



The Cosmic Cup Heist

Grade 4 math · Rounding, Word problems, Multi-step word problems, Addition, Division · Reading level grades 3-4

Detective: _____ Date: _____

The biggest robot-dinosaur basketball game of the century was about to start. Suddenly, a sneaky cat pilot broke into the trophy vault and took the Golden Hoop! We need to find which pirate player did it before the final buzzer.

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 Bandit is _____

Possible suspects

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

NAME	SPECIAL SHOT	PIRATE GEAR	SHOOTING HAND	FUR PATTERN	DISTRACTION
Pelé Purr	laser pass	hook hand	right handed	calico patches	squeaky toy
Robo Raptor	meteor dunk	holo whiskers	left handed	orange fur	laser pointer
Star Tail	nebula spin	solar cape	left handed	orange fur	catnip ball
Megan Rapinoe	nebula spin	rocket boots	left handed	orange fur	squeaky toy
Saber Claw	laser pass	holo whiskers	left handed	silver metal fur	catnip ball
Luna Laser	comet shot	rocket boots	right handed	silver metal fur	laser pointer
Shaq Attack	nebula spin	rocket boots	left handed	orange fur	catnip ball
Steph Furry	laser pass	eyepatch radar	right handed	silver metal fur	squeaky toy
Alex Morgan	gravity slam	hook hand	right handed	calico patches	catnip ball
Cristiano Ronaldo	gravity slam	solar cape	left handed	calico patches	laser pointer
Neymar Cat	gravity slam	holo whiskers	right handed	calico patches	laser pointer
Barnaby Bot	nebula spin	solar cape	right handed	orange fur	squeaky toy
Giannis Claw	comet shot	hook hand	right handed	orange fur	catnip ball
Captain Meow	laser pass	eyepatch radar	left handed	silver metal fur	laser pointer
T Rex Tom	laser pass	solar cape	left handed	silver metal fur	squeaky toy
Cosmo Kitten	gravity slam	hook hand	left handed	calico patches	laser pointer
Luka Doge	nebula spin	hook hand	left handed	orange fur	catnip ball
LeBron Claws	gravity slam	holo whiskers	left handed	orange fur	catnip ball
Yao Ming Kitty	gravity slam	hook hand	right handed	silver metal fur	squeaky toy
Kobe Cat	meteor dunk	eyepatch radar	right handed	calico patches	catnip ball
Meow Jordan	laser pass	hook hand	left handed	orange fur	catnip ball

CLUE 1 Rounding

Captain Meow needs to pack his space crates. He puts three fish snacks in each box and loads five boxes onto two ships. Help him count the leftovers to find the first clue.

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

T																	T
2900	9000	290	300	430	90	90	170	430	4300	900	2300	290	70	4300	2300	2900	

3700	290	170	2000	170	70	2300	90	170	2000	7000	170	500	290

Round 2,867 to the nearest hundred →

T

Round 2,354 to the nearest thousand →

R

Round 537 to the nearest hundred →

P

Round 2,251 to the nearest hundred →

O

Round 4,290 to the nearest hundred →

N

Round 3,668 to the nearest hundred →

W

Round 427 to the nearest ten →

I

Round 67 to the nearest ten →

S

Round 288 to the nearest ten →

E

Round 91 to the nearest ten →

L

Round 168 to the nearest ten →

A

Round 6,616 to the nearest thousand →

C

Round 309 to the nearest hundred →

V

Round 8,859 to the nearest thousand →

H

Round 930 to the nearest hundred →

D

Scratch space:

CLUE 2

Word problems

The robot referee counted the basketballs on the court. Some were flat and some were ready to bounce. Use the totals to unlock the security camera footage.

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

A witness saw the villain was L D D .

59 22 30 80 61 21 20 22

Captain Meow found 45 laser balls yesterday and 14 more today. How many laser balls in all?

Answer: → L

Captain Meow found 9 fish biscuits yesterday and 11 more today. How many fish biscuits in all?

Answer: → N

Captain Meow lined up 11 rows of 2 gold trophies. How many gold trophies in all?

Answer: → E

Captain Meow lined up 6 rows of 5 fish biscuits. How many fish biscuits in all?

Answer: → F

Captain Meow lined up 7 rows of 3 laser balls. How many laser balls in all?

Answer: → A

There were 99 dino batteries. 38 were used up. How many dino batteries are left?

Answer: → H

Captain Meow lined up 10 rows of 8 gold trophies. How many gold trophies in all?

Answer: → T

Scratch space:

CLUE 3 Multi-step word problems

The radar screen is fuzzy. It only shows the spaceship speeds rounded to the nearest ten. Round the numbers to track the suspect's escape route.

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

Someone scared the villain off with C L L .

70 81 83 38 75 26 72 81

There were 211 rocket boots in all. 1 rocket boots were set aside. The rest were shared equally among 3 The Space Claws. How many rocket boots did each get?

Answer: → C

There were 134 gold trophies in all. 1 The Space Claws used 30 gold trophies each. The other 4 The Space Claws shared the rest equally. How many gold trophies did each of the other The Space Claws get?

Answer: → P

Captain Meow collected 378 rocket boots in the morning and 120 rocket boots in the afternoon, then split them equally among 6 The Space Claws. How many rocket boots did each get?

Answer: → T

Captain Meow filled 2 boxes with 7 laser balls each, then found 24 more laser balls. How many laser balls are there in all?

Answer: → N

Captain Meow collected 217 dino batteries in the morning and 143 dino batteries in the afternoon, then split them equally among 5 The Space Claws. How many dino batteries did each get?

Answer: → B

There were 468 laser balls in all. 4 The Space Claws used 36 laser balls each. The other 4 The Space Claws shared the rest equally. How many laser balls did each of the other The Space Claws get?

Answer: → A

Captain Meow collected 33 dino batteries in the morning and 117 dino batteries in the afternoon, then split them equally among 2 The Space Claws. How many dino batteries did each get?

Answer: → I

Scratch space:

CLUE 4

Addition

The pit crew is adding up the pirate fuel barrels. Join the numbers together to find out which gate the thief used.

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

W																	
4032	5244	5416	5157	8771	6407	4855	5157	7421	5120	6407	9326	5244	5416	8771	7421	5157	6407
9739	4488	5244	8428	5157	8771	7421	9739										

$2732 + 1300 = \square \rightarrow \text{W}$

$5984 + 3755 = \square \rightarrow \text{T}$

$2036 + 3084 = \square \rightarrow \text{A}$

$5668 + 3658 = \square \rightarrow \text{G}$

$3080 + 2077 = \square \rightarrow \text{O}$

$1757 + 3487 = \square \rightarrow \text{E}$

$4102 + 2305 = \square \rightarrow \text{N}$

$3589 + 5182 = \square \rightarrow \text{U}$

$2496 + 2359 = \square \rightarrow \text{D}$

$2584 + 1904 = \square \rightarrow \text{H}$

$2538 + 4883 = \square \rightarrow \text{R}$

$2907 + 2509 = \square \rightarrow \text{F}$

$5438 + 2990 = \square \rightarrow \text{C}$

Scratch space:

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

The crew has to share the golden fish treats equally among the robotic dinosaurs. Divide the snacks to reveal the final secret.

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:

$50 \div 10 = \boxed{}$

$44 \div 4 = \boxed{}$

$20 \div 2 = \boxed{}$

$70 \div 10 = \boxed{}$

$120 \div 10 = \boxed{}$

$6 \div 2 = \boxed{}$

$20 \div 10 = \boxed{}$

$8 \div 1 = \boxed{}$

$8 \div 2 = \boxed{}$

$42 \div 7 = \boxed{}$

$10 \div 10 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain took the star cup, then zoomed off in a flying pirate ship.
2. The villain swiped the golden game ball, then escaped in a rusty dino bot.
3. The villain intercepted the championship trophy, then zoomed off in a flying pirate ship.
4. The villain pinched the championship rings, then dashed away on rocket skates.
5. The villain pinched the championship rings, then zoomed off in a flying pirate ship.
6. The villain stole the rocket engine, then zoomed off in a flying pirate ship.
7. The villain intercepted the championship trophy, then dashed away on rocket skates.
8. The villain stole the rocket engine, then scampered through the laser gate.
9. The villain swiped the golden game ball, then blasted off into deep space.
10. The villain took the star cup, then blasted off into deep space.
11. The villain took the star cup, then escaped in a rusty dino bot.
12. The villain intercepted the championship trophy, then blasted off into deep space.

Answer Key

The Cosmic Cup Heist

Culprit: Meow Jordan

laser pass · hook hand · left handed · orange fur · catnip ball

Trail: Start 21 → Clue 1 17 → Clue 2 9 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN DOES NOT WEAR A SOLAR CAPE"

Round 2,867 to the nearest hundred = 2900 (T) · Round 2,354 to the nearest thousand = 2000 (R) · Round 537 to the nearest hundred = 500 (P) · Round 2,251 to the nearest hundred = 2300 (O) · Round 4,290 to the nearest hundred = 4300 (N) · Round 3,668 to the nearest hundred = 3700 (W) · Round 427 to the nearest ten = 430 (I) · Round 67 to the nearest ten = 70 (S) · Round 288 to the nearest ten = 290 (E) · Round 91 to the nearest ten = 90 (L) · Round 168 to the nearest ten = 170 (A) · Round 6,616 to the nearest thousand = 7000 (C) · Round 309 to the nearest hundred = 300 (V) · Round 8,859 to the nearest thousand = 9000 (H) · Round 930 to the nearest hundred = 900 (D)

Clue 2 (Word problems): "LEFT HANDED"

Captain Meow found 45 laser balls yesterday and 14 more today. How many laser balls in all? = 59 (L) · Captain Meow found 9 fish biscuits yesterday and 11 more today. How many fish biscuits in all? = 20 (N) · Captain Meow lined up 11 rows of 2 gold trophies. How many gold trophies in all? = 22 (E) · Captain Meow lined up 6 rows of 5 fish biscuits. How many fish biscuits in all? = 30 (F) · Captain Meow lined up 7 rows of 3 laser balls. How many laser balls in all? = 21 (A) · There were 99 dino batteries. 38 were used up. How many dino batteries are left? = 61 (H) · Captain Meow lined up 10 rows of 8 gold trophies. How many gold trophies in all? = 80 (T)

Clue 3 (Multi-step word problems): "CATNIP BALL"

There were 211 rocket boots in all. 1 rocket boots were set aside. The rest were shared equally among 3 The Space Claws. How many rocket boots did each get? = 70 (C) · There were 134 gold trophies in all. 1 The Space Claws used 30 gold trophies each. The other 4 The Space Claws shared the rest equally. How many gold trophies did each of the other The Space Claws get? = 26 (P) · Captain Meow collected 378 rocket boots in the morning and 120 rocket boots in the afternoon, then split them equally among 6 The Space Claws. How many rocket boots did each get? = 83 (T) · Captain Meow filled 2 boxes with 7 laser balls each, then found 24 more laser balls. How many laser balls are there in all? = 38 (N) · Captain Meow collected 217 dino batteries in the morning and 143 dino batteries in the afternoon, then split them equally among 5 The Space Claws. How many dino batteries did each get? = 72 (B) · There were 468 laser balls in all. 4 The Space Claws used 36 laser balls each. The other 4 The Space Claws shared the rest equally. How many laser balls did each of the other The Space Claws get? = 81 (A) · Captain Meow collected 33 dino batteries in the morning and 117 dino batteries in the afternoon, then split them equally among 2 The Space Claws. How many dino batteries did each get? = 75 (I)

Clue 4 (Addition): "WE FOUND ORANGE FUR ON THE COURT"

$2732 + 1300 = 4032$ (W) · $5984 + 3755 = 9739$ (T) · $2036 + 3084 = 5120$ (A) · $5668 + 3658 = 9326$ (G) · $3080 + 2077 = 5157$ (O) · $1757 + 3487 = 5244$ (E) · $4102 + 2305 = 6407$ (N) · $3589 + 5182 = 8771$ (U) · $2496 + 2359 = 4855$ (D) · $2584 + 1904 = 4488$ (H) · $2538 + 4883 = 7421$ (R) · $2907 + 2509 = 5416$ (F) · $5438 + 2990 = 8428$ (C)

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

$50 \div 10 = 5$ · $44 \div 4 = 11$ · $20 \div 2 = 10$ · $70 \div 10 = 7$ · $120 \div 10 = 12$ · $6 \div 2 = 3$ · $20 \div 10 = 2$ · $8 \div 1 = 8$ · $8 \div 2 = 4$ · $42 \div 7 = 6$ · $10 \div 10 = 1$