The Great Dino Fossil Mystery

Grade 1 math · Addition, Subtraction, Multiplication, Skip counting, Division · Reading level grades 1-2

Detective: _____ **Date:** _____

A rare glowing fossil went missing from Dino Valley Park! Help Ranger Sam track down the sneaky thief before the big museum tour begins.

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 fossil thief is _____

Possible suspects

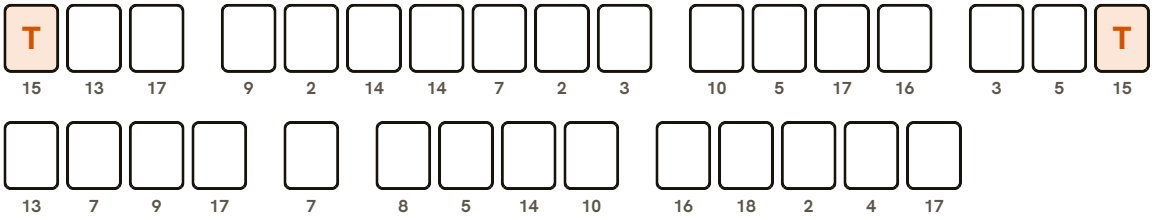
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	DINO GEAR	DINO BADGE	WATCH WRIST	HAT COLOR	FAVORITE SNACK
Tracker Tim	Track Finder	Silver Leaf	Right Wrist	Green Cap	Fern Crisps
Dr Bone	Safety Net	Silver Leaf	Left Wrist	Green Cap	Fern Crisps
Ranger Sam	Lava Lamp	Gold Spike	Right Wrist	Brown Cap	Fern Crisps
Scientist Sara	Track Finder	Ruby Shell	Left Wrist	Green Cap	Fern Crisps
Explorer Maya	Bone Scanner	Bronze Claw	Right Wrist	Red Cap	Nut Bars
Ranger Ron	Track Finder	Bronze Claw	Left Wrist	Green Cap	Fern Crisps
Professor Fern	Safety Net	Gold Spike	Left Wrist	Green Cap	Berry Bites
Digging Dan	Track Finder	Gold Spike	Left Wrist	Red Cap	Nut Bars
Trapper Tess	Lava Lamp	Amber Gem	Left Wrist	Red Cap	Nut Bars
Camper Cody	Rope Lasso	Gold Spike	Left Wrist	Brown Cap	Nut Bars
Camper Chloe	Rope Lasso	Amber Gem	Left Wrist	Green Cap	Nut Bars
Scout Zoe	Lava Lamp	Gold Spike	Left Wrist	Green Cap	Fern Crisps
Hunter Hannah	Lava Lamp	Amber Gem	Right Wrist	Green Cap	Berry Bites
Scientist Skye	Track Finder	Silver Leaf	Left Wrist	Green Cap	Nut Bars
Guide Gabe	Bone Scanner	Amber Gem	Left Wrist	Red Cap	Fern Crisps
Dino Daisy	Lava Lamp	Amber Gem	Right Wrist	Green Cap	Nut Bars
Professor Pam	Rope Lasso	Gold Spike	Right Wrist	Green Cap	Berry Bites
Ranger Rex	Track Finder	Gold Spike	Right Wrist	Red Cap	Nut Bars
Scout Ben	Bone Scanner	Silver Leaf	Left Wrist	Green Cap	Fern Crisps
Tracker Leo	Safety Net	Silver Leaf	Right Wrist	Brown Cap	Fern Crisps
Digger Dave	Rope Lasso	Silver Leaf	Left Wrist	Red Cap	Fern Crisps

CLUE 1 Addition

Ranger Sam found dino footprint molds in two tents. Add them together to unlock the first hint.

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



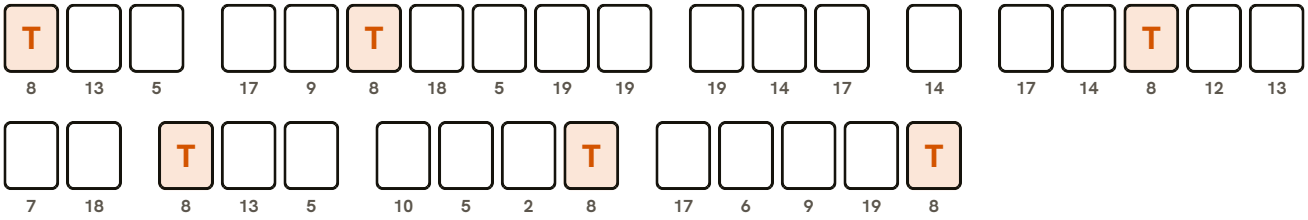
4 + 11 = ☐ → T	3 + 6 = ☐ → V	2 + 5 = ☐ → A	6 + 2 = ☐ → G
7 + 7 = ☐ → L	5 + 11 = ☐ → S	1 + 4 = ☐ → O	4 + 9 = ☐ → H
1 + 2 = ☐ → N	4 + 6 = ☐ → D	2 + 2 = ☐ → K	1 + 1 = ☐ → I
9 + 9 = ☐ → P	11 + 6 = ☐ → E		

Scratch space:

CLUE 2 Subtraction

Tracker Leo counted fossil brushes but some went missing. Subtract to find the watch clue.

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



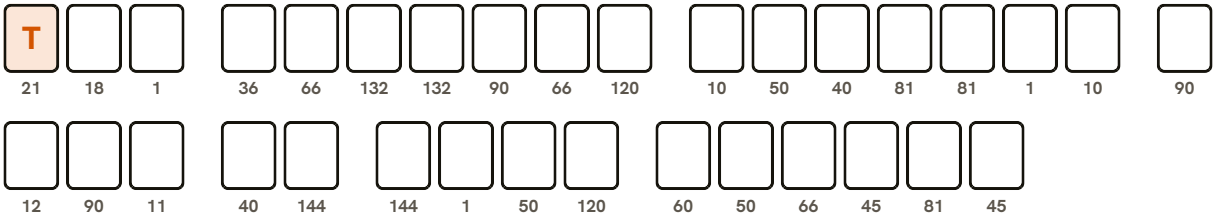
14 - 6 = ☐ → T	15 - 8 = ☐ → O	9 - 3 = ☐ → R	14 - 1 = ☐ → H
20 - 2 = ☐ → N	14 - 2 = ☐ → C	20 - 1 = ☐ → S	8 - 6 = ☐ → F
18 - 4 = ☐ → A	12 - 7 = ☐ → E	19 - 2 = ☐ → W	
15 - 6 = ☐ → I	16 - 6 = ☐ → L		

Scratch space:

CLUE 3 Multiplication facts (1-12)

> Professor Fern saw boxes of shiny amber stones in equal rows. Multiply to open the path.

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



3 × 7 = ☐ → T

3 × 6 = ☐ → H

12 × 5 = ☐ → C

12 × 12 = ☐ → F

10 × 1 = ☐ → D

6 × 11 = ☐ → I

9 × 4 = ☐ → V

1 × 1 = ☐ → E

12 × 10 = ☐ → N

9 × 10 = ☐ → A

9 × 9 = ☐ → P

11 × 12 = ☐ → L

6 × 2 = ☐ → B

9 × 5 = ☐ → S

10 × 4 = ☐ → O

5 × 10 = ☐ → R

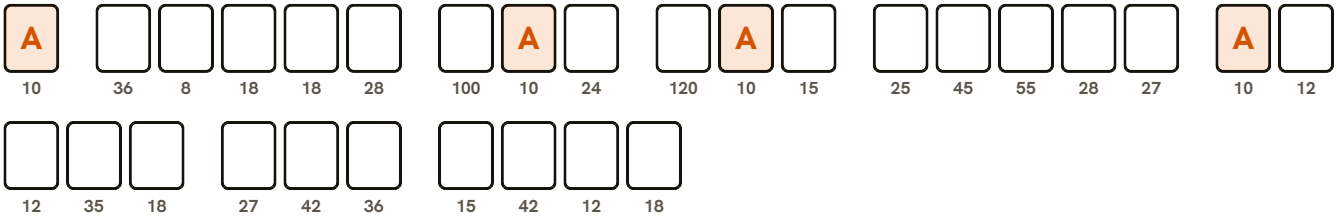
1 × 11 = ☐ → G

Scratch space:

CLUE 4 Skip counting

Dino Daisy tracked footprints going by twos up the hill. Skip count to trace the suspect.

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, 8, ___, 12, 14 ☐ → **A**

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, ___, 27, 30 ☐ → **P**

Skip-count by 5s. Fill the blank: 5, 10, ___, 20, 25 ☐ → **S**

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

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

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

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

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, ___, 39, 42 ☐ → **G**

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

Skip-count by 3s. Fill the blank: 3, 6, 9, ___, 15, 18 ☐ → **T**

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

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

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, ___, 50, 55 ☐ → **O**

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, ___, 60, 65 ☐ → **U**

Scratch space:

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

> Explorer Maya divided dino snacks equally among the campers. Divide to solve 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:

35 ÷ 5 = ☐	66 ÷ 11 = ☐	12 ÷ 12 = ☐	45 ÷ 5 = ☐	96 ÷ 12 = ☐
12 ÷ 6 = ☐	55 ÷ 11 = ☐	48 ÷ 4 = ☐	44 ÷ 4 = ☐	9 ÷ 3 = ☐
28 ÷ 7 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain cast a safety net, then pinned on a silver leaf.
2. The villain threw a rope lasso, then pinned on a silver leaf.
3. The villain ran a bone scanner, then pinned on a bronze claw.
4. The villain used a lava lamp, then pinned on a ruby shell.
5. The villain threw a rope lasso, then pinned on a bronze claw.
6. The villain followed a track finder, then pinned on a ruby shell.
7. The villain followed a track finder, then pinned on a bronze claw.
8. The villain threw a rope lasso, then pinned on a amber gem.
9. The villain used a lava lamp, then pinned on a gold spike.
10. The villain ran a bone scanner, then pinned on a silver leaf.
11. The villain cast a safety net, then pinned on a ruby shell.
12. The villain ran a bone scanner, then pinned on a gold spike.

TEACHER / PARENT

Answer Key

The Great Dino Fossil Mystery

Culprit: Scout Ben

Bone Scanner · Silver Leaf · Left Wrist · Green Cap · Fern Crisps

Trail: Start 21 → Clue 1 14 → Clue 2 9 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT HAVE A GOLD SPIKE"

4 + 11 = 15 (T) · 3 + 6 = 9 (V) · 2 + 5 = 7 (A) · 6 + 2 = 8 (G) · 7 + 7 = 14 (L) · 5 + 11 = 16 (S) · 1 + 4 = 5 (O) · 4 + 9 = 13 (H) · 1 + 2 = 3 (N) · 4 + 6 = 10 (D) · 2 + 2 = 4 (K) · 1 + 1 = 2 (I) · 9 + 9 = 18 (P) · 11 + 6 = 17 (E)

Clue 2 (Subtraction): "THE WITNESS SAW A WATCH ON THE LEFT WRIST"

14 - 6 = 8 (T) · 15 - 8 = 7 (O) · 9 - 3 = 6 (R) · 14 - 1 = 13 (H) · 20 - 2 = 18 (N) · 14 - 2 = 12 (C) · 20 - 1 = 19 (S) · 8 - 6 = 2 (F) · 18 - 4 = 14 (A) · 12 - 7 = 5 (E) · 19 - 2 = 17 (W) · 15 - 6 = 9 (I) · 16 - 6 = 10 (L)

Clue 3 (Multiplication facts (1-12)): "THE VILLAIN DROPPED A BAG OF FERN CRISPS"

3 × 7 = 21 (T) · 3 × 6 = 18 (H) · 12 × 5 = 60 (C) · 12 × 12 = 144 (F) · 10 × 1 = 10 (D) · 6 × 11 = 66 (I) · 9 × 4 = 36 (V) · 1 × 1 = 1 (E) · 12 × 10 = 120 (N) · 9 × 10 = 90 (A) · 9 × 9 = 81 (P) · 11 × 12 = 132 (L) · 6 × 2 = 12 (B) · 9 × 5 = 45 (S) · 10 × 4 = 40 (O) · 5 × 10 = 50 (R) · 1 × 11 = 11 (G)

Clue 4 (Skip counting): "A GREEN CAP WAS FOUND AT THE DIG SITE"

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, ___, 12, 14 = 10 (A) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, ___, 27, 30 = 24 (P) · Skip-count by 5s. Fill the blank: 5, 10, ___, 20, 25 = 15 (S) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, ___, 45, 48 = 42 (I) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, ___, 30, 32 = 28 (N) · Skip-count by 2s. Fill the blank: 2, 4, 6, ___, 10, 12 = 8 (R) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, ___, 40, 45 = 35 (H) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, ___, 30, 33 = 27 (D) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, ___, 39, 42 = 36 (G) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, ___, 130, 140 = 120 (W) · Skip-count by 3s. Fill the blank: 3, 6, 9, ___, 15, 18 = 12 (T) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, ___, 110, 120 = 100 (C) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, ___, 30, 35 = 25 (F) · 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, ___, 50, 55 = 45 (O) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, ___, 60, 65 = 55 (U)

Clue 5 (Division facts (1-12)): surviving statement is box 10 → Scout Ben

35 ÷ 5 = 7 · 66 ÷ 11 = 6 · 12 ÷ 12 = 1 · 45 ÷ 5 = 9 · 96 ÷ 12 = 8 · 12 ÷ 6 = 2 · 55 ÷ 11 = 5 · 48 ÷ 4 = 12 · 44 ÷ 4 = 11 · 9 ÷ 3 = 3 · 28 ÷ 7 = 4