



Case of the Cretaceous Crook

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

Detective: _____ **Date:** _____

Someone snatched the famous golden T. rex skull right out of the Thunder Valley Dino Park museum. The night guard saw a shadow dash past the fossil hall and vanish into the fern garden. It is up to you to track down the Cretaceous Crook before the trail goes cold.

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 Cretaceous Crook is _____

Possible suspects

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

NAME	DINO TYPE	SPECIAL TRICK	FOOTPRINT	SCALE COLOR	WEAK SPOT
Spike	Velociraptor	dig a tunnel	big clawed track	striped scales	loud roars
Sandy	Triceratops	stomp a quake	small clawed track	green scales	loud roars
Clawdia	Triceratops	dig a tunnel	big clawed track	striped scales	bright lights
Tilly	Stegosaurus	leap a fence	big clawed track	brown scales	bright lights
Trixie	Stegosaurus	dig a tunnel	big clawed track	striped scales	bright lights
Pebble	Tyrannosaurus	glide on wind	big clawed track	green scales	loud roars
Bronto	Velociraptor	dig a tunnel	big clawed track	green scales	bright lights
Theo	Velociraptor	stomp a quake	small clawed track	striped scales	loud roars
Ziggy	Tyrannosaurus	stomp a quake	small clawed track	green scales	loud roars
Cole	Velociraptor	glide on wind	small clawed track	striped scales	loud roars
Juno	Pterodactyl	whip a tail	small clawed track	green scales	loud roars
Maia	Stegosaurus	whip a tail	small clawed track	striped scales	bright lights
Dot	Tyrannosaurus	stomp a quake	big clawed track	green scales	bright lights
Ferny	Pterodactyl	leap a fence	small clawed track	striped scales	loud roars
Rocky	Velociraptor	leap a fence	small clawed track	brown scales	cold rain
Rexford	Velociraptor	whip a tail	big clawed track	green scales	loud roars
Bram	Stegosaurus	glide on wind	big clawed track	green scales	cold rain
Mossy	Tyrannosaurus	glide on wind	small clawed track	striped scales	loud roars
Vela	Velociraptor	stomp a quake	small clawed track	green scales	cold rain
Dax	Stegosaurus	dig a tunnel	small clawed track	striped scales	loud roars
Comet	Triceratops	whip a tail	big clawed track	striped scales	cold rain

CLUE 1

Rounding

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

T																			
50000	310	300	470	500000	3100000	3100000	1400	470	31000	700	700	3100000	50000	70000	300	31000	1400000	31000	
70	300	700	470	300															

Round 50,425 to the nearest ten thousand → T

Round 721 to the nearest hundred → N

Round 545,229 to the nearest hundred thousand → R

Round 31,155 to the nearest thousand → A

Round 289 to the nearest hundred → E

Round 3,066,947 to the nearest hundred thousand → O

Round 67,365 to the nearest ten thousand → L

Round 1,371 to the nearest hundred → K

Round 468 to the nearest ten → C

Round 72 to the nearest ten → F

Round 312 to the nearest ten → H

Round 1,367,829 to the nearest hundred thousand → P

Scratch space:

CLUE 2

Addition

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

A			A					A						A		
5980	6031	6587	5980	3205	3205	3924	3205	5980	7717	2112	8171	9630	8079	5980	3924	8977
	A								A							
6587	5980	8079	8977	2112	8171	9630	8696	2112	5152	5980	9630	8696				

$1947 + 4033 = \square \rightarrow \text{A}$

$916 + 1196 = \square \rightarrow \text{E}$

$3024 + 5147 = \square \rightarrow \text{D}$

$3769 + 5861 = \square \rightarrow \text{T}$

$5440 + 3537 = \square \rightarrow \text{K}$

$1507 + 1698 = \square \rightarrow \text{L}$

$3832 + 4864 = \square \rightarrow \text{H}$

$4196 + 1835 = \square \rightarrow \text{S}$

$4473 + 3606 = \square \rightarrow \text{R}$

$2055 + 4532 = \square \rightarrow \text{M}$

$2165 + 2987 = \square \rightarrow \text{P}$

$1815 + 2109 = \square \rightarrow \text{C}$

$3262 + 4455 = \square \rightarrow \text{W}$

Scratch space:

CLUE 3

Subtraction

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

A			A					A									
6246	4045	6079	6246	3721	3619	2150	3397	6246	3721	6783	3619	8748	7018	8018	5634	5634	

				A							A	
7556	8748	7018	2262	6246	5479	8018	6079	3619	3721	8018	6246	3721

$10626 - 4380 = \square \rightarrow \text{A}$

$7238 - 4976 = \square \rightarrow \text{H}$

$11985 - 4429 = \square \rightarrow \text{W}$

$6359 - 4209 = \square \rightarrow \text{S}$

$8337 - 1319 = \square \rightarrow \text{T}$

$5960 - 2341 = \square \rightarrow \text{D}$

$7105 - 1626 = \square \rightarrow \text{L}$

$6795 - 3398 = \square \rightarrow \text{C}$

$9243 - 3164 = \square \rightarrow \text{U}$

$10041 - 1293 = \square \rightarrow \text{I}$

$6213 - 579 = \square \rightarrow \text{F}$

$6041 - 1996 = \square \rightarrow \text{G}$

$9599 - 1581 = \square \rightarrow \text{O}$

$4972 - 1251 = \square \rightarrow \text{R}$

$7559 - 776 = \square \rightarrow \text{E}$

Scratch space:

CLUE 4
Multiplication facts (1-12)

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

A										A							
27	120	14	18	36	108	21	8	120	70	27	44	21	63	21	44	44	36 100

14	77	21	63	21	18 100 120

$3 \times 9 = \square \rightarrow$ A	$7 \times 9 = \square \rightarrow$ F	$3 \times 12 = \square \rightarrow$ I	$3 \times 7 = \square \rightarrow$ E
$7 \times 2 = \square \rightarrow$ T	$9 \times 12 = \square \rightarrow$ P	$6 \times 3 = \square \rightarrow$ R	
$12 \times 10 = \square \rightarrow$ S	$7 \times 10 = \square \rightarrow$ C	$8 \times 1 = \square \rightarrow$ D	
$10 \times 10 = \square \rightarrow$ N	$11 \times 7 = \square \rightarrow$ H	$4 \times 11 = \square \rightarrow$ L	

Scratch space:

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

$35 \div 7 = \boxed{}$

$36 \div 4 = \boxed{}$

$16 \div 2 = \boxed{}$

$18 \div 9 = \boxed{}$

$144 \div 12 = \boxed{}$

$70 \div 7 = \boxed{}$

$12 \div 2 = \boxed{}$

$63 \div 9 = \boxed{}$

$9 \div 9 = \boxed{}$

$66 \div 6 = \boxed{}$

$6 \div 2 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain swoops from the roof, then leaps a fence.
2. The villain swoops from the roof, then whips a tail.
3. The villain swings a spiked tail, then leaps a fence.
4. The villain sneaks on quick claws, then stomps a quake.
5. The villain bites through the lock, then glides on wind.
6. The villain sneaks on quick claws, then whips a tail.
7. The villain bites through the lock, then leaps a fence.
8. The villain swings a spiked tail, then digs a tunnel.
9. The villain sneaks on quick claws, then glides on wind.
10. The villain swings a spiked tail, then stomps a quake.
11. The villain bites through the lock, then whips a tail.
12. The villain charges with three horns, then stomps a quake.

Answer Key

Case of the Cretaceous Crook

Culprit: Theo

Velociraptor · stomp a quake · small clawed track · striped scales · loud roars

Trail: Start 21 → Clue 1 18 → Clue 2 9 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE CROOK CANNOT LEAP A FENCE"

Round 50,425 to the nearest ten thousand = 50000 (T) · Round 721 to the nearest hundred = 700 (N) · Round 545,229 to the nearest hundred thousand = 500000 (R) · Round 31,155 to the nearest thousand = 31000 (A) · Round 289 to the nearest hundred = 300 (E) · Round 3,066,947 to the nearest hundred thousand = 3100000 (O) · Round 67,365 to the nearest ten thousand = 70000 (L) · Round 1,371 to the nearest hundred = 1400 (K) · Round 468 to the nearest ten = 470 (C) · Round 72 to the nearest ten = 70 (F) · Round 312 to the nearest ten = 310 (H) · Round 1,367,829 to the nearest hundred thousand = 1400000 (P)

Clue 2 (Addition): "A SMALL CLAWED TRACK MARKED THE PATH"

$1947 + 4033 = 5980$ (A) · $916 + 1196 = 2112$ (E) · $3024 + 5147 = 8171$ (D) · $3769 + 5861 = 9630$ (T) · $5440 + 3537 = 8977$ (K) · $1507 + 1698 = 3205$ (L) · $3832 + 4864 = 8696$ (H) · $4196 + 1835 = 6031$ (S) · $4473 + 3606 = 8079$ (R) · $2055 + 4532 = 6587$ (M) · $2165 + 2987 = 5152$ (P) · $1815 + 2109 = 3924$ (C) · $3262 + 4455 = 7717$ (W)

Clue 3 (Subtraction): "A GUARD SCARED IT OFF WITH A LOUD ROAR"

$10626 - 4380 = 6246$ (A) · $7238 - 4976 = 2262$ (H) · $11985 - 4429 = 7556$ (W) · $6359 - 4209 = 2150$ (S) · $8337 - 1319 = 7018$ (T) · $5960 - 2341 = 3619$ (D) · $7105 - 1626 = 5479$ (L) · $6795 - 3398 = 3397$ (C) · $9243 - 3164 = 6079$ (U) · $10041 - 1293 = 8748$ (I) · $6213 - 579 = 5634$ (F) · $6041 - 1996 = 4045$ (G) · $9599 - 1581 = 8018$ (O) · $4972 - 1251 = 3721$ (R) · $7559 - 776 = 6783$ (E)

Clue 4 (Multiplication facts (1-12)): "A STRIPED SCALE FELL IN THE FERNS"

$3 \times 9 = 27$ (A) · $7 \times 9 = 63$ (F) · $3 \times 12 = 36$ (I) · $3 \times 7 = 21$ (E) · $7 \times 2 = 14$ (T) · $9 \times 12 = 108$ (P) · $6 \times 3 = 18$ (R) · $12 \times 10 = 120$ (S) · $7 \times 10 = 70$ (C) · $8 \times 1 = 8$ (D) · $10 \times 10 = 100$ (N) · $11 \times 7 = 77$ (H) · $4 \times 11 = 44$ (L)

Clue 5 (Division facts (1-12)): surviving statement is box 4 → Theo

$35 \div 7 = 5$ · $36 \div 4 = 9$ · $16 \div 2 = 8$ · $18 \div 9 = 2$ · $144 \div 12 = 12$ · $70 \div 7 = 10$ · $12 \div 2 = 6$ · $63 \div 9 = 7$ · $9 \div 9 = 1$ · $66 \div 6 = 11$ · $6 \div 2 = 3$