



The Underwater Blox Cup Mystery

Grade 4 math · Place value, Skip counting, Rounding, Bar models, Fractions of a number · Reading level grades 3-4

Detective: _____ Date: _____

Someone swapped the golden soccer trophy with a bubble wand right before the championship game! Solve the clues to catch 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 Sneaky Striker 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	EQUIPPED GEAR	PLAYER STANCE	PLAYER HAIR	DISTRACTION
Sea Breeze	Rainbow Kick	Aqua Fin	Left Handed	Blue Fin Hair	Shiny Coins
Blox Builder	Tail Swipe	Glitch Boots	Wears Visor	Blue Fin Hair	Shiny Coins
Megan Rapinoe	Rainbow Kick	Glitch Boots	Wears Visor	Blue Fin Hair	Laser Pointers
Blox Star	Horn Blast	Aqua Fin	Left Handed	Orange Fur	Shiny Coins
Finnly Flip	Tail Swipe	Aqua Fin	Wears Visor	Pink Mane	Laser Pointers
Meowser	Rainbow Kick	Glitch Boots	Left Handed	Pink Mane	Squeaky Toys
Neymar Cat	Tail Swipe	Pixel Wand	Left Handed	Orange Fur	Squeaky Toys
Tidal Waves	Horn Blast	Glitch Boots	Wears Visor	Blue Fin Hair	Shiny Coins
Princess Coral	Horn Blast	Sparkle Cloak	Wears Visor	Blue Fin Hair	Shiny Coins
Splashy Sam	Horn Blast	Glitch Boots	Left Handed	Orange Fur	Squeaky Toys
Captain Whiskers	Bubble Dash	Neon Cleats	Left Handed	Orange Fur	Laser Pointers
Kittie Kick	Horn Blast	Sparkle Cloak	Wears Visor	Blue Fin Hair	Squeaky Toys
Pele	Bubble Dash	Pixel Wand	Wears Visor	Blue Fin Hair	Laser Pointers
Pixel Pete	Rainbow Kick	Neon Cleats	Left Handed	Orange Fur	Squeaky Toys
Sirena Blue	Tail Swipe	Aqua Fin	Left Handed	Orange Fur	Squeaky Toys
Rainbow Dash	Rainbow Kick	Glitch Boots	Wears Visor	Orange Fur	Squeaky Toys
Purrnaldo	Horn Blast	Sparkle Cloak	Left Handed	Orange Fur	Squeaky Toys
Starlight Horn	Bubble Dash	Neon Cleats	Left Handed	Pink Mane	Shiny Coins
Mia Hamm	Rainbow Kick	Pixel Wand	Wears Visor	Pink Mane	Shiny Coins
Catnip Carl	Bubble Dash	Neon Cleats	Left Handed	Pink Mane	Squeaky Toys
Glitter Mane	Bubble Dash	Glitch Boots	Left Handed	Blue Fin Hair	Shiny Coins

CLUE 1 Place value

The stadium digital clock showed place value digits to reveal the first clue.

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

T																	T
100	40	500	600	90	30	30	800	90	4000	20	7000	500	6000	4000	7000	100	
40	800	600	500	800	6000	60	800	2000	400	30	500	8000	30	7000	800	400	

What is the value of the 1 in 149? → **T**

What is the value of the 6 in 8,060? → **P**

What is the value of the 8 in 822? → **A**

What is the value of the 6 in 7,678? → **V**

What is the value of the 7 in 97,142? → **O**

What is the value of the 9 in 795? → **I**

What is the value of the 2 in 2,715? → **R**

What is the value of the 6 in 6,128? → **S**

What is the value of the 4 in 8,473? → **K**

What is the value of the 3 in 437? → **L**

What is the value of the 5 in 6,549? → **E**

What is the value of the 4 in 14,976? → **N**

What is the value of the 2 in 4,726? → **D**

What is the value of the 4 in 5,743? → **H**

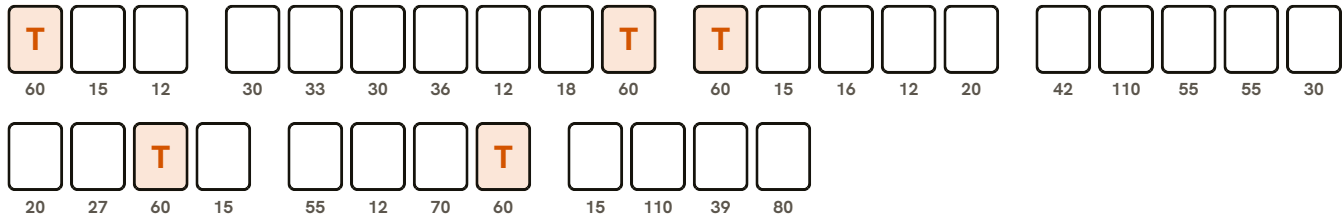
What is the value of the 8 in 8,197? → **C**

Scratch space:

CLUE 2 Skip counting

Referee Whiskers counted soccer balls by skip counting in groups across the field.

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



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

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 → **N**

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, __, 35, 40 → **S**

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, __, 25, 30 → **W**

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

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

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

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

Skip-count by 5s. Fill the blank: 5, 10, __, 20, 25 → **H**

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

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

Scratch space:

CLUE 3

Rounding

The arena scoreboard rounded the fan attendance number to give a helpful clue.

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

T																	
30	1100	7000	300	500	3700	3700	1700	500	70	2900	3700	7000	7000	2900	2300	1300	9000

							T			
370	430	290	7000	1700	230	900	30	1300	900	370

Round 26 to the nearest ten → **T**

Round 367 to the nearest ten → **S**

Round 2,906 to the nearest hundred → **F**

Round 67 to the nearest ten → **N**

Round 7,443 to the nearest thousand → **E**

Round 1,656 to the nearest hundred → **A**

Round 293 to the nearest ten → **U**

Round 1,266 to the nearest hundred → **O**

Round 1,086 to the nearest hundred → **H**

Round 431 to the nearest ten → **Q**

Round 949 to the nearest hundred → **Y**

Round 234 to the nearest ten → **K**

Round 3,722 to the nearest hundred → **L**

Round 8,947 to the nearest thousand → **M**

Round 269 to the nearest hundred → **V**

Round 2,253 to the nearest hundred → **R**

Round 493 to the nearest hundred → **I**

Scratch space:

CLUE 4

Bar model word problems

Coach Whiskers drew a bar model in the sand to compare team points.

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 O U hair turned up at the scene.

16 106 79 71 85 114 144 106

There were 26 blox coins in all. 10 blox coins were used. How many blox coins are left?

draw a bar model

Answer: → O

There were 146 blox coins in all. 40 blox coins were used. How many blox coins are left?

draw a bar model

Answer: → R

The red team has 149 unicorn snacks and the blue team has 5 unicorn snacks. How many more unicorn snacks does the red team have?

draw a bar model

Answer: → F

Coach Whiskers used $\frac{4}{5}$ of the glitter soccer balls on the first day. The other 17 glitter soccer balls were used the next day. How many glitter soccer balls were there in all?

draw a bar model

Answer: → G

Coach Whiskers shares 158 squeaky mouse toys equally among 2 teams. How many squeaky mouse toys does each team get?

draw a bar model

Answer: → A

Coach Whiskers used $\frac{1}{2}$ of the squeaky mouse toys on the first day. The other 57 squeaky mouse toys were used the next day. How many squeaky mouse toys were there in all?

draw a bar model

Answer: → E

Coach Whiskers shares 213 glitter soccer balls equally among 3 teams. How many glitter soccer balls does each team get?

draw a bar model

Answer: → N

CLUE 5**Fractions of a number - the last clue**

The cat captain calculated a fraction of energy drinks left in the cooler.

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:

$1/5 \text{ of } 30 = \boxed{}$

$2/10 \text{ of } 5 = \boxed{}$

$2/8 \text{ of } 44 = \boxed{}$

$5/10 \text{ of } 24 = \boxed{}$

$2/4 \text{ of } 16 = \boxed{}$

$1/4 \text{ of } 8 = \boxed{}$

$2/10 \text{ of } 35 = \boxed{}$

$1/5 \text{ of } 20 = \boxed{}$

$5/10 \text{ of } 20 = \boxed{}$

$3/6 \text{ of } 10 = \boxed{}$

$1/4 \text{ of } 36 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain swiped with tail swipe, then swam with aqua fin.
2. The villain blasted a horn blast, then laced up neon cleats.
3. The villain blasted a horn blast, then laced up glitch boots.
4. The villain blocked with purr shield, then put on a sparkle cloak.
5. The villain dashed using bubble dash, then swam with aqua fin.
6. The villain swiped with tail swipe, then waved a pixel wand.
7. The villain blocked with purr shield, then waved a pixel wand.
8. The villain kicked with rainbow kick, then put on a sparkle cloak.
9. The villain swiped with tail swipe, then laced up glitch boots.
10. The villain swiped with tail swipe, then put on a sparkle cloak.
11. The villain kicked with rainbow kick, then laced up neon cleats.
12. The villain kicked with rainbow kick, then laced up glitch boots.

Answer Key

The Underwater Blox Cup Mystery

Culprit: Splashy Sam

Horn Blast · Glitch Boots · Left Handed · Orange Fur · Squeaky Toys

Trail: Start 21 → Clue 1 18 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT HAVE A SPARKLE CLOAK"

What is the value of the 1 in 149? = 100 (T) · What is the value of the 6 in 8,060? = 60 (P) · What is the value of the 8 in 822? = 800 (A) · What is the value of the 6 in 7,678? = 600 (V) · What is the value of the 7 in 97,142? = 7000 (O) · What is the value of the 9 in 795? = 90 (I) · What is the value of the 2 in 2,715? = 2000 (R) · What is the value of the 6 in 6,128? = 6000 (S) · What is the value of the 4 in 8,473? = 400 (K) · What is the value of the 3 in 437? = 30 (L) · What is the value of the 5 in 6,549? = 500 (E) · What is the value of the 4 in 14,976? = 4000 (N) · What is the value of the 2 in 4,726? = 20 (D) · What is the value of the 4 in 5,743? = 40 (H) · What is the value of the 8 in 8,197? = 8000 (C)

Clue 2 (Skip counting): "THE SUSPECT THREW BALLS WITH LEFT HAND"

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

Clue 3 (Rounding): "THE VILLAIN FLEE FROM SQUEAKY TOYS"

Round 26 to the nearest ten = 30 (T) · Round 367 to the nearest ten = 370 (S) · Round 2,906 to the nearest hundred = 2900 (F) · Round 67 to the nearest ten = 70 (N) · Round 7,443 to the nearest thousand = 7000 (E) · Round 1,656 to the nearest hundred = 1700 (A) · Round 293 to the nearest ten = 290 (U) · Round 1,266 to the nearest hundred = 1300 (O) · Round 1,086 to the nearest hundred = 1100 (H) · Round 431 to the nearest ten = 430 (Q) · Round 949 to the nearest hundred = 900 (Y) · Round 234 to the nearest ten = 230 (K) · Round 3,722 to the nearest hundred = 3700 (L) · Round 8,947 to the nearest thousand = 9000 (M) · Round 269 to the nearest hundred = 300 (V) · Round 2,253 to the nearest hundred = 2300 (R) · Round 493 to the nearest hundred = 500 (I)

Clue 4 (Bar model word problems): "ORANGE FUR"

There were 26 blox coins in all. 10 blox coins were used. How many blox coins are left? = 16 (O) · There were 146 blox coins in all. 40 blox coins were used. How many blox coins are left? = 106 (R) · The red team has 149 unicorn snacks and the blue team has 5 unicorn snacks. How many more unicorn snacks does the red team have? = 144 (F) · Coach Whiskers used $\frac{4}{5}$ of the glitter soccer balls on the first day. The other 17 glitter soccer balls were used the next day. How many glitter soccer balls were there in all? = 85 (G) · Coach Whiskers shares 158 squeaky mouse toys equally among 2 teams. How many squeaky mouse toys does each team get? = 79 (A) · Coach Whiskers used $\frac{1}{2}$ of the squeaky mouse toys on the first day. The other 57 squeaky mouse toys were used the next day. How many squeaky mouse toys were there in all? = 114 (E) · Coach Whiskers shares 213 glitter soccer balls equally among 3 teams. How many glitter soccer balls does each team get? = 71 (N)

Clue 5 (Fractions of a number): surviving statement is box 3 → Splashy Sam

$\frac{1}{5}$ of 30 = 6 · $\frac{2}{10}$ of 5 = 1 · $\frac{2}{8}$ of 44 = 11 · $\frac{5}{10}$ of 24 = 12 · $\frac{2}{4}$ of 16 = 8 · $\frac{1}{4}$ of 8 = 2 · $\frac{2}{10}$ of 35 = 7 · $\frac{1}{5}$ of 20 = 4 · $\frac{5}{10}$ of 20 = 10 · $\frac{3}{6}$ of 10 = 5 · $\frac{1}{4}$ of 36 = 9