The Secret of Dino Ridge

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

Detective: _____ **Date:** _____

Someone snuck into Dino Ridge Camp and scrambled all the fossil maps! Use your detective skills to find out 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 Dino Trapper is _____

Possible suspects

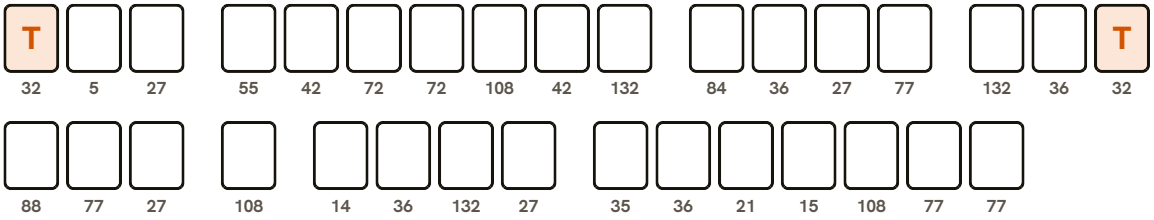
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	DINO PARTNER	FOSSIL GEAR	WATCH HAND	HAT STYLE	DISTRACTION TOOL
Dr. Barnum Brown	Ankylo Helper	Bone Compass	Right Handed	Safari Fedora	Shiny Mirror
Crew Chris	Ankylo Helper	Amber Scanner	Left Handed	Feathered Cap	Fruity Treat
Dr. Alan Grant	Triceratops Mount	Rope Launcher	Right Handed	Safari Fedora	Shiny Mirror
Hunter Hannah	Raptor Companion	Gravel Shovel	Left Handed	Safari Fedora	Squeaky Toy
Scout Sam	Triceratops Mount	Sonic Whistle	Left Handed	Feathered Cap	Shiny Mirror
Trapper Tina	Stegosaurus Guard	Sonic Whistle	Left Handed	Leather Helmet	Squeaky Toy
Mason Max	Stegosaurus Guard	Rope Launcher	Left Handed	Feathered Cap	Fruity Treat
Rover Rita	Stegosaurus Guard	Bone Compass	Right Handed	Safari Fedora	Fruity Treat
Professor Pete	Pterodactyl Scout	Rope Launcher	Left Handed	Safari Fedora	Fruity Treat
Guide Gary	Stegosaurus Guard	Amber Scanner	Left Handed	Safari Fedora	Shiny Mirror
Officer Owen	Stegosaurus Guard	Bone Compass	Left Handed	Safari Fedora	Shiny Mirror
Camper Chloe	Raptor Companion	Bone Compass	Left Handed	Leather Helmet	Squeaky Toy
Tech Tyler	Ankylo Helper	Amber Scanner	Right Handed	Feathered Cap	Fruity Treat
Ranger Rex	Raptor Companion	Bone Compass	Left Handed	Feathered Cap	Fruity Treat
Dr. Mary Anning	Raptor Companion	Rope Launcher	Left Handed	Feathered Cap	Fruity Treat
Fossil Frank	Ankylo Helper	Rope Launcher	Left Handed	Feathered Cap	Fruity Treat
Dino Dan	Ankylo Helper	Amber Scanner	Left Handed	Safari Fedora	Fruity Treat
Officer Olivia	Stegosaurus Guard	Gravel Shovel	Right Handed	Leather Helmet	Shiny Mirror
Pilot Piper	Stegosaurus Guard	Amber Scanner	Left Handed	Feathered Cap	Shiny Mirror
Dr. Bob Bakker	Stegosaurus Guard	Sonic Whistle	Left Handed	Safari Fedora	Squeaky Toy
Agent Ava	Triceratops Mount	Rope Launcher	Left Handed	Leather Helmet	Shiny Mirror

CLUE 1 Multiplication facts (1-12)

> The tracker counted the dino tracks packed in neat equal rows across the mud flat.

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



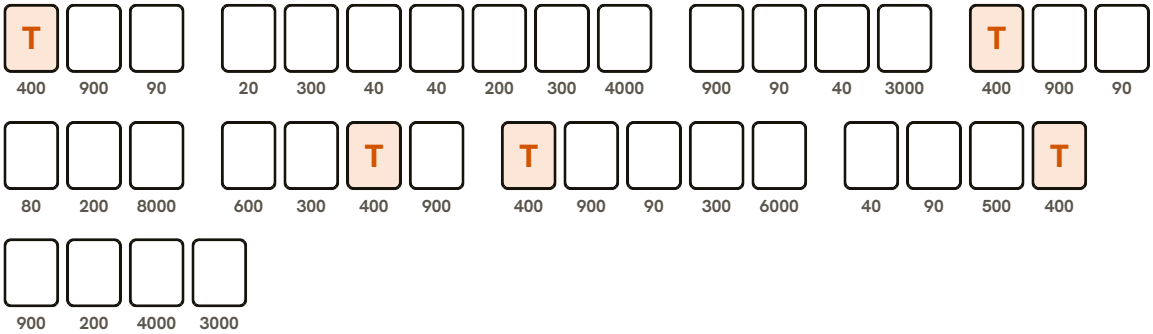
4 × 8 = ☐ → T	7 × 11 = ☐ → S	12 × 3 = ☐ → O
8 × 11 = ☐ → U	9 × 8 = ☐ → L	6 × 7 = ☐ → I
7 × 5 = ☐ → C		
5 × 11 = ☐ → V	7 × 2 = ☐ → B	12 × 11 = ☐ → N
3 × 9 = ☐ → E	9 × 12 = ☐ → A	1 × 5 = ☐ → H
3 × 5 = ☐ → P		
7 × 3 = ☐ → M	12 × 7 = ☐ → D	

Scratch space:

CLUE 2 Rounding

The digital camp radar blurred the exact distance showing only a rounded scan of the trail.

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



Round 351 to the nearest hundred ☐ → **T**

Round 87 to the nearest ten ☐ → **E**

Round 5,796 to the nearest thousand ☐ → **R**

Round 21 to the nearest ten ☐ → **V**

Round 84 to the nearest ten ☐ → **M**

Round 42 to the nearest ten ☐ → **L**

Round 4,454 to the nearest thousand ☐ → **N**

Round 500 to the nearest hundred ☐ → **F**

Round 211 to the nearest hundred ☐ → **A**

Round 7,679 to the nearest thousand ☐ → **P**

Round 948 to the nearest hundred ☐ → **H**

Round 265 to the nearest hundred ☐ → **I**

Round 3,216 to the nearest thousand ☐ → **D**

Round 591 to the nearest hundred ☐ → **W**

Scratch space:

CLUE 3 Addition

The paleontology team added up all the scattered fossil fragments found near the camp gate.

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



487 + 237 = ☐ → T

299 + 133 = ☐ → A

302 + 640 = ☐ → I

180 + 295 = ☐ → W

266 + 444 = ☐ → S

157 + 163 = ☐ → V

164 + 299 = ☐ → R

341 + 416 = ☐ → U

331 + 648 = ☐ → E

243 + 142 = ☐ → H

119 + 162 = ☐ → N

122 + 143 = ☐ → B

215 + 433 = ☐ → L

623 + 296 = ☐ → F

489 + 274 = ☐ → Y

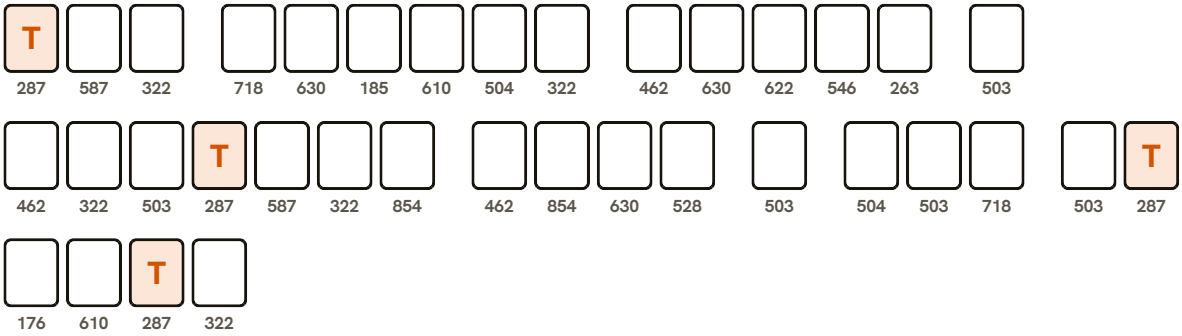
342 + 366 = ☐ → D

Scratch space:

CLUE 4 Subtraction

The guard subtracted the remaining water canteens from the original supply stack to see what was missing.

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



416 - 129 = ☐ → T

660 - 156 = ☐ → C

812 - 202 = ☐ → I

1037 - 183 = ☐ → R

796 - 250 = ☐ → N

709 - 181 = ☐ → M

189 - 13 = ☐ → S

824 - 106 = ☐ → P

810 - 180 = ☐ → O

899 - 277 = ☐ → U

654 - 332 = ☐ → E

870 - 367 = ☐ → A

564 - 102 = ☐ → F

407 - 222 = ☐ → L

716 - 129 = ☐ → H

513 - 250 = ☐ → D

Scratch space:

CLUE 5

Division facts (1-12) - the last clue

> The rangers shared the supply crates equally among their patrol teams before heading into the canyon.

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 ÷ 7 = ☐ | 100 ÷ 10 = ☐ | 72 ÷ 6 = ☐ | 6 ÷ 1 = ☐ | 24 ÷ 3 = ☐

5 ÷ 5 = ☐ | 9 ÷ 3 = ☐ | 81 ÷ 9 = ☐ | 55 ÷ 11 = ☐ | 88 ÷ 8 = ☐

22 ÷ 11 = ☐

Step 2 - cross out the sentence with each answer:

1. The villain whistled for a raptor companion, then dug with a gravel shovel.
2. The villain signaled a stegosaurus guard, then checked an amber scanner.
3. The villain signaled a stegosaurus guard, then blew a sonic whistle.
4. The villain signaled a stegosaurus guard, then fired a rope launcher.
5. The villain signaled a stegosaurus guard, then dug with a gravel shovel.
6. The villain rode on a triceratops mount, then fired a rope launcher.
7. The villain whistled for a raptor companion, then fired a rope launcher.
8. The villain whistled for a raptor companion, then checked an amber scanner.
9. The villain guided an ankylo helper, then dug with a gravel shovel.
10. The villain guided an ankylo helper, then checked an amber scanner.
11. The villain launched a pterodactyl scout, then blew a sonic whistle.
12. The villain guided an ankylo helper, then fired a rope launcher.

TEACHER / PARENT

Answer Key

The Secret of Dino Ridge

Culprit: Dr. Mary Anning

Raptor Companion · Rope Launcher · Left Handed · Feathered Cap · Fruity Treat

Trail: Start 21 → Clue 1 16 → Clue 2 13 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT USE A BONE COMPASS"

4 × 8 = 32 (T) · 7 × 11 = 77 (S) · 12 × 3 = 36 (O) · 8 × 11 = 88 (U) · 9 × 8 = 72 (L) · 6 × 7 = 42 (I) · 7 × 5 = 35 (C) · 5 × 11 = 55 (V) · 7 × 2 = 14 (B) · 12 × 11 = 132 (N) · 3 × 9 = 27 (E) · 9 × 12 = 108 (A) · 1 × 5 = 5 (H) · 3 × 5 = 15 (P) · 7 × 3 = 21 (M) · 12 × 7 = 84 (D)

Clue 2 (Rounding): "THE VILLAIN HELD THE MAP WITH THEIR LEFT HAND"

Round 351 to the nearest hundred = 400 (T) · Round 87 to the nearest ten = 90 (E) · Round 5,796 to the nearest thousand = 6000 (R) · Round 21 to the nearest ten = 20 (V) · Round 84 to the nearest ten = 80 (M) · Round 42 to the nearest ten = 40 (L) · Round 4,454 to the nearest thousand = 4000 (N) · Round 500 to the nearest hundred = 500 (F) · Round 211 to the nearest hundred = 200 (A) · Round 7,679 to the nearest thousand = 8000 (P) · Round 948 to the nearest hundred = 900 (H) · Round 265 to the nearest hundred = 300 (I) · Round 3,216 to the nearest thousand = 3000 (D) · Round 591 to the nearest hundred = 600 (W)

Clue 3 (Addition): "THE VILLAIN WAS LURED AWAY BY A FRUITY TREAT"

487 + 237 = 724 (T) · 299 + 133 = 432 (A) · 302 + 640 = 942 (I) · 180 + 295 = 475 (W) · 266 + 444 = 710 (S) · 157 + 163 = 320 (V) · 164 + 299 = 463 (R) · 341 + 416 = 757 (U) · 331 + 648 = 979 (E) · 243 + 142 = 385 (H) · 119 + 162 = 281 (N) · 122 + 143 = 265 (B) · 215 + 433 = 648 (L) · 623 + 296 = 919 (F) · 489 + 274 = 763 (Y) · 342 + 366 = 708 (D)

Clue 4 (Subtraction): "THE POLICE FOUND A FEATHER FROM A CAP AT SITE"

416 - 129 = 287 (T) · 660 - 156 = 504 (C) · 812 - 202 = 610 (I) · 1037 - 183 = 854 (R) · 796 - 250 = 546 (N) · 709 - 181 = 528 (M) · 189 - 13 = 176 (S) · 824 - 106 = 718 (P) · 810 - 180 = 630 (O) · 899 - 277 = 622 (U) · 654 - 332 = 322 (E) · 870 - 367 = 503 (A) · 564 - 102 = 462 (F) · 407 - 222 = 185 (L) · 716 - 129 = 587 (H) · 513 - 250 = 263 (D)

Clue 5 (Division facts (1-12)): surviving statement is box 7 → Dr. Mary Anning

28 ÷ 7 = 4 · 100 ÷ 10 = 10 · 72 ÷ 6 = 12 · 6 ÷ 1 = 6 · 24 ÷ 3 = 8 · 5 ÷ 5 = 1 · 9 ÷ 3 = 3 · 81 ÷ 9 = 9 · 55 ÷ 11 = 5 · 88 ÷ 8 = 11 · 22 ÷ 11 = 2