



The Case of the Cyber Cat Trophy Mystery

Grade 3 math · Skip counting, Place value, Word problems, Bar models, Missing addends · Reading level grades 3-4

Detective: _____ Date: _____

Someone sneaked into Emerald Bay Arena and swapped the championship trophy for a giant pixelated block! Detective, examine the evidence to unmask the culprit.

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 the stadium snatcher is _____

Possible suspects

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

NAME	MAIN SPORT SKILL	ROBOTIC GEAR	OBSERVATIONAL TELL	FUR COLOR	DISTRACTION
Sir Hooktail	Slam Dunk	Pixel Shield	LEFT HANDED	NEON BLUE FUR	SPARKLE APPLES
Clawdia Cleats	Pirate Slide	Rocket Boots	LEFT HANDED	NEON BLUE FUR	CATNIP TOYS
Pixel Prowler	Block Craft	Laser Goggles	LEFT HANDED	NEON BLUE FUR	SPARKLE APPLES
Cleat Cat	Slam Dunk	Pixel Shield	RIGHT HANDED	BRIGHT PURPLE FUR	SILVER WHISTLES
Salty Paws	Block Craft	Pixel Shield	RIGHT HANDED	NEON BLUE FUR	SILVER WHISTLES
Rusty Robo	Unicorn Dash	Sonar Whistle	LEFT HANDED	NEON BLUE FUR	SPARKLE APPLES
Tiga Turbo	Slam Dunk	Laser Goggles	RIGHT HANDED	BRIGHT PURPLE FUR	SILVER WHISTLES
Finley Float	Corner Kick	Turbo Wings	LEFT HANDED	NEON BLUE FUR	SILVER WHISTLES
Nova Nether	Block Craft	Rocket Boots	RIGHT HANDED	BRIGHT PURPLE FUR	SILVER WHISTLES
Bella Bounce	Block Craft	Laser Goggles	LEFT HANDED	BRIGHT PURPLE FUR	SPARKLE APPLES
Barnaby Block	Corner Kick	Sonar Whistle	LEFT HANDED	NEON BLUE FUR	SILVER WHISTLES
Gears McPaws	Slam Dunk	Sonar Whistle	RIGHT HANDED	NEON BLUE FUR	SPARKLE APPLES
Seahawk Sam	Pirate Slide	Rocket Boots	LEFT HANDED	GOLDEN ORANGE FUR	SPARKLE APPLES
Mina Unicorn	Block Craft	Pixel Shield	LEFT HANDED	BRIGHT PURPLE FUR	SPARKLE APPLES
Marina Wave	Corner Kick	Turbo Wings	LEFT HANDED	NEON BLUE FUR	SPARKLE APPLES
Dunkin Feline	Unicorn Dash	Rocket Boots	RIGHT HANDED	GOLDEN ORANGE FUR	CATNIP TOYS
Purrfect Pete	Pirate Slide	Sonar Whistle	LEFT HANDED	GOLDEN ORANGE FUR	SPARKLE APPLES
Sparky Hoops	Block Craft	Rocket Boots	RIGHT HANDED	NEON BLUE FUR	SILVER WHISTLES
Slick Striker	Corner Kick	Rocket Boots	LEFT HANDED	NEON BLUE FUR	SPARKLE APPLES
Captain Emerald	Pirate Slide	Pixel Shield	RIGHT HANDED	BRIGHT PURPLE FUR	SPARKLE APPLES
Boots Thunder	Unicorn Dash	Turbo Wings	LEFT HANDED	BRIGHT PURPLE FUR	SPARKLE APPLES

CLUE 1 Skip counting

Follow the paw prints spaced out in equal groups along the basketball court to crack the code.

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

A 2x12 grid of boxes. The top row contains the following sequence: an orange box with 'T', three empty boxes, an orange box with 'T', and nine empty boxes. The bottom row contains twelve empty boxes. Below each box is a number. The numbers for the top row are: 36, 6, 21, 16, 18, 15, 15, 55, 18, 130, 25, 9, 21, 42, 130, 9, 36. The numbers for the bottom row are: 110, 42, 21, 55, 22, 18, 35, 21, 15, 42, 6, 18, 21, 15, 25.

T																T
36	6	21	16	18	15	15	55	18	130	25	9	21	42	130	9	36
110	42	21	55	22	18	35	21	15	42	6	18	21	15	25		

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 → **T**

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

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 → **N**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, , 18, 21 → **L**

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

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, , 24, 27 → **E**

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

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

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

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

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

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

Scratch space:

CLUE 2 Place value

Check the digital scoreboard readout to reveal the correct digit values and narrow the suspect list.

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

T																	
800	700	70	4000	30	4000	500	70	600	800	10	7000	4000	4000	70	70	90	
30	4000	60	90	6000	800	700	70	60	50	200	70	80	800	700	7000	90	300

What is the value of the 8 in 835? → **T**

What is the value of the 5 in 4,254? → **R**

What is the value of the 6 in 968? → **I**

What is the value of the 7 in 87,118? → **A**

What is the value of the 8 in 7,280? → **F**

What is the value of the 1 in 7,013? → **W**

What is the value of the 6 in 643? → **C**

What is the value of the 5 in 6,531? → **P**

What is the value of the 9 in 692? → **N**

What is the value of the 3 in 6,320? → **D**

What is the value of the 6 in 6,829? → **G**

What is the value of the 7 in 3,704? → **H**

What is the value of the 2 in 294? → **L**

What is the value of the 7 in 2,975? → **E**

What is the value of the 4 in 4,827? → **S**

What is the value of the 3 in 2,632? → **U**

Scratch space:

CLUE 3 Word problems

Solve this sports equipment challenge to help Coach Blitz gather clues about the thief.

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

Someone scared the villain off with  .

There were 31 pirate coins. 6 were used up. How many pirate coins are left?

Answer: → **S**

Coach Blitz found 54 pirate coins yesterday and 4 more today. How many pirate coins in all?

Answer: → **K**

There were 83 catnip treats. 32 were used up. How many catnip treats are left?

Answer: → **E**

There were 40 pirate coins. 17 were used up. How many pirate coins are left?

Answer: → **A**

Coach Blitz found 35 glowing helmets yesterday and 12 more today. How many glowing helmets in all?

Answer: → **R**

There were 71 catnip treats. 4 were used up. How many catnip treats are left?

Answer: → **L**

Coach Blitz found 57 pixel blocks yesterday and 13 more today. How many pixel blocks in all?

Answer: → **P**

Scratch space:

CLUE 4

Bar model word problems

Compare the gear energy levels on the arena bar chart to unlock the next secret message.

Draw a bar model to solve each word problem, then write its letter in the boxes to fill in the missing word.

A strand of

N			N							R
27	38	59	27	24	58	60	38	18	60	

 hair turned up at the scene.

There were 35 pirate coins in all. 8 pirate coins were used. How many pirate coins are left?

draw a bar model

Answer: → **N**

One group collected 12 glowing helmets and another group collected 6 glowing helmets. How many glowing helmets in all?

draw a bar model

Answer: → **F**

The red team has 55 glowing helmets and the blue team has 31 glowing helmets. How many more glowing helmets does the red team have?

draw a bar model

Answer: → **B**

One group collected 21 glowing helmets and another group collected 17 glowing helmets. How many glowing helmets in all?

draw a bar model

Answer: → **E**

One group collected 49 pirate coins and another group collected 10 pirate coins. How many pirate coins in all?

draw a bar model

Answer: → **O**

The red team has 92 glowing helmets and the blue team has 34 glowing helmets. How many more glowing helmets does the red team have?

draw a bar model

Answer: → **L**

Coach Blitz has 10 times as many pirate coins as a teammate. The teammate has 6 pirate coins. How many pirate coins does Coach Blitz have?

draw a bar model

Answer: → **U**

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

Find the missing total on the locker room inventory sheet to uncover the final trace.

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:

$9 + \underline{\quad} = 17$

$5 + \underline{\quad} = 7$

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

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

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

$1 + \underline{\quad} = 13$

$2 + \underline{\quad} = 9$

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

$2 + \underline{\quad} = 13$

$9 + \underline{\quad} = 10$

$3 + \underline{\quad} = 6$

Step 2 - cross out the sentence with each answer:

1. The villain slid across the wooden deck, then zoomed away with laser goggles.
2. The villain kicked the neon soccer ball, then flew high with turbo wings.
3. The villain dashed like a wild unicorn, then zoomed away with laser goggles.
4. The villain slid across the wooden deck, then blew a loud sonar whistle.
5. The villain built a pixelated wall, then blew a loud sonar whistle.
6. The villain dashed like a wild unicorn, then blew a loud sonar whistle.
7. The villain kicked the neon soccer ball, then blew a loud sonar whistle.
8. The villain built a pixelated wall, then zoomed away with laser goggles.
9. The villain kicked the neon soccer ball, then blasted off on rocket boots.
10. The villain built a pixelated wall, then flew high with turbo wings.
11. The villain kicked the neon soccer ball, then zoomed away with laser goggles.
12. The villain dunked the glowing basketball, then deflected clues using a pixel shield.

Answer Key

The Case of the Cyber Cat Trophy Mystery

Culprit: Slick Striker

Corner Kick · Rocket Boots · LEFT HANDED · NEON BLUE FUR · SPARKLE APPLES

Trail: Start 21 → Clue 1 16 → Clue 2 11 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Skip counting): "THE VILLAIN DOES NOT USE A PIXEL SHIELD"

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, __, 39, 42 = 36 (T) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, __, 18, 20 = 16 (V) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (S) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, __, 140, 150 = 130 (N) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, __, 18, 21 = 15 (L) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, __, 20, 22 = 18 (I) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (X) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, __, 24, 27 = 21 (E) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, __, 120, 130 = 110 (U) · Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 = 6 (H) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 = 22 (P) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, __, 60, 65 = 55 (A) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, __, 30, 35 = 25 (D) · Skip-count by 3s. Fill the blank: 3, 6, __, 12, 15 = 9 (O)

Clue 2 (Place value): "THE SUSPECT WAS SEEN USING THEIR LEFT HAND"

What is the value of the 8 in 835? = 800 (T) · What is the value of the 5 in 4,254? = 50 (R) · What is the value of the 6 in 968? = 60 (I) · What is the value of the 7 in 87,118? = 7000 (A) · What is the value of the 8 in 7,280? = 80 (F) · What is the value of the 1 in 7,013? = 10 (W) · What is the value of the 6 in 643? = 600 (C) · What is the value of the 5 in 6,531? = 500 (P) · What is the value of the 9 in 692? = 90 (N) · What is the value of the 3 in 6,320? = 300 (D) · What is the value of the 6 in 6,829? = 6000 (G) · What is the value of the 7 in 3,704? = 700 (H) · What is the value of the 2 in 294? = 200 (L) · What is the value of the 7 in 2,975? = 70 (E) · What is the value of the 4 in 4,827? = 4000 (S) · What is the value of the 3 in 2,632? = 30 (U)

Clue 3 (Word problems): "SPARKLE APPLES"

There were 31 pirate coins. 6 were used up. How many pirate coins are left? = 25 (S) · Coach Blitz found 54 pirate coins yesterday and 4 more today. How many pirate coins in all? = 58 (K) · There were 83 catnip treats. 32 were used up. How many catnip treats are left? = 51 (E) · There were 40 pirate coins. 17 were used up. How many pirate coins are left? = 23 (A) · Coach Blitz found 35 glowing helmets yesterday and 12 more today. How many glowing helmets in all? = 47 (R) · There were 71 catnip treats. 4 were used up. How many catnip treats are left? = 67 (L) · Coach Blitz found 57 pixel blocks yesterday and 13 more today. How many pixel blocks in all? = 70 (P)

Clue 4 (Bar model word problems): "NEON BLUE FUR"

There were 35 pirate coins in all. 8 pirate coins were used. How many pirate coins are left? = 27 (N) · One group collected 12 glowing helmets and another group collected 6 glowing helmets. How many glowing helmets in all? = 18 (F) · The red team has 55 glowing helmets and the blue team has 31 glowing helmets. How many more glowing helmets does the red team have? = 24 (B) · One group collected 21 glowing helmets and another group collected 17 glowing helmets. How many glowing helmets in all? = 38 (E) · One group collected 49 pirate coins and another group collected 10 pirate coins. How many pirate coins in all? = 59 (O) · The red team has 92 glowing helmets and the blue team has 34 glowing helmets. How many more glowing helmets does the red team have? = 58 (L) · Coach Blitz has 10 times as many pirate coins as a teammate. The teammate has 6 pirate coins. How many pirate coins does Coach Blitz have? = 60 (U)

Clue 5 (Missing addends): surviving statement is box 9 → Slick Striker

$9 + \underline{\quad} = 17 = 8$ · $5 + \underline{\quad} = 7 = 2$ · $6 + \underline{\quad} = 12 = 6$ · $3 + \underline{\quad} = 7 = 4$ · $2 + \underline{\quad} = 12 = 10$ · $1 + \underline{\quad} = 13 = 12$ · $2 + \underline{\quad} = 9 = 7$ · $5 + \underline{\quad} = 10 = 5$ · $2 + \underline{\quad} = 13 = 11$ · $9 + \underline{\quad} = 10 = 1$ · $3 + \underline{\quad} = 6 = 3$