



The Great Dino-Valley Caper

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

Detective: _____ Date: _____

Oh no! Someone took the Golden Fossil from the Dino-Valley Rescue Center! Chief Ranger Pete needs your help to track down the sneaky dinosaur who took 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 Prankster Dino is _____

Possible suspects

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

NAME	DINO SKILL	SPECIAL FEATURE	FOOTPRINT TYPE	FEATHERS OR CREST	DINO DISTRACTION
Titus	tree climb	glowing tail	left-clawed footprint	blue feathers	shiny mirrors
Toby	super speed	night vision	right-clawed footprint	blue feathers	squeaky toys
Rocky	loud stomp	night vision	left-clawed footprint	green crest	squeaky toys
Penny	tail swipe	armor plates	left-clawed footprint	red spikes	shiny mirrors
Sally	loud stomp	crest horn	left-clawed footprint	blue feathers	shiny mirrors
Bronto	tree climb	sharp claws	left-clawed footprint	red spikes	shiny mirrors
Spike	super speed	crest horn	left-clawed footprint	red spikes	squeaky toys
Rex	tree climb	armor plates	left-clawed footprint	red spikes	shiny mirrors
Zoey	high jump	armor plates	left-clawed footprint	blue feathers	shiny mirrors
Becky	loud stomp	night vision	right-clawed footprint	red spikes	shiny mirrors
Trixie	loud stomp	glowing tail	left-clawed footprint	blue feathers	shiny mirrors
Ziggy	loud stomp	night vision	right-clawed footprint	green crest	squeaky toys
Cooper	high jump	sharp claws	right-clawed footprint	blue feathers	shiny mirrors
Bella	tree climb	night vision	left-clawed footprint	blue feathers	shiny mirrors
Dash	high jump	armor plates	left-clawed footprint	red spikes	shiny mirrors
Otis	super speed	sharp claws	left-clawed footprint	green crest	shiny mirrors
Wally	loud stomp	night vision	left-clawed footprint	red spikes	sweet apples
Daisy	tail swipe	sharp claws	left-clawed footprint	blue feathers	squeaky toys
Steggy	tail swipe	crest horn	left-clawed footprint	red spikes	squeaky toys
Raptor	super speed	glowing tail	left-clawed footprint	blue feathers	sweet apples
Gemma	tail swipe	armor plates	left-clawed footprint	blue feathers	squeaky toys

CLUE 1

Addition

Ranger Pete is counting the footprints left in the mud. Let us add up all the prints to find our first clue.

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

T																	
4311	5050	5427	8068	9485	5427	6421	3890	6552	6709	7628	9485	2916	5050	6421	8068	9485	2916

				T				
6529	4791	5427	8068	4311	5050	2916	4791	9485

$2926 + 1385 = \boxed{} \rightarrow \boxed{T}$

$3314 + 1736 = \boxed{} \rightarrow \boxed{H}$

$3393 + 2034 = \boxed{} \rightarrow \boxed{E}$

$2441 + 1449 = \boxed{} \rightarrow \boxed{K}$

$4307 + 3321 = \boxed{} \rightarrow \boxed{I}$

$5945 + 3540 = \boxed{} \rightarrow \boxed{N}$

$4349 + 2180 = \boxed{} \rightarrow \boxed{C}$

$2858 + 3851 = \boxed{} \rightarrow \boxed{D}$

$2443 + 5625 = \boxed{} \rightarrow \boxed{S}$

$2386 + 2405 = \boxed{} \rightarrow \boxed{R}$

$1412 + 1504 = \boxed{} \rightarrow \boxed{O}$

$3969 + 2583 = \boxed{} \rightarrow \boxed{Y}$

$3202 + 3219 = \boxed{} \rightarrow \boxed{A}$

Scratch space:

CLUE 2
Rounding

The computer scanner tracks the dino's speed. It only shows numbers rounded to the nearest ten.

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

T			T															T
20	30	170	20	50	1100	1700	130	900	900	30	3000	200	1100	2000	170	2900	20	
									T								T	
1700	2000	1100	200	170	110	2900	3000	3000	20	2300	50	4300	9000	20				

Round 23 to the nearest ten → **T**

Round 113 to the nearest ten → **D**

Round 51 to the nearest ten → **R**

Round 2,909 to the nearest hundred → **F**

Round 133 to the nearest ten → **K**

Round 4,290 to the nearest hundred → **I**

Round 29 to the nearest ten → **H**

Round 940 to the nearest hundred → **S**

Round 243 to the nearest hundred → **W**

Round 9,335 to the nearest thousand → **N**

Round 2,876 to the nearest thousand → **O**

Round 2,300 to the nearest hundred → **P**

Round 1,653 to the nearest hundred → **C**

Round 2,101 to the nearest thousand → **L**

Round 170 to the nearest ten → **E**

Round 1,136 to the nearest hundred → **A**

Scratch space:

CLUE 3
Subtraction

Some sweet leaves are missing from the dino food bin. Let us subtract what is left to see how many were taken.

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

T																			
8691	4662	3385	1497	4818	3385	4717	4256	4531	6871	4035	4818	3255	1116	4717	4818				
4717	8942	4717	4531	1219	1116	3255	4214	1497	4662	4035	4818	4531	4214	4035	1116	1116	3255	1116	1497

$11184 - 2493 = \square \rightarrow \boxed{\text{T}}$

$4888 - 632 = \square \rightarrow \boxed{\text{K}}$

$6564 - 1847 = \square \rightarrow \boxed{\text{A}}$

$4555 - 1170 = \square \rightarrow \boxed{\text{E}}$

$9297 - 4766 = \square \rightarrow \boxed{\text{Y}}$

$9153 - 4491 = \square \rightarrow \boxed{\text{H}}$

$11226 - 4355 = \square \rightarrow \boxed{\text{D}}$

$5202 - 3983 = \square \rightarrow \boxed{\text{F}}$

$8781 - 4746 = \square \rightarrow \boxed{\text{I}}$

$12482 - 3540 = \square \rightarrow \boxed{\text{W}}$

$4012 - 2896 = \square \rightarrow \boxed{\text{R}}$

$6375 - 1557 = \square \rightarrow \boxed{\text{N}}$

$1739 - 242 = \square \rightarrow \boxed{\text{S}}$

$7041 - 2827 = \square \rightarrow \boxed{\text{M}}$

$7402 - 4147 = \square \rightarrow \boxed{\text{O}}$

Scratch space:

CLUE 4
Multiplication facts (1-12)

We found rows of egg nests near the river. Let us multiply the rows to see how many nests there are.

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

T					T			T								
18	42	36	77	36	18	36	55	18	48	72	36	2	33	27	63	77

							T					
88	44	27	36	2	36	54	18	42	36	108	4	

$9 \times 2 = \square \rightarrow$ T	$8 \times 11 = \square \rightarrow$ B	$11 \times 7 = \square \rightarrow$ D	
$9 \times 12 = \square \rightarrow$ R	$2 \times 2 = \square \rightarrow$ S	$5 \times 11 = \square \rightarrow$ C	
$11 \times 4 = \square \rightarrow$ L	$4 \times 12 = \square \rightarrow$ I	$2 \times 1 = \square \rightarrow$ F	
$9 \times 6 = \square \rightarrow$ A	$9 \times 7 = \square \rightarrow$ N	$3 \times 11 = \square \rightarrow$ O	$9 \times 8 = \square \rightarrow$ V
$4 \times 9 = \square \rightarrow$ E	$6 \times 7 = \square \rightarrow$ H	$3 \times 9 = \square \rightarrow$ U	

Scratch space:

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

Let us share these treats equally among the baby raptors. Division will help us find 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:

$8 \div 4 = \boxed{}$

$55 \div 11 = \boxed{}$

$72 \div 6 = \boxed{}$

$88 \div 8 = \boxed{}$

$99 \div 11 = \boxed{}$

$64 \div 8 = \boxed{}$

$6 \div 6 = \boxed{}$

$36 \div 9 = \boxed{}$

$120 \div 12 = \boxed{}$

$3 \div 1 = \boxed{}$

$28 \div 4 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain dashed past the cameras, then cut the ropes with sharp claws.
2. The villain jumped over the tall gate, then blocked the lasers with armor plates.
3. The villain swiped the lock with its tail, then blocked the lasers with armor plates.
4. The villain stomped through the mud, then snuck through the dark with night vision.
5. The villain climbed the high leafy tree, then snuck through the dark with night vision.
6. The villain climbed the high leafy tree, then lit up the tunnel with its glowing tail.
7. The villain climbed the high leafy tree, then cut the ropes with sharp claws.
8. The villain stomped through the mud, then blocked the lasers with armor plates.
9. The villain dashed past the cameras, then lit up the tunnel with its glowing tail.
10. The villain swiped the lock with its tail, then slipped past the branch with its crest horn.
11. The villain dashed past the cameras, then blocked the lasers with armor plates.
12. The villain stomped through the mud, then lit up the tunnel with its glowing tail.

Answer Key

The Great Dino-Valley Caper

Culprit: Titus

tree climb · glowing tail · left-clawed footprint · blue feathers · shiny mirrors

Trail: Start 21 → Clue 1 18 → Clue 2 14 → Clue 3 9 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE SNEAKY DINO HAS NO CREST HORN"

$2926 + 1385 = 4311$ (T) · $3314 + 1736 = 5050$ (H) · $3393 + 2034 = 5427$ (E) · $2441 + 1449 = 3890$ (K) · $4307 + 3321 = 7628$ (I) · $5945 + 3540 = 9485$ (N) · $4349 + 2180 = 6529$ (C) · $2858 + 3851 = 6709$ (D) · $2443 + 5625 = 8068$ (S) · $2386 + 2405 = 4791$ (R) · $1412 + 1504 = 2916$ (O) · $3969 + 2583 = 6552$ (Y) · $3202 + 3219 = 6421$ (A)

Clue 2 (Rounding): "THE TRACKS SHOW A LEFT CLAWED FOOTPRINT"

Round 23 to the nearest ten = 20 (T) · Round 113 to the nearest ten = 110 (D) · Round 51 to the nearest ten = 50 (R) · Round 2,909 to the nearest hundred = 2900 (F) · Round 133 to the nearest ten = 130 (K) · Round 4,290 to the nearest hundred = 4300 (I) · Round 29 to the nearest ten = 30 (H) · Round 940 to the nearest hundred = 900 (S) · Round 243 to the nearest hundred = 200 (W) · Round 9,335 to the nearest thousand = 9000 (N) · Round 2,876 to the nearest thousand = 3000 (O) · Round 2,300 to the nearest hundred = 2300 (P) · Round 1,653 to the nearest hundred = 1700 (C) · Round 2,101 to the nearest thousand = 2000 (L) · Round 170 to the nearest ten = 170 (E) · Round 1,136 to the nearest hundred = 1100 (A)

Clue 3 (Subtraction): "THE SNEAKY DINO RAN AWAY FROM SHINY MIRRORS"

$11184 - 2493 = 8691$ (T) · $4888 - 632 = 4256$ (K) · $6564 - 1847 = 4717$ (A) · $4555 - 1170 = 3385$ (E) · $9297 - 4766 = 4531$ (Y) · $9153 - 4491 = 4662$ (H) · $11226 - 4355 = 6871$ (D) · $5202 - 3983 = 1219$ (F) · $8781 - 4746 = 4035$ (I) · $12482 - 3540 = 8942$ (W) · $4012 - 2896 = 1116$ (R) · $6375 - 1557 = 4818$ (N) · $1739 - 242 = 1497$ (S) · $7041 - 2827 = 4214$ (M) · $7402 - 4147 = 3255$ (O)

Clue 4 (Multiplication facts (1-12)): "THE DETECTIVE FOUND BLUE FEATHERS"

$9 \times 2 = 18$ (T) · $8 \times 11 = 88$ (B) · $11 \times 7 = 77$ (D) · $9 \times 12 = 108$ (R) · $2 \times 2 = 4$ (S) · $5 \times 11 = 55$ (C) · $11 \times 4 = 44$ (L) · $4 \times 12 = 48$ (I) · $2 \times 1 = 2$ (F) · $9 \times 6 = 54$ (A) · $9 \times 7 = 63$ (N) · $3 \times 11 = 33$ (O) · $9 \times 8 = 72$ (V) · $4 \times 9 = 36$ (E) · $6 \times 7 = 42$ (H) · $3 \times 9 = 27$ (U)

Clue 5 (Division facts (1-12)): surviving statement is box 6 → Titus

$8 \div 4 = 2$ · $55 \div 11 = 5$ · $72 \div 6 = 12$ · $88 \div 8 = 11$ · $99 \div 11 = 9$ · $64 \div 8 = 8$ · $6 \div 6 = 1$ · $36 \div 9 = 4$ · $120 \div 12 = 10$ · $3 \div 1 = 3$ · $28 \div 4 = 7$