The Case of the Missing Diamond Trophy

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

Detective: _____ **Date:** _____

During the big championship game at Pixel Hoops Arena someone unlocked the safe and stole the shiny Diamond Trophy! The thief left behind glowing redstone dust and gear tracks. Detective Alex needs your help to crack the case.

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 Rogue Mech Hooper is _____

Possible suspects

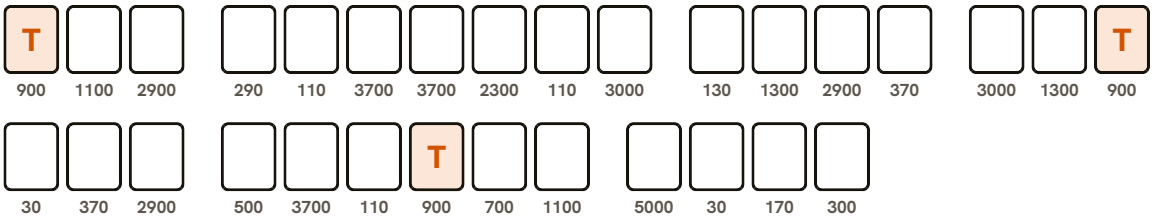
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	SIGNATURE MOVE	CYBER GEAR	SHOOTING HAND	ANTENNA STYLE	WEAKNESS
Kobe Redstone	Enderman Teleport Dunk	Turbo Boosters	Left Handed	Silver Dish Radar	Redstone Signal Jam
Chris Paulbot	Enderman Teleport Dunk	Lava Shield	Right Handed	Silver Dish Radar	Water Bucket Splash
Joel Embiidcraft	Laser Pass	Turbo Boosters	Right Handed	Copper Coil Loop	Splash Potion Confusion
Anthony Edwards	Diamond Shield Swish	Piston Legs	Right Handed	Silver Dish Radar	Redstone Signal Jam
Devin Bookerbot	Enderman Teleport Dunk	Piston Legs	Left Handed	Silver Dish Radar	Redstone Signal Jam
Luka Pixel	Laser Pass	Lava Shield	Left Handed	Silver Dish Radar	Redstone Signal Jam
Victor Wembanyama	Enderman Teleport Dunk	Magnet Arm	Right Handed	Silver Dish Radar	Redstone Signal Jam
Jayson Tatumcraft	Slime Bounce Shot	Piston Legs	Left Handed	Copper Coil Loop	Water Bucket Splash
Kevin Durantcraft	Slime Bounce Shot	Glitch Jump	Right Handed	Silver Dish Radar	Redstone Signal Jam
Giannis Block	Laser Pass	Lava Shield	Right Handed	Copper Coil Loop	Redstone Signal Jam
Shaq O Matic	Slime Bounce Shot	Piston Legs	Left Handed	Neon Blue Spikes	Water Bucket Splash
LeBron Bot	Redstone Slam	Turbo Boosters	Left Handed	Copper Coil Loop	Splash Potion Confusion
Jimmy Butlercraft	Laser Pass	Glitch Jump	Left Handed	Copper Coil Loop	Splash Potion Confusion
Steph Currycraft	Laser Pass	Magnet Arm	Right Handed	Silver Dish Radar	Redstone Signal Jam
James Hardenbot	Redstone Slam	Lava Shield	Right Handed	Neon Blue Spikes	Redstone Signal Jam
Caitlin Clarkbot	Redstone Slam	Turbo Boosters	Left Handed	Copper Coil Loop	Redstone Signal Jam
Kawhi Leonard	Enderman Teleport Dunk	Magnet Arm	Left Handed	Copper Coil Loop	Redstone Signal Jam
Nikola Jokicbot	Redstone Slam	Turbo Boosters	Right Handed	Silver Dish Radar	Splash Potion Confusion
Sabrina Ionescubot	Slime Bounce Shot	Glitch Jump	Left Handed	Neon Blue Spikes	Splash Potion Confusion
Aja Wilsoncraft	Redstone Slam	Piston Legs	Right Handed	Silver Dish Radar	Redstone Signal Jam
Sue Birdbot	Diamond Shield Swish	Lava Shield	Left Handed	Silver Dish Radar	Redstone Signal Jam

CLUE 1 Rounding

> The arena digital display was damaged so it only showed rounded estimates of the points scored during the break in

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



Round 911 to the nearest hundred ☐ → T

Round 294 to the nearest ten ☐ → V

Round 3,189 to the nearest thousand ☐ → N

Round 724 to the nearest hundred ☐ → C

Round 3,665 to the nearest hundred ☐ → L

Round 460 to the nearest hundred ☐ → G

Round 130 to the nearest ten ☐ → D

Round 111 to the nearest ten ☐ → I

Round 4,886 to the nearest thousand ☐ → J

Round 373 to the nearest ten ☐ → S

Round 2,856 to the nearest hundred ☐ → E

Round 274 to the nearest hundred ☐ → P

Round 1,061 to the nearest hundred ☐ → H

Round 26 to the nearest ten ☐ → U

Round 173 to the nearest ten ☐ → M

Round 1,306 to the nearest hundred ☐ → O

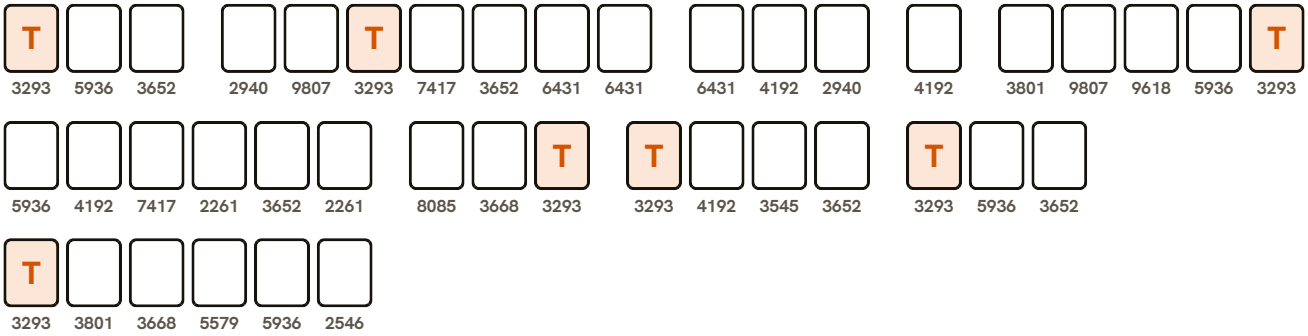
Round 2,295 to the nearest hundred ☐ → A

Scratch space:

CLUE 2 Addition

> Coach Steve added up the total redstone energy cells collected from all three practice courts

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



2188 + 1105 = ☐ → T	4507 + 5111 = ☐ → G	3853 + 4232 = ☐ → B
1628 + 2173 = ☐ → R	1873 + 2319 = ☐ → A	1414 + 2131 = ☐ → K
861 + 1685 = ☐ → Y	3908 + 2523 = ☐ → S	703 + 1558 = ☐ → D
3066 + 2513 = ☐ → P	4985 + 4822 = ☐ → I	3063 + 4354 = ☐ → N
2087 + 3849 = ☐ → H	1616 + 1324 = ☐ → W	1486 + 2166 = ☐ → E
1753 + 1915 = ☐ → O		

Scratch space:

CLUE 3 Subtraction

The security team subtracted the damaged basketballs from the inventory crate to see what was missing

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



10000 - 2947 = ☐ → T

3870 - 616 = ☐ → I

5536 - 318 = ☐ → D

5137 - 2858 = ☐ → A

9199 - 1007 = ☐ → Y

3585 - 1808 = ☐ → E

5732 - 1470 = ☐ → W

12470 - 4627 = ☐ → L

9724 - 3588 = ☐ → F

11736 - 4553 = ☐ → G

10570 - 1832 = ☐ → J

9700 - 4945 = ☐ → C

8479 - 3163 = ☐ → H

8482 - 2424 = ☐ → O

8462 - 4682 = ☐ → R

8232 - 3808 = ☐ → M

4071 - 1998 = ☐ → B

5940 - 2428 = ☐ → S

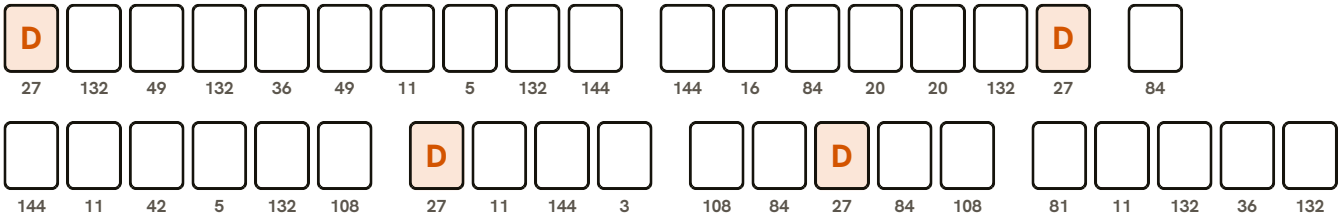
9728 - 2072 = ☐ → N

Scratch space:

CLUE 4 Multiplication facts (1-12)

> The referee bot checked the grid pattern of floor blocks by multiplying rows and columns

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



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

Scratch space:

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

> The arena staff divided the remaining net crystals equally among all the basketball hoops

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 ÷ 6 = ☐	42 ÷ 7 = ☐	80 ÷ 8 = ☐	24 ÷ 6 = ☐	81 ÷ 9 = ☐
10 ÷ 10 = ☐	8 ÷ 1 = ☐	44 ÷ 4 = ☐	20 ÷ 4 = ☐	56 ÷ 8 = ☐
21 ÷ 7 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain scored over defender with diamond shield swish, then snatched the ball away using magnet arm.
2. The villain blasted a fast break using laser pass, then snatched the ball away using magnet arm.
3. The villain leaped clear over defender using slime bounce shot, then warped high into the air with glitch jump.
4. The villain blasted a fast break using laser pass, then soared over the defense with piston legs.
5. The villain dunked from the free throw line with redstone slam, then snatched the ball away using magnet arm.
6. The villain scored over defender with diamond shield swish, then soared over the defense with piston legs.
7. The villain scored over defender with diamond shield swish, then warped high into the air with glitch jump.
8. The villain leaped clear over defender using slime bounce shot, then snatched the ball away using magnet arm.
9. The villain scored over defender with diamond shield swish, then blocked all oncoming shots using lava shield.
10. The villain warped through the hoop using enderman teleport dunk, then snatched the ball away using magnet arm.
11. The villain dunked from the free throw line with redstone slam, then blocked all oncoming shots using lava shield.
12. The villain dunked from the free throw line with redstone slam, then soared over the defense with piston legs.

TEACHER / PARENT

Answer Key

The Case of the Missing Diamond Trophy

Culprit: Aja Wilsoncraft

Redstone Slam · Piston Legs · Right Handed · Silver Dish Radar · Redstone Signal Jam

Trail: Start 21 → Clue 1 18 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE VILLAIN DOES NOT USE GLITCH JUMP"

Round 911 to the nearest hundred = 900 (T) · Round 294 to the nearest ten = 290 (V) · Round 3,189 to the nearest thousand = 3000 (N) · Round 724 to the nearest hundred = 700 (C) · Round 3,665 to the nearest hundred = 3700 (L) · Round 460 to the nearest hundred = 500 (G) · Round 130 to the nearest ten = 130 (D) · Round 111 to the nearest ten = 110 (I) · Round 4,886 to the nearest thousand = 5000 (J) · Round 373 to the nearest ten = 370 (S) · Round 2,856 to the nearest hundred = 2900 (E) · Round 274 to the nearest hundred = 300 (P) · Round 1,061 to the nearest hundred = 1100 (H) · Round 26 to the nearest ten = 30 (U) · Round 173 to the nearest ten = 170 (M) · Round 1,306 to the nearest hundred = 1300 (O) · Round 2,295 to the nearest hundred = 2300 (A)

Clue 2 (Addition): "THE WITNESS SAW A RIGHT HANDED BOT TAKE THE TROPHY"

2188 + 1105 = 3293 (T) · 4507 + 5111 = 9618 (G) · 3853 + 4232 = 8085 (B) · 1628 + 2173 = 3801 (R) · 1873 + 2319 = 4192 (A) · 1414 + 2131 = 3545 (K) · 861 + 1685 = 2546 (Y) · 3908 + 2523 = 6431 (S) · 703 + 1558 = 2261 (D) · 3066 + 2513 = 5579 (P) · 4985 + 4822 = 9807 (I) · 3063 + 4354 = 7417 (N) · 2087 + 3849 = 5936 (H) · 1616 + 1324 = 2940 (W) · 1486 + 2166 = 3652 (E) · 1753 + 1915 = 3668 (O)

Clue 3 (Subtraction): "THE MECH WAS FAINTED BY REDSTONE SIGNAL JAM"

10000 - 2947 = 7053 (T) · 3870 - 616 = 3254 (I) · 5536 - 318 = 5218 (D) · 5137 - 2858 = 2279 (A) · 9199 - 1007 = 8192 (Y) · 3585 - 1808 = 1777 (E) · 5732 - 1470 = 4262 (W) · 12470 - 4627 = 7843 (L) · 9724 - 3588 = 6136 (F) · 11736 - 4553 = 7183 (G) · 10570 - 1832 = 8738 (J) · 9700 - 4945 = 4755 (C) · 8479 - 3163 = 5316 (H) · 8482 - 2424 = 6058 (O) · 8462 - 4682 = 3780 (R) · 8232 - 3808 = 4424 (M) · 4071 - 1998 = 2073 (B) · 5940 - 2428 = 3512 (S) · 9728 - 2072 = 7656 (N)

Clue 4 (Multiplication facts (1-12)): "DETECTIVES SNAGGED A SILVER DISH RADAR PIECE"

3 × 9 = 27 (D) · 1 × 11 = 11 (I) · 12 × 9 = 108 (R) · 10 × 2 = 20 (G) · 7 × 6 = 42 (L) · 9 × 9 = 81 (P) · 7 × 12 = 84 (A) · 1 × 5 = 5 (V) · 12 × 3 = 36 (C) · 12 × 11 = 132 (E) · 7 × 7 = 49 (T) · 1 × 3 = 3 (H) · 2 × 8 = 16 (N) · 12 × 12 = 144 (S)

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

12 ÷ 6 = 2 · 42 ÷ 7 = 6 · 80 ÷ 8 = 10 · 24 ÷ 6 = 4 · 81 ÷ 9 = 9 · 10 ÷ 10 = 1 · 8 ÷ 1 = 8 · 44 ÷ 4 = 11 · 20 ÷ 4 = 5 · 56 ÷ 8 = 7 · 21 ÷ 7 = 3