



The Lost Emerald of Temple Island

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

Detective: _____ **Date:** _____

The Golden Monkey Statue has been snatched from the central altar of Temple Island! The Chief Curator needs your team of junior archeologists to track down 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 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	ADVENTURE TOOL	ANIMAL COMPANION	COMPASS GRIP	HAIRSTYLE	JUNGLE DISTRACTION
Sally Lockhart	magnifying lens	helpful gecko	right handed compass	curly hair	tickle curse
Lara Croft	grappling hook	sneaky capybara	left handed compass	spiky crewcut	pollen sneeze
Cam Jansen	pocket sonar	clever monkey	right handed compass	spiky crewcut	tickle curse
Julius Stone	laser pointer	sneaky capybara	left handed compass	spiky crewcut	pollen sneeze
Sadie Kane	grappling hook	trained parrot	right handed compass	messy ponytail	fear of frogs
Leo Cruz	pocket sonar	trained parrot	left handed compass	spiky crewcut	fear of frogs
Carter Kane	magnifying lens	helpful gecko	left handed compass	spiky crewcut	pollen sneeze
Ben Gates	pocket sonar	sneaky capybara	left handed compass	curly hair	pollen sneeze
Nancy Drew	pocket sonar	tiny tree frog	left handed compass	spiky crewcut	pollen sneeze
Percy Jackson	decoder ring	helpful gecko	right handed compass	spiky crewcut	fear of frogs
Grover Underwood	grappling hook	clever monkey	right handed compass	curly hair	fear of frogs
Minerva Keen	pocket sonar	sneaky capybara	left handed compass	messy ponytail	tickle curse
Encyclopedia Brown	decoder ring	trained parrot	right handed compass	curly hair	pollen sneeze
Indiana Jones	laser pointer	trained parrot	left handed compass	spiky crewcut	fear of frogs
Hazel Levesque	decoder ring	clever monkey	left handed compass	spiky crewcut	pollen sneeze
Nellie Bly	magnifying lens	helpful gecko	right handed compass	spiky crewcut	fear of frogs
Frank Hardy	decoder ring	sneaky capybara	right handed compass	spiky crewcut	pollen sneeze
Cody Zambrano	laser pointer	tiny tree frog	left handed compass	curly hair	tickle curse
Joe Hardy	magnifying lens	helpful gecko	right handed compass	messy ponytail	fear of frogs
Alex Rider	decoder ring	clever monkey	right handed compass	messy ponytail	tickle curse
Annabelle Chase	laser pointer	sneaky capybara	left handed compass	messy ponytail	fear of frogs

CLUE 1
Fractions of a number

To unlock the temple's outer gate, we must count a specific fraction of the carved sun tiles on the floor.

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

T																T
20	37	22	30	18	31	31	9	18	16	25	8	22	15	16	8	20
37	9	30	22	9	34	31	22	30	22	28	19	8	16	10	22	17

$1/8 \text{ of } 160 = \square \rightarrow \boxed{\text{T}}$

$2/4 \text{ of } 34 = \square \rightarrow \boxed{\text{Y}}$

$7/8 \text{ of } 32 = \square \rightarrow \boxed{\text{R}}$

$1/8 \text{ of } 80 = \square \rightarrow \boxed{\text{K}}$

$1/6 \text{ of } 114 = \square \rightarrow \boxed{\text{M}}$

$1/6 \text{ of } 150 = \square \rightarrow \boxed{\text{D}}$

$2/5 \text{ of } 85 = \square \rightarrow \boxed{\text{C}}$

$1/6 \text{ of } 132 = \square \rightarrow \boxed{\text{E}}$

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

$3/6 \text{ of } 74 = \square \rightarrow \boxed{\text{H}}$

$3/6 \text{ of } 36 = \square \rightarrow \boxed{\text{I}}$

$9/10 \text{ of } 10 = \square \rightarrow \boxed{\text{A}}$

$1/6 \text{ of } 96 = \square \rightarrow \boxed{\text{N}}$

$5/6 \text{ of } 18 = \square \rightarrow \boxed{\text{S}}$

$2/4 \text{ of } 62 = \square \rightarrow \boxed{\text{L}}$

$2/10 \text{ of } 40 = \square \rightarrow \boxed{\text{O}}$

Scratch space:

CLUE 2

Word problems

We found a discarded supply crate. Let us solve the word problem to figure out how many juice boxes the thief drank.

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	C	O	M	P		S	S	.
117	39	41	99	69	38	86		39						38			

Explorer found 88 pith helmets yesterday and 29 more today. How many pith helmets in all?

Answer: → **L**

Explorer found 39 golden coins yesterday and 30 more today. How many golden coins in all?

Answer: → **H**

There were 122 golden coins. 36 were used up. How many golden coins are left?

Answer: → **N**

There were 104 ancient maps. 5 were used up. How many ancient maps are left?

Answer: → **T**

There were 56 golden coins. 17 were used up. How many golden coins are left?

Answer: → **E**

There were 81 pith helmets. 40 were used up. How many pith helmets are left?

Answer: → **F**

Explorer found 10 crystal shards yesterday and 28 more today. How many crystal shards in all?

Answer: → **A**

Scratch space:

CLUE 3 Rounding

The pressure plate on the pedestal is broken and only shows a rounded number of total grams.

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

T																			
70	900	50	2300	200	4300	4300	370	200	130	20	130	50	50	2900	50	90			
										T									
4300	3000	290	90	4300	230	130	50	370	2000	70	900	50	430	4300	3000	500	50	2000	20

Round 74 to the nearest ten → **T**

Round 879 to the nearest hundred → **H**

Round 1,958 to the nearest thousand → **R**

Round 431 to the nearest ten → **F**

Round 549 to the nearest hundred → **W**

Round 4,292 to the nearest hundred → **L**

Round 367 to the nearest ten → **A**

Round 2,879 to the nearest hundred → **Z**

Round 133 to the nearest ten → **N**

Round 92 to the nearest ten → **D**

Round 293 to the nearest ten → **U**

Round 222 to the nearest hundred → **I**

Round 231 to the nearest ten → **Y**

Round 21 to the nearest ten → **S**

Round 50 to the nearest ten → **E**

Round 3,491 to the nearest thousand → **O**

Round 2,262 to the nearest hundred → **V**

Scratch space:

CLUE 4

Multiplication facts (1-12)

We need to count the columns of stone pillars in the grand hall to find the correct path.

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

W																
9	20	144	3	48	4	132	54	6	3	8	40	6	72	44	8	54
												W				
144	8	3	12	72	54	110	44	45	70	18	8	20	9	18	48	40

$3 \times 3 = \square \rightarrow \text{W}$

$9 \times 5 = \square \rightarrow \text{K}$

$2 \times 6 = \square \rightarrow \text{M}$

$12 \times 4 = \square \rightarrow \text{U}$

$9 \times 8 = \square \rightarrow \text{A}$

$11 \times 12 = \square \rightarrow \text{D}$

$8 \times 1 = \square \rightarrow \text{R}$

$8 \times 5 = \square \rightarrow \text{T}$

$3 \times 1 = \square \rightarrow \text{O}$

$11 \times 10 = \square \rightarrow \text{P}$

$1 \times 4 = \square \rightarrow \text{N}$

$6 \times 1 = \square \rightarrow \text{H}$

$6 \times 9 = \square \rightarrow \text{S}$

$11 \times 4 = \square \rightarrow \text{I}$

$7 \times 10 = \square \rightarrow \text{Y}$

$12 \times 12 = \square \rightarrow \text{F}$

$5 \times 4 = \square \rightarrow \text{E}$

$2 \times 9 = \square \rightarrow \text{C}$

Scratch space:

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

To split our water supplies evenly, we have to calculate the exact fraction of canteens left in our packs.

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:

$5/8 \text{ of } 8 = \boxed{}$

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

$1/10 \text{ of } 120 = \boxed{}$

$1/4 \text{ of } 36 = \boxed{}$

$1/5 \text{ of } 35 = \boxed{}$

$5/10 \text{ of } 12 = \boxed{}$

$5/10 \text{ of } 6 = \boxed{}$

$1/3 \text{ of } 6 = \boxed{}$

$5/10 \text{ of } 22 = \boxed{}$

$1/8 \text{ of } 64 = \boxed{}$

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

Step 2 - cross out the sentence with each answer:

1. The villain grabbed the ancient crown, then fled through a secret tunnel.
2. The villain pocketed the diamond key, then escaped on a zipline.
3. The villain stole the golden monkey statue, then hopped onto a river raft.
4. The villain snatched the sacred scroll, then fled through a secret tunnel.
5. The villain stole the golden monkey statue, then swung away on a jungle vine.
6. The villain pocketed the diamond key, then fled through a secret tunnel.
7. The villain grabbed the ancient crown, then hopped onto a river raft.
8. The villain stole the golden monkey statue, then escaped on a zipline.
9. The villain snatched the sacred scroll, then hopped onto a river raft.
10. The villain swiped the ruby map, then hopped onto a river raft.
11. The villain snatched the sacred scroll, then dashed into the thick mist.
12. The villain pocketed the diamond key, then swung away on a jungle vine.

Answer Key

The Lost Emerald of Temple Island

Culprit: Nancy Drew

pocket sonar · tiny tree frog · left handed compass · spiky crewcut · pollen sneeze

Trail: Start 21 → Clue 1 17 → Clue 2 10 → Clue 3 5 → Clue 4 4 → Clue 5 1

Clue 1 (Fractions of a number): "THE VILLAIN DOES NOT HAVE A CLEVER MONKEY"

$\frac{1}{8}$ of 160 = 20 (T) · $\frac{2}{4}$ of 34 = 17 (Y) · $\frac{7}{8}$ of 32 = 28 (R) · $\frac{1}{8}$ of 80 = 10 (K) · $\frac{1}{6}$ of 114 = 19 (M) · $\frac{1}{6}$ of 150 = 25 (D) · $\frac{2}{5}$ of 85 = 34 (C) · $\frac{1}{6}$ of 132 = 22 (E) · $\frac{3}{8}$ of 80 = 30 (V) · $\frac{3}{6}$ of 74 = 37 (H) · $\frac{3}{6}$ of 36 = 18 (I) · $\frac{9}{10}$ of 10 = 9 (A) · $\frac{1}{6}$ of 96 = 16 (N) · $\frac{5}{6}$ of 18 = 15 (S) · $\frac{2}{4}$ of 62 = 31 (L) · $\frac{2}{10}$ of 40 = 8 (O)

Clue 2 (Word problems): "LEFT HANDED COMPASS"

Explorer found 88 pith helmets yesterday and 29 more today. How many pith helmets in all? = 117 (L) · Explorer found 39 golden coins yesterday and 30 more today. How many golden coins in all? = 69 (H) · There were 122 golden coins. 36 were used up. How many golden coins are left? = 86 (N) · There were 104 ancient maps. 5 were used up. How many ancient maps are left? = 99 (T) · There were 56 golden coins. 17 were used up. How many golden coins are left? = 39 (E) · There were 81 pith helmets. 40 were used up. How many pith helmets are left? = 41 (F) · Explorer found 10 crystal shards yesterday and 28 more today. How many crystal shards in all? = 38 (A)

Clue 3 (Rounding): "THE VILLAIN SNEEZED LOUDLY NEAR THE FLOWERS"

Round 74 to the nearest ten = 70 (T) · Round 879 to the nearest hundred = 900 (H) · Round 1,958 to the nearest thousand = 2000 (R) · Round 431 to the nearest ten = 430 (F) · Round 549 to the nearest hundred = 500 (W) · Round 4,292 to the nearest hundred = 4300 (L) · Round 367 to the nearest ten = 370 (A) · Round 2,879 to the nearest hundred = 2900 (Z) · Round 133 to the nearest ten = 130 (N) · Round 92 to the nearest ten = 90 (D) · Round 293 to the nearest ten = 290 (U) · Round 222 to the nearest hundred = 200 (I) · Round 231 to the nearest ten = 230 (Y) · Round 21 to the nearest ten = 20 (S) · Round 50 to the nearest ten = 50 (E) · Round 3,491 to the nearest thousand = 3000 (O) · Round 2,262 to the nearest hundred = 2300 (V)

Clue 4 (Multiplication facts (1-12)): "WE FOUND SHORT HAIRS FROM A SPIKY CREWCUT"

$3 \times 3 = 9$ (W) · $9 \times 5 = 45$ (K) · $2 \times 6 = 12$ (M) · $12 \times 4 = 48$ (U) · $9 \times 8 = 72$ (A) · $11 \times 12 = 132$ (D) · $8 \times 1 = 8$ (R) · $8 \times 5 = 40$ (T) · $3 \times 1 = 3$ (O) · $11 \times 10 = 110$ (P) · $1 \times 4 = 4$ (N) · $6 \times 1 = 6$ (H) · $6 \times 9 = 54$ (S) · $11 \times 4 = 44$ (I) · $7 \times 10 = 70$ (Y) · $12 \times 12 = 144$ (F) · $5 \times 4 = 20$ (E) · $2 \times 9 = 18$ (C)

Clue 5 (Fractions of a number): surviving statement is box 10 → Nancy Drew

$\frac{5}{8}$ of 8 = 5 · $\frac{1}{4}$ of 4 = 1 · $\frac{1}{10}$ of 120 = 12 · $\frac{1}{4}$ of 36 = 9 · $\frac{1}{5}$ of 35 = 7 · $\frac{5}{10}$ of 12 = 6 · $\frac{5}{10}$ of 6 = 3 · $\frac{1}{3}$ of 6 = 2 · $\frac{5}{10}$ of 22 = 11 · $\frac{1}{8}$ of 64 = 8 · $\frac{4}{10}$ of 10 = 4