The Great Purr-maid Soccer Mystery

Grade 2 math · Place value, Addition, Subtraction, Skip counting, Missing addends · Reading level grades 1-2

Detective: _____ **Date:** _____

The shiny golden soccer trophy disappeared right before the big game. Coach Calico needs your detective skills to find the guilty player before kickoff.

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 soccer snatcher is _____

Possible suspects

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

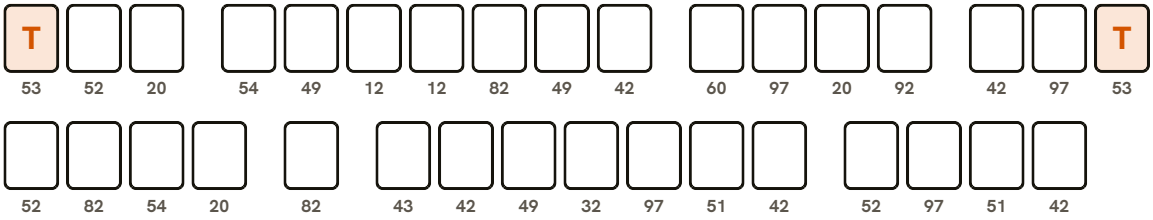
NAME	KICK STYLE	SPARKLE TRAIT	GLOVE STYLE	TAIL COLOR	FAVORITE SNACK
Cristiano Purr-naldo	Star Shoot	Mermaid Tail	Left Glove	Golden Yellow	Tuna Crunch
Sam Kerr-purr	Purr Strike	Unicorn Horn	Left Glove	Ocean Blue	Tuna Crunch
Lieke Martens-purr	Bubble Kick	Shiny Wings	Right Glove	Bright Pink	Berry Pop
Lucy Bronze-tail	Purr Strike	Shiny Wings	Right Glove	Golden Yellow	Berry Pop
Chloe Kelly-tail	Rainbow Pass	Shiny Wings	Right Glove	Golden Yellow	Tuna Crunch
Beth Mead-paw	Purr Strike	Cat Ears	Left Glove	Golden Yellow	Tuna Crunch
Abby Wambach-paw	Purr Strike	Mermaid Tail	Left Glove	Ocean Blue	Berry Pop
Sunil Chhetri-tail	Wave Dash	Glitter Whiskers	Left Glove	Ocean Blue	Tuna Crunch
Wendie Renard-paw	Star Shoot	Unicorn Horn	Right Glove	Golden Yellow	Berry Pop
Marta Whiskers	Wave Dash	Shiny Wings	Right Glove	Ocean Blue	Tuna Crunch
Megan Rapinoe-tail	Wave Dash	Shiny Wings	Left Glove	Bright Pink	Tuna Crunch
Debinha Star	Bubble Kick	Shiny Wings	Left Glove	Golden Yellow	Berry Pop
Rose Lavelle-horn	Star Shoot	Mermaid Tail	Right Glove	Ocean Blue	Tuna Crunch
Christine Sinclair-fin	Wave Dash	Cat Ears	Left Glove	Ocean Blue	Berry Pop
Mia Hamm-ster	Wave Dash	Mermaid Tail	Left Glove	Ocean Blue	Tuna Crunch
Carli Lloyd-cat	Purr Strike	Mermaid Tail	Left Glove	Bright Pink	Tuna Crunch
Pele Paws	Purr Strike	Shiny Wings	Left Glove	Bright Pink	Kelp Treats
Lionel Meow-ssi	Purr Strike	Mermaid Tail	Right Glove	Bright Pink	Tuna Crunch
Vivianne Miedema-cat	Rainbow Pass	Glitter Whiskers	Left Glove	Ocean Blue	Tuna Crunch
Asisat Oshoala-fin	Rainbow Pass	Cat Ears	Right Glove	Golden Yellow	Tuna Crunch
Trinity Rodman-tail	Purr Strike	Glitter Whiskers	Left Glove	Ocean Blue	Tuna Crunch

make your own at mathcrackers.com

CLUE 1 Place value

You inspect the tens and ones blocks on the equipment counter to reveal the first secret note.

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



What number has 5 tens and 3 ones? ☐ → T

What number has 5 tens and 2 ones? ☐ → H

What number has 5 tens and 1 one? ☐ → R

What number has 4 tens and 2 ones? ☐ → N

What number has 4 tens and 9 ones? ☐ → I

What number has 6 tens and 0 ones? ☐ → D

What number has 9 tens and 7 ones? ☐ → O

What number has 2 tens and 0 ones? ☐ → E

What number has 1 ten and 2 ones? ☐ → L

What number has 3 tens and 2 ones? ☐ → C

What number has 4 tens and 3 ones? ☐ → U

What number has 5 tens and 4 ones? ☐ → V

What number has 8 tens and 2 ones? ☐ → A

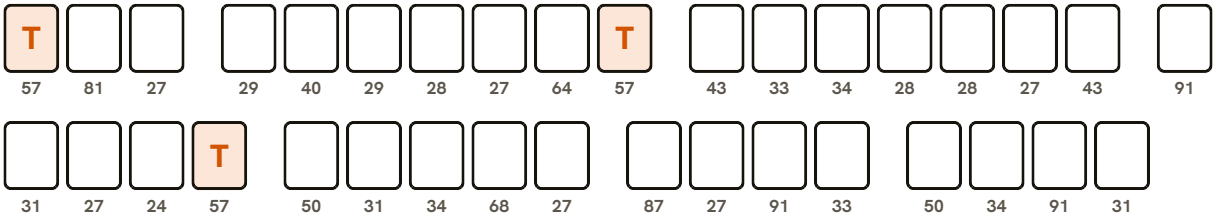
What number has 9 tens and 2 ones? ☐ → S

Scratch space:

CLUE 2 Addition

You add up the soccer balls collected on the field to uncover another piece of evidence.

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



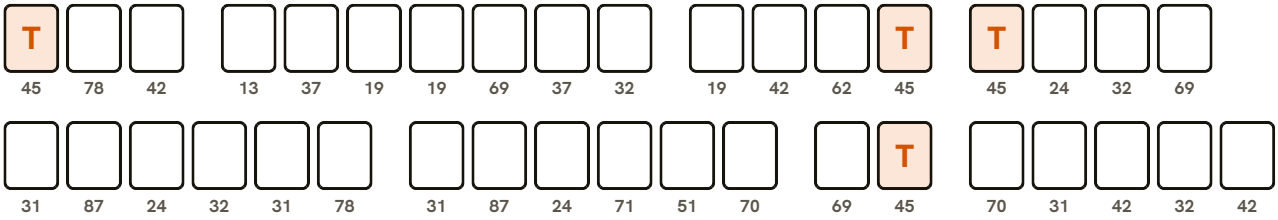
17 + 40 = ☐ → T	17 + 16 = ☐ → R	32 + 18 = ☐ → G
29 + 14 = ☐ → D	23 + 17 = ☐ → U	17 + 7 = ☐ → F
17 + 17 = ☐ → O	11 + 20 = ☐ → L	24 + 40 = ☐ → C
56 + 31 = ☐ → N	12 + 16 = ☐ → P	24 + 44 = ☐ → V
12 + 17 = ☐ → S	37 + 54 = ☐ → A	11 + 16 = ☐ → E
44 + 37 = ☐ → H		

Scratch space:

CLUE 3 Subtraction

You subtract the missing orange cones from the total to find a hidden message.

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



81 - 36 = ☐ → T

75 - 33 = ☐ → E

16 - 3 = ☐ → V

44 - 12 = ☐ → N

80 - 9 = ☐ → M

81 - 12 = ☐ → A

40 - 21 = ☐ → L

28 - 4 = ☐ → U

80 - 18 = ☐ → F

116 - 38 = ☐ → H

71 - 20 = ☐ → B

76 - 39 = ☐ → I

115 - 28 = ☐ → R

39 - 8 = ☐ → C

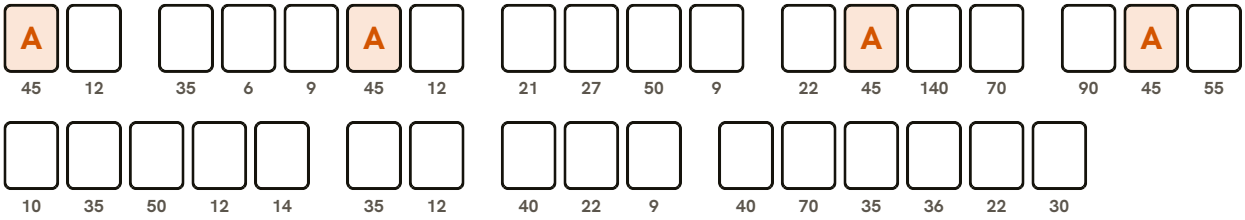
82 - 12 = ☐ → S

Scratch space:

CLUE 4 Skip counting

You skip count the shiny shells along the goal line to decode a witness report.

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



Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, ___, 50, 55 ☐ → A

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, ___, 55, 60 ☐ → U

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, ___, 40, 45 ☐ → O

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, ___, 39, 42 ☐ → P

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, ___, 16, 18 ☐ → D

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, ___, 60, 65 ☐ → S

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, ___, 150, 160 ☐ → I

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, ___, 24, 27 ☐ → B

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, ___, 45, 50 ☐ → T

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, ___, 24, 26 ☐ → H

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, ___, 100, 110 ☐ → W

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, ___, 30, 33 ☐ → L

Skip-count by 3s. Fill the blank: 3, 6, ___, 12, 15 ☐ → E

Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 ☐ → **C**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, ___, 75, 80 ☐ → **R**

Skip-count by 10s. Fill the blank: 10, 20, ___, 40, 50 ☐ → **Y**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, ___, 12, 14 ☐ → **F**

Skip-count by 3s. Fill the blank: 3, 6, 9, ___, 15, 18 ☐ → **N**

Scratch space:

CLUE 5 Missing addends - the last clue

> You figure out how many more sea stars are needed to unlock the final clue locker.

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:

4 + ___ = 14 ☐	2 + ___ = 10 ☐	4 + ___ = 15 ☐	4 + ___ = 7 ☐
1 + ___ = 2 ☐	9 + ___ = 18 ☐	8 + ___ = 12 ☐	3 + ___ = 5 ☐
2 + ___ = 8 ☐	9 + ___ = 16 ☐		

1 + ___ = 6 ☐

Step 2 - cross out the sentence with each answer:

1. The villain attempted a star shoot, then wiggled cat ears.
2. The villain practiced a bubble kick, then flashed shiny wings.
3. The villain delivered a purr strike, then showed off a unicorn horn.
4. The villain executed a rainbow pass, then flapped a mermaid tail.
5. The villain executed a rainbow pass, then wiggled cat ears.
6. The villain attempted a star shoot, then flapped a mermaid tail.
7. The villain delivered a purr strike, then wiggled cat ears.
8. The villain executed a rainbow pass, then twitched glitter whiskers.
9. The villain practiced a bubble kick, then twitched glitter whiskers.
10. The villain performed a wave dash, then flapped a mermaid tail.
11. The villain delivered a purr strike, then twitched glitter whiskers.
12. The villain performed a wave dash, then twitched glitter whiskers.

TEACHER / PARENT

Answer Key

The Great Purr-maid Soccer Mystery

Culprit: Sunil Chhetri-tail

Wave Dash · Glitter Whiskers · Left Glove · Ocean Blue · Tuna Crunch

Trail: Start 21 → Clue 1 19 → Clue 2 12 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT HAVE A UNICORN HORN"

What number has 5 tens and 3 ones? = 53 (T) · What number has 5 tens and 2 ones? = 52 (H) · What number has 5 tens and 1 one? = 51 (R) · What number has 4 tens and 2 ones? = 42 (N) · What number has 4 tens and 9 ones? = 49 (I) · What number has 6 tens and 0 ones? = 60 (D) · What number has 9 tens and 7 ones? = 97 (O) · What number has 2 tens and 0 ones? = 20 (E) · What number has 1 ten and 2 ones? = 12 (L) · What number has 3 tens and 2 ones? = 32 (C) · What number has 4 tens and 3 ones? = 43 (U) · What number has 5 tens and 4 ones? = 54 (V) · What number has 8 tens and 2 ones? = 82 (A) · What number has 9 tens and 2 ones? = 92 (S)

Clue 2 (Addition): "THE SUSPECT DROPPED A LEFT GLOVE NEAR GOAL"

17 + 40 = 57 (T) · 17 + 16 = 33 (R) · 32 + 18 = 50 (G) · 29 + 14 = 43 (D) · 23 + 17 = 40 (U) · 17 + 7 = 24 (F) · 17 + 17 = 34 (O) · 11 + 20 = 31 (L) · 24 + 40 = 64 (C) · 56 + 31 = 87 (N) · 12 + 16 = 28 (P) · 24 + 44 = 68 (V) · 12 + 17 = 29 (S) · 37 + 54 = 91 (A) · 11 + 16 = 27 (E) · 44 + 37 = 81 (H)

Clue 3 (Subtraction): "THE VILLAIN LEFT TUNA CRUNCH CRUMBS AT SCENE"

81 - 36 = 45 (T) · 75 - 33 = 42 (E) · 16 - 3 = 13 (V) · 44 - 12 = 32 (N) · 80 - 9 = 71 (M) · 81 - 12 = 69 (A) · 40 - 21 = 19 (L) · 28 - 4 = 24 (U) · 80 - 18 = 62 (F) · 116 - 38 = 78 (H) · 71 - 20 = 51 (B) · 76 - 39 = 37 (I) · 115 - 28 = 87 (R) · 39 - 8 = 31 (C) · 82 - 12 = 70 (S)

Clue 4 (Skip counting): "AN OCEAN BLUE HAIR WAS FOUND ON THE TROPHY"

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, ___, 50, 55 = 45 (A) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, ___, 55, 60 = 50 (U) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, ___, 40, 45 = 35 (O) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, ___, 39, 42 = 36 (P) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, ___, 16, 18 = 14 (D) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, ___, 60, 65 = 55 (S) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, ___, 150, 160 = 140 (I) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, ___, 24, 27 = 21 (B) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, ___, 45, 50 = 40 (T) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, ___, 24, 26 = 22 (H) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, ___, 100, 110 = 90 (W) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, ___, 30, 33 = 27 (L) · Skip-count by 3s. Fill the blank: 3, 6, ___, 12, 15 = 9 (E) · Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 = 6 (C) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, ___, 75, 80 = 70 (R) · Skip-count by 10s. Fill the blank: 10, 20, ___, 40, 50 = 30 (Y) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, ___, 12, 14 = 10 (F) · Skip-count by 3s. Fill the blank: 3, 6, 9, ___, 15, 18 = 12 (N)

Clue 5 (Missing addends): surviving statement is box 12 → Sunil Chhetri-tail

4 + ___ = 14 = 10 · 2 + ___ = 10 = 8 · 4 + ___ = 15 = 11 · 4 + ___ = 7 = 3 · 1 + ___ = 2 = 1 · 9 + ___ = 18 = 9 · 8 + ___ = 12 = 4 · 3 + ___ = 5 = 2 · 1 + ___ = 6 = 5 · 2 + ___ = 8 = 6 · 9 + ___ = 16 = 7