



The Great Sports Center Mystery

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

Detective: _____ **Date:** _____

Someone scrambled the championship trophies at Champions Dome Arena! Coach Vance needs your math skills to figure out who snuck into the equipment room and swapped the grand prize.

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 League Crasher is _____

Possible suspects

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

NAME	SIGNATURE MOVE	FAVORITE GEAR	STANCE	VISOR COLOR	WEAKNESS
Patrick Mahomes	Curving Corner	Cleated Boots	Right Handed	Green Visor	Squeaky Shoes
Rafael Nadal	High Spin Lob	Gold Whistle	Right Handed	Green Visor	Bright Floodlights
Cristiano Ronaldo	Bicycle Kick	Grip Tape Glove	Left Handed	Green Visor	Squeaky Shoes
Megan Rapinoe	Rocket Serve	Padded Helmet	Right Handed	Red Visor	Squeaky Shoes
Marta Vieira	Hail Mary Pass	Neon Wristbands	Left Handed	Green Visor	Bright Floodlights
Tom Brady	High Spin Lob	Grip Tape Glove	Right Handed	Red Visor	Bright Floodlights
Travis Kelce	High Spin Lob	Grip Tape Glove	Left Handed	Green Visor	Loud Whistles
Venus Williams	Bicycle Kick	Gold Whistle	Right Handed	Blue Visor	Squeaky Shoes
Serena Williams	Bicycle Kick	Neon Wristbands	Right Handed	Red Visor	Squeaky Shoes
Lionel Messi	Curving Corner	Cleated Boots	Left Handed	Red Visor	Squeaky Shoes
Justin Jefferson	Curving Corner	Neon Wristbands	Right Handed	Red Visor	Squeaky Shoes
Carlos Alcaraz	Curving Corner	Padded Helmet	Right Handed	Blue Visor	Bright Floodlights
Alex Morgan	Hail Mary Pass	Grip Tape Glove	Right Handed	Red Visor	Squeaky Shoes
Aryna Sabalenka	Curving Corner	Neon Wristbands	Left Handed	Blue Visor	Squeaky Shoes
Novak Djokovic	Hail Mary Pass	Gold Whistle	Left Handed	Red Visor	Squeaky Shoes
Sam Kerr	Curving Corner	Neon Wristbands	Right Handed	Blue Visor	Squeaky Shoes
Josh Allen	Rocket Serve	Neon Wristbands	Left Handed	Red Visor	Loud Whistles
Erling Haaland	Bicycle Kick	Grip Tape Glove	Left Handed	Blue Visor	Bright Floodlights
Naomi Osaka	High Spin Lob	Neon Wristbands	Right Handed	Red Visor	Loud Whistles
Coco Gauff	Curving Corner	Grip Tape Glove	Left Handed	Red Visor	Loud Whistles
Jalen Hurts	Rocket Serve	Grip Tape Glove	Right Handed	Red Visor	Squeaky Shoes

CLUE 1
Multiplication facts (1-12)

To narrow down the suspect list check the equipment racks where gear was set up in equal rows on the field.

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

T																T
77	96	48	32	14	6	6	121	14	7	99	64	48	90	7	64	77
																T
35	90	48	121	22	121	99	99	48	99	96	48	6	45	48	77	

$11 \times 7 = \square \rightarrow \text{**T**}$

$9 \times 11 = \square \rightarrow \text{**D**}$

$8 \times 4 = \square \rightarrow \text{**V**}$

$11 \times 2 = \square \rightarrow \text{**P**}$

$3 \times 2 = \square \rightarrow \text{**L**}$

$5 \times 7 = \square \rightarrow \text{**U**}$

$4 \times 12 = \square \rightarrow \text{**E**}$

$5 \times 9 = \square \rightarrow \text{**M**}$

$9 \times 10 = \square \rightarrow \text{**S**}$

$1 \times 7 = \square \rightarrow \text{**N**}$

$8 \times 12 = \square \rightarrow \text{**H**}$

$8 \times 8 = \square \rightarrow \text{**O**}$

$11 \times 11 = \square \rightarrow \text{**A**}$

$7 \times 2 = \square \rightarrow \text{**I**}$

Scratch space:

CLUE 2 Place value

A digital scoreboard flashed a mysterious code showing total stadium seats. Break down the place values to reveal the clue.

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

T																			
3000	30	7000	20	6000	100	1000	90	4000	100	200	1000	100	2000	20	30	900	60	20	
					T														
100	200	50	9000	30	3000	30	100	6000	70	7000	70	80	20	7000	200				

What is the value of the 3 in 73,488? → **T**

What is the value of the 9 in 9,652? → **G**

What is the value of the 2 in 2,615? → **M**

What is the value of the 8 in 7,382? → **U**

What is the value of the 2 in 820? → **S**

What is the value of the 5 in 1,151? → **I**

What is the value of the 9 in 498? → **K**

What is the value of the 7 in 8,574? → **D**

What is the value of the 4 in 4,233? → **B**

What is the value of the 3 in 735? → **H**

What is the value of the 1 in 6,165? → **A**

What is the value of the 6 in 76,127? → **N**

What is the value of the 6 in 863? → **W**

What is the value of the 7 in 7,092? → **E**

What is the value of the 2 in 6,260? → **R**

What is the value of the 9 in 964? → **O**

What is the value of the 1 in 1,972? → **C**

Scratch space:

CLUE 3

Word problems

Equipment Manager Sam tracked how many sports items went missing during practice. Solve this word problem to find the trail.

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

Someone scared the villain off with

S						
27	34	55	52	57	73	16

S	H	O		S
27			52	27

.

Equipment Manager Sam lined up 9 rows of 3 football helmets. How many football helmets in all?

Answer: →

S

There were 87 championship cones. 14 were used up. How many championship cones are left?

Answer: →

K

There were 39 sports towels. 23 were used up. How many sports towels are left?

Answer: →

Y

Equipment Manager Sam found 36 championship cones yesterday and 16 more today. How many championship cones in all?

Answer: →

E

There were 95 soccer balls. 38 were used up. How many soccer balls are left?

Answer: →

A

Equipment Manager Sam lined up 5 rows of 11 tennis rackets. How many tennis rackets in all?

Answer: →

U

There were 52 football helmets. 18 were used up. How many football helmets are left?

Answer: →

Q

Scratch space:

CLUE 4 Rounding

The stadium radar track only shows rounded speeds of the runner who fled past the bleachers.

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

A																		
50	5000	2000	60	700	80	8000	4000	5000	8000	400	5000	50	6000	300	50	8000		
9000	2000	600	400	50	400	400	3000	2000	8000	70	2000	30	2000					

Round 53 to the nearest ten → **A**

Round 709 to the nearest hundred → **V**

Round 7,770 to the nearest thousand → **S**

Round 576 to the nearest hundred → **F**

Round 5,369 to the nearest thousand → **R**

Round 3,623 to the nearest thousand → **O**

Round 72 to the nearest ten → **C**

Round 6,380 to the nearest thousand → **P**

Round 1,954 to the nearest thousand → **E**

Round 362 to the nearest hundred → **T**

Round 33 to the nearest ten → **N**

Round 318 to the nearest hundred → **W**

Round 58 to the nearest ten → **D**

Round 3,102 to the nearest thousand → **H**

Round 78 to the nearest ten → **I**

Round 9,291 to the nearest thousand → **L**

Scratch space:

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

The Stadium Crew wants to split all the retrieved practice cones equally into training drills.

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:

$3 \div 1 = \boxed{}$

$4 \div 1 = \boxed{}$

$108 \div 9 = \boxed{}$

$7 \div 1 = \boxed{}$

$60 \div 10 = \boxed{}$

$16 \div 8 = \boxed{}$

$72 \div 9 = \boxed{}$

$60 \div 6 = \boxed{}$

$132 \div 12 = \boxed{}$

$25 \div 5 = \boxed{}$

$3 \div 3 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain launched a rocket serve, then blew a gold whistle.
2. The villain launched a rocket serve, then strapped on a padded helmet.
3. The villain launched a rocket serve, then wrapped a grip tape glove.
4. The villain kicked a curving corner, then put on neon wristbands.
5. The villain launched a rocket serve, then laced up cleated boots.
6. The villain hit a high spin lob, then put on neon wristbands.
7. The villain kicked a curving corner, then strapped on a padded helmet.
8. The villain threw a hail mary pass, then laced up cleated boots.
9. The villain landed a bicycle kick, then put on neon wristbands.
10. The villain landed a bicycle kick, then strapped on a padded helmet.
11. The villain kicked a curving corner, then blew a gold whistle.
12. The villain threw a hail mary pass, then wrapped a grip tape glove.

Answer Key

The Great Sports Center Mystery

Culprit: Serena Williams

Bicycle Kick · Neon Wristbands · Right Handed · Red Visor · Squeaky Shoes

Trail: Start 21 → Clue 1 19 → Clue 2 10 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT USE A PADDED HELMET"

$11 \times 7 = 77$ (T) · $9 \times 11 = 99$ (D) · $8 \times 4 = 32$ (V) · $11 \times 2 = 22$ (P) · $3 \times 2 = 6$ (L) · $5 \times 7 = 35$ (U) · $4 \times 12 = 48$ (E) · $5 \times 9 = 45$ (M) · $9 \times 10 = 90$ (S) · $1 \times 7 = 7$ (N) · $8 \times 12 = 96$ (H) · $8 \times 8 = 64$ (O) · $11 \times 11 = 121$ (A) · $7 \times 2 = 14$ (I)

Clue 2 (Place value): "THE SNACK BAR CAM SHOWS A RIGHT HANDED USER"

What is the value of the 3 in 73,488? = 3000 (T) · What is the value of the 9 in 9,652? = 9000 (G) · What is the value of the 2 in 2,615? = 2000 (M) · What is the value of the 8 in 7,382? = 80 (U) · What is the value of the 2 in 820? = 20 (S) · What is the value of the 5 in 1,151? = 50 (I) · What is the value of the 9 in 498? = 90 (K) · What is the value of the 7 in 8,574? = 70 (D) · What is the value of the 4 in 4,233? = 4000 (B) · What is the value of the 3 in 735? = 30 (H) · What is the value of the 1 in 6,165? = 100 (A) · What is the value of the 6 in 76,127? = 6000 (N) · What is the value of the 6 in 863? = 60 (W) · What is the value of the 7 in 7,092? = 7000 (E) · What is the value of the 2 in 6,260? = 200 (R) · What is the value of the 9 in 964? = 900 (O) · What is the value of the 1 in 1,972? = 1000 (C)

Clue 3 (Word problems): "SQUEAKY SHOES"

Equipment Manager Sam lined up 9 rows of 3 football helmets. How many football helmets in all? = 27 (S) · There were 87 championship cones. 14 were used up. How many championship cones are left? = 73 (K) · There were 39 sports towels. 23 were used up. How many sports towels are left? = 16 (Y) · Equipment Manager Sam found 36 championship cones yesterday and 16 more today. How many championship cones in all? = 52 (E) · There were 95 soccer balls. 38 were used up. How many soccer balls are left? = 57 (A) · Equipment Manager Sam lined up 5 rows of 11 tennis rackets. How many tennis rackets in all? = 55 (U) · There were 52 football helmets. 18 were used up. How many football helmets are left? = 34 (Q)

Clue 4 (Rounding): "A RED VISOR STRAP WAS LEFT AT THE SCENE"

Round 53 to the nearest ten = 50 (A) · Round 709 to the nearest hundred = 700 (V) · Round 7,770 to the nearest thousand = 8000 (S) · Round 576 to the nearest hundred = 600 (F) · Round 5,369 to the nearest thousand = 5000 (R) · Round 3,623 to the nearest thousand = 4000 (O) · Round 72 to the nearest ten = 70 (C) · Round 6,380 to the nearest thousand = 6000 (P) · Round 1,954 to the nearest thousand = 2000 (E) · Round 362 to the nearest hundred = 400 (T) · Round 33 to the nearest ten = 30 (N) · Round 318 to the nearest hundred = 300 (W) · Round 58 to the nearest ten = 60 (D) · Round 3,102 to the nearest thousand = 3000 (H) · Round 78 to the nearest ten = 80 (I) · Round 9,291 to the nearest thousand = 9000 (L)

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

$3 \div 1 = 3$ · $4 \div 1 = 4$ · $108 \div 9 = 12$ · $7 \div 1 = 7$ · $60 \div 10 = 6$ · $16 \div 8 = 2$ · $72 \div 9 = 8$ · $60 \div 6 = 10$ · $132 \div 12 = 11$ · $25 \div 5 = 5$ · $3 \div 3 = 1$