The Dinosaur Dig Disaster

Grade 3 math · Multiplication, Rounding, Addition, Subtraction, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

A priceless Spinosaurus claw fossil was stolen from the excavation site at Fern Ridge! Use your math skills and deductive reasoning to uncover the sneaky saboteur before the convoy leaves.

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 Saboteur is _____

Possible suspects

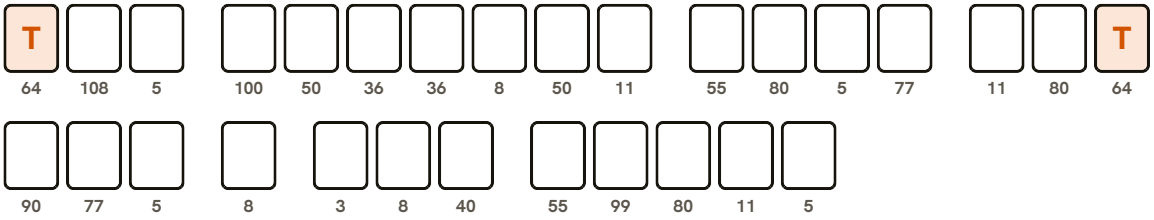
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	DINO TOOL	FIELD GEAR	DOMINANT HAND	TRACE FIBER	VULNERABILITY
Karen Chin	Sonic Chisel	Mag Drone	Left Handed	Red Cap Fiber	Mud Splash
Rex Tracker	Laser Scraper	Jet Pack	Right Handed	Red Cap Fiber	Mud Splash
Claire Dearing	Laser Scraper	Night Goggles	Right Handed	Red Cap Fiber	Loud Whistle
Ian Malcolm	Laser Scraper	Heat Sensor	Right Handed	Red Cap Fiber	Loud Whistle
Sue Hendrickson	Amber Scanner	Heat Sensor	Left Handed	Green Canvas Thread	Flash Bulb
Fossil Phil	Amber Scanner	Heat Sensor	Right Handed	Blue Tweed Strand	Mud Splash
Mary Anning	Laser Scraper	Grapple Hook	Left Handed	Green Canvas Thread	Flash Bulb
Robert Bakker	Laser Scraper	Night Goggles	Right Handed	Green Canvas Thread	Mud Splash
Roy Chapman Andrews	Sonic Chisel	Night Goggles	Left Handed	Red Cap Fiber	Loud Whistle
Dong Zhiming	Amber Scanner	Jet Pack	Left Handed	Blue Tweed Strand	Flash Bulb
Talon Flint	Amber Scanner	Jet Pack	Left Handed	Green Canvas Thread	Mud Splash
Paul Sereno	Sonic Chisel	Night Goggles	Right Handed	Blue Tweed Strand	Loud Whistle
Digby Stone	Ground Radar	Night Goggles	Right Handed	Red Cap Fiber	Loud Whistle
Edward Cope	Sonic Chisel	Grapple Hook	Left Handed	Green Canvas Thread	Loud Whistle
Luis Chiappe	Amber Scanner	Grapple Hook	Left Handed	Blue Tweed Strand	Loud Whistle
Patricia Vickers	Sonic Chisel	Grapple Hook	Left Handed	Red Cap Fiber	Flash Bulb
Barnum Brown	Ground Radar	Grapple Hook	Left Handed	Green Canvas Thread	Flash Bulb
Xu Xing	Laser Scraper	Grapple Hook	Right Handed	Red Cap Fiber	Mud Splash
Ellie Sattler	Sonic Chisel	Mag Drone	Right Handed	Red Cap Fiber	Loud Whistle
Othniel Marsh	Sonic Chisel	Jet Pack	Right Handed	Blue Tweed Strand	Loud Whistle
Owen Grady	Sonic Chisel	Grapple Hook	Right Handed	Red Cap Fiber	Loud Whistle

CLUE 1 Multiplication facts (1-12)

To check the supply crates, you multiply the number of tool trays by the items in each row.

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



8 × 8 = ☐ → T

9 × 11 = ☐ → R

7 × 11 = ☐ → S

4 × 9 = ☐ → L

9 × 12 = ☐ → H

1 × 3 = ☐ → M

4 × 10 = ☐ → G

10 × 10 = ☐ → V

5 × 11 = ☐ → D

9 × 10 = ☐ → U

1 × 8 = ☐ → A

11 × 1 = ☐ → N

5 × 1 = ☐ → E

5 × 10 = ☐ → I

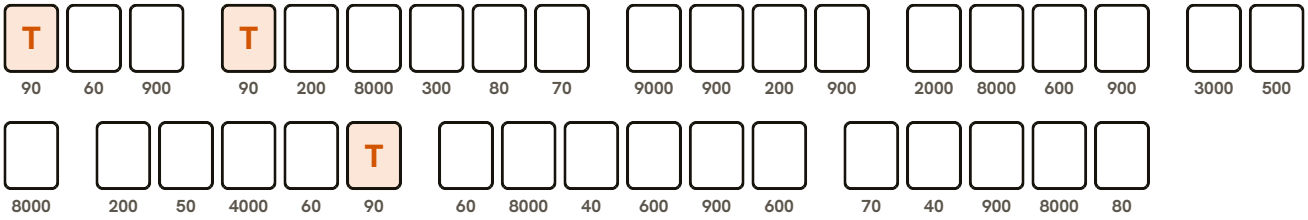
10 × 8 = ☐ → O

Scratch space:

CLUE 2 Rounding

The digital quarry scale shows weight estimates that round to the nearest hundred pounds.

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



Round 92 to the nearest ten ☐ → T

Round 7,540 to the nearest thousand ☐ → A

Round 595 to the nearest hundred ☐ → D

Round 8,575 to the nearest thousand ☐ → W

Round 52 to the nearest ten ☐ → I

Round 36 to the nearest ten ☐ → N

Round 487 to the nearest hundred ☐ → Y

Round 83 to the nearest ten ☐ → K

Round 260 to the nearest hundred ☐ → C

Round 1,980 to the nearest thousand ☐ → M

Round 3,850 to the nearest thousand ☐ → G

Round 74 to the nearest ten ☐ → S

Round 944 to the nearest hundred ☐ → E

Round 162 to the nearest hundred ☐ → R

Round 63 to the nearest ten ☐ → H

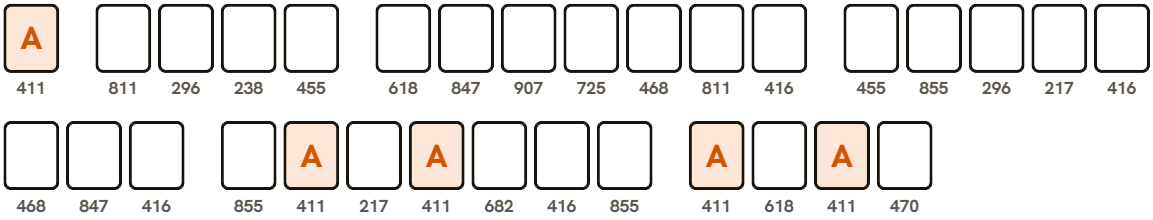
Round 2,596 to the nearest thousand ☐ → B

Scratch space:

CLUE 3 Addition

You total up all the bone fragments gathered across the three dig sectors.

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



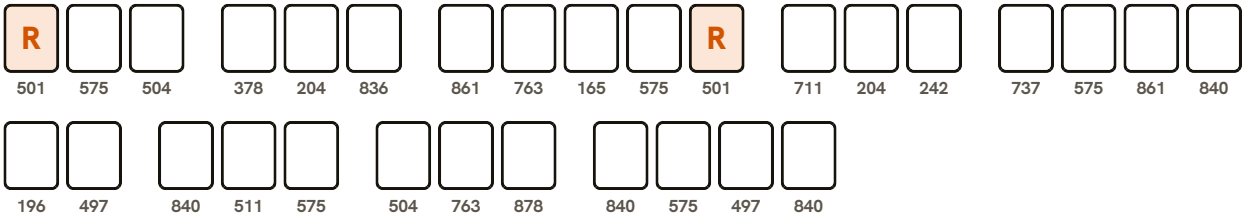
137 + 274 = ☐ → A	543 + 312 = ☐ → R	359 + 488 = ☐ → H
277 + 630 = ☐ → I	248 + 207 = ☐ → D	173 + 243 = ☐ → E
238 + 444 = ☐ → G	305 + 313 = ☐ → W	229 + 239 = ☐ → T
92 + 125 = ☐ → V	127 + 111 = ☐ → U	158 + 312 = ☐ → Y
513 + 298 = ☐ → L	142 + 154 = ☐ → O	329 + 396 = ☐ → S

Scratch space:

CLUE 4 Subtraction

You take the initial count of survey maps and subtract those left in the field tent.

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



827 - 326 = ☐ → R

547 - 50 = ☐ → N

218 - 53 = ☐ → B

975 - 264 = ☐ → W

911 - 174 = ☐ → L

845 - 9 = ☐ → P

990 - 112 = ☐ → G

632 - 390 = ☐ → S

1026 - 165 = ☐ → F

492 - 114 = ☐ → C

850 - 339 = ☐ → H

862 - 287 = ☐ → E

497 - 293 = ☐ → A

717 - 213 = ☐ → D

1122 - 282 = ☐ → T

390 - 194 = ☐ → O

883 - 120 = ☐ → I

Scratch space:

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

> You share the specimen jars equally among all the research teams at the site.

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:

12 ÷ 6 = ☐	132 ÷ 11 = ☐	77 ÷ 7 = ☐	48 ÷ 8 = ☐	27 ÷ 3 = ☐
56 ÷ 7 = ☐	11 ÷ 11 = ☐	24 ÷ 6 = ☐	42 ÷ 6 = ☐	20 ÷ 2 = ☐
15 ÷ 5 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain zapped with a laser scraper, then floated a mag drone.
2. The villain swept with ground radar, then crept around in night goggles.
3. The villain tuned an amber scanner, then tracked heat with a heat sensor.
4. The villain swept with ground radar, then tracked heat with a heat sensor.
5. The villain zapped with a laser scraper, then tracked heat with a heat sensor.
6. The villain used a sonic chisel, then escaped on a jet pack.
7. The villain coated the fossil in plaster, then crept around in night goggles.
8. The villain used a sonic chisel, then floated a mag drone.
9. The villain swept with ground radar, then scaled the quarry with a grapple hook.
10. The villain tuned an amber scanner, then crept around in night goggles.
11. The villain zapped with a laser scraper, then crept around in night goggles.
12. The villain used a sonic chisel, then scaled the quarry with a grapple hook.

TEACHER / PARENT

Answer Key

The Dinosaur Dig Disaster

Culprit: Ian Malcolm

Laser Scraper · Heat Sensor · Right Handed · Red Cap Fiber · Loud Whistle

Trail: Start 21 → Clue 1 19 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

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

8 × 8 = 64 (T) · 9 × 11 = 99 (R) · 7 × 11 = 77 (S) · 4 × 9 = 36 (L) · 9 × 12 = 108 (H) · 1 × 3 = 3 (M) · 4 × 10 = 40 (G) · 10 × 10 = 100 (V) · 5 × 11 = 55 (D) · 9 × 10 = 90 (U) · 1 × 8 = 8 (A) · 11 × 1 = 11 (N) · 5 × 1 = 5 (E) · 5 × 10 = 50 (I) · 10 × 8 = 80 (O)

Clue 2 (Rounding): "THE TRACKS WERE MADE BY A RIGHT HANDED SNEAK"

Round 92 to the nearest ten = 90 (T) · Round 7,540 to the nearest thousand = 8000 (A) · Round 595 to the nearest hundred = 600 (D) · Round 8,575 to the nearest thousand = 9000 (W) · Round 52 to the nearest ten = 50 (I) · Round 36 to the nearest ten = 40 (N) · Round 487 to the nearest hundred = 500 (Y) · Round 83 to the nearest ten = 80 (K) · Round 260 to the nearest hundred = 300 (C) · Round 1,980 to the nearest thousand = 2000 (M) · Round 3,850 to the nearest thousand = 4000 (G) · Round 74 to the nearest ten = 70 (S) · Round 944 to the nearest hundred = 900 (E) · Round 162 to the nearest hundred = 200 (R) · Round 63 to the nearest ten = 60 (H) · Round 2,596 to the nearest thousand = 3000 (B)

Clue 3 (Addition): "A LOUD WHISTLE DROVE THE RAVAGER AWAY"

137 + 274 = 411 (A) · 543 + 312 = 855 (R) · 359 + 488 = 847 (H) · 277 + 630 = 907 (I) · 248 + 207 = 455 (D) · 173 + 243 = 416 (E) · 238 + 444 = 682 (G) · 305 + 313 = 618 (W) · 229 + 239 = 468 (T) · 92 + 125 = 217 (V) · 127 + 111 = 238 (U) · 158 + 312 = 470 (Y) · 513 + 298 = 811 (L) · 142 + 154 = 296 (O) · 329 + 396 = 725 (S)

Clue 4 (Subtraction): "RED CAP FIBER WAS LEFT ON THE DIG TENT"

827 - 326 = 501 (R) · 547 - 50 = 497 (N) · 218 - 53 = 165 (B) · 975 - 264 = 711 (W) · 911 - 174 = 737 (L) · 845 - 9 = 836 (P) · 990 - 112 = 878 (G) · 632 - 390 = 242 (S) · 1026 - 165 = 861 (F) · 492 - 114 = 378 (C) · 850 - 339 = 511 (H) · 862 - 287 = 575 (E) · 497 - 293 = 204 (A) · 717 - 213 = 504 (D) · 1122 - 282 = 840 (T) · 390 - 194 = 196 (O) · 883 - 120 = 763 (I)

Clue 5 (Division facts (1-12)): surviving statement is box 5 → Ian Malcolm

12 ÷ 6 = 2 · 132 ÷ 11 = 12 · 77 ÷ 7 = 11 · 48 ÷ 8 = 6 · 27 ÷ 3 = 9 · 56 ÷ 7 = 8 · 11 ÷ 11 = 1 · 24 ÷ 6 = 4 · 42 ÷ 6 = 7 · 20 ÷ 2 = 10 · 15 ÷ 5 = 3