square \rightarrow \mathbf{S}$	$7770 - 943 = \square \rightarrow \mathbf{L}$	

Scratch space:

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

We found a pile of glowing space crystals left behind. If we share them equally among the five search teams, how many does each team get?

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:

$70 \div 10 = \boxed{}$

$36 \div 12 = \boxed{}$

$120 \div 12 = \boxed{}$

$18 \div 3 = \boxed{}$

$2 \div 1 = \boxed{}$

$16 \div 4 = \boxed{}$

$45 \div 9 = \boxed{}$

$48 \div 6 = \boxed{}$

$10 \div 10 = \boxed{}$

$36 \div 3 = \boxed{}$

$55 \div 5 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain makes a comet dash through the corridor, then swings a plasma claw at the glass.
2. The villain creates a force shield to block the lasers, then swings a plasma claw at the glass.
3. The villain activates a laser tail to melt the lock, then unleashes a sonic roar to escape.
4. The villain activates a laser tail to melt the lock, then swings a plasma claw at the glass.
5. The villain performs a gravity jump over the fence, then uses solar sight to find the safe.
6. The villain uses a jetpack blast to fly high, then unleashes a sonic roar to escape.
7. The villain creates a force shield to block the lasers, then uses solar sight to find the safe.
8. The villain makes a comet dash through the corridor, then uses magnet skin to slide up the wall.
9. The villain performs a gravity jump over the fence, then unleashes a sonic roar to escape.
10. The villain performs a gravity jump over the fence, then shoots a freeze ray at the alarms.
11. The villain activates a laser tail to melt the lock, then uses solar sight to find the safe.
12. The villain makes a comet dash through the corridor, then uses solar sight to find the safe.

Answer Key

The Great Cosmic Egg Heist

Culprit: Titan Terry

Gravity Jump · Sonic Roar · Left-clawed · Glowing Blue Crest · Shiny Meteors

Trail: Start 21 → Clue 1 15 → Clue 2 11 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Skip counting): "THE VILLAIN DOES NOT USE PLASMA CLAW"

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

Clue 2 (Rounding): "THE FOOTPRINTS SHOW A LEFT CLAWED STEP"

Round 2,883 to the nearest hundred = 2900 (T) · Round 2,089 to the nearest thousand = 2000 (E) · Round 366 to the nearest ten = 370 (O) · Round 4,511 to the nearest thousand = 5000 (F) · Round 52 to the nearest ten = 50 (S) · Round 169 to the nearest ten = 170 (C) · Round 3,674 to the nearest hundred = 3700 (L) · Round 510 to the nearest hundred = 500 (A) · Round 31 to the nearest ten = 30 (H) · Round 18 to the nearest ten = 20 (I) · Round 7,163 to the nearest thousand = 7000 (D) · Round 1,275 to the nearest hundred = 1300 (R) · Round 927 to the nearest hundred = 900 (P) · Round 348 to the nearest hundred = 300 (N) · Round 181 to the nearest hundred = 200 (W)

Clue 3 (Addition): "THEY STOPPED TO STARE AT SHINY METEORS"

$3162 + 5437 = 8599$ (T) · $2549 + 1392 = 3941$ (Y) · $1396 + 1094 = 2490$ (N) · $2433 + 2136 = 4569$ (A) · $2160 + 1725 = 3885$ (S) · $2803 + 6291 = 9094$ (D) · $4736 + 4922 = 9658$ (H) · $1070 + 1029 = 2099$ (O) · $5464 + 3067 = 8531$ (R) · $3231 + 5261 = 8492$ (I) · $1988 + 1670 = 3658$ (P) · $3334 + 4381 = 7715$ (M) · $2676 + 4454 = 7130$ (E)

Clue 4 (Subtraction): "A GLOWING BLUE CREST WAS SPOTTED NEARBY"

$6139 - 4256 = 1883$ (A) · $8868 - 2718 = 6150$ (D) · $5893 - 2754 = 3139$ (P) · $9549 - 1346 = 8203$ (R) · $13110 - 4769 = 8341$ (I) · $12071 - 4395 = 7676$ (Y) · $10196 - 1812 = 8384$ (U) · $10729 - 3532 = 7197$ (G) · $9096 - 3095 = 6001$ (T) · $8976 - 4472 = 4504$ (O) · $6059 - 4786 = 1273$ (B) · $4110 - 1143 = 2967$ (E) · $3316 - 162 = 3154$ (W) · $4809 - 3678 = 1131$ (N) · $5313 - 3056 = 2257$ (C) · $9690 - 1529 = 8161$ (S) · $7770 - 943 = 6827$ (L)

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

$70 \div 10 = 7$ · $36 \div 12 = 3$ · $120 \div 12 = 10$ · $18 \div 3 = 6$ · $2 \div 1 = 2$ · $16 \div 4 = 4$ · $45 \div 9 = 5$ · $48 \div 6 = 8$ · $10 \div 10 = 1$ · $36 \div 3 = 12$ · $55 \div 5 = 11$