



The Great Dino Fossil Heist

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

Detective: _____ Date: _____

Someone stole the priceless golden T-Rex footprint right out of the canyon lab! Detective, use your math skills to narrow down the clues and reveal the villain among the fossil park crew.

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 RIDE	DOMINANT HAND	OUTFIT	DISTRACTION
Sierra Fossil	Net Launcher	Raptor Scout	Right Handed	Green Scale Coat	Bright Flashlight
Claire Dearing	Sound Whistle	Ankylosaurus Crusher	Right Handed	Red Parka	Bright Flashlight
Hunter Stone	Roar Megaphone	Triceratops Cart	Left Handed	Red Parka	Loud Air Horn
Alan Dino	Fossil Scanner	Raptor Scout	Left Handed	Green Scale Coat	Bright Flashlight
Eli Boulder	Net Launcher	Raptor Scout	Right Handed	Red Parka	Loud Air Horn
Bone Ranger	Sound Whistle	Raptor Scout	Right Handed	Green Scale Coat	Loud Air Horn
Ruby Amber	Fossil Scanner	Triceratops Cart	Left Handed	Green Scale Coat	Loud Air Horn
Leo Ridge	Sound Whistle	Stegosaurus Loader	Left Handed	Green Scale Coat	Loud Air Horn
Rex Tracker	Amber Goggles	Pterodactyl Glider	Left Handed	Red Parka	Bright Flashlight
Dr. Sam Grant	Amber Goggles	Pterodactyl Glider	Left Handed	Green Scale Coat	Loud Air Horn
Ian Malcolm	Net Launcher	Stegosaurus Loader	Right Handed	Brown Leather Vest	Bright Flashlight
Chloe Spire	Net Launcher	Triceratops Cart	Right Handed	Brown Leather Vest	Bright Flashlight
Tara Raptor	Amber Goggles	Triceratops Cart	Left Handed	Red Parka	Smoky Flare
Ellie Sattler	Sound Whistle	Pterodactyl Glider	Left Handed	Green Scale Coat	Loud Air Horn
Owen Grady	Sound Whistle	Ankylosaurus Crusher	Left Handed	Red Parka	Loud Air Horn
Ivy Crest	Fossil Scanner	Ankylosaurus Crusher	Left Handed	Green Scale Coat	Smoky Flare
Wyatt Strata	Roar Megaphone	Triceratops Cart	Right Handed	Red Parka	Bright Flashlight
Zack Quarry	Fossil Scanner	Raptor Scout	Left Handed	Brown Leather Vest	Smoky Flare
Maya Canopy	Sound Whistle	Ankylosaurus Crusher	Left Handed	Green Scale Coat	Loud Air Horn
Nico Talon	Sound Whistle	Pterodactyl Glider	Right Handed	Red Parka	Bright Flashlight
Dakota Diggs	Amber Goggles	Pterodactyl Glider	Left Handed	Brown Leather Vest	Smoky Flare

Rounding

The motion sensor on the dig site fence only shows rounded counts of footsteps.

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

Round 7,361 to the nearest thousand $\rightarrow$ **T**

Round 4,292 to the nearest hundred $\rightarrow$ **R**

Round 170 to the nearest ten $\rightarrow$ **N**

Round 109 to the nearest ten $\rightarrow$ **P**

Round 30 to the nearest ten $\rightarrow$

Round 293 to the nearest hundred $\rightarrow$ **S**

Round 1,943 to the nearest thousand $\rightarrow$ **E**

Round 1,103 to the nearest hundred $\rightarrow$ **D**

Round 1,681 to the nearest hundred $\rightarrow$ **C**

Round 372 to the nearest ten $\rightarrow$ **H**

Round 537 to the nearest hundred $\rightarrow$ **0**

Round 2,898 to the nearest hundred $\rightarrow$ **U**

Round 1,251 to the nearest hundred → **A**

Scratch space:

CLUE 2 Addition

We tallied all the fossil brushes and chisels found at the base camp.

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

L																			
6961	4073	5056	2696	2947	4342	9430	2049	4073	2049	5056	2498	2498	2696	9009	3916	5323	9430	2696	2706
2294	4073	3916	4073	9430	4073	4342	3916	2696	2947	4073	2049	5323	9326						

$$3224 + 3737 = \boxed{} \rightarrow \boxed{\text{L}}$$

$$1214 + 835 = \boxed{} \rightarrow \boxed{\text{D}}$$

$$1707 + 791 = \boxed{} \rightarrow \boxed{\text{O}}$$

$$1465 + 2608 = \boxed{} \rightarrow \boxed{\text{E}}$$

$$848 + 1858 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$3314 + 1742 = \boxed{} \rightarrow \boxed{\text{F}}$$

$$1265 + 1431 = \boxed{} \rightarrow \boxed{\text{T}}$$

$$3246 + 2077 = \boxed{} \rightarrow \boxed{\text{I}}$$

$$948 + 1346 = \boxed{} \rightarrow \boxed{\text{W}}$$

$$6481 + 2845 = \boxed{} \rightarrow \boxed{\text{G}}$$

$$4233 + 4776 = \boxed{} \rightarrow \boxed{\text{P}}$$

$$1299 + 2617 = \boxed{} \rightarrow \boxed{\text{R}}$$

$$1922 + 2420 = \boxed{} \rightarrow \boxed{\text{A}}$$

$$6385 + 3045 = \boxed{} \rightarrow \boxed{\text{N}}$$

$$1960 + 987 = \boxed{} \rightarrow \boxed{\text{H}}$$

Scratch space:

CLUE 3

Subtraction

Comparing the glowing amber stones before and after the theft shows the missing count.

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

T																		
6522	5980	8911	5126	5113	2404	2404	5339	5113	5762	4104	5339	3017	3017	3542	5339	1821	8911	6162

1605	7671	2404	3950	2179	6162	5339	5113	1821	5980	3950	1821	5762

$8333 - 1811 = \square \rightarrow \boxed{\text{T}}$

$7190 - 3086 = \square \rightarrow \boxed{\text{W}}$

$3550 - 1729 = \square \rightarrow \boxed{\text{R}}$

$4623 - 1081 = \square \rightarrow \boxed{\text{C}}$

$8172 - 3046 = \square \rightarrow \boxed{\text{V}}$

$11283 - 2372 = \square \rightarrow \boxed{\text{E}}$

$6758 - 4354 = \square \rightarrow \boxed{\text{L}}$

$9065 - 2903 = \square \rightarrow \boxed{\text{D}}$

$5589 - 2572 = \square \rightarrow \boxed{\text{S}}$

$10859 - 4879 = \square \rightarrow \boxed{\text{H}}$

$8342 - 4392 = \square \rightarrow \boxed{\text{O}}$

$7378 - 1616 = \square \rightarrow \boxed{\text{N}}$

$6206 - 1093 = \square \rightarrow \boxed{\text{I}}$

$6441 - 4836 = \square \rightarrow \boxed{\text{B}}$

$8606 - 935 = \square \rightarrow \boxed{\text{Y}}$

$5619 - 3440 = \square \rightarrow \boxed{\text{U}}$

$5389 - 50 = \square \rightarrow \boxed{\text{A}}$

Scratch space:

CLUE 4

Multiplication facts (1-12)

The raptor crates are stored in equal rows inside the supply tent.

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

G															
36	54	14	14	64	22	9	18	144	14	9	4	18	27		
27	56	54	14	18	1	22	144	14	49	27	4	64	18	50	120

$12 \times 3 =$

→ G

$6 \times 9 =$

→ R

$7 \times 7 =$

→ F

$9 \times 1 =$

→ C

$5 \times 10 =$

→ B

$8 \times 8 =$

→ N

$1 \times 4 =$

→ O

$3 \times 9 =$

→ T

$2 \times 11 =$

→ S

$1 \times 1 =$

→ D

$7 \times 2 =$

→ E

$12 \times 12 =$

→ L

$8 \times 7 =$

→ H

$3 \times 6 =$

→ A

$12 \times 10 =$

→ U

Scratch space:

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

We must split the dinosaur treat bags equally among the feeding stations.

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:

$3 \div 3 = \boxed{}$

$18 \div 6 = \boxed{}$

$108 \div 12 = \boxed{}$

$44 \div 4 = \boxed{}$

$40 \div 10 = \boxed{}$

$28 \div 4 = \boxed{}$

$48 \div 8 = \boxed{}$

$60 \div 5 = \boxed{}$

$40 \div 5 = \boxed{}$

$80 \div 8 = \boxed{}$

$5 \div 1 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain blew a loud sound whistle, then soared away on a pterodactyl glider.
2. The villain adjusted amber goggles, then soared away on a pterodactyl glider.
3. The villain blew a loud sound whistle, then rammed past on an ankylosaurus crusher.
4. The villain scanned the mud for footprints, then escaped on a raptor scout.
5. The villain scanned the mud for footprints, then drove off in a triceratops cart.
6. The villain adjusted amber goggles, then rammed past on an ankylosaurus crusher.
7. The villain shouted through a roar megaphone, then soared away on a pterodactyl glider.
8. The villain scanned the mud for footprints, then soared away on a pterodactyl glider.
9. The villain blew a loud sound whistle, then hailed a stegosaurus loader.
10. The villain blew a loud sound whistle, then drove off in a triceratops cart.
11. The villain shouted through a roar megaphone, then escaped on a raptor scout.
12. The villain fired a heavy net launcher, then hailed a stegosaurus loader.

Answer Key

The Great Dino Fossil Heist

Culprit: Dr. Sam Grant

Amber Goggles · Pterodactyl Glider · Left Handed · Green Scale Coat · Loud Air Horn

Trail: Start 21 → Clue 1 16 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE SUSPECT DOES NOT USE TRICERATOPS CART"

Round 7,361 to the nearest thousand = 7000 (T) · Round 4,292 to the nearest hundred = 4300 (R) · Round 170 to the nearest ten = 170 (N) · Round 109 to the nearest ten = 110 (P) · Round 30 to the nearest ten = 30 (I) · Round 293 to the nearest hundred = 300 (S) · Round 1,943 to the nearest thousand = 2000 (E) · Round 1,103 to the nearest hundred = 1100 (D) · Round 1,681 to the nearest hundred = 1700 (C) · Round 372 to the nearest ten = 370 (H) · Round 537 to the nearest hundred = 500 (O) · Round 2,898 to the nearest hundred = 2900 (U) · Round 1,251 to the nearest hundred = 1300 (A)

Clue 2 (Addition): "LEFT HANDED FOOTPRINTS WERE NEAR THE DIG"

$3224 + 3737 = 6961$ (L) · $1214 + 835 = 2049$ (D) · $1707 + 791 = 2498$ (O) · $1465 + 2608 = 4073$ (E) · $848 + 1858 = 2706$ (S) · $3314 + 1742 = 5056$ (F) · $1265 + 1431 = 2696$ (T) · $3246 + 2077 = 5323$ (I) · $948 + 1346 = 2294$ (W) · $6481 + 2845 = 9326$ (G) · $4233 + 4776 = 9009$ (P) · $1299 + 2617 = 3916$ (R) · $1922 + 2420 = 4342$ (A) · $6385 + 3045 = 9430$ (N) · $1960 + 987 = 2947$ (H)

Clue 3 (Subtraction): "THE VILLAIN WAS SCARED BY LOUD AIR HORN"

$8333 - 1811 = 6522$ (T) · $7190 - 3086 = 4104$ (W) · $3550 - 1729 = 1821$ (R) · $4623 - 1081 = 3542$ (C) · $8172 - 3046 = 5126$ (V) · $11283 - 2372 = 8911$ (E) · $6758 - 4354 = 2404$ (L) · $9065 - 2903 = 6162$ (D) · $5589 - 2572 = 3017$ (S) · $10859 - 4879 = 5980$ (H) · $8342 - 4392 = 3950$ (O) · $7378 - 1616 = 5762$ (N) · $6206 - 1093 = 5113$ (I) · $6441 - 4836 = 1605$ (B) · $8606 - 935 = 7671$ (Y) · $5619 - 3440 = 2179$ (U) · $5389 - 50 = 5339$ (A)

Clue 4 (Multiplication facts (1-12)): "GREEN SCALE COAT THREADS LEFT ON A BUSH"

$12 \times 3 = 36$ (G) · $6 \times 9 = 54$ (R) · $7 \times 7 = 49$ (F) · $9 \times 1 = 9$ (C) · $5 \times 10 = 50$ (B) · $8 \times 8 = 64$ (N) · $1 \times 4 = 4$ (O) · $3 \times 9 = 27$ (T) · $2 \times 11 = 22$ (S) · $1 \times 1 = 1$ (D) · $7 \times 2 = 14$ (E) · $12 \times 12 = 144$ (L) · $8 \times 7 = 56$ (H) · $3 \times 6 = 18$ (A) · $12 \times 10 = 120$ (U)

Clue 5 (Division facts (1-12)): surviving statement is box 2 → Dr. Sam Grant

$3 \div 3 = 1$ · $18 \div 6 = 3$ · $108 \div 12 = 9$ · $44 \div 4 = 11$ · $40 \div 10 = 4$ · $28 \div 4 = 7$ · $48 \div 8 = 6$ · $60 \div 5 = 12$ · $40 \div 5 = 8$ · $80 \div 8 = 10$ · $5 \div 1 = 5$