



The Canopy Chase

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

Detective: _____ **Date:** _____

Someone has swiped the legendary Golden Jaguar Statue from the jungle temple camp! The head archeologist needs your help to decode the clues, track down the rogue explorer, and recover the artifact before they escape the island.

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 rogue explorer is _____

Possible suspects

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

NAME	PRIMARY TOOL	ESCAPE GEAR	DOMINANT HAND	HAIR DYE	MAIN PHOBIA
Fay Forest	grappling hook	motorcycle	right-handed grip	neon yellow hair	allergic to pollen
Tess Temple	climbing boots	motorcycle	right-handed grip	neon yellow hair	allergic to pollen
Cole Cavern	machete tool	zipline kit	left-handed grip	fiery red hair	afraid of spiders
Roy River	grappling hook	paraglider	left-handed grip	neon yellow hair	afraid of spiders
Sam Trail	laser flashlight	speed boat	right-handed grip	neon yellow hair	allergic to pollen
Professor Leo	sonic whistle	speed boat	left-handed grip	neon yellow hair	allergic to pollen
Amy Alpine	sonic whistle	hoverboard	right-handed grip	neon yellow hair	afraid of spiders
Joy Journey	machete tool	paraglider	left-handed grip	fiery red hair	afraid of spiders
Skye Summit	climbing boots	motorcycle	left-handed grip	neon yellow hair	allergic to pollen
Ben Boulder	sonic whistle	motorcycle	left-handed grip	neon yellow hair	allergic to pollen
Mia Mapmaker	laser flashlight	hoverboard	left-handed grip	fiery red hair	afraid of spiders
Hal Hunter	laser flashlight	speed boat	left-handed grip	fiery red hair	allergic to pollen
Kai Kayak	sonic whistle	hoverboard	left-handed grip	neon yellow hair	allergic to pollen
Zoe Ranger	machete tool	speed boat	right-handed grip	fiery red hair	afraid of spiders
Eva Everest	climbing boots	motorcycle	right-handed grip	fiery red hair	allergic to pollen
Kim Canyon	sonic whistle	zipline kit	left-handed grip	neon yellow hair	hates muddy boots
Explorer Indy	machete tool	zipline kit	left-handed grip	neon yellow hair	hates muddy boots
Lara Stone	laser flashlight	paraglider	left-handed grip	neon yellow hair	allergic to pollen
Jax Jungle	climbing boots	motorcycle	left-handed grip	bright blue hair	allergic to pollen
Dan Digger	machete tool	paraglider	left-handed grip	fiery red hair	hates muddy boots
Rex Tracker	sonic whistle	motorcycle	right-handed grip	neon yellow hair	allergic to pollen

CLUE 1

We found a torn page of the thief's flight log. Only a fraction of the coordinates are readable, but solving this reveals their escape route plan.

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

14 12 19 14 12 23 19 20 33 11 19 25 28 11 14 2 25 19 32

12 11 3 19 9 36 11 32 9 33

$$1/10 \text{ of } 140 = \boxed{} \rightarrow \boxed{\mathbf{T}}$$

8/10 of 15 = → **H**

5/10 of 18 = $\rightarrow$ **R**

$$\frac{3}{6} \text{ of } 38 = \boxed{} \rightarrow \boxed{\text{E}}$$

$2/5$ of 80 = $\rightarrow$ **A**

2/6 of 33 = → **0**

$$\frac{1}{6} \text{ of } 150 = \boxed{} \rightarrow \boxed{\text{S}}$$

$$\frac{1}{4} \text{ of } 12 = \boxed{} \rightarrow \boxed{\mathbf{v}}$$

$$\frac{1}{2} \text{ of } 40 = \boxed{} \rightarrow \boxed{\mathbf{F}}$$

$$2/10 \text{ of } 115 = \boxed{} \rightarrow \boxed{}$$

$2/6$ of $108 = \boxed{} \rightarrow \boxed{\text{B}}$

4/6 of 42 = → **N**

$$\frac{3}{8} \text{ of } 88 = \boxed{} \rightarrow \boxed{\text{D}}$$

$2/4$ of 4 = $\rightarrow$ **U**

Scratch space:

CLUE 2
Order of operations

The temple security door has a complex keypad. To unlock the camera footage of the thief's escape gear, we must follow the exact order of operations.

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

L																			
63	21	61	32	58	40	72	75	21	75	17	32	15	40	39	20	40	15	43	17
55	21	15	21	61	37	34	72	75	37	72	32	58	21	15	37	39	21		

$45 + 3 \times 6 = \square \rightarrow \text{L}$

$43 + 6 \times 2 = \square \rightarrow \text{W}$

$64 + 4 \times 2 = \square \rightarrow \text{N}$

$25 + 3 \times 3 = \square \rightarrow \text{U}$

$31 + 4 \times 2 = \square \rightarrow \text{P}$

$7 + 6 \times 5 = \square \rightarrow \text{O}$

$1 + 2 \times 7 = \square \rightarrow \text{R}$

$12 \times 4 - 28 = \square \rightarrow \text{M}$

$11 + 4 \times 8 = \square \rightarrow \text{K}$

$8 \times 6 - 16 = \square \rightarrow \text{T}$

$7 \times 5 - 18 = \square \rightarrow \text{S}$

$11 \times 9 - 24 = \square \rightarrow \text{D}$

$33 + 5 \times 5 = \square \rightarrow \text{H}$

$12 \times 7 - 23 = \square \rightarrow \text{F}$

$3 + 6 \times 3 = \square \rightarrow \text{E}$

$7 \times 9 - 23 = \square \rightarrow \text{A}$

Scratch space:

CLUE 3
Multiplication facts (1-12)

We counted several rows of identical boot prints leading away from the tents. Multiplying the rows gives us the clue to their weakness.

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

T																	T
81	64	11	4	7	11	11	66	55	7	90	4	3	4	44	11	144	81
50	30	2	44	44	11	50	36	5	2	24	2	25					
T																	
81	55	4	4	3	11	4											

$9 \times 9 =$ → T	$11 \times 4 =$ → P	$5 \times 1 =$ → B	$5 \times 5 =$ → F
$9 \times 10 =$ → G	$1 \times 2 =$ → O	$4 \times 9 =$ → A	$8 \times 8 =$ → H
$5 \times 11 =$ → I	$11 \times 1 =$ → E	$12 \times 12 =$ → C	
$1 \times 3 =$ → U	$7 \times 1 =$ → N	$5 \times 10 =$ → D	
$12 \times 2 =$ → X	$4 \times 1 =$ → S	$3 \times 10 =$ → R	
$11 \times 6 =$ → Z			

Scratch space:

CLUE 4

The base camp radar detected a fast-moving heat signature, but the digital screen only displays rounded values. Estimate the speed to find the hair sample.

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

Figure 1 shows a 3D volume represented by a 3x10 grid of boxes. The values in the boxes are as follows:

1100	4300	1700	1100	2300	4300	290	290	1700	70	430	170	3700	900		
3000	300	900	170	1100	700	3000	70	4300	900	4300	1700	1100	300	430	4300
20	900	170	1100	9000	430										

The boxes with values 1100, 1100, 1100, 1100, and 1100 are highlighted in orange and labeled 'N'.

Round 1,101 to the nearest hundred → **N**

Round 171 to the nearest ten $\rightarrow$ **A**

Round 19 to the nearest ten $\rightarrow$ **B**

Round 2,946 to the nearest thousand → **S**

Round 434 to the nearest ten $\rightarrow$ **H**

Round 1,656 to the nearest hundred $\rightarrow$ **0**

Round 900 to the nearest hundred $\rightarrow$ **R**

Round 2,258 to the nearest hundred $\rightarrow$ **Y**

Round 652 to the nearest hundred → **D**

Round 3,677 to the nearest hundred →

Round 9,270 to the nearest thousand → **C**

Round 4,273 to the nearest hundred $\rightarrow$ **E**

Round 336 to the nearest hundred $\rightarrow$ **T**

Round 66 to the nearest ten $\rightarrow$ **W**

Round 293 to the nearest ten $\rightarrow$ **L**

Scratch space:

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

The team must divide the remaining trail rations equally among the search party to ensure everyone has enough energy to corner the thief.

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:

$12 \div 2 = \boxed{}$

$24 \div 2 = \boxed{}$

$9 \div 1 = \boxed{}$

$32 \div 8 = \boxed{}$

$36 \div 12 = \boxed{}$

$6 \div 6 = \boxed{}$

$48 \div 6 = \boxed{}$

$10 \div 5 = \boxed{}$

$100 \div 10 = \boxed{}$

$10 \div 2 = \boxed{}$

$84 \div 12 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain lights up the dark cave with a laser flashlight, then slides down the ancient line using a zipline kit.
2. The villain scales the sheer stone wall with climbing boots, then zooms over the ruins on a hoverboard.
3. The villain swings across the canyon with a grappling hook, then speeds down the dirt trail on a motorcycle.
4. The villain scales the sheer stone wall with climbing boots, then escapes by gliding away on a paraglider.
5. The villain cuts through the thick vines with a machete tool, then zooms over the ruins on a hoverboard.
6. The villain scales the sheer stone wall with climbing boots, then speeds down the dirt trail on a motorcycle.
7. The villain cuts through the thick vines with a machete tool, then slides down the ancient line using a zipline kit.
8. The villain cuts through the thick vines with a machete tool, then escapes down the river in a speed boat.
9. The villain distracts the guard monkeys with a sonic whistle, then speeds down the dirt trail on a motorcycle.
10. The villain cuts through the thick vines with a machete tool, then speeds down the dirt trail on a motorcycle.
11. The villain lights up the dark cave with a laser flashlight, then escapes by gliding away on a paraglider.
12. The villain distracts the guard monkeys with a sonic whistle, then escapes down the river in a speed boat.

Answer Key

The Canopy Chase

Culprit: Lara Stone

laser flashlight · paraglider · left-handed grip · neon yellow hair · allergic to pollen

Trail: Start 21 → Clue 1 18 → Clue 2 12 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE THIEF DOES NOT USE A HOVERBOARD"

$1/10$ of 140 = 14 (T) · $8/10$ of 15 = 12 (H) · $5/10$ of 18 = 9 (R) · $3/6$ of 38 = 19 (E) · $2/5$ of 80 = 32 (A) · $2/6$ of 33 = 11 (O) · $1/6$ of 150 = 25 (S) · $1/4$ of 12 = 3 (V) · $1/2$ of 40 = 20 (F) · $2/10$ of 115 = 23 (I) · $2/6$ of 108 = 36 (B) · $4/6$ of 42 = 28 (N) · $3/8$ of 88 = 33 (D) · $2/4$ of 4 = 2 (U)

Clue 2 (Order of operations): "LEFT HANDED STRAP MARKS WERE FOUND ON THE ROPE"

$45 + 3 \times 6 = 63$ (L) · $43 + 6 \times 2 = 55$ (W) · $64 + 4 \times 2 = 72$ (N) · $25 + 3 \times 3 = 34$ (U) · $31 + 4 \times 2 = 39$ (P) · $7 + 6 \times 5 = 37$ (O) · $1 + 2 \times 7 = 15$ (R) · $12 \times 4 - 28 = 20$ (M) · $11 + 4 \times 8 = 43$ (K) · $8 \times 6 - 16 = 32$ (T) · $7 \times 5 - 18 = 17$ (S) · $11 \times 9 - 24 = 75$ (D) · $33 + 5 \times 5 = 58$ (H) · $12 \times 7 - 23 = 61$ (F) · $3 + 6 \times 3 = 21$ (E) · $7 \times 9 - 23 = 40$ (A)

Clue 3 (Multiplication facts (1-12)): "THE SNEEZING SUSPECT DROPPED A BOX OF TISSUES"

$9 \times 9 = 81$ (T) · $11 \times 4 = 44$ (P) · $5 \times 1 = 5$ (B) · $5 \times 5 = 25$ (F) · $9 \times 10 = 90$ (G) · $1 \times 2 = 2$ (O) · $4 \times 9 = 36$ (A) · $8 \times 8 = 64$ (H) · $5 \times 11 = 55$ (I) · $11 \times 1 = 11$ (E) · $12 \times 12 = 144$ (C) · $1 \times 3 = 3$ (U) · $7 \times 1 = 7$ (N) · $5 \times 10 = 50$ (D) · $12 \times 2 = 24$ (X) · $4 \times 1 = 4$ (S) · $3 \times 10 = 30$ (R) · $11 \times 6 = 66$ (Z)

Clue 4 (Rounding): "NEON YELLOW HAIR STRANDS WERE ON THE BRANCH"

Round 1,101 to the nearest hundred = 1100 (N) · Round 171 to the nearest ten = 170 (A) · Round 19 to the nearest ten = 20 (B) · Round 2,946 to the nearest thousand = 3000 (S) · Round 434 to the nearest ten = 430 (H) · Round 1,656 to the nearest hundred = 1700 (O) · Round 900 to the nearest hundred = 900 (R) · Round 2,258 to the nearest hundred = 2300 (Y) · Round 652 to the nearest hundred = 700 (D) · Round 3,677 to the nearest hundred = 3700 (I) · Round 9,270 to the nearest thousand = 9000 (C) · Round 4,273 to the nearest hundred = 4300 (E) · Round 336 to the nearest hundred = 300 (T) · Round 66 to the nearest ten = 70 (W) · Round 293 to the nearest ten = 290 (L)

Clue 5 (Division facts (1-12)): surviving statement is box 11 → Lara Stone

$12 \div 2 = 6$ · $24 \div 2 = 12$ · $9 \div 1 = 9$ · $32 \div 8 = 4$ · $36 \div 12 = 3$ · $6 \div 6 = 1$ · $48 \div 6 = 8$ · $10 \div 5 = 2$ · $100 \div 10 = 10$ · $10 \div 2 = 5$ · $84 \div 12 = 7$