The Mystery of the Volt Harbor Trophy

Grade 2 math · Place value, Addition, Subtraction, Skip counting, Missing addends · Reading level grades 3-4

Detective: _____ **Date:** _____

The golden league trophy has vanished right before the championship battle! A sneaky rogue trainer slipped into the vault. Solve the clues to reveal who did it!

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 Trainer is _____

Possible suspects

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

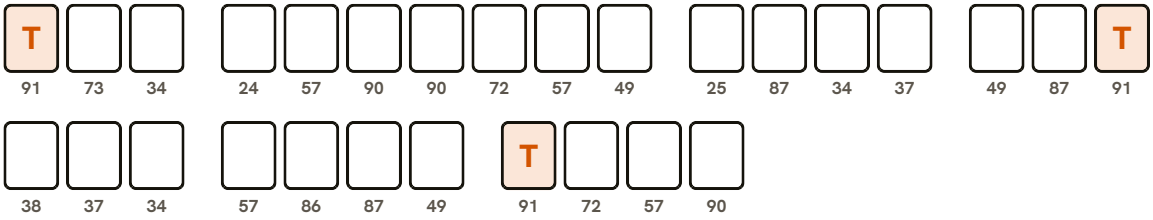
NAME	PRIMARY MOVE	SECONDARY MOVE	THROWING HAND	CAP COLOR	BADGE WEAKNESS
Clemont	Tidal Wave	Solar Beam	Right Handed	Blue Cap	Water Badge
Kabu	Zap Cannon	Ice Punch	Right Handed	Green Cap	Water Badge
Melony	Leaf Storm	Solar Beam	Right Handed	Blue Cap	Flame Badge
Piers	Shadow Sneak	Ice Punch	Left Handed	Green Cap	Water Badge
Marnie	Flame Blast	Psychic Ray	Left Handed	Green Cap	Water Badge
Allister	Leaf Storm	Solar Beam	Left Handed	Green Cap	Water Badge
Lance	Leaf Storm	Ice Punch	Left Handed	Blue Cap	Water Badge
Cynthia	Leaf Storm	Psychic Ray	Left Handed	Blue Cap	Water Badge
Bea	Leaf Storm	Psychic Ray	Left Handed	Blue Cap	Flame Badge
Raihan	Shadow Sneak	Solar Beam	Left Handed	Blue Cap	Water Badge
Brock	Zap Cannon	Ice Punch	Left Handed	Red Cap	Spark Badge
Rai	Tidal Wave	Dragon Claw	Left Handed	Red Cap	Water Badge
Misty	Shadow Sneak	Psychic Ray	Left Handed	Green Cap	Flame Badge
Gary	Shadow Sneak	Ice Punch	Right Handed	Blue Cap	Water Badge
Steven	Zap Cannon	Dragon Claw	Right Handed	Blue Cap	Spark Badge
Gordie	Flame Blast	Ice Punch	Right Handed	Green Cap	Water Badge
May	Tidal Wave	Dragon Claw	Left Handed	Red Cap	Flame Badge
Ash	Leaf Storm	Psychic Ray	Right Handed	Blue Cap	Flame Badge
Serena	Tidal Wave	Iron Tail	Left Handed	Blue Cap	Water Badge
Dawn	Flame Blast	Solar Beam	Left Handed	Blue Cap	Water Badge
Nessa	Leaf Storm	Dragon Claw	Right Handed	Blue Cap	Flame Badge

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CLUE 1 Place value

You check the digital locker code at the stadium. Looking closely at the place values reveals your first clue.

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



What number has 9 tens and 1 one? ☐ → T

What number has 8 tens and 6 ones? ☐ → R

What number has 3 tens and 7 ones? ☐ → S

What number has 5 tens and 7 ones? ☐ → I

What number has 3 tens and 8 ones? ☐ → U

What number has 7 tens and 2 ones? ☐ → A

What number has 9 tens and 0 ones? ☐ → L

What number has 8 tens and 7 ones? ☐ → O

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

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

What number has 7 tens and 3 ones? ☐ → H

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

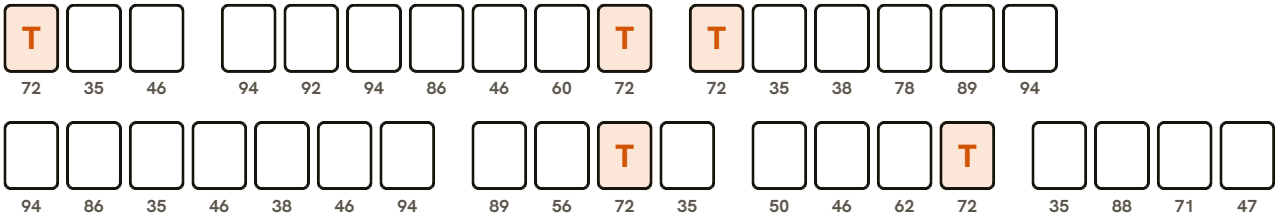
What number has 2 tens and 4 ones? ☐ → V

Scratch space:

CLUE 2 Addition

You count the total supply of berry snacks found near the arena door by adding the crates together.

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



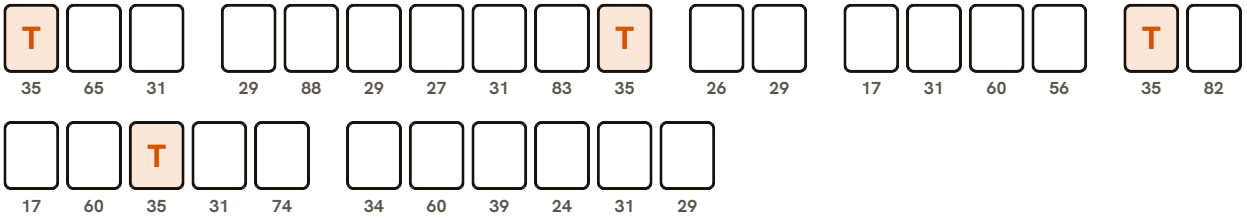
42 + 30 = ☐ → T	37 + 23 = ☐ → C	40 + 54 = ☐ → S
19 + 19 = ☐ → R	27 + 23 = ☐ → L	31 + 57 = ☐ → A
32 + 30 = ☐ → F	45 + 47 = ☐ → U	13 + 22 = ☐ → H
34 + 22 = ☐ → I	16 + 31 = ☐ → D	27 + 59 = ☐ → P
30 + 59 = ☐ → W	26 + 45 = ☐ → N	31 + 15 = ☐ → E
30 + 48 = ☐ → O		

Scratch space:

CLUE 3 Subtraction

You calculate how many battle spheres were stolen by subtracting the left over items from the total.

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



65 - 30 = ☐ → T

90 - 16 = ☐ → R

95 - 13 = ☐ → O

65 - 39 = ☐ → I

56 - 32 = ☐ → G

108 - 20 = ☐ → U

33 - 16 = ☐ → W

41 - 12 = ☐ → S

92 - 9 = ☐ → C

55 - 16 = ☐ → D

55 - 24 = ☐ → E

69 - 9 = ☐ → A

43 - 16 = ☐ → P

86 - 30 = ☐ → K

59 - 25 = ☐ → B

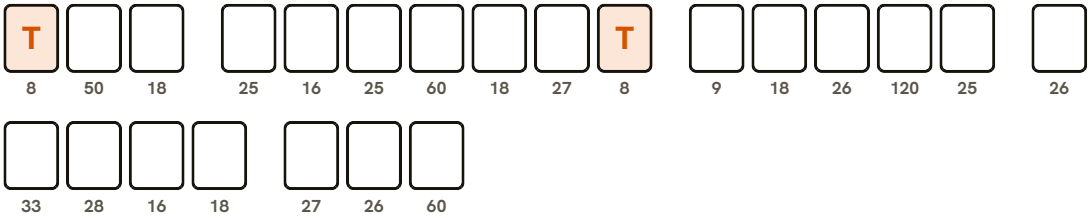
67 - 2 = ☐ → H

Scratch space:

CLUE 4 Skip counting

You count the rows of stadium seats by skip counting to locate a dropped hint card.

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



Skip-count by 2s. Fill the blank: 2, 4, 6, ___, 10, 12 ☐ → T

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, ___, 20, 22 ☐ → E

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, ___, 36, 39 ☐ → B

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, ___, 65, 70 ☐ → P

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

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

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, ___, 130, 140 ☐ → R

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, ___, 28, 30 ☐ → A

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, ___, 30, 32 ☐ → L

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

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

Scratch space:

CLUE 5 Missing addends - the last clue

You figure out how many more badge tokens are needed to complete the set and unlock the final secret.

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:

1 + ___ = 8 ☐	10 + ___ = 13 ☐	4 + ___ = 14 ☐	7 + ___ = 12 ☐
1 + ___ = 9 ☐	6 + ___ = 17 ☐	1 + ___ = 10 ☐	9 + ___ = 10 ☐
1 + ___ = 5 ☐	6 + ___ = 18 ☐	8 + ___ = 14 ☐	

Step 2 - cross out the sentence with each answer:

1. The villain launched a flame blast, then delivered an ice punch.
2. The villain whipped up a leaf storm, then delivered an ice punch.
3. The villain whipped up a leaf storm, then beamed a psychic ray.
4. The villain fired a zap cannon, then swung an iron tail.
5. The villain used a shadow sneak, then delivered an ice punch.
6. The villain used a shadow sneak, then slashed a dragon claw.
7. The villain used a shadow sneak, then charged a solar beam.
8. The villain summoned a tidal wave, then swung an iron tail.
9. The villain launched a flame blast, then beamed a psychic ray.
10. The villain launched a flame blast, then charged a solar beam.
11. The villain launched a flame blast, then swung an iron tail.
12. The villain whipped up a leaf storm, then charged a solar beam.

TEACHER / PARENT

Answer Key

The Mystery of the Volt Harbor Trophy

Culprit: Lance

Leaf Storm · Ice Punch · Left Handed · Blue Cap · Water Badge

Trail: Start 21 → Clue 1 20 → Clue 2 12 → Clue 3 8 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT USE IRON TAIL"

What number has 9 tens and 1 one? = 91 (T) · What number has 8 tens and 6 ones? = 86 (R) · What number has 3 tens and 7 ones? = 37 (S) · What number has 5 tens and 7 ones? = 57 (I) · What number has 3 tens and 8 ones? = 38 (U) · What number has 7 tens and 2 ones? = 72 (A) · What number has 9 tens and 0 ones? = 90 (L) · What number has 8 tens and 7 ones? = 87 (O) · What number has 2 tens and 5 ones? = 25 (D) · What number has 4 tens and 9 ones? = 49 (N) · What number has 7 tens and 3 ones? = 73 (H) · What number has 3 tens and 4 ones? = 34 (E) · What number has 2 tens and 4 ones? = 24 (V)

Clue 2 (Addition): "THE SUSPECT THROWS SPHERES WITH LEFT HAND"

42 + 30 = 72 (T) · 37 + 23 = 60 (C) · 40 + 54 = 94 (S) · 19 + 19 = 38 (R) · 27 + 23 = 50 (L) · 31 + 57 = 88 (A) · 32 + 30 = 62 (F) · 45 + 47 = 92 (U) · 13 + 22 = 35 (H) · 34 + 22 = 56 (I) · 16 + 31 = 47 (D) · 27 + 59 = 86 (P) · 30 + 59 = 89 (W) · 26 + 45 = 71 (N) · 31 + 15 = 46 (E) · 30 + 48 = 78 (O)

Clue 3 (Subtraction): "THE SUSPECT IS WEAK TO WATER BADGES"

65 - 30 = 35 (T) · 90 - 16 = 74 (R) · 95 - 13 = 82 (O) · 65 - 39 = 26 (I) · 56 - 32 = 24 (G) · 108 - 20 = 88 (U) · 33 - 16 = 17 (W) · 41 - 12 = 29 (S) · 92 - 9 = 83 (C) · 55 - 16 = 39 (D) · 55 - 24 = 31 (E) · 69 - 9 = 60 (A) · 43 - 16 = 27 (P) · 86 - 30 = 56 (K) · 59 - 25 = 34 (B) · 67 - 2 = 65 (H)

Clue 4 (Skip counting): "THE SUSPECT WEARS A BLUE CAP"

Skip-count by 2s. Fill the blank: 2, 4, 6, ___, 10, 12 = 8 (T) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, ___, 20, 22 = 18 (E) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, ___, 55, 60 = 50 (H) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, ___, 36, 39 = 33 (B) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, ___, 65, 70 = 60 (P) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, ___, 30, 33 = 27 (C) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, ___, 18, 20 = 16 (U) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, ___, 130, 140 = 120 (R) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, ___, 28, 30 = 26 (A) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, ___, 30, 32 = 28 (L) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, ___, 30, 35 = 25 (S) · Skip-count by 3s. Fill the blank: 3, 6, ___, 12, 15 = 9 (W)

Clue 5 (Missing addends): surviving statement is box 2 → Lance

1 + ___ = 8 = 7 · 10 + ___ = 13 = 3 · 4 + ___ = 14 = 10 · 7 + ___ = 12 = 5 · 1 + ___ = 9 = 8 · 6 + ___ = 17 = 11 · 1 + ___ = 10 = 9 · 9 + ___ = 10 = 1 · 1 + ___ = 5 = 4 · 6 + ___ = 18 = 12 · 8 + ___ = 14 = 6