



The Great Blocky Fossil Heist

Grade 4 math · Multiplication, Fractions of a number, Rounding, Addition, Division · Reading level grades 3-4

Detective: _____ Date: _____

A sneaky blocky thief has broken into the Dino-Craft Museum! They spawned a wild T-Rex to distract the guards and stole the legendary Diamond Dino Egg. We must look at the blocks and tracks left behind to catch the culprit.

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 Giga-Griefer is _____

Possible suspects

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

NAME	MINECRAFT SKILL	SPAWNED DINOSAUR	BLOCK PLACEMENT	HELMET STYLE	DINO DISTRACTION
Amber Abby	Dino Taming	Spinosaurus Ally	Left Handed	Gold Helmet	Splash Potion
Blocky Bob	Dino Taming	Raptor Pack	Left Handed	Iron Helmet	Splash Potion
Gravel Greg	Redstone Engineering	Pterodactyl Scout	Left Handed	Gold Helmet	Golden Apple
Joel	Obsidian Mining	Pterodactyl Scout	Left Handed	Gold Helmet	Golden Apple
Minecrafter Sam	Dino Taming	Stegosaurus Pet	Left Handed	Gold Helmet	Golden Apple
Dr Alan Grant	Redstone Engineering	Triceratops Ride	Left Handed	Iron Helmet	Splash Potion
Fossil Fred	Redstone Engineering	Spinosaurus Ally	Left Handed	Iron Helmet	Golden Apple
Lizzie	Redstone Engineering	Triceratops Ride	Left Handed	Gold Helmet	Golden Apple
Ellie Sattler	Redstone Engineering	Triceratops Ride	Right Handed	Gold Helmet	Golden Apple
Ian Malcolm	Elytra Flying	Stegosaurus Pet	Right Handed	Gold Helmet	Golden Apple
Stampy	Obsidian Mining	Stegosaurus Pet	Right Handed	Iron Helmet	Golden Apple
DanTDM	Elytra Flying	Pterodactyl Scout	Right Handed	Diamond Helmet	Splash Potion
Claire Dearing	Dino Taming	Raptor Pack	Left Handed	Gold Helmet	Splash Potion
Rex Ranger	Redstone Engineering	Stegosaurus Pet	Left Handed	Iron Helmet	Golden Apple
Paleo Pete	Redstone Engineering	Triceratops Ride	Left Handed	Gold Helmet	Splash Potion
MumboJumbo	Potion Brewing	Spinosaurus Ally	Right Handed	Iron Helmet	Raw Fish
Dino Dan	Potion Brewing	Triceratops Ride	Left Handed	Gold Helmet	Golden Apple
Steve	Dino Taming	Triceratops Ride	Left Handed	Iron Helmet	Raw Fish
HermitGrian	Potion Brewing	Raptor Pack	Left Handed	Iron Helmet	Splash Potion
Owen Grady	Dino Taming	Pterodactyl Scout	Left Handed	Gold Helmet	Golden Apple
Alex	Elytra Flying	Triceratops Ride	Right Handed	Gold Helmet	Splash Potion

CLUE 1

Multiplication facts (1-12)

We found rows of mysterious footprints near the Dino Museum. There are several identical groups of dinosaur tracks to multiply.

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

T																		T
54	44	56	16	12	35	56	27	56	12	66	18	56	55	6	18	54		

						T								T				
12	35	66	56	15	54	12	35	81	56	12	15	54	18	121	55			

$9 \times 6 = \square \rightarrow \boxed{\text{T}}$

$9 \times 3 = \square \rightarrow \boxed{\text{F}}$

$5 \times 3 = \square \rightarrow \boxed{\text{A}}$

$7 \times 5 = \square \rightarrow \boxed{\text{I}}$

$5 \times 11 = \square \rightarrow \boxed{\text{S}}$

$8 \times 2 = \square \rightarrow \boxed{\text{G}}$

$11 \times 11 = \square \rightarrow \boxed{\text{P}}$

$3 \times 2 = \square \rightarrow \boxed{\text{N}}$

$3 \times 6 = \square \rightarrow \boxed{\text{O}}$

$7 \times 8 = \square \rightarrow \boxed{\text{E}}$

$9 \times 9 = \square \rightarrow \boxed{\text{C}}$

$6 \times 11 = \square \rightarrow \boxed{\text{D}}$

$11 \times 4 = \square \rightarrow \boxed{\text{H}}$

$12 \times 1 = \square \rightarrow \boxed{\text{R}}$

Scratch space:

CLUE 2
Fractions of a number

The thief dropped a stack of green emeralds, but only a fraction of them remained unbroken in the grass.

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

T																	
11	20	28	30	40	7	7	21	40	14	18	7	21	16	28	23		
								T				T					
2	7	6	16	24	23	33	40	11	20	7	28	12	11	20	21	14	4

$1/4 \text{ of } 44 = \square \rightarrow \text{ **T** }$

$7/10 \text{ of } 40 = \square \rightarrow \text{ **E** }$

$5/10 \text{ of } 42 = \square \rightarrow \text{ **A** }$

$2/8 \text{ of } 8 = \square \rightarrow \text{ **B** }$

$3/10 \text{ of } 20 = \square \rightarrow \text{ **O** }$

$1/6 \text{ of } 96 = \square \rightarrow \text{ **C** }$

$4/8 \text{ of } 80 = \square \rightarrow \text{ **I** }$

$3/6 \text{ of } 14 = \square \rightarrow \text{ **L** }$

$1/5 \text{ of } 60 = \square \rightarrow \text{ **F** }$

$8/10 \text{ of } 5 = \square \rightarrow \text{ **D** }$

$1/2 \text{ of } 46 = \square \rightarrow \text{ **S** }$

$3/6 \text{ of } 66 = \square \rightarrow \text{ **W** }$

$4/6 \text{ of } 30 = \square \rightarrow \text{ **H** }$

$2/5 \text{ of } 60 = \square \rightarrow \text{ **K** }$

$1/6 \text{ of } 180 = \square \rightarrow \text{ **V** }$

$1/3 \text{ of } 54 = \square \rightarrow \text{ **P** }$

$3/6 \text{ of } 28 = \square \rightarrow \text{ **N** }$

Scratch space:

CLUE 3

Our blocky radar scanner is fuzzy, so we have to round the distance to the nearest ten blocks to find the hideout.

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

The diagram shows the distribution of 1000 items across 100 boxes in two rows. The top row has 10 boxes, and the bottom row has 10 boxes. The boxes are labeled with numbers, and some contain a 'T'.

Box	Label	Contains 'T'
1	20	Yes
2	90	No
3	1300	No
4	5000	No
5	500	No
6	5000	No
7	1700	No
8	1300	No
9	700	No
10	20	Yes
11	5000	No
12	20	Yes
13	9000	No
14	1700	No
15	1700	No
16	1300	No
17	3000	No
18	20	Yes
19	9000	No
20		No
21	1300	No
22	170	No
23	20	Yes
24	170	No
25	1100	No
26	9000	No
27	110	No
28	3000	No
29	1300	No
30	430	No
31	170	No
32	1700	No
33	1700	No
34	110	No
35	1300	No

Round 18 to the nearest ten $\rightarrow$ **T**

Round 174 to the nearest ten $\rightarrow$ **A**

Round 9,108 to the nearest thousand $\rightarrow$ **0**

Round 1,282 to the nearest hundred $\rightarrow$ **E**

Round 2,889 to the nearest thousand $\rightarrow$ **D**

Round 88 to the nearest ten $\rightarrow$ **H**

Round 427 to the nearest ten $\rightarrow$ **N**

Round 1,091 to the nearest hundred → **G**

Round 4,526 to the nearest thousand $\rightarrow$ **S**

Round 108 to the nearest ten $\rightarrow$ **L**

Round 730 to the nearest hundred $\rightarrow$ **C**

Round 533 to the nearest hundred $\rightarrow$ **U**

Round 1,746 to the nearest hundred → **P**

Scratch space:

CLUE 4 Addition

We gathered up all the leftover dino bones and copper ingots and added them together to see what the thief left behind.

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

W																		
3687	8086	5327	7736	6350	5958	6502	7354	7736	9796	6502	7441	8086	2854	7046	9796	9796	5316	5765

6502	6350	2833	2854	7736	5958	2854	9397	8086	7354	3272	7736	6350	5958	6502

$1560 + 2127 = \square \rightarrow \mathbf{W}$	$1707 + 1126 = \square \rightarrow \mathbf{S}$	$2374 + 3584 = \square \rightarrow \mathbf{N}$
$2586 + 3764 = \square \rightarrow \mathbf{U}$	$3853 + 2649 = \square \rightarrow \mathbf{D}$	$4250 + 2796 = \square \rightarrow \mathbf{A}$
$3574 + 3867 = \square \rightarrow \mathbf{M}$	$2543 + 5193 = \square \rightarrow \mathbf{O}$	$1364 + 1908 = \square \rightarrow \mathbf{R}$
$2285 + 3042 = \square \rightarrow \mathbf{F}$	$4831 + 3255 = \square \rightarrow \mathbf{E}$	$3101 + 4253 = \square \rightarrow \mathbf{G}$
$5090 + 4706 = \square \rightarrow \mathbf{L}$	$1052 + 1802 = \square \rightarrow \mathbf{T}$	$2718 + 3047 = \square \rightarrow \mathbf{C}$
$1631 + 3685 = \square \rightarrow \mathbf{I}$	$5801 + 3596 = \square \rightarrow \mathbf{H}$	

Scratch space:

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

We need to divide our dinosaur food treats equally into the chests to see how many days we can track the suspect.

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:

$132 \div 11 = \boxed{}$

$96 \div 12 = \boxed{}$

$90 \div 10 = \boxed{}$

$12 \div 2 = \boxed{}$

$77 \div 11 = \boxed{}$

$24 \div 12 = \boxed{}$

$4 \div 4 = \boxed{}$

$5 \div 1 = \boxed{}$

$110 \div 11 = \boxed{}$

$121 \div 11 = \boxed{}$

$12 \div 3 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain soars high with the elytra, then summons a friendly stegosaurus.
2. The villain mixes a bubbling potion, then calls upon a giant spinosaurus.
3. The villain breaks through thick obsidian, then sends out a pterodactyl scout.
4. The villain breaks through thick obsidian, then calls upon a giant spinosaurus.
5. The villain mixes a bubbling potion, then whistles for a quick raptor pack.
6. The villain soars high with the elytra, then calls upon a giant spinosaurus.
7. The villain soars high with the elytra, then mounts a massive triceratops.
8. The villain tunes a redstone circuit, then sends out a pterodactyl scout.
9. The villain tames a wild pack of raptors, then summons a friendly stegosaurus.
10. The villain soars high with the elytra, then sends out a pterodactyl scout.
11. The villain breaks through thick obsidian, then summons a friendly stegosaurus.
12. The villain tames a wild pack of raptors, then sends out a pterodactyl scout.

Answer Key

The Great Blocky Fossil Heist

Culprit: Joel

Obsidian Mining · Pterodactyl Scout · Left Handed · Gold Helmet · Golden Apple

Trail: Start 21 → Clue 1 14 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE GRIEFER DOES NOT RIDE A TRICERATOPS"

$9 \times 6 = 54$ (T) · $9 \times 3 = 27$ (F) · $5 \times 3 = 15$ (A) · $7 \times 5 = 35$ (I) · $5 \times 11 = 55$ (S) · $8 \times 2 = 16$ (G) · $11 \times 11 = 121$ (P) · $3 \times 2 = 6$ (N) · $3 \times 6 = 18$ (O) · $7 \times 8 = 56$ (E) · $9 \times 9 = 81$ (C) · $6 \times 11 = 66$ (D) · $11 \times 4 = 44$ (H) · $12 \times 1 = 12$ (R)

Clue 2 (Fractions of a number): "THE VILLAIN PLACES BLOCKS WITH LEFT HAND"

$\frac{1}{4}$ of 44 = 11 (T) · $\frac{7}{10}$ of 40 = 28 (E) · $\frac{5}{10}$ of 42 = 21 (A) · $\frac{2}{8}$ of 8 = 2 (B) · $\frac{3}{10}$ of 20 = 6 (O) · $\frac{1}{6}$ of 96 = 16 (C) · $\frac{4}{8}$ of 80 = 40 (I) · $\frac{3}{6}$ of 14 = 7 (L) · $\frac{1}{5}$ of 60 = 12 (F) · $\frac{8}{10}$ of 5 = 4 (D) · $\frac{1}{2}$ of 46 = 23 (S) · $\frac{3}{6}$ of 66 = 33 (W) · $\frac{4}{6}$ of 30 = 20 (H) · $\frac{2}{5}$ of 60 = 24 (K) · $\frac{1}{6}$ of 180 = 30 (V) · $\frac{1}{3}$ of 54 = 18 (P) · $\frac{3}{6}$ of 28 = 14 (N)

Clue 3 (Rounding): "THE SUSPECT STOPPED TO EAT A GOLDEN APPLE"

Round 18 to the nearest ten = 20 (T) · Round 174 to the nearest ten = 170 (A) · Round 9,108 to the nearest thousand = 9000 (O) · Round 1,282 to the nearest hundred = 1300 (E) · Round 2,889 to the nearest thousand = 3000 (D) · Round 88 to the nearest ten = 90 (H) · Round 427 to the nearest ten = 430 (N) · Round 1,091 to the nearest hundred = 1100 (G) · Round 4,526 to the nearest thousand = 5000 (S) · Round 108 to the nearest ten = 110 (L) · Round 730 to the nearest hundred = 700 (C) · Round 533 to the nearest hundred = 500 (U) · Round 1,746 to the nearest hundred = 1700 (P)

Clue 4 (Addition): "WE FOUND GOLD METALLIC DUST ON THE GROUND"

$1560 + 2127 = 3687$ (W) · $1707 + 1126 = 2833$ (S) · $2374 + 3584 = 5958$ (N) · $2586 + 3764 = 6350$ (U) · $3853 + 2649 = 6502$ (D) · $4250 + 2796 = 7046$ (A) · $3574 + 3867 = 7441$ (M) · $2543 + 5193 = 7736$ (O) · $1364 + 1908 = 3272$ (R) · $2285 + 3042 = 5327$ (F) · $4831 + 3255 = 8086$ (E) · $3101 + 4253 = 7354$ (G) · $5090 + 4706 = 9796$ (L) · $1052 + 1802 = 2854$ (T) · $2718 + 3047 = 5765$ (C) · $1631 + 3685 = 5316$ (I) · $5801 + 3596 = 9397$ (H)

Clue 5 (Division facts (1-12)): surviving statement is box 3 → Joel

$132 \div 11 = 12$ · $96 \div 12 = 8$ · $90 \div 10 = 9$ · $12 \div 2 = 6$ · $77 \div 11 = 7$ · $24 \div 12 = 2$ · $4 \div 4 = 1$ · $5 \div 1 = 5$ · $110 \div 11 = 10$ · $121 \div 11 = 11$ · $12 \div 3 = 4$