



The Case of the Missing Diamond Trophy

Grade 8 math · Addition, Multiplication, Rounding, Word problems, Division · Reading level grades 7-9

Detective: _____ Date: _____

Just before game seven of the championship series, the trophy vanished from its display case at Diamond Park Stadium. The culprit left behind a trail of baseball equipment and subtle clues across the diamond.

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 phantom pitcher is _____

Possible suspects

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

NAME	SIGNATURE PITCH	LUCKY GEAR	DOMINANT HAND	CAP STYLE HAIR	DUGOUT SNACK
Adley Rutschman	Sweeping Slider	Gold Cleats	Right Handed Thrower	Curly Afro Hair	Salty Peanuts
Elly De La Cruz	Wild Knuckleball	Gold Cleats	Left Handed Thrower	Long Flowing Locks	Salty Peanuts
Yordan Alvarez	Sweeping Slider	Custom Mitt	Left Handed Thrower	Long Flowing Locks	Salty Peanuts
Mike Trout	Wild Knuckleball	Pine Tar Bat	Left Handed Thrower	Long Flowing Locks	Bubble Gum
Corey Seager	Nasty Curveball	Emerald Bat Tape	Left Handed Thrower	Curly Afro Hair	Salty Peanuts
Julio Rodriguez	Nasty Curveball	Gold Cleats	Left Handed Thrower	Curly Afro Hair	Bubble Gum
Freddie Freeman	Wild Knuckleball	Gold Cleats	Left Handed Thrower	Buzz Cut Hair	Bubble Gum
Juan Soto	Rising Fastball	Custom Mitt	Left Handed Thrower	Curly Afro Hair	Bubble Gum
Vladimir Guerrero	Rising Fastball	Emerald Bat Tape	Left Handed Thrower	Buzz Cut Hair	Salty Peanuts
Rafael Devers	Wild Knuckleball	Emerald Bat Tape	Right Handed Thrower	Long Flowing Locks	Sunflower Seeds
Trea Turner	Rising Fastball	Signed Helmet	Left Handed Thrower	Curly Afro Hair	Bubble Gum
Mookie Betts	Wild Knuckleball	Custom Mitt	Right Handed Thrower	Curly Afro Hair	Bubble Gum
Gunnar Henderson	Sweeping Slider	Emerald Bat Tape	Left Handed Thrower	Long Flowing Locks	Bubble Gum
Gerrit Cole	Sweeping Slider	Pine Tar Bat	Left Handed Thrower	Curly Afro Hair	Bubble Gum
Bryce Harper	Rising Fastball	Pine Tar Bat	Right Handed Thrower	Long Flowing Locks	Bubble Gum
Bo Bichette	Wild Knuckleball	Emerald Bat Tape	Right Handed Thrower	Curly Afro Hair	Bubble Gum
Ronald Acuna	Sweeping Slider	Emerald Bat Tape	Left Handed Thrower	Curly Afro Hair	Bubble Gum
Fernando Tatis	Wild Knuckleball	Gold Cleats	Right Handed Thrower	Long Flowing Locks	Sunflower Seeds
Corbin Carroll	Circle Changeup	Pine Tar Bat	Right Handed Thrower	Buzz Cut Hair	Sunflower Seeds
Aaron Judge	Wild Knuckleball	Custom Mitt	Left Handed Thrower	Curly Afro Hair	Sunflower Seeds
Shohei Ohtani	Wild Knuckleball	Gold Cleats	Left Handed Thrower	Curly Afro Hair	Sunflower Seeds

CLUE 1 Addition

The head umpire tallied all the baseballs retrieved from the dugout after the game.

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

T								T								T
9721	3215	4499	7835	5932	7835	6465	4499	6441	9721	3182	7128	4499	7835	5118	7128	9721

									T	
5932	7835	4499	7986	7128	6744	3182	6441	6744	4499	3605

$$3569 + 6152 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$2715 + 4029 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$2176 + 2323 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$3632 + 2300 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$1083 + 2132 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$1109 + 2073 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$2710 + 2408 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$4259 + 3576 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$1156 + 2449 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$5519 + 2467 = \boxed{} \rightarrow \boxed{\text{G}}$$

$$3732 + 3396 = \boxed{} \rightarrow \boxed{\text{O}}$$

$$3749 + 2692 = \boxed{} \rightarrow \boxed{\text{C}}$$

$$2129 + 4336 = \boxed{} \rightarrow \boxed{\text{P}}$$

Scratch space:

CLUE 2
Multiplication facts (1-12)

The stadium manager organized the stadium seats into equal rows to estimate crowd capacity.

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

W									W					
84	54	99	44	110	24	24	24	16	84	16	9	110	64	99

									W						
18	16	44	144	110	144	99	18	66	48	84	110	66	9	110	16

$12 \times 7 = \square \rightarrow \text{W}$

$9 \times 1 = \square \rightarrow \text{L}$

$8 \times 8 = \square \rightarrow \text{F}$

$11 \times 6 = \square \rightarrow \text{R}$

$2 \times 9 = \square \rightarrow \text{H}$

$11 \times 10 = \square \rightarrow \text{E}$

$11 \times 9 = \square \rightarrow \text{T}$

$12 \times 12 = \square \rightarrow \text{D}$

$11 \times 4 = \square \rightarrow \text{N}$

$6 \times 9 = \square \rightarrow \text{I}$

$5 \times 5 = \square \rightarrow \text{V}$

$6 \times 8 = \square \rightarrow \text{O}$

$4 \times 4 = \square \rightarrow \text{A}$

$8 \times 3 = \square \rightarrow \text{S}$

Scratch space:

CLUE 3 Rounding

The digital speed radar on the outfield scoreboard displayed velocity rounded to the nearest ten.

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

F																			
170	1700	290	70	110	370	230	2300	500	2300	110	1300	290	1300	1300	200	2300	3700	290	5000

90	30	230	1700	5000	2300	1100	200	90	30	2300

Round 172 to the nearest ten → **F**

Round 222 to the nearest hundred → **L**

Round 233 to the nearest ten → **H**

Round 374 to the nearest ten → **C**

Round 289 to the nearest ten → **U**

Round 2,286 to the nearest hundred → **E**

Round 1,317 to the nearest hundred → **B**

Round 112 to the nearest ten → **D**

Round 5,238 to the nearest thousand → **M**

Round 1,051 to the nearest hundred → **P**

Round 491 to the nearest hundred → **W**

Round 33 to the nearest ten → **T**

Round 1,684 to the nearest hundred → **O**

Round 3,742 to the nearest hundred → **G**

Round 68 to the nearest ten → **N**

Round 92 to the nearest ten → **A**

Scratch space:

CLUE 4

Word problems

The team equipment manager cataloged gear bags and athletic bats before the road trip.

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

A strand of C O H I hair turned up at the scene.

There were 125 tickets. 6 were used up. How many tickets are left?

Answer: → C

Head Scout found 26 helmets yesterday and 9 more today. How many helmets in all?

Answer: → F

Head Scout found 2 helmets yesterday and 13 more today. How many helmets in all?

Answer: → U

Head Scout found 23 championship rings yesterday and 8 more today. How many championship rings in all?

Answer: → R

There were 82 bats. 10 were used up. How many bats are left?

Answer: → L

Head Scout lined up 12 rows of 5 championship rings. How many championship rings in all?

Answer: → A

There were 93 tickets. 8 were used up. How many tickets are left?

Answer: → Y

Scratch space:

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

The grounds crew divided the practice baseballs evenly among the bullpen containers.

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:

$30 \div 5 = \boxed{}$

$77 \div 11 = \boxed{}$

$35 \div 7 = \boxed{}$

$6 \div 6 = \boxed{}$

$6 \div 2 = \boxed{}$

$12 \div 1 = \boxed{}$

$70 \div 7 = \boxed{}$

$22 \div 2 = \boxed{}$

$36 \div 9 = \boxed{}$

$18 \div 2 = \boxed{}$

$88 \div 11 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain floated a circle changeup, then laced up the gold cleats.
2. The villain threw a rising fastball, then polished the signed helmet.
3. The villain dropped a nasty curveball, then laced up the gold cleats.
4. The villain dropped a nasty curveball, then grabbed the pine tar bat.
5. The villain snapped a sweeping slider, then grabbed the pine tar bat.
6. The villain snapped a sweeping slider, then wrapped the emerald bat tape.
7. The villain threw a rising fastball, then adjusted the custom mitt.
8. The villain snapped a sweeping slider, then adjusted the custom mitt.
9. The villain floated a circle changeup, then adjusted the custom mitt.
10. The villain knuckled a wild fastball, then grabbed the pine tar bat.
11. The villain floated a circle changeup, then polished the signed helmet.
12. The villain floated a circle changeup, then grabbed the pine tar bat.

Answer Key

The Case of the Missing Diamond Trophy

Culprit: Trea Turner

Rising Fastball · Signed Helmet · Left Handed Thrower · Curly Afro Hair · Bubble Gum

Trail: Start 21 → Clue 1 15 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SUSPECT DOES NOT USE GOLD CLEATS"

$3569 + 6152 = 9721$ (T) · $2715 + 4029 = 6744$ (L) · $2176 + 2323 = 4499$ (E) · $3632 + 2300 = 5932$ (U) · $1083 + 2132 = 3215$ (H) · $1109 + 2073 = 3182$ (D) · $2710 + 2408 = 5118$ (N) · $4259 + 3576 = 7835$ (S) · $1156 + 2449 = 3605$ (A) · $5519 + 2467 = 7986$ (G) · $3732 + 3396 = 7128$ (O) · $3749 + 2692 = 6441$ (C) · $2129 + 4336 = 6465$ (P)

Clue 2 (Multiplication facts (1-12)): "WITNESS SAW A LEFT HANDED THROWER LEAVE"

$12 \times 7 = 84$ (W) · $9 \times 1 = 9$ (L) · $8 \times 8 = 64$ (F) · $11 \times 6 = 66$ (R) · $2 \times 9 = 18$ (H) · $11 \times 10 = 110$ (E) · $11 \times 9 = 99$ (T) · $12 \times 12 = 144$ (D) · $11 \times 4 = 44$ (N) · $6 \times 9 = 54$ (I) · $5 \times 5 = 25$ (V) · $6 \times 8 = 48$ (O) · $4 \times 4 = 16$ (A) · $8 \times 3 = 24$ (S)

Clue 3 (Rounding): "FOUND CHEWED BUBBLE GUM AT HOME PLATE"

Round 172 to the nearest ten = 170 (F) · Round 222 to the nearest hundred = 200 (L) · Round 233 to the nearest ten = 230 (H) · Round 374 to the nearest ten = 370 (C) · Round 289 to the nearest ten = 290 (U) · Round 2,286 to the nearest hundred = 2300 (E) · Round 1,317 to the nearest hundred = 1300 (B) · Round 112 to the nearest ten = 110 (D) · Round 5,238 to the nearest thousand = 5000 (M) · Round 1,051 to the nearest hundred = 1100 (P) · Round 491 to the nearest hundred = 500 (W) · Round 33 to the nearest ten = 30 (T) · Round 1,684 to the nearest hundred = 1700 (O) · Round 3,742 to the nearest hundred = 3700 (G) · Round 68 to the nearest ten = 70 (N) · Round 92 to the nearest ten = 90 (A)

Clue 4 (Word problems): "CURLY AFRO HAIR"

There were 125 tickets. 6 were used up. How many tickets are left? = 119 (C) · Head Scout found 26 helmets yesterday and 9 more today. How many helmets in all? = 35 (F) · Head Scout found 2 helmets yesterday and 13 more today. How many helmets in all? = 15 (U) · Head Scout found 23 championship rings yesterday and 8 more today. How many championship rings in all? = 31 (R) · There were 82 bats. 10 were used up. How many bats are left? = 72 (L) · Head Scout lined up 12 rows of 5 championship rings. How many championship rings in all? = 60 (A) · There were 93 tickets. 8 were used up. How many tickets are left? = 85 (Y)

Clue 5 (Division facts (1-12)): surviving statement is box 2 → Trea Turner

$30 \div 5 = 6$ · $77 \div 11 = 7$ · $35 \div 7 = 5$ · $6 \div 6 = 1$ · $6 \div 2 = 3$ · $12 \div 1 = 12$ · $70 \div 7 = 10$ · $22 \div 2 = 11$ · $36 \div 9 = 4$ · $18 \div 2 = 9$ · $88 \div 11 = 8$