



The Mystery of Serpent Ridge Ruins

Grade 6 math · Multiplication, Multi-step word problems, Word problems, Fractions of a number · Reading level grades 5-6

Detective: _____ Date: _____

A sneaky raid threw the Serpent Ridge expedition into chaos! Someone snuck into the central vault, disabled the temple defense grids, and ran off with precious ancient relics. Detective, examine the clues, solve the math mysteries, and unmask the culprit before they escape the jungle!

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 Temple Bandit is _____

Possible suspects

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

NAME	GEAR USED	STOLEN RELIC	DOMINANT HAND	HAIR STYLE	DEFENSIVE TRAP
Carter Kane	Torch Launcher	Jade Key	Right-Handed	Curly Afro	Net Trap
Jason Grace	Glider Wings	Jade Key	Right-Handed	Short Crew Cut	Flashlight Beam
Thalia Grace	Torch Launcher	Ruby Medallion	Left-Handed	Short Crew Cut	Flashlight Beam
Percy Jackson	Grappling Hook	Ancient Map	Right-Handed	Braided Ponytail	Flashlight Beam
Sami Cruz	Smoke Bombs	Ruby Medallion	Right-Handed	Curly Afro	Net Trap
Sadie Kane	Torch Launcher	Ancient Map	Left-Handed	Curly Afro	Flashlight Beam
Nico di Angelo	Glider Wings	Jade Key	Left-Handed	Curly Afro	Sneezing Powder
Indiana Bones	Decodable Compass	Jade Key	Left-Handed	Curly Afro	Flashlight Beam
Rory Williams	Glider Wings	Golden Idol	Right-Handed	Curly Afro	Flashlight Beam
Luke Castellan	Glider Wings	Ancient Map	Right-Handed	Braided Ponytail	Flashlight Beam
Frank Zhang	Glider Wings	Ruby Medallion	Right-Handed	Short Crew Cut	Net Trap
Will Solace	Glider Wings	Ancient Map	Left-Handed	Curly Afro	Flashlight Beam
Hazel Levesque	Torch Launcher	Jade Key	Right-Handed	Braided Ponytail	Flashlight Beam
Maya Lin	Torch Launcher	Jeweled Dagger	Left-Handed	Curly Afro	Flashlight Beam
Leo Valdez	Decodable Compass	Jeweled Dagger	Right-Handed	Short Crew Cut	Net Trap
Lara Croft	Grappling Hook	Ancient Map	Left-Handed	Curly Afro	Flashlight Beam
Zoe Nightshade	Smoke Bombs	Jade Key	Left-Handed	Braided Ponytail	Net Trap
Calypso Moon	Grappling Hook	Ruby Medallion	Left-Handed	Short Crew Cut	Sneezing Powder
Alex Fierro	Glider Wings	Golden Idol	Left-Handed	Curly Afro	Sneezing Powder
Magnus Chase	Glider Wings	Golden Idol	Right-Handed	Braided Ponytail	Net Trap
Piper McLean	Grappling Hook	Golden Idol	Right-Handed	Braided Ponytail	Sneezing Powder

Multiplication facts (1-12)

The camp was flipped upside down during the night raid. Help the supply crew count the remaining trail gear to decode the first clue.

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

16 24 70 22 35 99 99 66 35 11 6 84 70 80 11 84 16

24 66 22 70 16 24 70 30 70 49 70 99 70 6 6 66 3 3 70 90

$$2 \times 8 = \boxed{} \rightarrow \boxed{\text{T}}$$

$10 \times 3 = \boxed{} \rightarrow \boxed{\mathbf{J}}$

$$6 \times 1 = \boxed{} \rightarrow \boxed{\text{D}}$$

$9 \times 11 = \square \rightarrow \mathbf{L}$

$8 \times 10 = \boxed{} \rightarrow \boxed{\text{S}}$

$9 \times 10 = \boxed{} \rightarrow \boxed{\text{R}}$

$$12 \times 7 = \boxed{} \rightarrow \boxed{0}$$

$12 \times 2 = \boxed{} \rightarrow \boxed{\text{H}}$

$3 \times 1 = \boxed{} \rightarrow \boxed{\mathbf{G}}$

$11 \times 1 = \boxed{} \rightarrow \boxed{\text{N}}$

$7 \times 5 = \boxed{} \rightarrow \boxed{1}$

$7 \times 7 = \boxed{} \rightarrow \boxed{\mathbf{W}}$

$10 \times 7 = \boxed{} \rightarrow \boxed{\text{E}}$

$$11 \times 2 = \boxed{} \rightarrow \boxed{\mathbf{V}}$$

$11 \times 6 = \boxed{} \rightarrow \boxed{\text{A}}$

Scratch space:

CLUE 2

Multi-step word problems

The trail split into three treacherous paths through the canyon. Solve these supply weight calculations to map out where the bandit fled.

Solve each problem, then write its letter in the boxes to fill in the missing word.

A witness saw the villain was L D D .

82 22 53 40 79 7 56 22

There were 195 scouting map in all. 1 Jungle Trek Crew used 31 scouting map each. The other 2 Jungle Trek Crew shared the rest equally. How many scouting map did each of the other Jungle Trek Crew get?

Answer: → L

Archaeologist filled 3 boxes with 3 trail canteen each, then found 31 more trail canteen. How many trail canteen are there in all?

Answer: → T

Archaeologist earned 8 climbing rope in each of 6 rounds, plus 12 bonus climbing rope. Then 7 climbing rope were lost. How many climbing rope are left?

Answer: → F

There were 428 scouting map in all. 36 scouting map were set aside. The rest were shared equally among 7 Jungle Trek Crew. How many scouting map did each get?

Answer: → N

There were 143 scouting map in all. 3 Jungle Trek Crew used 33 scouting map each. The other 2 Jungle Trek Crew shared the rest equally. How many scouting map did each of the other Jungle Trek Crew get?

Answer: → E

Archaeologist earned 5 brass compass in each of 6 rounds, plus 56 bonus brass compass. Then 7 brass compass were lost. How many brass compass are left?

Answer: → H

Archaeologist collected 5 expedition tent in the morning and 16 expedition tent in the afternoon, then split them equally among 3 Jungle Trek Crew. How many expedition tent did each get?

Answer: → A

Scratch space:

CLUE 3

Word problems

A carved stone wall blocks the secret passage. Multiply the ancient glyph rows to unlock the hidden mechanism.

Solve each problem, then write its letter in the boxes to fill in the missing word.

Someone scared the villain off with

F **T** **B** **E** **M** .

31 7 79 82 119 7 45 77 119 79

There were 48 trail canteen. 17 were used up. How many trail canteen are left?

Answer: → **F**

There were 106 trail canteen. 29 were used up. How many trail canteen are left?

Answer: → **G**

Archaeologist found 41 expedition tent yesterday and 78 more today. How many expedition tent in all?

Answer: → **H**

There were 68 brass compass. 23 were used up. How many brass compass are left?

Answer: → **I**

There were 108 scouting map. 29 were used up. How many scouting map are left?

Answer: → **A**

There were 99 brass compass. 17 were used up. How many brass compass are left?

Answer: → **S**

There were 29 brass compass. 22 were used up. How many brass compass are left?

Answer: → **L**

Scratch space:

CLUE 4

Fractions of a number

Our canteens are running low on fresh spring water. Calculate the remaining fractions of water supplies to keep moving forward.

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

T																	
25	39	34	8	31	23	19	25	37	23	19	14	6	31	19	36	35	24
30	37	36	23	39	30	22	36										

$1/3 \text{ of } 75 = \square \rightarrow \boxed{\text{T}}$

$3/6 \text{ of } 46 = \square \rightarrow \boxed{\text{O}}$

$2/10 \text{ of } 185 = \square \rightarrow \boxed{\text{F}}$

$3/8 \text{ of } 80 = \square \rightarrow \boxed{\text{A}}$

$3/4 \text{ of } 8 = \square \rightarrow \boxed{\text{D}}$

$2/10 \text{ of } 170 = \square \rightarrow \boxed{\text{E}}$

$2/3 \text{ of } 21 = \square \rightarrow \boxed{\text{N}}$

$3/6 \text{ of } 72 = \square \rightarrow \boxed{\text{R}}$

$3/4 \text{ of } 52 = \square \rightarrow \boxed{\text{H}}$

$1/4 \text{ of } 76 = \square \rightarrow \boxed{\text{U}}$

$2/8 \text{ of } 124 = \square \rightarrow \boxed{\text{C}}$

$2/6 \text{ of } 24 = \square \rightarrow \boxed{\text{S}}$

$2/10 \text{ of } 110 = \square \rightarrow \boxed{\text{I}}$

$5/10 \text{ of } 70 = \square \rightarrow \boxed{\text{L}}$

$3/4 \text{ of } 32 = \square \rightarrow \boxed{\text{Y}}$

Scratch space:

CLUE 5**Fractions of a number - the last clue**

The stolen map fragment shows only a fraction of the jungle grid. Solve the fractional distances to pinpoint the bandit hideout.

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:

$1/5 \text{ of } 5 = \boxed{}$

$1/5 \text{ of } 50 = \boxed{}$

$1/2 \text{ of } 22 = \boxed{}$

$2/6 \text{ of } 21 = \boxed{}$

$2/6 \text{ of } 24 = \boxed{}$

$1/4 \text{ of } 16 = \boxed{}$

$1/8 \text{ of } 72 = \boxed{}$

$2/4 \text{ of } 4 = \boxed{}$

$4/8 \text{ of } 10 = \boxed{}$

$2/6 \text{ of } 9 = \boxed{}$

$4/5 \text{ of } 15 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain guided their path with a decodable compass, then grabbed the jade key.
2. The villain dropped a cloud of smoke bombs, then stole the ruby medallion.
3. The villain swung with a grappling hook, then took the jeweled dagger.
4. The villain swung with a grappling hook, then stole the ruby medallion.
5. The villain fired a path with a torch launcher, then grabbed the jade key.
6. The villain swung with a grappling hook, then swiped the ancient map.
7. The villain guided their path with a decodable compass, then stole the ruby medallion.
8. The villain guided their path with a decodable compass, then swiped the ancient map.
9. The villain fired a path with a torch launcher, then took the jeweled dagger.
10. The villain glided overhead on glider wings, then swiped the ancient map.
11. The villain fired a path with a torch launcher, then swiped the ancient map.
12. The villain fired a path with a torch launcher, then stole the ruby medallion.

Answer Key

The Mystery of Serpent Ridge Ruins

Culprit: Lara Croft

Grappling Hook · Ancient Map · Left-Handed · Curly Afro · Flashlight Beam

Trail: Start 21 → Clue 1 19 → Clue 2 9 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Multiplication facts (1-12)): "THE VILLAIN DOES NOT HAVE THE JEWELLED DAGGER"

$2 \times 8 = 16$ (T) · $10 \times 3 = 30$ (J) · $6 \times 1 = 6$ (D) · $9 \times 11 = 99$ (L) · $8 \times 10 = 80$ (S) · $9 \times 10 = 90$ (R) · $12 \times 7 = 84$ (O) · $12 \times 2 = 24$ (H) · $3 \times 1 = 3$ (G) · $11 \times 1 = 11$ (N) · $7 \times 5 = 35$ (I) · $7 \times 7 = 49$ (W) · $10 \times 7 = 70$ (E) · $11 \times 2 = 22$ (V) · $11 \times 6 = 66$ (A)

Clue 2 (Multi-step word problems): "LEFT HANDED"

There were 195 scouting map in all. 1 Jungle Trek Crew used 31 scouting map each. The other 2 Jungle Trek Crew shared the rest equally. How many scouting map did each of the other Jungle Trek Crew get? = 82 (L) · Archaeologist filled 3 boxes with 3 trail canteen each, then found 31 more trail canteen. How many trail canteen are there in all? = 40 (T) · Archaeologist earned 8 climbing rope in each of 6 rounds, plus 12 bonus climbing rope. Then 7 climbing rope were lost. How many climbing rope are left? = 53 (F) · There were 428 scouting map in all. 36 scouting map were set aside. The rest were shared equally among 7 Jungle Trek Crew. How many scouting map did each get? = 56 (N) · There were 143 scouting map in all. 3 Jungle Trek Crew used 33 scouting map each. The other 2 Jungle Trek Crew shared the rest equally. How many scouting map did each of the other Jungle Trek Crew get? = 22 (E) · Archaeologist earned 5 brass compass in each of 6 rounds, plus 56 bonus brass compass. Then 7 brass compass were lost. How many brass compass are left? = 79 (H) · Archaeologist collected 5 expedition tent in the morning and 16 expedition tent in the afternoon, then split them equally among 3 Jungle Trek Crew. How many expedition tent did each get? = 7 (A)

Clue 3 (Word problems): "FLASHLIGHT BEAM"

There were 48 trail canteen. 17 were used up. How many trail canteen are left? = 31 (F) · There were 106 trail canteen. 29 were used up. How many trail canteen are left? = 77 (G) · Archaeologist found 41 expedition tent yesterday and 78 more today. How many expedition tent in all? = 119 (H) · There were 68 brass compass. 23 were used up. How many brass compass are left? = 45 (I) · There were 108 scouting map. 29 were used up. How many scouting map are left? = 79 (A) · There were 99 brass compass. 17 were used up. How many brass compass are left? = 82 (S) · There were 29 brass compass. 22 were used up. How many brass compass are left? = 7 (L)

Clue 4 (Fractions of a number): "THE SCOUT FOUND CURLY AFRO HAIR"

$1/3$ of 75 = 25 (T) · $3/6$ of 46 = 23 (O) · $2/10$ of 185 = 37 (F) · $3/8$ of 80 = 30 (A) · $3/4$ of 8 = 6 (D) · $2/10$ of 170 = 34 (E) · $2/3$ of 21 = 14 (N) · $3/6$ of 72 = 36 (R) · $3/4$ of 52 = 39 (H) · $1/4$ of 76 = 19 (U) · $2/8$ of 124 = 31 (C) · $2/6$ of 24 = 8 (S) · $2/10$ of 110 = 22 (I) · $5/10$ of 70 = 35 (L) · $3/4$ of 32 = 24 (Y)

Clue 5 (Fractions of a number): surviving statement is box 6 → Lara Croft

$1/5$ of 5 = 1 · $1/5$ of 50 = 10 · $1/2$ of 22 = 11 · $2/6$ of 21 = 7 · $2/6$ of 24 = 8 · $1/4$ of 16 = 4 · $1/8$ of 72 = 9 · $2/4$ of 4 = 2 · $4/8$ of 10 = 5 · $2/6$ of 9 = 3 · $4/5$ of 15 = 12