



The Great Space Cat Soccer Caper

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

Detective: _____ Date: _____

Someone took the Golden Cosmic Cup right off the soccer field! Work through the math clues to help Coach Whiskers catch the sneaky space pirate.

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 sneaky space pirate is _____

Possible suspects

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

NAME	SOCCER MOVE	SPACE GEAR	DOMINANT PAW	FUR COLOR	DISTRACTION
Milo Starlight	Rocket Dash	Solar Boots	Right Paws	Cosmic Blue Fur	Laser Pointers
Pepper Shuttle	Gravity Shield	Solar Boots	Right Paws	Cosmic Blue Fur	Catnip Sprays
Loki Radar	Rocket Dash	Solar Boots	Left Paws	Cosmic Blue Fur	Catnip Sprays
Gatsby Vector	Comet Pass	Plasma Cape	Left Paws	Star Purple Fur	Laser Pointers
Penny Quasar	Starlight Spin	Neon Helmet	Left Paws	Neon Orange Fur	Squeaky Toys
Nala Cosmo	Comet Pass	Plasma Cape	Right Paws	Neon Orange Fur	Laser Pointers
Bella Galaxy	Rocket Dash	Neon Helmet	Right Paws	Neon Orange Fur	Squeaky Toys
Felix Rocket	Gravity Shield	Glow Gloves	Left Paws	Neon Orange Fur	Squeaky Toys
Sophie Flare	Rocket Dash	Plasma Cape	Right Paws	Neon Orange Fur	Laser Pointers
Chloe Zenith	Rocket Dash	Solar Boots	Left Paws	Star Purple Fur	Laser Pointers
Oliver Astro	Laser Kick	Turbo Wings	Right Paws	Neon Orange Fur	Squeaky Toys
Leo Paws	Starlight Spin	Turbo Wings	Right Paws	Neon Orange Fur	Laser Pointers
Daisy Orbit	Gravity Shield	Glow Gloves	Right Paws	Star Purple Fur	Catnip Sprays
Shadow Eclipse	Gravity Shield	Turbo Wings	Right Paws	Neon Orange Fur	Laser Pointers
Jasper Nova	Gravity Shield	Glow Gloves	Left Paws	Cosmic Blue Fur	Laser Pointers
Luna Whiskers	Laser Kick	Neon Helmet	Left Paws	Star Purple Fur	Laser Pointers
Hazel Warp	Comet Pass	Glow Gloves	Right Paws	Neon Orange Fur	Laser Pointers
Smokey Pulsar	Comet Pass	Neon Helmet	Right Paws	Neon Orange Fur	Squeaky Toys
Buster Beacon	Comet Pass	Plasma Cape	Left Paws	Neon Orange Fur	Laser Pointers
Captain Barnaby	Laser Kick	Neon Helmet	Left Paws	Cosmic Blue Fur	Squeaky Toys
Simba Meteor	Comet Pass	Plasma Cape	Right Paws	Neon Orange Fur	Catnip Sprays

CLUE 1
Place value

Look at the digit values on the arena board to unlock the first clue.

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

T																T
52	18	61	64	95	93	93	24	95	88	59	56	61	17	88	56	52
63	61	24	86	90	93	56	63	90	93	56	64	61	17			

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

What number has 1 ten and 7 ones? → **S**

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

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

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

What number has 6 tens and 3 ones? → **W**

What number has 6 tens and 1 one? → **E**

What number has 1 ten and 8 ones? → **H**

What number has 9 tens and 5 ones? → **I**

What number has 9 tens and 0 ones? → **G**

What number has 2 tens and 4 ones? → **A**

What number has 5 tens and 9 ones? → **D**

What number has 8 tens and 6 ones? → **R**

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

Scratch space:

CLUE 2 Addition

Add the shiny star tokens left on the field to find the next clue.

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

T					T									
46	61	42	59	76	46	77	42	30	30	30	90	59	90	

														T		
47	76	84	84	90	76	77	69	30	76	77	78	41	76	78	61	46

66	90	59	30

$18 + 28 = \square \rightarrow$ T	$26 + 15 = \square \rightarrow$ R	$46 + 31 = \square \rightarrow$ N
$39 + 37 = \square \rightarrow$ I	$20 + 22 = \square \rightarrow$ E	$54 + 30 = \square \rightarrow$ L
$37 + 22 = \square \rightarrow$ W	$35 + 43 = \square \rightarrow$ G	$15 + 15 = \square \rightarrow$ S
$42 + 48 = \square \rightarrow$ A	$21 + 40 = \square \rightarrow$ H	$30 + 36 = \square \rightarrow$ P
$47 + 22 = \square \rightarrow$ U	$15 + 32 = \square \rightarrow$ V	

Scratch space:

CLUE 3

Subtraction

Subtract the missing energy packs from the team bench to get another clue.

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

T															
22	67	72	67	72	62	16	44	70	72	24	58	74	70	72	62

				T				T			T			T			
50	16	85	87	22	72	62	70	22	16	70	22	16	50	22	67	72	46

$41 - 19 = \square \rightarrow \boxed{\text{T}}$

$52 - 2 = \square \rightarrow \boxed{\text{P}}$

$99 - 29 = \square \rightarrow \boxed{\text{S}}$

$47 - 23 = \square \rightarrow \boxed{\text{D}}$

$66 - 22 = \square \rightarrow \boxed{\text{U}}$

$72 - 14 = \square \rightarrow \boxed{\text{L}}$

$80 - 6 = \square \rightarrow \boxed{\text{A}}$

$89 - 27 = \square \rightarrow \boxed{\text{R}}$

$123 - 36 = \square \rightarrow \boxed{\text{N}}$

$85 - 18 = \square \rightarrow \boxed{\text{H}}$

$92 - 7 = \square \rightarrow \boxed{\text{I}}$

$74 - 28 = \square \rightarrow \boxed{\text{M}}$

$26 - 10 = \square \rightarrow \boxed{\text{O}}$

$80 - 8 = \square \rightarrow \boxed{\text{E}}$

Scratch space:

CLUE 4

S

Diagram illustrating a sequence of boxes and their associated values:

Box Index	Box Content	Value
1	F	35
2		120
3		40
4		110
5		70
6		110
7		20
8		120
9		110
10		120
11		9
12		16
13		110
14		18
15		20
16	F	35
17		40
18		9
19		16
20		14
21		14
22		80
23		20
24		100
25		6
26		20
27		110
28		20

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

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

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

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

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

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

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

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

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

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

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

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

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

Scratch space:

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

Find the missing number of glowing soccer balls to reveal the final clue.

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:

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

$3 + \underline{\quad} = 12$

$3 + \underline{\quad} = 7$

$6 + \underline{\quad} = 12$

$6 + \underline{\quad} = 7$

$8 + \underline{\quad} = 18$

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

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

$5 + \underline{\quad} = 10$

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

$2 + \underline{\quad} = 14$

Step 2 - cross out the sentence with each answer:

1. The villain kicks a laser soccer ball, then adjusts a neon helmet.
2. The villain makes a comet pass, then adjusts a neon helmet.
3. The villain activates a gravity shield, then flaps turbo wings.
4. The villain makes a comet pass, then swishes a plasma cape.
5. The villain makes a comet pass, then flaps turbo wings.
6. The villain kicks a laser soccer ball, then swishes a plasma cape.
7. The villain kicks a laser soccer ball, then tightens glow gloves.
8. The villain dashes with rocket speed, then swishes a plasma cape.
9. The villain executes a starlight spin, then flaps turbo wings.
10. The villain dashes with rocket speed, then flaps turbo wings.
11. The villain kicks a laser soccer ball, then flaps turbo wings.
12. The villain kicks a laser soccer ball, then zips past on solar boots.

Answer Key

The Great Space Cat Soccer Caper

Culprit: Shadow Eclipse

Gravity Shield · Turbo Wings · Right Paws · Neon Orange Fur · Laser Pointers

Trail: Start 21 → Clue 1 17 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT WEAR GLOW GLOVES"

What number has 5 tens and 2 ones? = 52 (T) · What number has 1 ten and 7 ones? = 17 (S) · What number has 8 tens and 8 ones? = 88 (N) · What number has 9 tens and 3 ones? = 93 (L) · What number has 5 tens and 6 ones? = 56 (O) · What number has 6 tens and 3 ones? = 63 (W) · What number has 6 tens and 1 one? = 61 (E) · What number has 1 ten and 8 ones? = 18 (H) · What number has 9 tens and 5 ones? = 95 (I) · What number has 9 tens and 0 ones? = 90 (G) · What number has 2 tens and 4 ones? = 24 (A) · What number has 5 tens and 9 ones? = 59 (D) · What number has 8 tens and 6 ones? = 86 (R) · What number has 6 tens and 4 ones? = 64 (V)

Clue 2 (Addition): "THE WITNESS SAW A VILLAIN USING RIGHT PAWS"

$18 + 28 = 46$ (T) · $26 + 15 = 41$ (R) · $46 + 31 = 77$ (N) · $39 + 37 = 76$ (I) · $20 + 22 = 42$ (E) · $54 + 30 = 84$ (L) · $37 + 22 = 59$ (W) · $35 + 43 = 78$ (G) · $15 + 15 = 30$ (S) · $42 + 48 = 90$ (A) · $21 + 40 = 61$ (H) · $30 + 36 = 66$ (P) · $47 + 22 = 69$ (U) · $15 + 32 = 47$ (V)

Clue 3 (Subtraction): "THE HERO USED LASER POINTERS TO STOP THEM"

$41 - 19 = 22$ (T) · $52 - 2 = 50$ (P) · $99 - 29 = 70$ (S) · $47 - 23 = 24$ (D) · $66 - 22 = 44$ (U) · $72 - 14 = 58$ (L) · $80 - 6 = 74$ (A) · $89 - 27 = 62$ (R) · $123 - 36 = 87$ (N) · $85 - 18 = 67$ (H) · $92 - 7 = 85$ (I) · $74 - 28 = 46$ (M) · $26 - 10 = 16$ (O) · $80 - 8 = 72$ (E)

Clue 4 (Skip counting): "FOUND NEON ORANGE FUR AT THE SCENE"

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

Clue 5 (Missing addends): surviving statement is box 3 → Shadow Eclipse

$1 + \underline{\quad} = 9 = 8$ · $3 + \underline{\quad} = 12 = 9$ · $3 + \underline{\quad} = 7 = 4$ · $6 + \underline{\quad} = 12 = 6$ · $6 + \underline{\quad} = 7 = 1$ · $8 + \underline{\quad} = 18 = 10$ · $3 + \underline{\quad} = 10 = 7$ · $4 + \underline{\quad} = 15 = 11$ · $5 + \underline{\quad} = 10 = 5$ · $4 + \underline{\quad} = 6 = 2$ · $2 + \underline{\quad} = 14 = 12$