



The Cosmic Craft League Mystery

Grade 4 math · Multiplication, Place value, Word problems, Rounding, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

A mystery player snuck into the Starlight Block Stadium and snatched the Galactic League Trophy right off the center court! The Space Sneak left behind scattered blocks, floating basketballs, and strange astro footprints. Work through the secret clues to figure out who took the trophy!

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 Sneak is _____

Possible suspects

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

NAME	SPECIAL MOVE	SPACE GEAR	SHOOTING HAND	HEADWEAR	DISTRACTION
Comet	Meteor Dribble	Redstone Shield	Left Handed Shooter	Neon Green Visor	Catnip Blast
Whiskers	Laser Pass	Astro Boots	Right Handed Shooter	Space Helmet	Squeaky Toy
Jasper	Laser Pass	Diamond Armor	Right Handed Shooter	Orange Spiky Hair	Laser Pointer
Astro	Rocket Kick	Diamond Armor	Right Handed Shooter	Neon Green Visor	Squeaky Toy
Shadow	Ender Teleport	Astro Boots	Right Handed Shooter	Orange Spiky Hair	Catnip Blast
Pele	Laser Pass	Diamond Armor	Left Handed Shooter	Orange Spiky Hair	Laser Pointer
Kyrie	Rocket Kick	Jetpack Glide	Left Handed Shooter	Orange Spiky Hair	Laser Pointer
Creeper	Laser Pass	Redstone Shield	Left Handed Shooter	Orange Spiky Hair	Laser Pointer
Messi	Meteor Dribble	Jetpack Glide	Right Handed Shooter	Neon Green Visor	Squeaky Toy
Nova	Laser Pass	Astro Boots	Left Handed Shooter	Orange Spiky Hair	Catnip Blast
Ziggy	Meteor Dribble	Jetpack Glide	Right Handed Shooter	Neon Green Visor	Laser Pointer
Alex	Meteor Dribble	Jetpack Glide	Left Handed Shooter	Orange Spiky Hair	Catnip Blast
Steph	Meteor Dribble	Astro Boots	Left Handed Shooter	Space Helmet	Laser Pointer
Orion	Meteor Dribble	Redstone Shield	Right Handed Shooter	Orange Spiky Hair	Catnip Blast
Samba	Meteor Dribble	Redstone Shield	Left Handed Shooter	Orange Spiky Hair	Laser Pointer
Blaze	Ender Teleport	Astro Boots	Left Handed Shooter	Neon Green Visor	Catnip Blast
Kobe	Laser Pass	Redstone Shield	Left Handed Shooter	Neon Green Visor	Laser Pointer
Pixel	Gravity Slam	Astro Boots	Left Handed Shooter	Orange Spiky Hair	Laser Pointer
Marta	Meteor Dribble	Astro Boots	Left Handed Shooter	Orange Spiky Hair	Catnip Blast
Mittens	Rocket Kick	Redstone Shield	Left Handed Shooter	Neon Green Visor	Catnip Blast
Luna	Rocket Kick	Redstone Shield	Left Handed Shooter	Space Helmet	Catnip Blast

Multiplication facts (1-12)

To find out what gear the culprit did NOT wear, count the grid of seats in the space bleachers row by row.

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

The grid contains the following numbers and markers:

T																			
7	2	84	60	6	84	45	120	54	60	144	60	4	84	3	7	15	42	84	60
		T						T											
6	42	7	144	60	84	18	84	7	4	45	3	120	72	16	8	15	84		

$7 \times 1 = \boxed{} \rightarrow \boxed{\text{T}}$

$6 \times 9 = \square \rightarrow \boxed{\text{Y}}$

$7 \times 6 = \boxed{} \rightarrow \boxed{0}$

$4 \times 1 = \square \rightarrow \boxed{\text{P}}$

$7 \times 12 = \square \rightarrow \mathbf{E}$

$12 \times 10 = \boxed{} \rightarrow \boxed{\text{K}}$

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

$6 \times 10 = \boxed{} \rightarrow \boxed{\text{S}}$

$6 \times 1 = \square \rightarrow \boxed{\mathbf{N}}$

$8 \times 2 = \boxed{} \rightarrow \boxed{\text{L}}$

$9 \times 2 = \square \rightarrow \boxed{\mathbf{J}}$

$9 \times 8 = \square \rightarrow \boxed{\mathbf{G}}$

$3 \times 5 = \square \rightarrow \boxed{\mathbf{D}}$

$2 \times 4 = \square \rightarrow \boxed{I}$

$5 \times 9 = \square \rightarrow \boxed{\mathbf{A}}$

$1 \times 3 = \square \rightarrow \boxed{\text{C}}$

$$1 \times 2 = \boxed{} \rightarrow \boxed{\text{H}}$$

Scratch space:

CLUE 2 Place value

Look at the main stadium computer panel to check digit values and unlock the suspect's shooting preference.

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

W											W					
4000	70	8000	10	700	2000	2000	700	2000	2000	3000	4000	3000	40	700	90	8000

30	3000	10	300	700	300	2000	30	100	100	8000	700	60	100	10	6000	100	500	60	8000

What is the value of the 4 in 24,577?

→ **W**

What is the value of the 1 in 5,916?

→ **N**

What is the value of the 2 in 42,036?

→ **S**

What is the value of the 6 in 6,207?

→ **C**

What is the value of the 8 in 8,962?

→ **T**

What is the value of the 9 in 5,594?

→ **F**

What is the value of the 7 in 6,471?

→ **I**

What is the value of the 1 in 130?

→ **O**

What is the value of the 6 in 269?

→ **R**

What is the value of the 3 in 135?

→ **H**

What is the value of the 3 in 53,878?

→ **A**

What is the value of the 5 in 512?

→ **U**

What is the value of the 4 in 2,346?

→ **L**

What is the value of the 3 in 381?

→ **D**

What is the value of the 7 in 750?

→ **E**

Scratch space:

CLUE 3

Word problems

Solve these basketball gear story problems to narrow down which distraction stopped the sneaky thief.

Solve each problem, then write its letter in the boxes to fill in the missing word.

Someone scared the villain off with L I N T .

14 9 39 16 71 79 8 16 71

Space Referee lined up 7 rows of 2 redstone torches. How many redstone torches in all?

Answer: → L

There were 78 redstone torches. 39 were used up. How many redstone torches are left?

Answer: → S

Space Referee found 14 glow blocks yesterday and 65 more today. How many glow blocks in all?

Answer: → P

Space Referee found 41 astro soccer balls yesterday and 30 more today. How many astro soccer balls in all?

Answer: → R

Space Referee found 13 astro soccer balls yesterday and 3 more today. How many astro soccer balls in all?

Answer: → E

Space Referee lined up 3 rows of 3 space basketballs. How many space basketballs in all?

Answer: → A

There were 32 cat treats. 24 were used up. How many cat treats are left?

Answer: → O

Scratch space:

CLUE 4

Rounding

The scanner screen rounds all heat readings to the nearest hundred, revealing clues about the thief's headwear.

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

O																		
900	9000	3000	1700	500	290	1100	30	700	2900	2300	90	3000	700	9000	3700	3000	1100	
	O													O				
7000	900	130	1700	1300	1700	290	3000	9000	300	90	290	300	9000	900	30	90	2300	

Round 865 to the nearest hundred → **O**

Round 1,344 to the nearest hundred → **D**

Round 3,415 to the nearest thousand → **A**

Round 132 to the nearest ten → **U**

Round 87 to the nearest ten → **H**

Round 34 to the nearest ten → **P**

Round 2,857 to the nearest hundred → **K**

Round 2,273 to the nearest hundred → **Y**

Round 8,957 to the nearest thousand → **R**

Round 262 to the nearest hundred → **T**

Round 1,138 to the nearest hundred → **S**

Round 511 to the nearest hundred → **G**

Round 290 to the nearest ten → **E**

Round 730 to the nearest hundred → **I**

Round 3,689 to the nearest hundred → **W**

Round 1,719 to the nearest hundred → **N**

Round 7,325 to the nearest thousand → **F**

Scratch space:

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

Divide the cat treats evenly among the space crew to decode the final mystery code!

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:

$50 \div 10 = \boxed{}$

$12 \div 3 = \boxed{}$

$8 \div 1 = \boxed{}$

$9 \div 1 = \boxed{}$

$21 \div 3 = \boxed{}$

$33 \div 3 = \boxed{}$

$66 \div 11 = \boxed{}$

$48 \div 4 = \boxed{}$

$12 \div 4 = \boxed{}$

$3 \div 3 = \boxed{}$

$16 \div 8 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain delivered a rocket kick, then blocked shots with a redstone shield.
2. The villain executed a meteor dribble, then dodged defense with cat reflexes.
3. The villain threw a laser pass, then floated away using jetpack glide.
4. The villain executed a meteor dribble, then blocked shots with a redstone shield.
5. The villain threw a laser pass, then defended the goal in diamond armor.
6. The villain delivered a rocket kick, then dodged defense with cat reflexes.
7. The villain delivered a rocket kick, then defended the goal in diamond armor.
8. The villain threw a laser pass, then blocked shots with a redstone shield.
9. The villain used ender teleportation, then jumped high in astro boots.
10. The villain performed a gravity slam, then jumped high in astro boots.
11. The villain threw a laser pass, then dodged defense with cat reflexes.
12. The villain used ender teleportation, then blocked shots with a redstone shield.

Answer Key

The Cosmic Craft League Mystery

Culprit: Pixel

Gravity Slam · Astro Boots · Left Handed Shooter · Orange Spiky Hair · Laser Pointer

Trail: Start 21 → Clue 1 17 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE SNEAKY SUSPECT DOES NOT USE JETPACK GLIDE"

$7 \times 1 = 7$ (T) · $6 \times 9 = 54$ (Y) · $7 \times 6 = 42$ (O) · $4 \times 1 = 4$ (P) · $7 \times 12 = 84$ (E) · $12 \times 10 = 120$ (K) · $12 \times 12 = 144$ (U) · $6 \times 10 = 60$ (S) · $6 \times 1 = 6$ (N) · $8 \times 2 = 16$ (L) · $9 \times 2 = 18$ (J) · $9 \times 8 = 72$ (G) · $3 \times 5 = 15$ (D) · $2 \times 4 = 8$ (I) · $5 \times 9 = 45$ (A) · $1 \times 3 = 3$ (C) · $1 \times 2 = 2$ (H)

Clue 2 (Place value): "WITNESSES SAW A LEFT HANDED SHOOTER ON COURT"

What is the value of the 4 in 24,577? = 4000 (W) · What is the value of the 1 in 5,916? = 10 (N) · What is the value of the 2 in 42,036? = 2000 (S) · What is the value of the 6 in 6,207? = 6000 (C) · What is the value of the 8 in 8,962? = 8000 (T) · What is the value of the 9 in 5,594? = 90 (F) · What is the value of the 7 in 6,471? = 70 (I) · What is the value of the 1 in 130? = 100 (O) · What is the value of the 6 in 269? = 60 (R) · What is the value of the 3 in 135? = 30 (H) · What is the value of the 3 in 53,878? = 3000 (A) · What is the value of the 5 in 512? = 500 (U) · What is the value of the 4 in 2,346? = 40 (L) · What is the value of the 3 in 381? = 300 (D) · What is the value of the 7 in 750? = 700 (E)

Clue 3 (Word problems): "LASER POINTER"

Space Referee lined up 7 rows of 2 redstone torches. How many redstone torches in all? = 14 (L) · There were 78 redstone torches. 39 were used up. How many redstone torches are left? = 39 (S) · Space Referee found 14 glow blocks yesterday and 65 more today. How many glow blocks in all? = 79 (P) · Space Referee found 41 astro soccer balls yesterday and 30 more today. How many astro soccer balls in all? = 71 (R) · Space Referee found 13 astro soccer balls yesterday and 3 more today. How many astro soccer balls in all? = 16 (E) · Space Referee lined up 3 rows of 3 space basketballs. How many space basketballs in all? = 9 (A) · There were 32 cat treats. 24 were used up. How many cat treats are left? = 8 (O)

Clue 4 (Rounding): "ORANGE SPIKY HAIR WAS FOUND NEAR THE TROPHY"

Round 865 to the nearest hundred = 900 (O) · Round 1,344 to the nearest hundred = 1300 (D) · Round 3,415 to the nearest thousand = 3000 (A) · Round 132 to the nearest ten = 130 (U) · Round 87 to the nearest ten = 90 (H) · Round 34 to the nearest ten = 30 (P) · Round 2,857 to the nearest hundred = 2900 (K) · Round 2,273 to the nearest hundred = 2300 (Y) · Round 8,957 to the nearest thousand = 9000 (R) · Round 262 to the nearest hundred = 300 (T) · Round 1,138 to the nearest hundred = 1100 (S) · Round 511 to the nearest hundred = 500 (G) · Round 290 to the nearest ten = 290 (E) · Round 730 to the nearest hundred = 700 (I) · Round 3,689 to the nearest hundred = 3700 (W) · Round 1,719 to the nearest hundred = 1700 (N) · Round 7,325 to the nearest thousand = 7000 (F)

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

$50 \div 10 = 5$ · $12 \div 3 = 4$ · $8 \div 1 = 8$ · $9 \div 1 = 9$ · $21 \div 3 = 7$ · $33 \div 3 = 11$ · $66 \div 11 = 6$ · $48 \div 4 = 12$ · $12 \div 4 = 3$ · $3 \div 3 = 1$ · $16 \div 8 = 2$