



The Great Dino-Rescue Mystery

Grade 3 math · Addition, Rounding, Subtraction, Multiplication, Division · Reading level grades 3-4

Detective: _____ Date: _____

A sneaky Dino-Snatcher has locked Dr. Rex in the fossil vault and scrambled the dino feeding schedules! We must find the culprit before the baby T-Rex gets grumpy.

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 Dino-Snatcher is _____

Possible suspects

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

NAME	DINO STYLE	PARK GEAR	HANDEDNESS	HAIR COLOR	DISTRACTION
Barry Sembene	T-Rex Roar	Deep Dive	Right-handed writing	Red Hair	Herbivore Treats
Ray Arnold	Raptor Speed	Mud Camouflage	Left-handed writing	Dark Hair	Herbivore Treats
Lowery Cruthers	Triceratops Shield	Super Jump	Right-handed writing	Sandy Hair	Squeaky Toys
Ken Wheatley	Raptor Speed	Mud Camouflage	Left-handed writing	Sandy Hair	Herbivore Treats
Ian Malcolm	Ankylosaurus Smash	Mud Camouflage	Left-handed writing	Red Hair	Squeaky Toys
Sarah Harding	Triceratops Shield	Lava Proof	Left-handed writing	Red Hair	Herbivore Treats
Maisie Lockwood	Triceratops Shield	Deep Dive	Left-handed writing	Red Hair	Squeaky Toys
Ben Hildebrand	Pterodactyl Flight	Lava Proof	Right-handed writing	Dark Hair	Shiny Amber
Eric Kirby	Triceratops Shield	Deep Dive	Left-handed writing	Dark Hair	Herbivore Treats
Nick Van Owen	Pterodactyl Flight	Super Jump	Left-handed writing	Dark Hair	Herbivore Treats
Claire Dearing	T-Rex Roar	Super Jump	Left-handed writing	Sandy Hair	Herbivore Treats
Vivian Krill	Pterodactyl Flight	Lava Proof	Left-handed writing	Sandy Hair	Squeaky Toys
Billy Brennan	Pterodactyl Flight	Night Vision	Left-handed writing	Dark Hair	Herbivore Treats
Roland Tembo	Ankylosaurus Smash	Super Jump	Left-handed writing	Red Hair	Herbivore Treats
John Hammond	Raptor Speed	Night Vision	Left-handed writing	Dark Hair	Shiny Amber
Franklin Webb	T-Rex Roar	Deep Dive	Right-handed writing	Red Hair	Shiny Amber
Amanda Kirby	Triceratops Shield	Mud Camouflage	Right-handed writing	Red Hair	Herbivore Treats
Henry Wu	Raptor Speed	Mud Camouflage	Left-handed writing	Sandy Hair	Squeaky Toys
Owen Grady	Triceratops Shield	Lava Proof	Right-handed writing	Sandy Hair	Squeaky Toys
Ellie Sattler	Triceratops Shield	Lava Proof	Left-handed writing	Dark Hair	Herbivore Treats
Paul Kirby	Pterodactyl Flight	Super Jump	Right-handed writing	Dark Hair	Herbivore Treats

CLUE 1 Addition

We counted the spare dino-tracking badges in the locker. Adding up the boxes gave us a clue to narrow down our suspect list!

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

T 357 387 966	204 538 857	649 795 987	T 357	987 844	443 610	T 357	857 834 951 834
649 795 610 610 878							

$138 + 219 = \square \rightarrow \boxed{\text{T}}$

$129 + 258 = \square \rightarrow \boxed{\text{H}}$

$387 + 223 = \square \rightarrow \boxed{\text{O}}$

$203 + 446 = \square \rightarrow \boxed{\text{P}}$

$563 + 281 = \square \rightarrow \boxed{\text{S}}$

$135 + 69 = \square \rightarrow \boxed{\text{C}}$

$499 + 488 = \square \rightarrow \boxed{\text{I}}$

$253 + 190 = \square \rightarrow \boxed{\text{N}}$

$587 + 364 = \square \rightarrow \boxed{\text{V}}$

$413 + 465 = \square \rightarrow \boxed{\text{F}}$

$560 + 406 = \square \rightarrow \boxed{\text{E}}$

$598 + 259 = \square \rightarrow \boxed{\text{L}}$

$531 + 303 = \square \rightarrow \boxed{\text{A}}$

$363 + 432 = \square \rightarrow \boxed{\text{R}}$

$371 + 167 = \square \rightarrow \boxed{\text{U}}$

Scratch space:

CLUE 2

The camp radar tracked a suspicious runner but could only round the speed to the nearest ten. The rounded number showed us a clue!

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

Round 32 to the nearest ten $\rightarrow$ **T**

Round 834 to the nearest hundred $\rightarrow$ **H**

Round 227 to the nearest hundred $\rightarrow$ **B**

Round 327 to the nearest hundred $\rightarrow$

Round 910 to the nearest hundred $\rightarrow$ **D**

Round 2,875 to the nearest thousand → **G**

Round 5,063 to the nearest thousand → **W**

Round 64 to the nearest ten $\rightarrow$ **L**

Round 8,160 to the nearest thousand $\rightarrow$

Round 712 to the nearest hundred $\rightarrow$ **F**

Round 368 to the nearest hundred $\rightarrow$ **C**

Round 571 to the nearest hundred $\rightarrow$ **R**

Round 7,094 to the nearest thousand → **N**

Round 22 to the nearest ten → **S**

Round 485 to the nearest hundred $\rightarrow$ **A**

Round 77 to the nearest ten → **E**

Scratch space:

CLUE 3
Subtraction

We subtracted the eaten dino snacks from the total box. Finding the leftover snacks revealed where the culprit dropped a clue!

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

T																
467	560	568	340	457	568	721	719	444	767	516	580	580	568	444		

									T					T	
560	568	767	128	247	651	516	767	568	467	767	568	721	467	340	

$628 - 161 = \square \rightarrow \boxed{\text{T}}$

$656 - 5 = \square \rightarrow \boxed{\text{V}}$

$965 - 244 = \square \rightarrow \boxed{\text{A}}$

$576 - 60 = \square \rightarrow \boxed{\text{O}}$

$957 - 389 = \square \rightarrow \boxed{\text{E}}$

$924 - 205 = \square \rightarrow \boxed{\text{K}}$

$249 - 121 = \square \rightarrow \boxed{\text{B}}$

$463 - 216 = \square \rightarrow \boxed{\text{I}}$

$689 - 232 = \square \rightarrow \boxed{\text{N}}$

$776 - 9 = \square \rightarrow \boxed{\text{R}}$

$554 - 214 = \square \rightarrow \boxed{\text{S}}$

$755 - 311 = \square \rightarrow \boxed{\text{D}}$

$738 - 158 = \square \rightarrow \boxed{\text{P}}$

$949 - 389 = \square \rightarrow \boxed{\text{H}}$

Scratch space:

Multiplication facts (1-12)

We looked at the grids of glowing dino tracks in the mud. Multiplying the rows by the columns cracked open a hidden clue!

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

Figure 1 shows a 3x12 matrix partitioned into four 3x6 blocks. The matrix is represented by a grid of boxes. The top row of boxes contains the following values: 16, 33, 99, 21, 121, 56, 99, 33, 2, 16, 121, 35, 144, 20, 33, 4, 99. The bottom row of boxes contains the following values: 30, 70, 99, 70, 56, 99, 33, 25, 25, 70, 16, 4, 2, 56, 20, 70. The boxes containing the values 2 and 70 are highlighted in orange, indicating they are the elements being compared in the algorithm.

$2 \times 8 = \square \rightarrow \boxed{\mathbf{D}}$

$$11 \times 11 = \boxed{} \rightarrow \boxed{\mathbf{S}}$$

$$3 \times 11 = \boxed{} \rightarrow \boxed{\mathbf{A}}$$

$$5 \times 5 = \boxed{} \rightarrow \boxed{\text{P}}$$

$10 \times 7 = \boxed{} \rightarrow \boxed{\mathbf{E}}$

$$7 \times 3 = \boxed{} \rightarrow \boxed{\text{K}}$$

$$7 \times 8 = \boxed{} \rightarrow \boxed{\text{T}}$$

$2 \times 2 = \square \rightarrow \boxed{1}$

$7 \times 5 = \boxed{} \rightarrow \boxed{0}$

$2 \times 10 = \square \rightarrow \text{H}$

$9 \times 9 = \square \rightarrow \boxed{\mathbf{G}}$

$3 \times 10 = \square \rightarrow \boxed{W}$

$12 \times 12 = \square \rightarrow \text{F}$

$1 \times 2 = \square \rightarrow \boxed{\mathbf{N}}$

$11 \times 9 = \square \rightarrow \boxed{\mathbf{R}}$

$4 \times 3 = \square \rightarrow \boxed{\text{C}}$

Scratch space:

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

Dr. Rex had to divide the rescue walkie-talkies equally among the search teams. Splitting them up perfectly gave us 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:

$28 \div 4 = \boxed{}$

$4 \div 4 = \boxed{}$

$12 \div 4 = \boxed{}$

$99 \div 9 = \boxed{}$

$24 \div 6 = \boxed{}$

$10 \div 5 = \boxed{}$

$50 \div 10 = \boxed{}$

$30 \div 5 = \boxed{}$

$88 \div 11 = \boxed{}$

$72 \div 6 = \boxed{}$

$10 \div 1 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain soared over the fences with pterodactyl flight, then snuck through the dark with night vision.
2. The villain soared over the fences with pterodactyl flight, then escaped through the deep lake with a deep dive.
3. The villain soared over the fences with pterodactyl flight, then leaped over the high watchtower with a super jump.
4. The villain roared like a mighty T-Rex, then blended into the swamp with mud camouflage.
5. The villain roared like a mighty T-Rex, then walked right over hot rocks with lava proofing.
6. The villain smashed the security gate like an ankylosaurus, then walked right over hot rocks with lava proofing.
7. The villain dashed away with raptor speed, then blended into the swamp with mud camouflage.
8. The villain soared over the fences with pterodactyl flight, then blended into the swamp with mud camouflage.
9. The villain blocked the path with a triceratops shield, then escaped through the deep lake with a deep dive.
10. The villain dashed away with raptor speed, then leaped over the high watchtower with a super jump.
11. The villain smashed the security gate like an ankylosaurus, then leaped over the high watchtower with a super jump.
12. The villain blocked the path with a triceratops shield, then snuck through the dark with night vision.

Answer Key

The Great Dino-Rescue Mystery

Culprit: Eric Kirby

Triceratops Shield · Deep Dive · Left-handed writing · Dark Hair · Herbivore Treats

Trail: Start 21 → Clue 1 16 → Clue 2 11 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE CULPRIT IS NOT LAVA PROOF"

$138 + 219 = 357$ (T) · $129 + 258 = 387$ (H) · $387 + 223 = 610$ (O) · $203 + 446 = 649$ (P) · $563 + 281 = 844$ (S) · $135 + 69 = 204$ (C) · $499 + 488 = 987$ (I) · $253 + 190 = 443$ (N) · $587 + 364 = 951$ (V) · $413 + 465 = 878$ (F) · $560 + 406 = 966$ (E) · $598 + 259 = 857$ (L) · $531 + 303 = 834$ (A) · $363 + 432 = 795$ (R) · $371 + 167 = 538$ (U)

Clue 2 (Rounding): "THE SCRIBBLING WAS DONE WITH THE LEFT HAND"

Round 32 to the nearest ten = 30 (T) · Round 834 to the nearest hundred = 800 (H) · Round 227 to the nearest hundred = 200 (B) · Round 327 to the nearest hundred = 300 (O) · Round 910 to the nearest hundred = 900 (D) · Round 2,875 to the nearest thousand = 3000 (G) · Round 5,063 to the nearest thousand = 5000 (W) · Round 64 to the nearest ten = 60 (L) · Round 8,160 to the nearest thousand = 8000 (I) · Round 712 to the nearest hundred = 700 (F) · Round 368 to the nearest hundred = 400 (C) · Round 571 to the nearest hundred = 600 (R) · Round 7,094 to the nearest thousand = 7000 (N) · Round 22 to the nearest ten = 20 (S) · Round 485 to the nearest hundred = 500 (A) · Round 77 to the nearest ten = 80 (E)

Clue 3 (Subtraction): "THE SNEAK DROPPED HERBIVORE TREATS"

$628 - 161 = 467$ (T) · $656 - 5 = 651$ (V) · $965 - 244 = 721$ (A) · $576 - 60 = 516$ (O) · $957 - 389 = 568$ (E) · $924 - 205 = 719$ (K) · $249 - 121 = 128$ (B) · $463 - 216 = 247$ (I) · $689 - 232 = 457$ (N) · $776 - 9 = 767$ (R) · $554 - 214 = 340$ (S) · $755 - 311 = 444$ (D) · $738 - 158 = 580$ (P) · $949 - 389 = 560$ (H)

Clue 4 (Multiplication facts (1-12)): "DARK STRANDS OF HAIR WERE TRAPPED IN THE CAGE"

$2 \times 8 = 16$ (D) · $11 \times 11 = 121$ (S) · $3 \times 11 = 33$ (A) · $5 \times 5 = 25$ (P) · $10 \times 7 = 70$ (E) · $7 \times 3 = 21$ (K) · $7 \times 8 = 56$ (T) · $2 \times 2 = 4$ (I) · $7 \times 5 = 35$ (O) · $2 \times 10 = 20$ (H) · $9 \times 9 = 81$ (G) · $3 \times 10 = 30$ (W) · $12 \times 12 = 144$ (F) · $1 \times 2 = 2$ (N) · $11 \times 9 = 99$ (R) · $4 \times 3 = 12$ (C)

Clue 5 (Division facts (1-12)): surviving statement is box 9 → Eric Kirby

$28 \div 4 = 7$ · $4 \div 4 = 1$ · $12 \div 4 = 3$ · $99 \div 9 = 11$ · $24 \div 6 = 4$ · $10 \div 5 = 2$ · $50 \div 10 = 5$ · $30 \div 5 = 6$ · $88 \div 11 = 8$ · $72 \div 6 = 12$ · $10 \div 1 = 10$