



The Indigo Plateau Vault Caper

Grade 4 math · Subtraction, Place value, Skip counting, Rounding, Division · Reading level grades 3-4

Detective: _____ Date: _____

A sneaky Team Rocket Impostor has snuck into the Indigo Plateau Vault! They took a legendary Golden Pokeball. The culprit is disguised as one of the elite trainers. Help Officer Jenny and her Arcanine sniff out the clues, solve the math puzzles, and unmask the thief before they escape!

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 Team Rocket Impostor is _____

Possible suspects

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

NAME	PARTNER POKEMON TYPE	HELD ITEM	SIGNATURE THROW	CAP COLOR	BATTLE WEAKNESS
Mallow	Electric-type partner	Rocky Helmet	Right-handed thrower	Blue Cap	Fire Blast
Lillie	Psychic-type partner	Focus Sash	Left-handed thrower	Green Cap	Fire Blast
Dawn	Fire-type partner	Focus Sash	Left-handed thrower	Green Cap	Electric Shock
Kiawe	Fire-type partner	Rocky Helmet	Right-handed thrower	Blue Cap	Electric Shock
Lana	Electric-type partner	Focus Sash	Right-handed thrower	Green Cap	Fire Blast
Sophocles	Grass-type partner	Leftovers	Right-handed thrower	Green Cap	Fire Blast
Goh	Electric-type partner	Choice Scarf	Right-handed thrower	Blue Cap	Electric Shock
Red	Psychic-type partner	Rocky Helmet	Left-handed thrower	Red Cap	Water Splash
Serena	Water-type partner	Rocky Helmet	Right-handed thrower	Green Cap	Water Splash
Misty	Electric-type partner	Rocky Helmet	Left-handed thrower	Blue Cap	Fire Blast
Silver	Grass-type partner	Choice Scarf	Right-handed thrower	Green Cap	Fire Blast
Gary	Fire-type partner	Choice Scarf	Right-handed thrower	Blue Cap	Fire Blast
Cilan	Electric-type partner	Leftovers	Right-handed thrower	Blue Cap	Electric Shock
Blue	Electric-type partner	Life Orb	Right-handed thrower	Green Cap	Fire Blast
Clemont	Electric-type partner	Rocky Helmet	Right-handed thrower	Blue Cap	Water Splash
Ethan	Fire-type partner	Leftovers	Right-handed thrower	Red Cap	Fire Blast
Iris	Grass-type partner	Life Orb	Right-handed thrower	Green Cap	Fire Blast
May	Electric-type partner	Leftovers	Left-handed thrower	Red Cap	Water Splash
Ash	Electric-type partner	Choice Scarf	Left-handed thrower	Blue Cap	Fire Blast
Leaf	Water-type partner	Choice Scarf	Right-handed thrower	Green Cap	Water Splash
Kris	Grass-type partner	Leftovers	Right-handed thrower	Green Cap	Electric Shock

CLUE 1

Subtraction

Officer Jenny counts the total Pokéballs in the display case and subtracts the ones left behind to find how many the thief took. This reveals our first big clue.

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

4648 8451 8257 4648 8451 7317 8257 7512 7881 6685 8257 5491 1751 6685 4648 2689 5491 8257

8497 8257 7512 4648 6685 2588 8257 8400 5491

$$5458 - 810 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$3912 - 1223 = \boxed{} \rightarrow \boxed{\text{U}}$$

$$12154 - 3703 = \boxed{} \rightarrow \boxed{\text{H}}$$

$$11440 - 2943 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$9940 - 4449 = \boxed{} \rightarrow \boxed{\text{S}}$$

$11809 - 4297 = \boxed{} \rightarrow \boxed{\text{F}}$

$11214 - 3897 = \boxed{} \rightarrow \boxed{}$

$11222 - 3341 = \boxed{} \rightarrow \boxed{\text{D}}$

$$4777 - 3026 = \boxed{} \rightarrow \boxed{\text{N}}$$

$13009 - 4609 = \boxed{} \rightarrow \boxed{\text{R}}$

$$4138 - 1550 = \boxed{} \rightarrow \boxed{\mathbf{V}}$$

$9921 - 1664 = \boxed{} \rightarrow \boxed{\text{E}}$

$$8765 - 2080 = \boxed{} \rightarrow \boxed{\mathbf{0}}$$

Scratch space:

CLUE 2 Place value

The vault security panel displays a scrambled number code. By finding the value of the digit in the tens place, the detective unlocks a photo of the thief's signature throw.

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

T			T					T								T	
200	600	300	200	600	6000	300	10	200	600	90	800	4000	400	4000	6000	200	600
T							T										
200	600	300	90	6000	700	600	200	600	3000	40	8000						

What is the value of the 2 in 294? → **T**

What is the value of the 4 in 843? → **N**

What is the value of the 3 in 7,396? → **E**

What is the value of the 8 in 3,840? → **O**

What is the value of the 4 in 4,732? → **W**

What is the value of the 3 in 3,570? → **A**

What is the value of the 7 in 702? → **G**

What is the value of the 6 in 6,429? → **I**

What is the value of the 9 in 2,394? → **R**

What is the value of the 6 in 7,635? → **H**

What is the value of the 1 in 2,210? → **F**

What is the value of the 8 in 78,291? → **D**

What is the value of the 4 in 432? → **S**

Scratch space:

CLUE 3 Skip counting

Arcanine tracks a trail of muddy footprints left by the escapee. By skip-counting the prints by fives, we find a dropped cap.

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

T			T															
100	14	22	100	14	28	22	80	15	35	42	42	45	35	70	22	140	39	6
35	80	28	70	22	39	18	35	42	T									

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 → **T**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 → **A**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 → **H**

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 → **C**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 → **B**

Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 → **Y**

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, __, 20, 22 → **L**

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 → **F**

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, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 → **D**

Skip-count by 5s. Fill the blank: 5, 10, __, 20, 25 → **W**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 → **S**

Scratch space:

CLUE 4 Rounding

The energy scanner picks up a power surge, but it only shows rounded estimates of the power levels. Rounding the energy spike leads us to the thief's weakness.

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

W																
90	110	9000	70	2300	230	20	7000	130	900	110	110	230	3000	7000	290	7000 200
200	1100	110	4300	3000	110	230	110									

Round 93 to the nearest ten → **W**

Round 234 to the nearest ten → **N**

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

Round 4,349 to the nearest hundred → **S**

Round 289 to the nearest ten → **P**

Round 2,659 to the nearest thousand → **C**

Round 113 to the nearest ten → **E**

Round 2,329 to the nearest hundred → **U**

Round 1,122 to the nearest hundred → **H**

Round 7,409 to the nearest thousand → **A**

Round 132 to the nearest ten → **G**

Round 69 to the nearest ten → **O**

Round 886 to the nearest hundred → **R**

Round 22 to the nearest ten → **D**

Round 184 to the nearest hundred → **T**

Scratch space:

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

To get clues from a wild Zigzagoon, the kids split a big pack of treats equally. The clever Pokemon drops a clue paper after eating its share.

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:

$60 \div 6 = \boxed{}$

$24 \div 12 = \boxed{}$

$55 \div 5 = \boxed{}$

$28 \div 7 = \boxed{}$

$7 \div 7 = \boxed{}$

$54 \div 9 = \boxed{}$

$18 \div 6 = \boxed{}$

$10 \div 2 = \boxed{}$

$144 \div 12 = \boxed{}$

$99 \div 11 = \boxed{}$

$84 \div 12 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain commanded their Psychic-type partner, then blocked with a Rocky Helmet.
2. The villain commanded their Electric-type partner, then held up a Focus Sash.
3. The villain commanded their Psychic-type partner, then activated a Choice Scarf.
4. The villain commanded their Water-type partner, then activated a Choice Scarf.
5. The villain commanded their Electric-type partner, then blocked with a Rocky Helmet.
6. The villain commanded their Water-type partner, then held up a Focus Sash.
7. The villain commanded their Fire-type partner, then blocked with a Rocky Helmet.
8. The villain commanded their Electric-type partner, then boosted with a Life Orb.
9. The villain commanded their Water-type partner, then boosted with a Life Orb.
10. The villain commanded their Grass-type partner, then activated a Choice Scarf.
11. The villain commanded their Grass-type partner, then boosted with a Life Orb.
12. The villain commanded their Grass-type partner, then nibbled some Leftovers.

Answer Key

The Indigo Plateau Vault Caper

Culprit: Blue

Electric-type partner · Life Orb · Right-handed thrower · Green Cap · Fire Blast

Trail: Start 21 → Clue 1 16 → Clue 2 11 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Subtraction): "THE THIEF DOES NOT USE LEFTOVERS"

$5458 - 810 = 4648$ (T) · $3912 - 1223 = 2689$ (U) · $12154 - 3703 = 8451$ (H) · $11440 - 2943 = 8497$ (L) · $9940 - 4449 = 5491$ (S) · $11809 - 4297 = 7512$ (F) · $11214 - 3897 = 7317$ (I) · $11222 - 3341 = 7881$ (D) · $4777 - 3026 = 1751$ (N) · $13009 - 4609 = 8400$ (R) · $4138 - 1550 = 2588$ (V) · $9921 - 1664 = 8257$ (E) · $8765 - 2080 = 6685$ (O)

Clue 2 (Place value): "THE THIEF THROWS WITH THE RIGHT HAND"

What is the value of the 2 in 294? = 200 (T) · What is the value of the 4 in 843? = 40 (N) · What is the value of the 3 in 7,396? = 300 (E) · What is the value of the 8 in 3,840? = 800 (O) · What is the value of the 4 in 4,732? = 4000 (W) · What is the value of the 3 in 3,570? = 3000 (A) · What is the value of the 7 in 702? = 700 (G) · What is the value of the 6 in 6,429? = 6000 (I) · What is the value of the 9 in 2,394? = 90 (R) · What is the value of the 6 in 7,635? = 600 (H) · What is the value of the 1 in 2,210? = 10 (F) · What is the value of the 8 in 78,291? = 8000 (D) · What is the value of the 4 in 432? = 400 (S)

Clue 3 (Skip counting): "THE THIEF WAS SCARED BY A FIRE BLAST"

Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, __, 110, 120 = 100 (T) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, __, 40, 45 = 35 (A) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, __, 16, 18 = 14 (H) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, __, 30, 32 = 28 (I) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, __, 24, 26 = 22 (E) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, __, 50, 55 = 45 (C) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, __, 42, 45 = 39 (B) · Skip-count by 2s. Fill the blank: 2, 4, __, 8, 10 = 6 (Y) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, __, 20, 22 = 18 (L) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, __, 90, 100 = 80 (F) · 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, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, __, 150, 160 = 140 (D) · Skip-count by 5s. Fill the blank: 5, 10, __, 20, 25 = 15 (W) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, __, 45, 48 = 42 (S)

Clue 4 (Rounding): "WE FOUND A GREEN CAP AT THE SCENE"

Round 93 to the nearest ten = 90 (W) · Round 234 to the nearest ten = 230 (N) · Round 9,200 to the nearest thousand = 9000 (F) · Round 4,349 to the nearest hundred = 4300 (S) · Round 289 to the nearest ten = 290 (P) · Round 2,659 to the nearest thousand = 3000 (C) · Round 113 to the nearest ten = 110 (E) · Round 2,329 to the nearest hundred = 2300 (U) · Round 1,122 to the nearest hundred = 1100 (H) · Round 7,409 to the nearest thousand = 7000 (A) · Round 132 to the nearest ten = 130 (G) · Round 69 to the nearest ten = 70 (O) · Round 886 to the nearest hundred = 900 (R) · Round 22 to the nearest ten = 20 (D) · Round 184 to the nearest hundred = 200 (T)

Clue 5 (Division facts (1-12)): surviving statement is box 8 → Blue

$60 \div 6 = 10$ · $24 \div 12 = 2$ · $55 \div 5 = 11$ · $28 \div 7 = 4$ · $7 \div 7 = 1$ · $54 \div 9 = 6$ · $18 \div 6 = 3$ · $10 \div 2 = 5$ · $144 \div 12 = 12$ · $99 \div 11 = 9$ · $84 \div 12 = 7$