The Great Amber Egg Heist

Grade 5 math · Multiplication, Fractions of a number, Order of operations, Rounding · Reading level grades 5-6

Detective: _____ **Date:** _____

A priceless glowing amber egg disappeared from the central lab vault overnight. Five field teams spotted distinct dinosaur-suited suspects near the scene. Solve the math clues to uncover the thief before the prehistoric relic leaves the canyon!

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 poacher is _____

Possible suspects

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

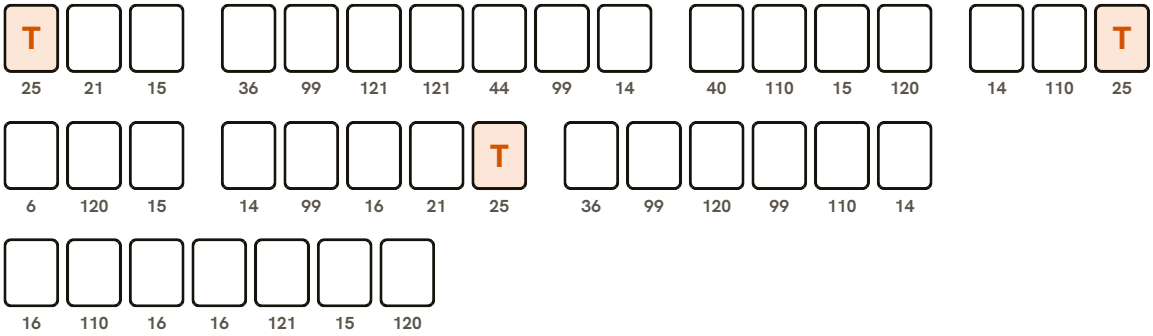
NAME	DINO SUIT	FIELD TOOL	WATCH LOCATION	CREST TYPE	DISTRACTION
Dr Barnum Brown	Stegosaurus Plates	Geode Chisel	Left Wrist Watch	Gold Scaled Horn	Flashing Light Beam
Dr Kristi Curry	Stegosaurus Plates	Sonar Scanner	Left Wrist Watch	Green Feather Crest	Loud Whistle Sound
Dr Paul Sereno	Raptor Suit	Geode Chisel	Left Wrist Watch	Green Feather Crest	Strong Dust Blast
Dr Angela Milner	Stegosaurus Plates	GPS Tracker	Left Wrist Watch	Gold Scaled Horn	Strong Dust Blast
Dr Nizar Ibrahim	Triceratops Armor	Geode Chisel	Left Wrist Watch	Green Feather Crest	Loud Whistle Sound
Dr Xing Xu	Triceratops Armor	Geode Chisel	Left Wrist Watch	Bright Red Spines	Loud Whistle Sound
Prof Lawrence Lambe	Ankylosaurus Shell	GPS Tracker	Left Wrist Watch	Gold Scaled Horn	Strong Dust Blast
Dr Anusuya Chinsamy	Ankylosaurus Shell	GPS Tracker	Left Wrist Watch	Green Feather Crest	Loud Whistle Sound
Dr Patricia Vickers	Stegosaurus Plates	Sonar Scanner	Left Wrist Watch	Green Feather Crest	Flashing Light Beam
Dr Victoria Arbour	Stegosaurus Plates	Sonar Scanner	Left Wrist Watch	Bright Red Spines	Flashing Light Beam
Dr Lindsay Zanno	Raptor Suit	Night Vision Goggles	Right Wrist Watch	Green Feather Crest	Flashing Light Beam
Dr Luis Chiappe	Stegosaurus Plates	Rope Launcher	Right Wrist Watch	Green Feather Crest	Flashing Light Beam
Dr Jack Horner	Triceratops Armor	Rope Launcher	Left Wrist Watch	Green Feather Crest	Loud Whistle Sound
Dr Othniel Marsh	Pterodactyl Wings	Night Vision Goggles	Left Wrist Watch	Bright Red Spines	Flashing Light Beam
Dr Karen Chin	Triceratops Armor	Rope Launcher	Right Wrist Watch	Green Feather Crest	Loud Whistle Sound
Dr Rodolfo Coria	Ankylosaurus Shell	Geode Chisel	Right Wrist Watch	Green Feather Crest	Loud Whistle Sound
Prof Edward Cope	Pterodactyl Wings	Geode Chisel	Right Wrist Watch	Green Feather Crest	Loud Whistle Sound
Dr Mary Anning	Stegosaurus Plates	Night Vision Goggles	Right Wrist Watch	Green Feather Crest	Strong Dust Blast
Dr Steve Brusatte	Ankylosaurus Shell	Night Vision Goggles	Left Wrist Watch	Green Feather Crest	Loud Whistle Sound
Dr Paul Barrett	Pterodactyl Wings	Night Vision Goggles	Left Wrist Watch	Green Feather Crest	Strong Dust Blast
Dr Roy Chapman	Raptor Suit	Rope Launcher	Left Wrist Watch	Gold Scaled Horn	Loud Whistle Sound

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CLUE 1 Multiplication facts (1-12)

> The security team organized fossil sample crates into equal rows to tally the inventory.

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



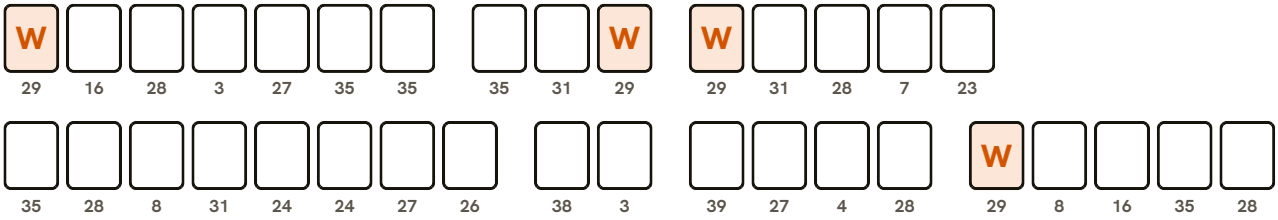
5 × 5 = ☐ → T	1 × 6 = ☐ → U	6 × 6 = ☐ → V	5 × 3 = ☐ → E
11 × 10 = ☐ → O	9 × 11 = ☐ → I	10 × 4 = ☐ → D	
4 × 4 = ☐ → G	7 × 3 = ☐ → H	4 × 11 = ☐ → A	
12 × 10 = ☐ → S	11 × 11 = ☐ → L	7 × 2 = ☐ → N	

Scratch space:

CLUE 2 Fractions of a number

> The chief curator calculated what fraction of the dig site grids were fully searched.

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



1/6 of 174 = ☐ → W

2/4 of 6 = ☐ → N

2/5 of 65 = ☐ → D

6/10 of 45 = ☐ → E

7/10 of 50 = ☐ → S

6/8 of 32 = ☐ → P

1/10 of 40 = ☐ → F

2/3 of 57 = ☐ → O

2/4 of 46 = ☐ → H

2/10 of 155 = ☐ → A

1/8 of 128 = ☐ → I

1/2 of 14 = ☐ → C

3/5 of 65 = ☐ → L

2/6 of 24 = ☐ → R

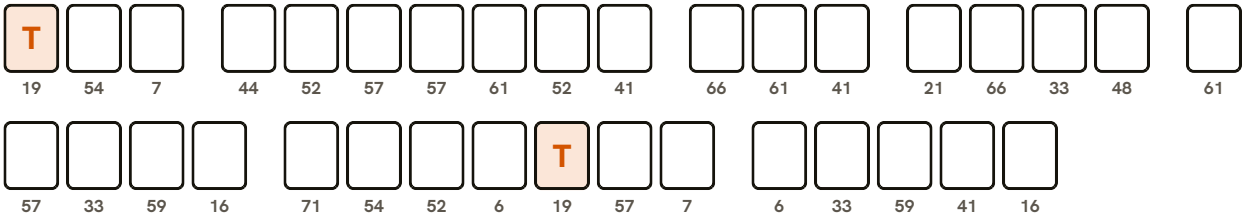
4/10 of 70 = ☐ → T

Scratch space:

CLUE 3 Order of operations

> The lab computer followed a strict sequence of calculations to process rock density measurements.

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



1 + 2 × 9 = ☐ → T	8 × 6 - 7 = ☐ → N	1 + 2 × 3 = ☐ → E
11 × 6 - 7 = ☐ → U	9 + 9 × 5 = ☐ → H	3 + 6 × 9 = ☐ → L
9 × 6 - 2 = ☐ → I	9 + 2 × 6 = ☐ → F	9 × 4 - 20 = ☐ → D
7 × 6 - 9 = ☐ → O	51 + 3 × 5 = ☐ → R	47 + 3 × 8 = ☐ → W
4 × 7 - 22 = ☐ → S	13 + 6 × 8 = ☐ → A	16 + 8 × 4 = ☐ → M
24 + 4 × 5 = ☐ → V		

Scratch space:

CLUE 4 Rounding

The station radar dish automatically rounded distance readings to the nearest hundred meters.

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

I						I																	
430	2300	130	50	200	290	430	70	1300	290	1700	4300	300	1700	370	2300	3700	1300	70	4300	50	50	2300	300	50	1300	290	30	50	4300	7000	4300	50	200	290

Round 432 to the nearest ten ☐ → I

Round 48 to the nearest ten ☐ → E

Round 290 to the nearest ten ☐ → T

Round 222 to the nearest hundred ☐ → S

Round 4,341 to the nearest hundred ☐ → R

Round 3,669 to the nearest hundred ☐ → D

Round 348 to the nearest hundred ☐ → F

Round 2,272 to the nearest hundred ☐ → N

Round 1,671 to the nearest hundred ☐ → O

Round 27 to the nearest ten ☐ → H

Round 373 to the nearest ten ☐ → U

Round 1,313 to the nearest hundred ☐ → A

Round 70 to the nearest ten ☐ → G

Round 6,854 to the nearest thousand ☐ → C

Round 129 to the nearest ten ☐ → V

Scratch space:

CLUE 5 Fractions of a number - the last clue

The tracker determined what fraction of the total footprint trackway was left undisturbed.

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:

1/5 of 20 = ☐	3/8 of 8 = ☐	3/6 of 22 = ☐	2/8 of 48 = ☐
2/10 of 5 = ☐	2/5 of 25 = ☐	2/6 of 15 = ☐	1/6 of 36 = ☐
1/3 of 24 = ☐	6/8 of 12 = ☐	2/4 of 14 = ☐	

Step 2 - cross out the sentence with each answer:

1. The villain swung a heavy clubbed tail, then scaled the canyon wall.
2. The villain stomped through the mud, then chipped away the stone lock.
3. The villain bashed open the vault door, then scanned the rock layers.
4. The villain stomped through the mud, then scaled the canyon wall.
5. The villain stomped through the mud, then scanned the rock layers.
6. The villain sprinted across the ridge, then tracked the security guard.
7. The villain bashed open the vault door, then tracked the security guard.
8. The villain bashed open the vault door, then scaled the canyon wall.
9. The villain sprinted across the ridge, then scanned the rock layers.
10. The villain glided down from the cliff, then scanned the rock layers.
11. The villain swung a heavy clubbed tail, then tracked the security guard.
12. The villain stomped through the mud, then tracked the security guard.

TEACHER / PARENT

Answer Key

The Great Amber Egg Heist

Culprit: Dr Nizar Ibrahim

Triceratops Armor · Geode Chisel · Left Wrist Watch · Green Feather Crest · Loud Whistle Sound

Trail: Start 21 → Clue 1 16 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT USE NIGHT VISION GOGGLES"

5 × 5 = 25 (T) · 1 × 6 = 6 (U) · 6 × 6 = 36 (V) · 5 × 3 = 15 (E) · 11 × 10 = 110 (O) · 9 × 11 = 99 (I) · 10 × 4 = 40 (D) · 4 × 4 = 16 (G) · 7 × 3 = 21 (H) · 4 × 11 = 44 (A) · 12 × 10 = 120 (S) · 11 × 11 = 121 (L) · 7 × 2 = 14 (N)

Clue 2 (Fractions of a number): "WITNESS SAW WATCH STRAPPED ON LEFT WRIST"

1/6 of 174 = 29 (W) · 2/4 of 6 = 3 (N) · 2/5 of 65 = 26 (D) · 6/10 of 45 = 27 (E) · 7/10 of 50 = 35 (S) · 6/8 of 32 = 24 (P) · 1/10 of 40 = 4 (F) · 2/3 of 57 = 38 (O) · 2/4 of 46 = 23 (H) · 2/10 of 155 = 31 (A) · 1/8 of 128 = 16 (I) · 1/2 of 14 = 7 (C) · 3/5 of 65 = 39 (L) · 2/6 of 24 = 8 (R) · 4/10 of 70 = 28 (T)

Clue 3 (Order of operations): "THE VILLAIN RAN FROM A LOUD WHISTLE SOUND"

1 + 2 × 9 = 19 (T) · 8 × 6 - 7 = 41 (N) · 1 + 2 × 3 = 7 (E) · 11 × 6 - 7 = 59 (U) · 9 + 9 × 5 = 54 (H) · 3 + 6 × 9 = 57 (L) · 9 × 6 - 2 = 52 (I) · 9 + 2 × 6 = 21 (F) · 9 × 4 - 20 = 16 (D) · 7 × 6 - 9 = 33 (O) · 51 + 3 × 5 = 66 (R) · 47 + 3 × 8 = 71 (W) · 4 × 7 - 22 = 6 (S) · 13 + 6 × 8 = 61 (A) · 16 + 8 × 4 = 48 (M) · 24 + 4 × 5 = 44 (V)

Clue 4 (Rounding): "INVESTIGATOR FOUND A GREEN FEATHER CREST"

Round 432 to the nearest ten = 430 (I) · Round 48 to the nearest ten = 50 (E) · Round 290 to the nearest ten = 290 (T) · Round 222 to the nearest hundred = 200 (S) · Round 4,341 to the nearest hundred = 4300 (R) · Round 3,669 to the nearest hundred = 3700 (D) · Round 348 to the nearest hundred = 300 (F) · Round 2,272 to the nearest hundred = 2300 (N) · Round 1,671 to the nearest hundred = 1700 (O) · Round 27 to the nearest ten = 30 (H) · Round 373 to the nearest ten = 370 (U) · Round 1,313 to the nearest hundred = 1300 (A) · Round 70 to the nearest ten = 70 (G) · Round 6,854 to the nearest thousand = 7000 (C) · Round 129 to the nearest ten = 130 (V)

Clue 5 (Fractions of a number): surviving statement is box 2 → Dr Nizar Ibrahim

1/5 of 20 = 4 · 3/8 of 8 = 3 · 3/6 of 22 = 11 · 2/8 of 48 = 12 · 2/10 of 5 = 1 · 2/5 of 25 = 10 · 2/6 of 15 = 5 · 1/6 of 36 = 6 · 1/3 of 24 = 8 · 6/8 of 12 = 9 · 2/4 of 14 = 7