The Mystery of the Enchanted Basketball

Grade 6 math · Multiplication, Percentages, Exponents, Order of operations, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

Someone stole the championship trophy right before the big basketball game at the Glitter Dome! The culprit left behind magical unicorn dust on the court. Help Coach Sparkle solve the clues and identify the culprit before tip-off!

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 Glitter Thief is _____

Possible suspects

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

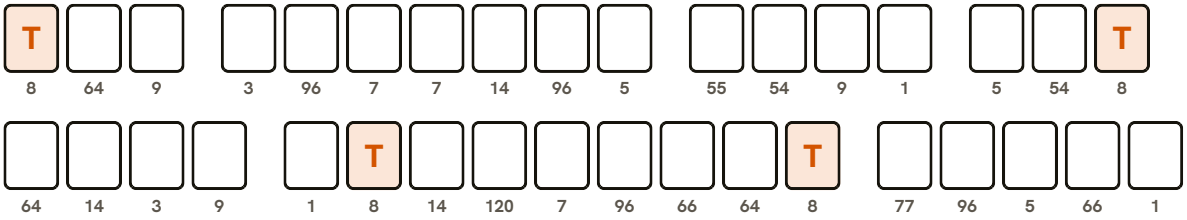
NAME	BASKETBALL MOVE	UNICORN GEAR	DOMINANT HAND	MANE COLOR	DISLIKE
Shaquille O'Neal	Horn Dribble	Star Shoes	Left-Handed	Pink Mane	Pop Music
Steph Curry	Rainbow Pass	Comet Boost	Right-Handed	Golden Mane	Loud Whistles
Luka Doncic	Horn Dribble	Prism Glow	Right-Handed	Pink Mane	Pop Music
Candace Parker	Magic Hoop	Starlight Wings	Left-Handed	Pink Mane	Loud Whistles
Giannis Antetokounmpo	Sparkle Slam	Comet Boost	Right-Handed	Golden Mane	Loud Whistles
Elena Delle Donne	Horn Dribble	Starlight Wings	Left-Handed	Purple Mane	Wet Courts
A'ja Wilson	Magic Hoop	Comet Boost	Right-Handed	Pink Mane	Loud Whistles
Paige Bueckers	Magic Hoop	Star Shoes	Left-Handed	Golden Mane	Loud Whistles
Devin Booker	Cloud Jump	Prism Glow	Left-Handed	Purple Mane	Wet Courts
Sabrina Ionescu	Rainbow Pass	Starlight Wings	Right-Handed	Purple Mane	Pop Music
Angel Reese	Sparkle Slam	Prism Glow	Right-Handed	Golden Mane	Wet Courts
Breanna Stewart	Sparkle Slam	Star Shoes	Right-Handed	Golden Mane	Loud Whistles
Diana Taurasi	Cloud Jump	Comet Boost	Right-Handed	Purple Mane	Loud Whistles
Skylar Diggins	Magic Hoop	Glitter Shield	Right-Handed	Golden Mane	Wet Courts
Napheesa Collier	Rainbow Pass	Starlight Wings	Right-Handed	Golden Mane	Loud Whistles
Caitlin Clark	Magic Hoop	Star Shoes	Right-Handed	Golden Mane	Pop Music
Kelsey Plum	Rainbow Pass	Starlight Wings	Right-Handed	Purple Mane	Loud Whistles
Anthony Davis	Rainbow Pass	Glitter Shield	Right-Handed	Golden Mane	Loud Whistles
LeBron James	Horn Dribble	Star Shoes	Left-Handed	Golden Mane	Loud Whistles
Zion Williamson	Horn Dribble	Comet Boost	Right-Handed	Purple Mane	Pop Music
Trae Young	Horn Dribble	Glitter Shield	Right-Handed	Purple Mane	Pop Music

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CLUE 1 Multiplication facts (1-12)

Coach Sparkle counts the racks of glitter basketballs set up in equal rows across the gym floor.

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



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

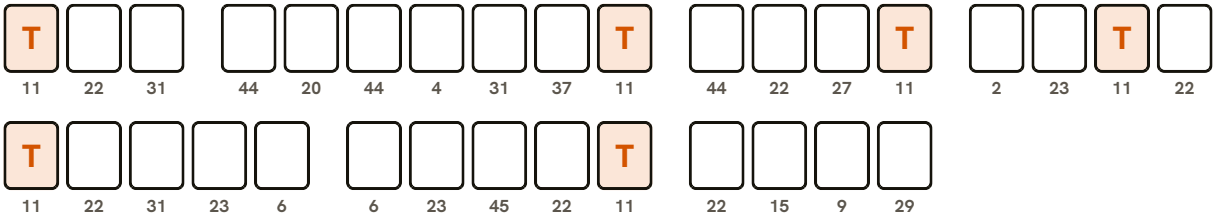
Scratch space:

CLUE 2

Percentages

The arena scoreboard displays the stat breakdown showing free throw percentages from tonight's game.

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



5% of 220 = ☐ → T

5% of 80 = ☐ → P

60% of 10 = ☐ → R

50% of 54 = ☐ → O

25% of 148 = ☐ → C

25% of 124 = ☐ → E

50% of 58 = ☐ → D

50% of 18 = ☐ → N

25% of 92 = ☐ → I

20% of 110 = ☐ → H

10% of 200 = ☐ → U

20% of 75 = ☐ → A

50% of 4 = ☐ → W

50% of 90 = ☐ → G

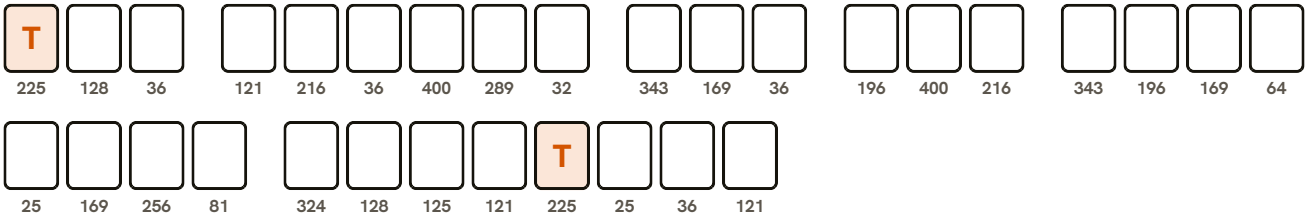
10% of 440 = ☐ → S

Scratch space:

CLUE 3 Exponents

> Sparkle Stadium's magical cheer energy multiplies rapidly in powers as the crowd stomps their feet.

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



15^2 = ☐ → T

14^2 = ☐ → R

16^2 = ☐ → U

18^2 = ☐ → W

2^5 = ☐ → Y

6^2 = ☐ → E

20^2 = ☐ → A

5^2 = ☐ → L

3^4 = ☐ → D

4^3 = ☐ → M

17^2 = ☐ → K

6^3 = ☐ → N

11^2 = ☐ → S

2^7 = ☐ → H

7^3 = ☐ → F

5^3 = ☐ → I

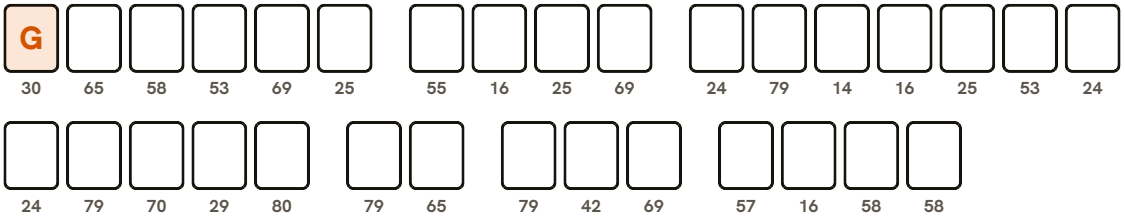
13^2 = ☐ → O

Scratch space:

CLUE 4 Order of operations

The assistant coach uses a strict step-by-step scoring formula to calculate practice drill points.

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



12 + 3 × 6 = ☐ → G

6 × 5 - 16 = ☐ → R

11 × 6 - 1 = ☐ → O

10 × 11 - 30 = ☐ → K

10 + 3 × 5 = ☐ → N

33 + 4 × 9 = ☐ → E

7 + 7 × 9 = ☐ → U

10 × 4 - 24 = ☐ → A

5 × 11 - 13 = ☐ → H

10 × 7 - 15 = ☐ → M

9 × 8 - 14 = ☐ → L

69 + 5 × 2 = ☐ → T

9 + 3 × 5 = ☐ → S

11 × 7 - 24 = ☐ → D

17 + 3 × 4 = ☐ → C

12 + 9 × 5 = ☐ → B

Scratch space:

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

> The team captain splits the leftover star trophies evenly among all the players in the locker room.

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:

35 ÷ 7 = ☐ | 22 ÷ 11 = ☐ | 12 ÷ 3 = ☐ | 48 ÷ 6 = ☐ | 72 ÷ 8 = ☐

70 ÷ 7 = ☐ | 24 ÷ 8 = ☐ | 120 ÷ 10 = ☐ | 60 ÷ 10 = ☐ | 22 ÷ 2 = ☐

14 ÷ 2 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain used a rainbow pass, then used comet boost.
2. The villain made a sparkle slam, then used comet boost.
3. The villain did a cloud jump, then activated glitter shield.
4. The villain made a sparkle slam, then laced up star shoes.
5. The villain used a rainbow pass, then activated glitter shield.
6. The villain shot a magic hoop, then laced up star shoes.
7. The villain made a sparkle slam, then flapped starlight wings.
8. The villain showed a horn dribble, then turned on prism glow.
9. The villain shot a magic hoop, then used comet boost.
10. The villain did a cloud jump, then flapped starlight wings.
11. The villain showed a horn dribble, then laced up star shoes.
12. The villain used a rainbow pass, then laced up star shoes.

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TEACHER / PARENT

Answer Key

The Mystery of the Enchanted Basketball

Culprit: Steph Curry

Rainbow Pass · Comet Boost · Right-Handed · Golden Mane · Loud Whistles

Trail: Start 21 → Clue 1 16 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT HAVE STARLIGHT WINGS"

4 × 2 = 8 (T) · 11 × 5 = 55 (D) · 1 × 9 = 9 (E) · 7 × 1 = 7 (L) · 2 × 7 = 14 (A) · 3 × 1 = 3 (V) · 8 × 12 = 96 (I) · 11 × 7 = 77 (W) · 6 × 9 = 54 (O) · 8 × 8 = 64 (H) · 10 × 12 = 120 (R) · 6 × 11 = 66 (G) · 5 × 1 = 5 (N) · 1 × 1 = 1 (S)

Clue 2 (Percentages): "THE SUSPECT SHOT WITH THEIR RIGHT HAND"

5% of 220 = 11 (T) · 5% of 80 = 4 (P) · 60% of 10 = 6 (R) · 50% of 54 = 27 (O) · 25% of 148 = 37 (C) · 25% of 124 = 31 (E) · 50% of 58 = 29 (D) · 50% of 18 = 9 (N) · 25% of 92 = 23 (I) · 20% of 110 = 22 (H) · 10% of 200 = 20 (U) · 20% of 75 = 15 (A) · 50% of 4 = 2 (W) · 50% of 90 = 45 (G) · 10% of 440 = 44 (S)

Clue 3 (Exponents): "THE SNEAKY FOE RAN FROM LOUD WHISTLES"

15^2 = 225 (T) · 14^2 = 196 (R) · 16^2 = 256 (U) · 18^2 = 324 (W) · 2^5 = 32 (Y) · 6^2 = 36 (E) · 20^2 = 400 (A) · 5^2 = 25 (L) · 3^4 = 81 (D) · 4^3 = 64 (M) · 17^2 = 289 (K) · 6^3 = 216 (N) · 11^2 = 121 (S) · 2^7 = 128 (H) · 7^3 = 343 (F) · 5^3 = 125 (I) · 13^2 = 169 (O)

Clue 4 (Order of operations): "GOLDEN MANE STRANDS STUCK TO THE BALL"

12 + 3 × 6 = 30 (G) · 6 × 5 - 16 = 14 (R) · 11 × 6 - 1 = 65 (O) · 10 × 11 - 30 = 80 (K) · 10 + 3 × 5 = 25 (N) · 33 + 4 × 9 = 69 (E) · 7 + 7 × 9 = 70 (U) · 10 × 4 - 24 = 16 (A) · 5 × 11 - 13 = 42 (H) · 10 × 7 - 15 = 55 (M) · 9 × 8 - 14 = 58 (L) · 69 + 5 × 2 = 79 (T) · 9 + 3 × 5 = 24 (S) · 11 × 7 - 24 = 53 (D) · 17 + 3 × 4 = 29 (C) · 12 + 9 × 5 = 57 (B)

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

35 ÷ 7 = 5 · 22 ÷ 11 = 2 · 12 ÷ 3 = 4 · 48 ÷ 6 = 8 · 72 ÷ 8 = 9 · 70 ÷ 7 = 10 · 24 ÷ 8 = 3 · 120 ÷ 10 = 12 · 60 ÷ 10 = 6 · 22 ÷ 2 = 11 · 14 ÷ 2 = 7