



The Case of the Golden Soccer Ball

Grade 3 math · Rounding, Word problems, Bar models, Addition, Division · Reading level grades 3-4

Detective: _____ Date: _____

The Golden Soccer Ball has vanished right before the big tournament! The Head Coach needs your help. One of the star players has taken it, and we must find out who before the opening whistle blows.

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 cleat burglar 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	LUCKY GEAR	PREFERRED FOOT	HAIR STYLE	BIG DISTRACTION
Lucy Bronze	diving save	laser headband	left footed	orange headband hair	squeaky toy
Robert Lewandowski	rocket shot	silver whistle	left footed	orange headband hair	shiny trophy
Antoine Griezmann	rocket shot	silver whistle	right footed	orange headband hair	shiny trophy
Jamal Musiala	power header	laser headband	left footed	orange headband hair	shiny trophy
Luka Modric	speed dribble	neon cleats	left footed	spiky green hair	muddy grass
Virgil van Dijk	diving save	laser headband	left footed	spiky green hair	squeaky toy
Harry Kane	diving save	laser headband	left footed	braided blue hair	squeaky toy
Jude Bellingham	bicycle kick	neon cleats	left footed	spiky green hair	shiny trophy
Bukayo Saka	rocket shot	silver whistle	right footed	braided blue hair	squeaky toy
Sam Kerr	rocket shot	golden shin guards	left footed	orange headband hair	shiny trophy
Alphonso Davies	power header	golden shin guards	left footed	orange headband hair	shiny trophy
Lionel Messi	rocket shot	golden shin guards	left footed	orange headband hair	muddy grass
Mo Salah	rocket shot	neon cleats	left footed	orange headband hair	squeaky toy
Kevin De Bruyne	diving save	golden shin guards	left footed	orange headband hair	shiny trophy
Kylian Mbappe	bicycle kick	neon cleats	right footed	braided blue hair	squeaky toy
Alex Morgan	power header	silver whistle	left footed	braided blue hair	shiny trophy
Christian Pulisic	power header	laser headband	right footed	braided blue hair	squeaky toy
Marcus Rashford	speed dribble	grip gloves	right footed	spiky green hair	shiny trophy
Erling Haaland	diving save	golden shin guards	right footed	braided blue hair	shiny trophy
Cristiano Ronaldo	speed dribble	silver whistle	right footed	orange headband hair	shiny trophy
Son Heungmin	bicycle kick	laser headband	left footed	braided blue hair	squeaky toy

CLUE 1

The coach draws a bar model on the tactics board. It compares the teams training hours to help us find the first clue.

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

Round 82 to the nearest ten $\rightarrow$ **T**

Round 320 to the nearest hundred $\rightarrow$

Round 66 to the nearest ten $\rightarrow$ **L**

Round 6,489 to the nearest thousand → **B**

Round 51 to the nearest ten $\rightarrow$ **K**

Round 173 to the nearest hundred $\rightarrow$ **N**

Round 4,081 to the nearest thousand $\rightarrow$ **S**

Round 7,910 to the nearest thousand → **A**

Round 535 to the nearest hundred $\rightarrow$ **W**

Round 4,989 to the nearest thousand → **E**

Round 41 to the nearest ten $\rightarrow$ **R**

Round 9,200 to the nearest thousand → **D**

Round 551 to the nearest hundred $\rightarrow$ **H**

Scratch space:

Scratch space:

CLUE 3

Bar models

The big stadium scoreboard is glitching. It only shows rounded numbers for the ticket sales, but it holds a secret.

Draw a bar model to solve each word problem, then write its letter in the boxes to fill in the missing word.

The S stops the cleat burglar

5 12 22 24 20 21 26 7 18 12 20

One part is 1 and the other part is 4. What is the whole?

draw a bar model

Answer: → S

The whole is 27. One part is 7. What is the other part?

draw a bar model

Answer: → Y

One part is 9 and the other part is 17. What is the whole?

draw a bar model

Answer: → R

One bar shows 19 and the other shows 1. How much longer is the first bar?

draw a bar model

Answer: → P

One bar shows 17 and the other shows 5. How much longer is the first bar?

draw a bar model

Answer: → H

One bar shows 26 and the other shows 4. How much longer is the first bar?

draw a bar model

Answer: → I

One bar shows 36 and the other shows 15. How much longer is the first bar?

draw a bar model

Answer: → T

One part is 15 and the other part is 9. What is the whole?

draw a bar model

Answer: → N

One part is 3 and the other part is 4. What is the whole?

draw a bar model

Answer:

→

CLUE 4 Addition

We need to add up all the soccer balls in the equipment bin. The total sum will unlock the next locker room clue.

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

O 267	351	761	323	529	461	457	461	761	488	389	761	323	488	457	761	536	351
426	357	536	323	529	602	267	602	457	461	323	461	602					

$106 + 161 = \square \rightarrow \boxed{\text{O}}$

$291 + 197 = \square \rightarrow \boxed{\text{D}}$

$219 + 132 = \square \rightarrow \boxed{\text{R}}$

$234 + 155 = \square \rightarrow \boxed{\text{B}}$

$412 + 349 = \square \rightarrow \boxed{\text{A}}$

$152 + 274 = \square \rightarrow \boxed{\text{C}}$

$117 + 240 = \square \rightarrow \boxed{\text{L}}$

$202 + 255 = \square \rightarrow \boxed{\text{H}}$

$166 + 295 = \square \rightarrow \boxed{\text{E}}$

$337 + 192 = \square \rightarrow \boxed{\text{G}}$

$283 + 253 = \square \rightarrow \boxed{\text{I}}$

$167 + 156 = \square \rightarrow \boxed{\text{N}}$

$197 + 405 = \square \rightarrow \boxed{\text{T}}$

Scratch space:

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

The referee needs to divide thirty training cones equally among five practice drills 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:

$16 \div 8 = \boxed{}$

$24 \div 4 = \boxed{}$

$5 \div 5 = \boxed{}$

$16 \div 2 = \boxed{}$

$5 \div 1 = \boxed{}$

$36 \div 9 = \boxed{}$

$36 \div 3 = \boxed{}$

$60 \div 6 = \boxed{}$

$24 \div 8 = \boxed{}$

$63 \div 7 = \boxed{}$

$14 \div 2 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain blasts a rocket shot into the sky, then flashes their golden shin guards.
2. The villain makes a spectacular diving save, then flashes their golden shin guards.
3. The villain performs a super speed dribble, then flashes their golden shin guards.
4. The villain flips into a wild bicycle kick, then runs away wearing neon cleats.
5. The villain performs a super speed dribble, then runs away wearing neon cleats.
6. The villain blasts a rocket shot into the sky, then blows a loud silver whistle.
7. The villain blasts a rocket shot into the sky, then turns on a glowing laser headband.
8. The villain leaps for a massive power header, then runs away wearing neon cleats.
9. The villain makes a spectacular diving save, then blows a loud silver whistle.
10. The villain performs a super speed dribble, then blows a loud silver whistle.
11. The villain leaps for a massive power header, then flashes their golden shin guards.
12. The villain leaps for a massive power header, then blows a loud silver whistle.

Answer Key

The Case of the Golden Soccer Ball

Culprit: Alphonso Davies

power header · golden shin guards · left footed · orange headband hair · shiny trophy

Trail: Start 21 → Clue 1 15 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE SNEAK DOES NOT WEAR A LASER HEADBAND"

Round 82 to the nearest ten = 80 (T) · Round 320 to the nearest hundred = 300 (O) · Round 66 to the nearest ten = 70 (L) · Round 6,489 to the nearest thousand = 6000 (B) · Round 51 to the nearest ten = 50 (K) · Round 173 to the nearest hundred = 200 (N) · Round 4,081 to the nearest thousand = 4000 (S) · Round 7,910 to the nearest thousand = 8000 (A) · Round 535 to the nearest hundred = 500 (W) · Round 4,989 to the nearest thousand = 5000 (E) · Round 41 to the nearest ten = 40 (R) · Round 9,200 to the nearest thousand = 9000 (D) · Round 551 to the nearest hundred = 600 (H)

Clue 2 (Word problems): "THE SNEAK KICKS WITH THEIR LEFT FOOT"

There were 42 tickets. 28 were used. How many are left? = 14 (T) · There were 55 tickets. 3 were used. How many are left? = 52 (R) · A detective found 22 clues on Monday and 4 more on Tuesday. How many clues in all? = 26 (L) · A detective found 32 clues on Monday and 25 more on Tuesday. How many clues in all? = 57 (O) · A detective found 26 clues on Monday and 4 more on Tuesday. How many clues in all? = 30 (E) · There were 30 tickets. 13 were used. How many are left? = 17 (C) · There were 61 tickets. 5 were used. How many are left? = 56 (F) · A detective found 26 clues on Monday and 39 more on Tuesday. How many clues in all? = 65 (N) · There were 62 tickets. 33 were used. How many are left? = 29 (K) · A detective found 7 clues on Monday and 40 more on Tuesday. How many clues in all? = 47 (I) · There were 18 tickets. 10 were used. How many are left? = 8 (A) · There were 79 tickets. 10 were used. How many are left? = 69 (W) · A detective found 48 clues on Monday and 32 more on Tuesday. How many clues in all? = 80 (S) · There are 2 boxes with 6 clues in each box. How many clues in all? = 12 (H)

Clue 3 (Bar models): "SHINY TROPHY"

One part is 1 and the other part is 4. What is the whole? = 5 (S) · The whole is 27. One part is 7. What is the other part? = 20 (Y) · One part is 9 and the other part is 17. What is the whole? = 26 (R) · One bar shows 19 and the other shows 1. How much longer is the first bar? = 18 (P) · One bar shows 17 and the other shows 5. How much longer is the first bar? = 12 (H) · One bar shows 26 and the other shows 4. How much longer is the first bar? = 22 (I) · One bar shows 36 and the other shows 15. How much longer is the first bar? = 21 (T) · One part is 15 and the other part is 9. What is the whole? = 24 (N) · One part is 3 and the other part is 4. What is the whole? = 7 (O)

Clue 4 (Addition): "ORANGE HEADBAND HAIR CLING TO THE NET"

$106 + 161 = 267$ (O) · $291 + 197 = 488$ (D) · $219 + 132 = 351$ (R) · $234 + 155 = 389$ (B) · $412 + 349 = 761$ (A) · $152 + 274 = 426$ (C) · $117 + 240 = 357$ (L) · $202 + 255 = 457$ (H) · $166 + 295 = 461$ (E) · $337 + 192 = 529$ (G) · $283 + 253 = 536$ (I) · $167 + 156 = 323$ (N) · $197 + 405 = 602$ (T)

Clue 5 (Division facts (1-12)): surviving statement is box 11 → Alphonso Davies

$16 \div 8 = 2$ · $24 \div 4 = 6$ · $5 \div 5 = 1$ · $16 \div 2 = 8$ · $5 \div 1 = 5$ · $36 \div 9 = 4$ · $36 \div 3 = 12$ · $60 \div 6 = 10$ · $24 \div 8 = 3$ · $63 \div 7 = 9$ · $14 \div 2 = 7$