



The Golden Basketball Mystery

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

Detective: _____ **Date:** _____

The championship buzzer sounded, but the legendary golden basketball was gone! The Court Crasher swiped it right off the trophy stand. Coach Barnes needs the Hoop Stars to solve the math puzzles, find the clues, and save the big game!

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 The Court 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	SHOE TECH	SHOOTING HAND	HAIR STYLE	GAME DISTRACTION
Kawhi	Half Court Buzz	Hover Mesh	Right Handed Shooter	Neon Green Afro	Glaring Shiny Trophy
Dame	Ankle Breaker Cross	Hover Mesh	Right Handed Shooter	Hot Pink Buzzcut	Loud Referee Whistle
LaMelo	Triple Pump Fake	Rocket Laces	Right Handed Shooter	Neon Green Afro	Glaring Shiny Trophy
Steph	Half Court Buzz	Springboard Soles	Right Handed Shooter	Bright Blue Mohawk	Squeaky Sneaker Sound
Giannis	Triple Pump Fake	Hover Mesh	Left Handed Shooter	Hot Pink Buzzcut	Squeaky Sneaker Sound
Nikola	Triple Pump Fake	LED Glow Trim	Right Handed Shooter	Neon Green Afro	Loud Referee Whistle
Kyrie	No Look Pass	Hover Mesh	Left Handed Shooter	Bright Blue Mohawk	Glaring Shiny Trophy
Jayson	Ankle Breaker Cross	Springboard Soles	Left Handed Shooter	Neon Green Afro	Glaring Shiny Trophy
Klay	Skyhook Dunk	Springboard Soles	Right Handed Shooter	Neon Green Afro	Squeaky Sneaker Sound
Ja	Triple Pump Fake	Rocket Laces	Left Handed Shooter	Neon Green Afro	Glaring Shiny Trophy
Luka	Triple Pump Fake	Springboard Soles	Left Handed Shooter	Neon Green Afro	Glaring Shiny Trophy
Russell	Skyhook Dunk	Hover Mesh	Right Handed Shooter	Bright Blue Mohawk	Loud Referee Whistle
Joel	No Look Pass	Springboard Soles	Left Handed Shooter	Neon Green Afro	Squeaky Sneaker Sound
Jimmy	Half Court Buzz	Rocket Laces	Right Handed Shooter	Neon Green Afro	Squeaky Sneaker Sound
James	Triple Pump Fake	LED Glow Trim	Left Handed Shooter	Neon Green Afro	Glaring Shiny Trophy
Paul	Half Court Buzz	Springboard Soles	Right Handed Shooter	Hot Pink Buzzcut	Squeaky Sneaker Sound
Anthony	Skyhook Dunk	Springboard Soles	Left Handed Shooter	Hot Pink Buzzcut	Glaring Shiny Trophy
Zion	Half Court Buzz	Rocket Laces	Left Handed Shooter	Neon Green Afro	Glaring Shiny Trophy
Devin	Half Court Buzz	Springboard Soles	Left Handed Shooter	Bright Blue Mohawk	Glaring Shiny Trophy
Kevin	Skyhook Dunk	Springboard Soles	Right Handed Shooter	Hot Pink Buzzcut	Loud Referee Whistle
Dearron	Half Court Buzz	Grip Pads	Right Handed Shooter	Neon Green Afro	Squeaky Sneaker Sound

CLUE 1 Place value

To find the first clue we need to read the broken digital scoreboard. The Court Crasher scrambled the digits. Look closely at the hundreds place to unlock the code.

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

T																T
60	30	3000	600	6000	3000	900	10	3000	300	600	200	50	6000	50	60	

30	900	8000	3000	80	3000	200	20	80	50	4000	60	300	5000	700	

What is the value of the 6 in 363? → **T**

What is the value of the 5 in 85,130? → **I**

What is the value of the 1 in 6,310? → **K**

What is the value of the 9 in 4,980? → **A**

What is the value of the 6 in 7,633? → **S**

What is the value of the 3 in 939? → **H**

What is the value of the 6 in 6,174? → **N**

What is the value of the 7 in 4,769? → **M**

What is the value of the 8 in 38,370? → **V**

What is the value of the 3 in 3,472? → **E**

What is the value of the 2 in 4,027? → **G**

What is the value of the 5 in 9,351? → **O**

What is the value of the 8 in 7,083? → **L**

What is the value of the 2 in 4,244? → **D**

What is the value of the 3 in 8,395? → **R**

What is the value of the 4 in 64,580? → **W**

Scratch space:

CLUE 2

Multiplication facts (1-12)

The gym floor is covered in messy footprints. They are in equal rows and columns. Multiply the rows of prints to find where the suspect ran.

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

T													T	T		
56	20	28	18	22	36	36	54	22	15	60	20	45	56	56	20	28
						T		T								T
49	54	36	36	99	22	56	20	56	20	28	22	120	36	28	48	56
20	54	15	7													

$8 \times 7 = \square \rightarrow$ T	$10 \times 6 = \square \rightarrow$ S	$4 \times 5 = \square \rightarrow$ H	
$12 \times 4 = \square \rightarrow$ F	$3 \times 6 = \square \rightarrow$ V	$7 \times 1 = \square \rightarrow$ D	$7 \times 7 = \square \rightarrow$ B
$5 \times 3 = \square \rightarrow$ N	$4 \times 7 = \square \rightarrow$ E	$9 \times 11 = \square \rightarrow$ W	$9 \times 6 = \square \rightarrow$ A
$9 \times 5 = \square \rightarrow$ O	$11 \times 2 = \square \rightarrow$ I	$3 \times 12 = \square \rightarrow$ L	
$12 \times 10 = \square \rightarrow$ R			

Scratch space:

CLUE 3

The arena radar tracked the runaway thief. The radar sensor only displays numbers rounded to the nearest ten. Round the speed to trace the path.

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

Round 2,907 to the nearest hundred $\rightarrow$ **T**

Round 112 to the nearest ten $\rightarrow$ **V**

Round 170 to the nearest ten $\rightarrow$ **B**

Round 2,817 to the nearest thousand → **E**

Round 92 to the nearest ten $\rightarrow$ **P**

Round 8,851 to the nearest thousand → **L**

Round 287 to the nearest ten $\rightarrow$ **0**

Round 70 to the nearest ten $\rightarrow$ **R**

Round 1,342 to the nearest hundred → **S**

Round 6,564 to the nearest thousand $\rightarrow$ **H**

Round 662 to the nearest hundred → **A**

Round 33 to the nearest ten → **N**

Round 4,294 to the nearest hundred $\rightarrow$

Round 53 to the nearest ten $\rightarrow$ **D**

Round 3,707 to the nearest hundred → **F**

Round 23 to the nearest ten $\rightarrow$ **Y**

Scratch space:

CLUE 4 Addition

We found a pile of dropped sports gear in the hallway. Add up all the basketballs and practice jerseys to count the evidence and reveal another secret.

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

W															
6050	8358	2455	7077	4646	3497	7172	8206	9264	8358	8358	3497	6800	2455	9264	7077
2062	8173	9264	6800	3497	7172	2062	7077	3497	8173	4809	8358	4809	7077	7077	7793

$3748 + 2302 = \square \rightarrow \text{W}$

$2905 + 4267 = \square \rightarrow \text{D}$

$2437 + 2372 = \square \rightarrow \text{H}$

$4677 + 2123 = \square \rightarrow \text{A}$

$714 + 1348 = \square \rightarrow \text{S}$

$4196 + 2881 = \square \rightarrow \text{O}$

$2315 + 2331 = \square \rightarrow \text{U}$

$1097 + 1358 = \square \rightarrow \text{F}$

$5662 + 2511 = \square \rightarrow \text{T}$

$2778 + 5015 = \square \rightarrow \text{P}$

$2392 + 1105 = \square \rightarrow \text{N}$

$3768 + 5496 = \square \rightarrow \text{R}$

$2780 + 5578 = \square \rightarrow \text{E}$

$2631 + 5575 = \square \rightarrow \text{G}$

Scratch space:

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

The team has a box of sports drinks to share equally among the players. Divide the drinks to find the last clue before the Court Crasher gets away.

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:

$12 \div 4 = \boxed{}$

$81 \div 9 = \boxed{}$

$6 \div 6 = \boxed{}$

$77 \div 7 = \boxed{}$

$96 \div 12 = \boxed{}$

$8 \div 4 = \boxed{}$

$28 \div 4 = \boxed{}$

$25 \div 5 = \boxed{}$

$30 \div 3 = \boxed{}$

$60 \div 10 = \boxed{}$

$12 \div 3 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain baffled the goalie with a triple pump fake, then bounced away on springboard soles.
2. The villain pulled off an ankle breaker cross, then zipped across the court with grip pads.
3. The villain baffled the goalie with a triple pump fake, then zoomed off using rocket laces.
4. The villain baffled the goalie with a triple pump fake, then escaped with flashing LED glow trim.
5. The villain used a skyhook dunk on the defense, then zipped across the court with grip pads.
6. The villain tricked everyone with a no look pass, then zipped across the court with grip pads.
7. The villain used a skyhook dunk on the defense, then zoomed off using rocket laces.
8. The villain tricked everyone with a no look pass, then escaped with flashing LED glow trim.
9. The villain shot a half court buzz shot, then zoomed off using rocket laces.
10. The villain shot a half court buzz shot, then escaped with flashing LED glow trim.
11. The villain tricked everyone with a no look pass, then floated out of the gym on hover mesh.
12. The villain pulled off an ankle breaker cross, then bounced away on springboard soles.

Answer Key

The Golden Basketball Mystery

Culprit: Jayson

Ankle Breaker Cross · Springboard Soles · Left Handed Shooter · Neon Green Afro · Glaring Shiny Trophy

Trail: Start 21 → Clue 1 19 → Clue 2 9 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE SNEAKERS DO NOT HAVE LED GLOW TRIM"

What is the value of the 6 in 363? = 60 (T) · What is the value of the 5 in 85,130? = 5000 (I) · What is the value of the 1 in 6,310? = 10 (K) · What is the value of the 9 in 4,980? = 900 (A) · What is the value of the 6 in 7,633? = 600 (S) · What is the value of the 3 in 939? = 30 (H) · What is the value of the 6 in 6,174? = 6000 (N) · What is the value of the 7 in 4,769? = 700 (M) · What is the value of the 8 in 38,370? = 8000 (V) · What is the value of the 3 in 3,472? = 3000 (E) · What is the value of the 2 in 4,027? = 20 (G) · What is the value of the 5 in 9,351? = 50 (O) · What is the value of the 8 in 7,083? = 80 (L) · What is the value of the 2 in 4,244? = 200 (D) · What is the value of the 3 in 8,395? = 300 (R) · What is the value of the 4 in 64,580? = 4000 (W)

Clue 2 (Multiplication facts (1-12)): "THE VILLAIN SHOT THE BALL WITH THEIR LEFT HAND"

$8 \times 7 = 56$ (T) · $10 \times 6 = 60$ (S) · $4 \times 5 = 20$ (H) · $12 \times 4 = 48$ (F) · $3 \times 6 = 18$ (V) · $7 \times 1 = 7$ (D) · $7 \times 7 = 49$ (B) · $5 \times 3 = 15$ (N) · $4 \times 7 = 28$ (E) · $9 \times 11 = 99$ (W) · $9 \times 6 = 54$ (A) · $9 \times 5 = 45$ (O) · $11 \times 2 = 22$ (I) · $3 \times 12 = 36$ (L) · $12 \times 10 = 120$ (R)

Clue 3 (Rounding): "THE SHINE OF THE TROPHY BLINDED THE VILLAIN"

Round 2,907 to the nearest hundred = 2900 (T) · Round 112 to the nearest ten = 110 (V) · Round 170 to the nearest ten = 170 (B) · Round 2,817 to the nearest thousand = 3000 (E) · Round 92 to the nearest ten = 90 (P) · Round 8,851 to the nearest thousand = 9000 (L) · Round 287 to the nearest ten = 290 (O) · Round 70 to the nearest ten = 70 (R) · Round 1,342 to the nearest hundred = 1300 (S) · Round 6,564 to the nearest thousand = 7000 (H) · Round 662 to the nearest hundred = 700 (A) · Round 33 to the nearest ten = 30 (N) · Round 4,294 to the nearest hundred = 4300 (I) · Round 53 to the nearest ten = 50 (D) · Round 3,707 to the nearest hundred = 3700 (F) · Round 23 to the nearest ten = 20 (Y)

Clue 4 (Addition): "WE FOUND GREEN AFRO STRANDS ON THE HOOP"

$3748 + 2302 = 6050$ (W) · $2905 + 4267 = 7172$ (D) · $2437 + 2372 = 4809$ (H) · $4677 + 2123 = 6800$ (A) · $714 + 1348 = 2062$ (S) · $4196 + 2881 = 7077$ (O) · $2315 + 2331 = 4646$ (U) · $1097 + 1358 = 2455$ (F) · $5662 + 2511 = 8173$ (T) · $2778 + 5015 = 7793$ (P) · $2392 + 1105 = 3497$ (N) · $3768 + 5496 = 9264$ (R) · $2780 + 5578 = 8358$ (E) · $2631 + 5575 = 8206$ (G)

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

$12 \div 4 = 3$ · $81 \div 9 = 9$ · $6 \div 6 = 1$ · $77 \div 7 = 11$ · $96 \div 12 = 8$ · $8 \div 4 = 2$ · $28 \div 4 = 7$ · $25 \div 5 = 5$ · $30 \div 3 = 10$ · $60 \div 10 = 6$ · $12 \div 3 = 4$