



The Case of the Missing Golden Bat

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

Detective: _____ **Date:** _____

Just hours before Game Seven of the championship series, the legendary Golden Bat vanished from its display case at Grand Slam Stadium. The Head Groundskeeper noticed tire tracks from a grounds cart leading away from the stadium vault. Detective, analyze the stats and stadium records to identify the culprit before first pitch!

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 Diamond Bandit 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	BATTING STYLE	THROWING HAND	CAP COLOR	PITCH WEAKNESS
Ty Cobb	Curveball	Bunt Master	Right Handed	Navy Cap	High Heat
Hank Aaron	Changeup	Switch Hitter	Left Handed	Navy Cap	High Heat
Justin Verlander	Curveball	Bunt Master	Left Handed	Gold Cap	High Heat
Roberto Clemente	Curveball	Power Pull	Left Handed	Gold Cap	Outside Corner
Pedro Martinez	Curveball	Opposite Field	Left Handed	Red Cap	High Heat
Willie Mays	Knuckleball	Power Pull	Left Handed	Red Cap	High Heat
Lou Gehrig	Changeup	Gap Hitter	Right Handed	Navy Cap	Outside Corner
Max Scherzer	Knuckleball	Switch Hitter	Right Handed	Gold Cap	Outside Corner
Mookie Betts	Fastball	Gap Hitter	Left Handed	Gold Cap	High Heat
Freddie Freeman	Fastball	Gap Hitter	Right Handed	Navy Cap	Outside Corner
Jackie Robinson	Slider	Power Pull	Left Handed	Gold Cap	High Heat
Miguel Cabrera	Slider	Power Pull	Right Handed	Gold Cap	High Heat
Cal Ripken	Fastball	Gap Hitter	Right Handed	Navy Cap	High Heat
Derek Jeter	Curveball	Opposite Field	Left Handed	Gold Cap	High Heat
Clayton Kershaw	Curveball	Gap Hitter	Right Handed	Navy Cap	High Heat
Greg Maddux	Curveball	Bunt Master	Right Handed	Gold Cap	Dirt Pitch
Ted Williams	Fastball	Opposite Field	Right Handed	Navy Cap	High Heat
Shohei Ohtani	Fastball	Power Pull	Right Handed	Navy Cap	High Heat
Randy Johnson	Slider	Gap Hitter	Right Handed	Navy Cap	Dirt Pitch
Mike Trout	Knuckleball	Gap Hitter	Left Handed	Gold Cap	Dirt Pitch
Nolan Ryan	Fastball	Switch Hitter	Right Handed	Gold Cap	High Heat

CLUE 1 Addition

To decode the first clue, add up the runs scored across all nine innings on the scoreboard.

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

T									T					T	
7159	2994	9774	3064	2067	3064	4493	9774	8713	7159	2026	3064	7089	2825	7159	6815

			T				T		
8363	2067	7089	7159	3966	6815	3064	7159	9774	2490

$$3515 + 3644 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$1431 + 1633 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$5549 + 3164 = \boxed{} \rightarrow \boxed{\text{C}}$$

$$1074 + 952 = \boxed{} \rightarrow \boxed{\text{I}}$$

$$3174 + 5189 = \boxed{} \rightarrow \boxed{\text{B}}$$

$$2705 + 4110 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$1977 + 1017 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$1349 + 2617 = \boxed{} \rightarrow \boxed{\text{M}}$$

$$3906 + 5868 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$1011 + 1479 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$1307 + 760 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$1942 + 2551 = \boxed{} \rightarrow \boxed{\text{P}}$$

$$2174 + 4915 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$992 + 1833 = \boxed{} \rightarrow \boxed{\text{O}}$$

Scratch space:

CLUE 2
Multiplication facts (1-12)

To unlock the next clue, calculate the total stadium seats by multiplying the rows by the seats in each section.

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

W									W						
96	3	72	80	2	77	77	77	20	96	20	100	3	48	21	72

									W						
21	20	80	28	2	28	72	21	100	90	96	20	72	72	21	2

64	3	2	6	28

$12 \times 8 = \square \rightarrow$ W	$10 \times 9 = \square \rightarrow$ O	$1 \times 3 = \square \rightarrow$ I	
$4 \times 7 = \square \rightarrow$ D	$2 \times 10 = \square \rightarrow$ A	$3 \times 7 = \square \rightarrow$ H	$8 \times 9 = \square \rightarrow$ T
$6 \times 8 = \square \rightarrow$ G	$10 \times 10 = \square \rightarrow$ R	$8 \times 10 = \square \rightarrow$ N	
$1 \times 2 = \square \rightarrow$ E	$7 \times 11 = \square \rightarrow$ S	$8 \times 8 = \square \rightarrow$ F	$1 \times 6 = \square \rightarrow$ L

Scratch space:

CLUE 3
Rounding

The radar gun display rounds pitch velocity to the nearest ten to generate the next code.

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

T									T					
700	50	290	1100	110	1100	5000	290	430	700	1100	3000	110	30	900

							T							T	
3000	200	500	2900	500	230	90	700	50	200	900	50	50	290	90	700

Round 691 to the nearest hundred → **T**

Round 433 to the nearest ten → **C**

Round 288 to the nearest ten → **E**

Round 2,947 to the nearest hundred → **D**

Round 174 to the nearest hundred → **I**

Round 1,134 to the nearest hundred → **S**

Round 231 to the nearest ten → **Y**

Round 2,540 to the nearest thousand → **W**

Round 33 to the nearest ten → **N**

Round 91 to the nearest ten → **A**

Round 4,818 to the nearest thousand → **P**

Round 948 to the nearest hundred → **G**

Round 51 to the nearest ten → **H**

Round 107 to the nearest ten → **U**

Round 499 to the nearest hundred → **L**

Scratch space:

CLUE 4**Word problems**

Solve this word problem about team inventory to reveal the fourth clue.

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

A strand of

N							
56	16	10	107	84	16	72	

 hair turned up at the scene.

Equipment Manager lined up 7 rows of 8 baseballs. How many baseballs in all?

Answer: →

N

Equipment Manager lined up 12 rows of 6 cleats. How many cleats in all?

Answer: →

P

Equipment Manager lined up 4 rows of 4 cleats. How many cleats in all?

Answer: →

A

There were 132 leather mitts. 25 were used up. How many leather mitts are left?

Answer: →

Y

There were 87 batting gloves. 3 were used up. How many batting gloves are left?

Answer: →

C

Equipment Manager lined up 5 rows of 2 batting gloves. How many batting gloves in all?

Answer: →

V

Scratch space:

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

Divide the total batting practice balls equally among the training buckets to reveal the final clue.

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:

$36 \div 12 = \boxed{}$

$44 \div 11 = \boxed{}$

$77 \div 11 = \boxed{}$

$66 \div 11 = \boxed{}$

$81 \div 9 = \boxed{}$

$8 \div 1 = \boxed{}$

$132 \div 11 = \boxed{}$

$30 \div 6 = \boxed{}$

$20 \div 10 = \boxed{}$

$33 \div 3 = \boxed{}$

$110 \div 11 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain fired a ninety five mph fastball, then drove the ball into the gap.
2. The villain swept a devastating slider, then batted as a switch hitter.
3. The villain snapped a nasty curveball, then drove the ball into the gap.
4. The villain fired a ninety five mph fastball, then hit to the opposite field.
5. The villain threw a sharp knuckleball, then hit to the opposite field.
6. The villain dropped in a subtle changeup, then hit to the opposite field.
7. The villain fired a ninety five mph fastball, then pulled the ball with power.
8. The villain swept a devastating slider, then pulled the ball with power.
9. The villain snapped a nasty curveball, then laid down a bunt master bunt.
10. The villain threw a sharp knuckleball, then batted as a switch hitter.
11. The villain threw a sharp knuckleball, then pulled the ball with power.
12. The villain swept a devastating slider, then hit to the opposite field.

Answer Key

The Case of the Missing Golden Bat

Culprit: Cal Ripken

Fastball · Gap Hitter · Right Handed · Navy Cap · High Heat

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SUSPECT IS NOT A BUNT MASTER"

$3515 + 3644 = 7159$ (T) · $1431 + 1633 = 3064$ (S) · $5549 + 3164 = 8713$ (C) · $1074 + 952 = 2026$ (I) · $3174 + 5189 = 8363$ (B) · $2705 + 4110 = 6815$ (A) · $1977 + 1017 = 2994$ (H) · $1349 + 2617 = 3966$ (M) · $3906 + 5868 = 9774$ (E) · $1011 + 1479 = 2490$ (R) · $1307 + 760 = 2067$ (U) · $1942 + 2551 = 4493$ (P) · $2174 + 4915 = 7089$ (N) · $992 + 1833 = 2825$ (O)

Clue 2 (Multiplication facts (1-12)): "WITNESS SAW A RIGHT HANDED THROW AT THE FIELD"

$12 \times 8 = 96$ (W) · $10 \times 9 = 90$ (O) · $1 \times 3 = 3$ (I) · $4 \times 7 = 28$ (D) · $2 \times 10 = 20$ (A) · $3 \times 7 = 21$ (H) · $8 \times 9 = 72$ (T) · $6 \times 8 = 48$ (G) · $10 \times 10 = 100$ (R) · $8 \times 10 = 80$ (N) · $1 \times 2 = 2$ (E) · $7 \times 11 = 77$ (S) · $8 \times 8 = 64$ (F) · $1 \times 6 = 6$ (L)

Clue 3 (Rounding): "THE SUSPECT SWUNG WILDLY AT HIGH HEAT"

Round 691 to the nearest hundred = 700 (T) · Round 433 to the nearest ten = 430 (C) · Round 288 to the nearest ten = 290 (E) · Round 2,947 to the nearest hundred = 2900 (D) · Round 174 to the nearest hundred = 200 (I) · Round 1,134 to the nearest hundred = 1100 (S) · Round 231 to the nearest ten = 230 (Y) · Round 2,540 to the nearest thousand = 3000 (W) · Round 33 to the nearest ten = 30 (N) · Round 91 to the nearest ten = 90 (A) · Round 4,818 to the nearest thousand = 5000 (P) · Round 948 to the nearest hundred = 900 (G) · Round 51 to the nearest ten = 50 (H) · Round 107 to the nearest ten = 110 (U) · Round 499 to the nearest hundred = 500 (L)

Clue 4 (Word problems): "NAVY CAP"

Equipment Manager lined up 7 rows of 8 baseballs. How many baseballs in all? = 56 (N) · Equipment Manager lined up 12 rows of 6 cleats. How many cleats in all? = 72 (P) · Equipment Manager lined up 4 rows of 4 cleats. How many cleats in all? = 16 (A) · There were 132 leather mitts. 25 were used up. How many leather mitts are left? = 107 (Y) · There were 87 batting gloves. 3 were used up. How many batting gloves are left? = 84 (C) · Equipment Manager lined up 5 rows of 2 batting gloves. How many batting gloves in all? = 10 (V)

Clue 5 (Division facts (1-12)): surviving statement is box 1 → Cal Ripken

$36 \div 12 = 3$ · $44 \div 11 = 4$ · $77 \div 11 = 7$ · $66 \div 11 = 6$ · $81 \div 9 = 9$ · $8 \div 1 = 8$ · $132 \div 11 = 12$ · $30 \div 6 = 5$ · $20 \div 10 = 2$ · $33 \div 3 = 11$ · $110 \div 11 = 10$