The Great Dino Bone Mystery

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

Detective: _____ **Date:** _____

Someone swiped the shiny gold T-Rex tooth from the paleontology tent! Track the footprints and decode the clues to catch the thief.

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

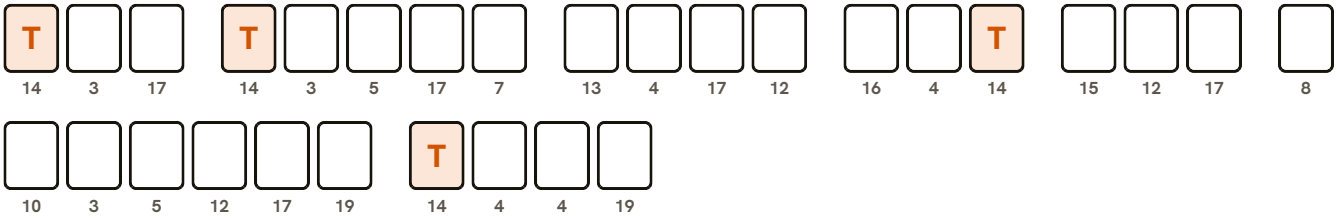
Cross off a row as each clue rules it out. The one left at the end is the culprit.

NAME	DINO SUIT	FOSSIL GADGET	COMPASS STRAP	EXPEDITION HAT	DISTRACTION TOY
Sam Fossil	Raptor Suit	Bone Scanner	Right Wrist Strap	Camo Bandana	Shiny Mirror
Maya Diggs	Raptor Suit	Magnifying Lens	Right Wrist Strap	Camo Bandana	Shiny Mirror
Rose Valley	Triceratops Suit	Chisel Tool	Right Wrist Strap	Safari Cap	Shiny Mirror
Ivy Creek	Pterodactyl Suit	Chisel Tool	Left Wrist Strap	Camo Bandana	Shiny Mirror
Ella Fern	Triceratops Suit	Chisel Tool	Right Wrist Strap	Camo Bandana	Shiny Mirror
Leo Raptor	Raptor Suit	Dust Brush	Left Wrist Strap	Safari Cap	Shiny Mirror
Luke Tracks	Triceratops Suit	Magnifying Lens	Left Wrist Strap	Camo Bandana	Shiny Mirror
Zack Boulder	Pterodactyl Suit	Dust Brush	Left Wrist Strap	Pith Helmet	Squeaky Duck
Tina Clay	Pterodactyl Suit	Bone Scanner	Right Wrist Strap	Pith Helmet	Shiny Mirror
Owen Park	T-Rex Suit	Magnifying Lens	Left Wrist Strap	Camo Bandana	Shiny Mirror
Toby Spike	Raptor Suit	Magnifying Lens	Left Wrist Strap	Pith Helmet	Shiny Mirror
Rex Stone	Pterodactyl Suit	Bone Scanner	Right Wrist Strap	Camo Bandana	Shiny Mirror
Jack Slate	T-Rex Suit	Chisel Tool	Right Wrist Strap	Camo Bandana	Whistle Toy
Ruby Flint	Stegosaurus Suit	Bone Scanner	Right Wrist Strap	Pith Helmet	Whistle Toy
Bruno Ridge	Stegosaurus Suit	GPS Radar	Right Wrist Strap	Pith Helmet	Whistle Toy
Hank Dirt	Pterodactyl Suit	Chisel Tool	Right Wrist Strap	Safari Cap	Whistle Toy
Mia Quarry	Stegosaurus Suit	Bone Scanner	Left Wrist Strap	Camo Bandana	Shiny Mirror
Pete Basin	Triceratops Suit	Dust Brush	Left Wrist Strap	Pith Helmet	Shiny Mirror
Nina Amber	Pterodactyl Suit	GPS Radar	Right Wrist Strap	Camo Bandana	Shiny Mirror
Cam Mud	Stegosaurus Suit	Chisel Tool	Right Wrist Strap	Camo Bandana	Squeaky Duck
Nora Cliff	Raptor Suit	GPS Radar	Right Wrist Strap	Camo Bandana	Whistle Toy

CLUE 1 Addition

We counted the footprint tracks found near the tent to learn our first hint.

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



7 + 7 = ☐ → T

1 + 2 = ☐ → H

8 + 11 = ☐ → L

5 + 11 = ☐ → N

5 + 2 = ☐ → F

1 + 3 = ☐ → O

3 + 7 = ☐ → C

5 + 3 = ☐ → A

10 + 5 = ☐ → U

9 + 4 = ☐ → D

7 + 5 = ☐ → S

1 + 4 = ☐ → I

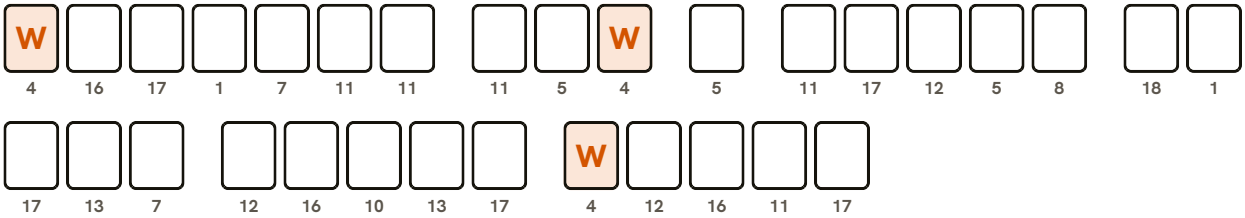
12 + 5 = ☐ → E

Scratch space:

CLUE 2 Subtraction

We took away the fake fossil tracks to reveal a hidden secret message.

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



12 - 8 = ☐ → W

19 - 1 = ☐ → O

15 - 3 = ☐ → R

20 - 4 = ☐ → I

20 - 3 = ☐ → T

20 - 7 = ☐ → H

17 - 6 = ☐ → S

15 - 7 = ☐ → P

15 - 5 = ☐ → G

9 - 4 = ☐ → A

10 - 9 = ☐ → N

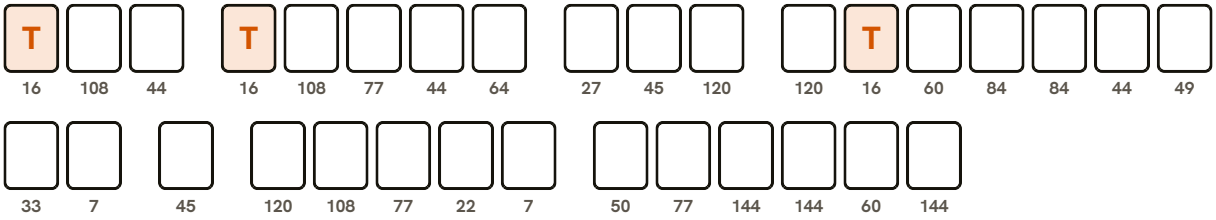
16 - 9 = ☐ → E

Scratch space:

CLUE 3 Multiplication facts (1-12)

> We checked three rows of specimen boxes to find a carved note.

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



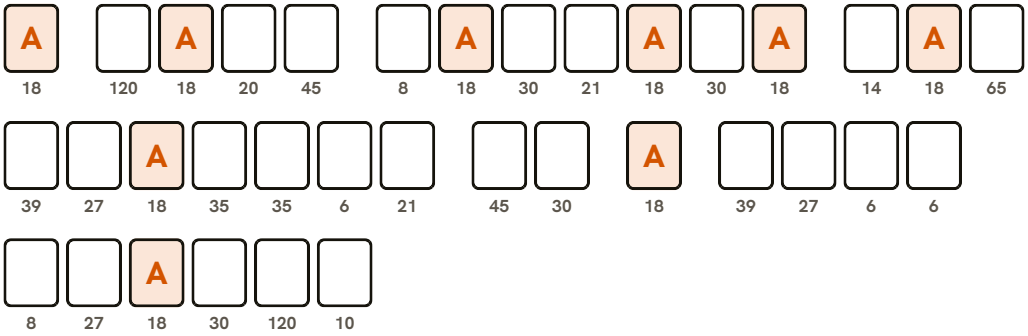
- 4 × 4 = ☐ → T
- 7 × 11 = ☐ → I
- 12 × 12 = ☐ → R
- 5 × 9 = ☐ → A
- 3 × 9 = ☐ → W
- 8 × 8 = ☐ → F
- 3 × 11 = ☐ → B
- 2 × 11 = ☐ → N
- 12 × 5 = ☐ → O
- 7 × 12 = ☐ → P
- 11 × 4 = ☐ → E
- 7 × 7 = ☐ → D
- 12 × 9 = ☐ → H
- 5 × 10 = ☐ → M
- 10 × 12 = ☐ → S
- 1 × 7 = ☐ → Y

Scratch space:

CLUE 4 Skip counting

We counted by twos along the dinosaur trail to spot a lost item.

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



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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, ___, 35, 40 ☐ → **N**

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

Skip-count by 2s. Fill the blank: 2, 4, 6, 8, ___, 12, 14 ☐ → **H**

Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 ☐ → **E**

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

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

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, ___, 24, 27 ☐ → **D**

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

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

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

Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, ___, 70, 75 ☐ → **S**

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

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

Scratch space:

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

> We shared the discovery tools into equal piles to decode 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:

12 ÷ 6 = ☐	50 ÷ 5 = ☐	30 ÷ 5 = ☐	84 ÷ 12 = ☐	55 ÷ 5 = ☐
8 ÷ 8 = ☐	48 ÷ 12 = ☐	54 ÷ 6 = ☐	80 ÷ 10 = ☐	18 ÷ 6 = ☐
36 ÷ 3 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain charged in a Triceratops suit, then swept dirt with a dust brush.
2. The villain pounced in a Raptor suit, then peered through a magnifying lens.
3. The villain swung a Stegosaurus suit tail, then swept dirt with a dust brush.
4. The villain stomped in a T-Rex suit, then swept dirt with a dust brush.
5. The villain glided in a Pterodactyl suit, then tracked signs with a GPS radar.
6. The villain glided in a Pterodactyl suit, then scanned the mud with a bone scanner.
7. The villain glided in a Pterodactyl suit, then peered through a magnifying lens.
8. The villain pounced in a Raptor suit, then tracked signs with a GPS radar.
9. The villain stomped in a T-Rex suit, then tracked signs with a GPS radar.
10. The villain pounced in a Raptor suit, then scanned the mud with a bone scanner.
11. The villain glided in a Pterodactyl suit, then swept dirt with a dust brush.
12. The villain pounced in a Raptor suit, then swept dirt with a dust brush.

TEACHER / PARENT

Answer Key

The Great Dino Bone Mystery

Culprit: Nina Amber

Pterodactyl Suit · GPS Radar · Right Wrist Strap · Camo Bandana · Shiny Mirror

Trail: Start 21 → Clue 1 15 → Clue 2 8 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE THIEF DOES NOT USE A CHISEL TOOL"

7 + 7 = 14 (T) · 1 + 2 = 3 (H) · 8 + 11 = 19 (L) · 5 + 11 = 16 (N) · 5 + 2 = 7 (F) · 1 + 3 = 4 (O) · 3 + 7 = 10 (C) · 5 + 3 = 8 (A) · 10 + 5 = 15 (U) · 9 + 4 = 13 (D) · 7 + 5 = 12 (S) · 1 + 4 = 5 (I) · 12 + 5 = 17 (E)

Clue 2 (Subtraction): "WITNESS SAW A STRAP ON THE RIGHT WRIST"

12 - 8 = 4 (W) · 19 - 1 = 18 (O) · 15 - 3 = 12 (R) · 20 - 4 = 16 (I) · 20 - 3 = 17 (T) · 20 - 7 = 13 (H) · 17 - 6 = 11 (S) · 15 - 7 = 8 (P) · 15 - 5 = 10 (G) · 9 - 4 = 5 (A) · 10 - 9 = 1 (N) · 16 - 9 = 7 (E)

Clue 3 (Multiplication facts (1-12)): "THE THIEF WAS STOPPED BY A SHINY MIRROR"

4 × 4 = 16 (T) · 7 × 11 = 77 (I) · 12 × 12 = 144 (R) · 5 × 9 = 45 (A) · 3 × 9 = 27 (W) · 8 × 8 = 64 (F) · 3 × 11 = 33 (B) · 2 × 11 = 22 (N) · 12 × 5 = 60 (O) · 7 × 12 = 84 (P) · 11 × 4 = 44 (E) · 7 × 7 = 49 (D) · 12 × 9 = 108 (H) · 5 × 10 = 50 (M) · 10 × 12 = 120 (S) · 1 × 7 = 7 (Y)

Clue 4 (Skip counting): "A CAMO BANDANA WAS TRAPPED ON A TREE BRANCH"

Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, ___, 21, 24 = 18 (A) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, ___, 35, 40 = 30 (N) · Skip-count by 2s. Fill the blank: 2, 4, 6, ___, 10, 12 = 8 (B) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, ___, 12, 14 = 10 (H) · Skip-count by 2s. Fill the blank: 2, 4, ___, 8, 10 = 6 (E) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, ___, 50, 55 = 45 (O) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, ___, 16, 18 = 14 (W) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, ___, 24, 27 = 21 (D) · Skip-count by 2s. Fill the blank: 2, 4, 6, 8, 10, 12, 14, 16, 18, ___, 22, 24 = 20 (M) · Skip-count by 10s. Fill the blank: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, ___, 130, 140 = 120 (C) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, ___, 30, 33 = 27 (R) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, ___, 70, 75 = 65 (S) · Skip-count by 5s. Fill the blank: 5, 10, 15, 20, 25, 30, ___, 40, 45 = 35 (P) · Skip-count by 3s. Fill the blank: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, ___, 42, 45 = 39 (T)

Clue 5 (Division facts (1-12)): surviving statement is box 5 → Nina Amber

12 ÷ 6 = 2 · 50 ÷ 5 = 10 · 30 ÷ 5 = 6 · 84 ÷ 12 = 7 · 55 ÷ 5 = 11 · 8 ÷ 8 = 1 · 48 ÷ 12 = 4 · 54 ÷ 6 = 9 · 80 ÷ 10 = 8 · 18 ÷ 6 = 3 · 36 ÷ 3 = 12