The Diamond League Sabotage

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

Detective: _____ **Date:** _____

Just hours before Game Seven of the Championship Series, someone broke into the equipment vault at Grand Slam Park and swapped the official game balls with heavy foam trick balls! Detective Maya arrived at the stadium to analyze pitch logs, turf prints, and dugout gear to unmask 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 Ballpark Saboteur is _____

Possible suspects

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

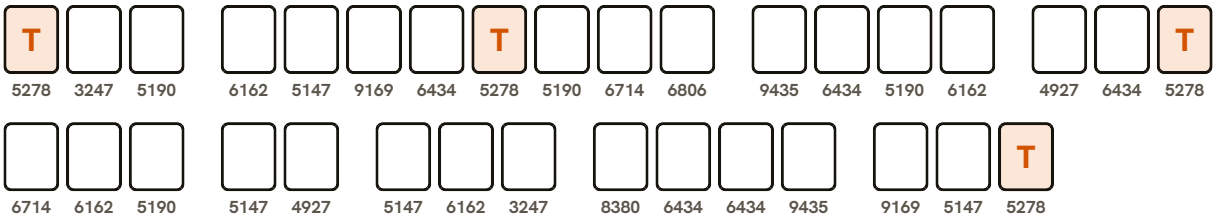
NAME	SIGNATURE PITCH	BAT TYPE	THROWING HAND	HAIR COLOR	SCENT LEFT BEHIND
Zack Wheeler	Changeup Specialist	Maple Bat	Right Handed Thrower	Dark Brown Hair	Sunflower Seeds
Ronald Acuna	Sinker Thrower	Ash Wood Bat	Left Handed Thrower	Blonde Hair	Bubblegum Scent
Juan Soto	Knuckleball Pitcher	Ash Wood Bat	Left Handed Thrower	Red Hair	Pine Tar Smell
Trea Turner	Changeup Specialist	Aluminum Bat	Left Handed Thrower	Red Hair	Pine Tar Smell
Elly De La Cruz	Fastball Thrower	Aluminum Bat	Right Handed Thrower	Blonde Hair	Bubblegum Scent
Freddie Freeman	Sinker Thrower	Composite Bat	Left Handed Thrower	Dark Brown Hair	Sunflower Seeds
Julio Rodriguez	Changeup Specialist	Composite Bat	Right Handed Thrower	Red Hair	Bubblegum Scent
Mookie Betts	Knuckleball Pitcher	Aluminum Bat	Right Handed Thrower	Blonde Hair	Pine Tar Smell
Bryce Harper	Curveball Master	Maple Bat	Right Handed Thrower	Blonde Hair	Bubblegum Scent
Pete Alonso	Changeup Specialist	Composite Bat	Right Handed Thrower	Dark Brown Hair	Pine Tar Smell
Gunnar Henderson	Knuckleball Pitcher	Ash Wood Bat	Right Handed Thrower	Red Hair	Sunflower Seeds
Bobby Witt Jr	Fastball Thrower	Ash Wood Bat	Left Handed Thrower	Dark Brown Hair	Bubblegum Scent
Paul Skenes	Curveball Master	Maple Bat	Left Handed Thrower	Blonde Hair	Sunflower Seeds
Gerrit Cole	Fastball Thrower	Maple Bat	Right Handed Thrower	Red Hair	Bubblegum Scent
Shohei Ohtani	Curveball Master	Bamboo Bat	Right Handed Thrower	Dark Brown Hair	Sunflower Seeds
Austin Riley	Fastball Thrower	Composite Bat	Right Handed Thrower	Dark Brown Hair	Sunflower Seeds
Corbin Burnes	Curveball Master	Ash Wood Bat	Left Handed Thrower	Red Hair	Pine Tar Smell
Adley Rutschman	Sinker Thrower	Aluminum Bat	Right Handed Thrower	Dark Brown Hair	Sunflower Seeds
Corey Seager	Knuckleball Pitcher	Ash Wood Bat	Right Handed Thrower	Dark Brown Hair	Sunflower Seeds
Mike Trout	Changeup Specialist	Maple Bat	Right Handed Thrower	Red Hair	Sunflower Seeds
Francisco Lindor	Fastball Thrower	Bamboo Bat	Left Handed Thrower	Dark Brown Hair	Bubblegum Scent

make your own at mathcrackers.com

CLUE 1 Addition

> Groundskeeper Miller tallied up the extra baseballs found strewn across the dugout bench to reveal the first piece of evidence.

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



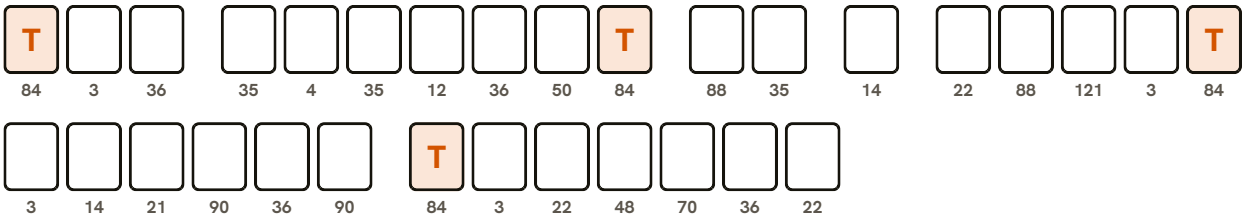
2007 + 3271 = ☐ → T	2543 + 4171 = ☐ → U	2608 + 3554 = ☐ → S
2997 + 6438 = ☐ → D	1828 + 1419 = ☐ → H	1960 + 2967 = ☐ → N
1569 + 3578 = ☐ → A	3429 + 3377 = ☐ → R	4941 + 3439 = ☐ → W
4897 + 4272 = ☐ → B	4382 + 2052 = ☐ → O	2705 + 2485 = ☐ → E

Scratch space:

CLUE 2 Multiplication facts (1-12)

> The detective calculated the total pitch count by multiplying the full innings pitched by the average throws per inning.

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



7 × 12 = ☐ → T	11 × 8 = ☐ → I	1 × 3 = ☐ → H
6 × 6 = ☐ → E	10 × 7 = ☐ → W	6 × 2 = ☐ → P
10 × 5 = ☐ → C	2 × 7 = ☐ → A	2 × 2 = ☐ → U
11 × 11 = ☐ → G	11 × 2 = ☐ → R	4 × 12 = ☐ → O
5 × 7 = ☐ → S	10 × 9 = ☐ → D	7 × 3 = ☐ → N

Scratch space:

CLUE 3 Rounding

> The stadium radar gun registered the suspect exit velocity, rounding the raw decimal speed to the nearest whole mile per hour.

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

E				E			E																	
130	2300	700	200	130	2900	30	130	7000	20	2000	50	7000	430	230	500	430	700	290	2000	1700	7000	1300	2900	1700

									E			E	E											
290	2000	50	130	500	7000	130	130	200	7000															

Round 134 to the nearest ten ☐ → **E**

Round 231 to the nearest ten ☐ → **T**

Round 6,875 to the nearest thousand ☐ → **S**

Round 665 to the nearest hundred ☐ → **I**

Round 505 to the nearest hundred ☐ → **R**

Round 2,938 to the nearest hundred ☐ → **N**

Round 1,294 to the nearest hundred ☐ → **U**

Round 16 to the nearest ten ☐ → **H**

Round 2,436 to the nearest thousand ☐ → **O**

Round 30 to the nearest ten ☐ → **C**

Round 161 to the nearest hundred ☐ → **D**

Round 2,341 to the nearest hundred ☐ → **V**

Round 291 to the nearest ten ☐ → **L**

Round 428 to the nearest ten ☐ → **A**

Round 51 to the nearest ten ☐ → **W**

Round 1,697 to the nearest hundred ☐ → **F**

Scratch space:

CLUE 4 Word problems

> The equipment manager carefully analyzed the bat storage log, solving a tricky inventory scenario to uncover a suspect detail.

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

A strand of

D								N	H		I		hair turned up at the
20	65	68	36	10	68	47	37			65		68	

scene.

Head Scout lined up 10 rows of 2 pine tar rags. How many pine tar rags in all?

Answer: ☐ → **D**

Head Scout lined up 3 rows of 12 baseball cleats. How many baseball cleats in all?

Answer: ☐ → **K**

Head Scout found 43 autographed balls yesterday and 25 more today. How many autographed balls in all?

Answer: ☐ → **R**

There were 95 pine tar rags. 30 were used up. How many pine tar rags are left?

Answer: ☐ → **A**

Head Scout lined up 2 rows of 5 pine tar rags. How many pine tar rags in all?

Answer: ☐ → **B**

Head Scout found 20 batting helmets yesterday and 17 more today. How many batting helmets in all?

Answer: ☐ → **W**

There were 68 leather gloves. 21 were used up. How many leather gloves are left?

Answer: ☐ → **O**

Scratch space:

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

> By dividing the stolen box of game tickets equally among the turnstile gates, the detective isolated 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:

6 ÷ 2 = ☐	72 ÷ 6 = ☐	12 ÷ 6 = ☐	14 ÷ 2 = ☐	50 ÷ 5 = ☐
16 ÷ 2 = ☐	10 ÷ 10 = ☐	6 ÷ 1 = ☐	35 ÷ 7 = ☐	132 ÷ 12 = ☐
20 ÷ 5 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain blazed a ninety mile fastball, then dented the locker door with an aluminum bat.
2. The villain blazed a ninety mile fastball, then smashed the lantern with a composite bat.
3. The villain threw a wicked curveball, then shattered the scoreboard with a bamboo bat.
4. The villain snuck in a sneaky changeup, then bunted away the trophy with an ash wood bat.
5. The villain blazed a ninety mile fastball, then shattered the scoreboard with a bamboo bat.
6. The villain threw a wicked curveball, then smashed the lantern with a composite bat.
7. The villain lofted a fluttery knuckleball, then dented the locker door with an aluminum bat.
8. The villain threw a wicked curveball, then bunted away the trophy with an ash wood bat.
9. The villain snuck in a sneaky changeup, then cracked the display case with a maple bat.
10. The villain blazed a ninety mile fastball, then cracked the display case with a maple bat.
11. The villain blazed a ninety mile fastball, then bunted away the trophy with an ash wood bat.
12. The villain dropped a heavy sinker pitch, then dented the locker door with an aluminum bat.

TEACHER / PARENT

Answer Key

The Diamond League Sabotage

Culprit: Zack Wheeler

Changeup Specialist · Maple Bat · Right Handed Thrower · Dark Brown Hair · Sunflower Seeds

Trail: Start 21 → Clue 1 15 → Clue 2 11 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SABOTEUR DOES NOT USE AN ASH WOOD BAT"

2007 + 3271 = 5278 (T) · 2543 + 4171 = 6714 (U) · 2608 + 3554 = 6162 (S) · 2997 + 6438 = 9435 (D) · 1828 + 1419 = 3247 (H) · 1960 + 2967 = 4927 (N) · 1569 + 3578 = 5147 (A) · 3429 + 3377 = 6806 (R) · 4941 + 3439 = 8380 (W) · 4897 + 4272 = 9169 (B) · 4382 + 2052 = 6434 (O) · 2705 + 2485 = 5190 (E)

Clue 2 (Multiplication facts (1-12)): "THE SUSPECT IS A RIGHT HANDED THROWER"

7 × 12 = 84 (T) · 11 × 8 = 88 (I) · 1 × 3 = 3 (H) · 6 × 6 = 36 (E) · 10 × 7 = 70 (W) · 6 × 2 = 12 (P) · 10 × 5 = 50 (C) · 2 × 7 = 14 (A) · 2 × 2 = 4 (U) · 11 × 11 = 121 (G) · 11 × 2 = 22 (R) · 4 × 12 = 48 (O) · 5 × 7 = 35 (S) · 10 × 9 = 90 (D) · 7 × 3 = 21 (N)

Clue 3 (Rounding): "EVIDENCE SHOWS A TRAIL OF SUNFLOWER SEEDS"

Round 134 to the nearest ten = 130 (E) · Round 231 to the nearest ten = 230 (T) · Round 6,875 to the nearest thousand = 7000 (S) · Round 665 to the nearest hundred = 700 (I) · Round 505 to the nearest hundred = 500 (R) · Round 2,938 to the nearest hundred = 2900 (N) · Round 1,294 to the nearest hundred = 1300 (U) · Round 16 to the nearest ten = 20 (H) · Round 2,436 to the nearest thousand = 2000 (O) · Round 30 to the nearest ten = 30 (C) · Round 161 to the nearest hundred = 200 (D) · Round 2,341 to the nearest hundred = 2300 (V) · Round 291 to the nearest ten = 290 (L) · Round 428 to the nearest ten = 430 (A) · Round 51 to the nearest ten = 50 (W) · Round 1,697 to the nearest hundred = 1700 (F)

Clue 4 (Word problems): "DARK BROWN HAIR"

Head Scout lined up 10 rows of 2 pine tar rags. How many pine tar rags in all? = 20 (D) · Head Scout lined up 3 rows of 12 baseball cleats. How many baseball cleats in all? = 36 (K) · Head Scout found 43 autographed balls yesterday and 25 more today. How many autographed balls in all? = 68 (R) · There were 95 pine tar rags. 30 were used up. How many pine tar rags are left? = 65 (A) · Head Scout lined up 2 rows of 5 pine tar rags. How many pine tar rags in all? = 10 (B) · Head Scout found 20 batting helmets yesterday and 17 more today. How many batting helmets in all? = 37 (W) · There were 68 leather gloves. 21 were used up. How many leather gloves are left? = 47 (O)

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

6 ÷ 2 = 3 · 72 ÷ 6 = 12 · 12 ÷ 6 = 2 · 14 ÷ 2 = 7 · 50 ÷ 5 = 10 · 16 ÷ 2 = 8 · 10 ÷ 10 = 1 · 6 ÷ 1 = 6 · 35 ÷ 7 = 5 · 132 ÷ 12 = 11 · 20 ÷ 5 = 4