



The Case of the Golden Compass Thief

Grade 4 math · Rounding, Word problems, Addition, Subtraction, Division · Reading level grades 5-6

Detective: _____ Date: _____

While exploring the Sunken Sun Temple, the Expedition Leader's prized Golden Compass was stolen! Track down the mystery bandit 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 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	SKILL	STANCE	HAT	FEAR
Scout Penny	Climbing Claws	Deciphering Glyphs	Left Handed	Leather Cap	Loud Whistles
Victor Vale	Glider Wings	Map Reading	Right Handed	Pith Helmet	Loud Whistles
Captain Bram	Flash Flare	Map Reading	Right Handed	Feather Band	Bright Mirrors
Tracker Trent	Smoke Pellets	Map Reading	Left Handed	Leather Cap	Loud Whistles
Daring Dirk	Flash Flare	Map Reading	Right Handed	Pith Helmet	Bright Mirrors
Gideon Gold	Smoke Pellets	Camouflage	Left Handed	Leather Cap	Water Sprays
Quentin Quarry	Climbing Claws	Camouflage	Right Handed	Feather Band	Bright Mirrors
Pippa Pines	Flash Flare	Camouflage	Right Handed	Feather Band	Bright Mirrors
Sammy Sands	Smoke Pellets	Lock Picking	Left Handed	Leather Cap	Water Sprays
Explorer Flint	Climbing Claws	Deciphering Glyphs	Left Handed	Leather Cap	Water Sprays
Maya Cruz	Climbing Claws	Rope Swinging	Left Handed	Leather Cap	Water Sprays
Sienna Brooks	Smoke Pellets	Lock Picking	Right Handed	Leather Cap	Water Sprays
Hazel Hunter	Grappling Hook	Lock Picking	Left Handed	Pith Helmet	Water Sprays
Dr Alistair	Smoke Pellets	Map Reading	Left Handed	Pith Helmet	Water Sprays
Professor Oakwood	Smoke Pellets	Map Reading	Left Handed	Leather Cap	Bright Mirrors
Chloe Canyon	Glider Wings	Rope Swinging	Left Handed	Leather Cap	Bright Mirrors
Navigator Nora	Grappling Hook	Camouflage	Right Handed	Pith Helmet	Water Sprays
Ranger Rick	Climbing Claws	Rope Swinging	Left Handed	Pith Helmet	Bright Mirrors
Jasper Ridge	Flash Flare	Deciphering Glyphs	Left Handed	Pith Helmet	Bright Mirrors
Fiona Falls	Glider Wings	Map Reading	Left Handed	Leather Cap	Water Sprays
Hunter Todd	Grappling Hook	Rope Swinging	Right Handed	Leather Cap	Bright Mirrors

CLUE 1

S

Round 68 to the nearest ten → **T**

Round 31 to the nearest ten $\rightarrow$

Round 94 to the nearest ten $\rightarrow$ **S**

Round 432 to the nearest ten → **E**

Round 169 to the nearest hundred $\rightarrow$

Round 53 to the nearest ten → **B**

Round 2,374 to the nearest thousand → **G**

Round 4,283 to the nearest hundred → **H**

Round 2,925 to the nearest hundred → **A**

Round 1,270 to the nearest hundred $\rightarrow$ **L**

Round 260 to the nearest hundred → **D**

Round 9,367 to the nearest thousand → **N**

Round 864 to the nearest hundred $\rightarrow$ **C**

Round 2,266 to the nearest hundred $\rightarrow$ **U**

Round 4,817 to the nearest thousand → **Y**

Round 111 to the nearest ten → **R**

Round 465 to the nearest hundred → **P**

Scratch space:

CLUE 2

Word problems

The temple security scanner only displays estimated energy readings rounded to the nearest hundred.

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 .

60 34 37 77 17 41 75 34

Junior Explorer found 58 map fragments yesterday and 2 more today. How many map fragments in all?

Answer: → L

There were 23 map fragments. 6 were used up. How many map fragments are left?

Answer: → H

Junior Explorer found 32 map fragments yesterday and 43 more today. How many map fragments in all?

Answer: → N

There were 71 rubies. 37 were used up. How many rubies are left?

Answer: → E

There were 75 rubies. 38 were used up. How many rubies are left?

Answer: → F

Junior Explorer lined up 11 rows of 7 canteen drops. How many canteen drops in all?

Answer: → T

Junior Explorer found 24 torch batteries yesterday and 17 more today. How many torch batteries in all?

Answer: → A

Scratch space:

CLUE 3

Addition

You combine all the artifact tally marks found etched on the stone walls.

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

T																			
3957	3702	3723	7471	4466	9588	3613	4340	3957	3613	7266	4234	6732	3723	3613	3673	6413	5905	2024	

9813	4466	3957	3723	6413	9097	2250	6413	4466	4085	9097

$2469 + 1488 = \square \rightarrow \text{ T }$

$1952 + 1721 = \square \rightarrow \text{ F }$

$2363 + 1722 = \square \rightarrow \text{ Y }$

$5047 + 2219 = \square \rightarrow \text{ U }$

$3044 + 6769 = \square \rightarrow \text{ W }$

$2069 + 1654 = \square \rightarrow \text{ E }$

$4651 + 2820 = \square \rightarrow \text{ B }$

$5977 + 3611 = \square \rightarrow \text{ N }$

$2114 + 3791 = \square \rightarrow \text{ O }$

$5703 + 3394 = \square \rightarrow \text{ S }$

$1993 + 2347 = \square \rightarrow \text{ I }$

$3903 + 2510 = \square \rightarrow \text{ R }$

$1020 + 1230 = \square \rightarrow \text{ P }$

$2024 + 4708 = \square \rightarrow \text{ K }$

$1342 + 2360 = \square \rightarrow \text{ H }$

$1372 + 2241 = \square \rightarrow \text{ D }$

$1019 + 1005 = \square \rightarrow \text{ M }$

$2744 + 1490 = \square \rightarrow \text{ C }$

$2898 + 1568 = \square \rightarrow \text{ A }$

Scratch space:

CLUE 4

Subtraction

You calculate how many gold coins are missing by comparing the original chest weight to the remainder.

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

A				A				A			A							A	
3964	7789	8992	4742	3964	6684	2148	7040	3964	8471	3339	3964	4065	8354	3339	4742	8992	3964	6684	

	A						
2496	3964	7789	7040	2148	8681	7992	8290

$5255 - 1291 = \square \rightarrow \boxed{\text{A}}$

$13222 - 4868 = \square \rightarrow \boxed{\text{H}}$

$6421 - 1679 = \square \rightarrow \boxed{\text{R}}$

$8819 - 348 = \square \rightarrow \boxed{\text{L}}$

$8486 - 196 = \square \rightarrow \boxed{\text{D}}$

$2566 - 418 = \square \rightarrow \boxed{\text{O}}$

$10990 - 4306 = \square \rightarrow \boxed{\text{P}}$

$13241 - 4249 = \square \rightarrow \boxed{\text{C}}$

$5542 - 3046 = \square \rightarrow \boxed{\text{W}}$

$10765 - 3725 = \square \rightarrow \boxed{\text{F}}$

$9673 - 1884 = \square \rightarrow \boxed{\text{S}}$

$9248 - 1256 = \square \rightarrow \boxed{\text{N}}$

$7355 - 4016 = \square \rightarrow \boxed{\text{E}}$

$8901 - 220 = \square \rightarrow \boxed{\text{U}}$

$6741 - 2676 = \square \rightarrow \boxed{\text{T}}$

Scratch space:

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

You divide the total path steps equally among your search team to pinpoint the trail.

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:

$35 \div 7 = \boxed{}$

$18 \div 6 = \boxed{}$

$21 \div 3 = \boxed{}$

$14 \div 7 = \boxed{}$

$12 \div 1 = \boxed{}$

$40 \div 4 = \boxed{}$

$88 \div 11 = \boxed{}$

$45 \div 5 = \boxed{}$

$18 \div 3 = \boxed{}$

$10 \div 10 = \boxed{}$

$36 \div 9 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain blinded the guards with a flash flare, then picked the ancient lock on the vault.
2. The villain blinded the guards with a flash flare, then read the secret map to find the exit.
3. The villain scaled the stone wall using climbing claws, then swung across the river on a rope.
4. The villain blinded the guards with a flash flare, then blended into the jungle camouflage.
5. The villain soared across the chasm with glider wings, then read the secret map to find the exit.
6. The villain soared across the chasm with glider wings, then decoded the temple glyphs.
7. The villain threw down smoke pellets, then blended into the jungle camouflage.
8. The villain scaled the stone wall using climbing claws, then decoded the temple glyphs.
9. The villain threw down smoke pellets, then swung across the river on a rope.
10. The villain scaled the stone wall using climbing claws, then read the secret map to find the exit.
11. The villain threw down smoke pellets, then picked the ancient lock on the vault.
12. The villain swung on a vine using a grappling hook, then blended into the jungle camouflage.

Answer Key

The Case of the Golden Compass Thief

Culprit: Sammy Sands

Smoke Pellets · Lock Picking · Left Handed · Leather Cap · Water Sprays

Trail: Start 21 → Clue 1 18 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Rounding): "THE BANDIT DOES NOT USE DECIPHERING GLYPHS"

Round 68 to the nearest ten = 70 (T) · Round 31 to the nearest ten = 30 (I) · Round 94 to the nearest ten = 90 (S) · Round 432 to the nearest ten = 430 (E) · Round 169 to the nearest hundred = 200 (O) · Round 53 to the nearest ten = 50 (B) · Round 2,374 to the nearest thousand = 2000 (G) · Round 4,283 to the nearest hundred = 4300 (H) · Round 2,925 to the nearest hundred = 2900 (A) · Round 1,270 to the nearest hundred = 1300 (L) · Round 260 to the nearest hundred = 300 (D) · Round 9,367 to the nearest thousand = 9000 (N) · Round 864 to the nearest hundred = 900 (C) · Round 2,266 to the nearest hundred = 2300 (U) · Round 4,817 to the nearest thousand = 5000 (Y) · Round 111 to the nearest ten = 110 (R) · Round 465 to the nearest hundred = 500 (P)

Clue 2 (Word problems): "LEFT HANDED"

Junior Explorer found 58 map fragments yesterday and 2 more today. How many map fragments in all? = 60 (L) · There were 23 map fragments. 6 were used up. How many map fragments are left? = 17 (H) · Junior Explorer found 32 map fragments yesterday and 43 more today. How many map fragments in all? = 75 (N) · There were 71 rubies. 37 were used up. How many rubies are left? = 34 (E) · There were 75 rubies. 38 were used up. How many rubies are left? = 37 (F) · Junior Explorer lined up 11 rows of 7 canteen drops. How many canteen drops in all? = 77 (T) · Junior Explorer found 24 torch batteries yesterday and 17 more today. How many torch batteries in all? = 41 (A)

Clue 3 (Addition): "THE BANDIT DUCKED FROM WATER SPRAYS"

$2469 + 1488 = 3957$ (T) · $1952 + 1721 = 3673$ (F) · $2363 + 1722 = 4085$ (Y) · $5047 + 2219 = 7266$ (U) · $3044 + 6769 = 9813$ (W) · $2069 + 1654 = 3723$ (E) · $4651 + 2820 = 7471$ (B) · $5977 + 3611 = 9588$ (N) · $2114 + 3791 = 5905$ (O) · $5703 + 3394 = 9097$ (S) · $1993 + 2347 = 4340$ (I) · $3903 + 2510 = 6413$ (R) · $1020 + 1230 = 2250$ (P) · $2024 + 4708 = 6732$ (K) · $1342 + 2360 = 3702$ (H) · $1372 + 2241 = 3613$ (D) · $1019 + 1005 = 2024$ (M) · $2744 + 1490 = 4234$ (C) · $2898 + 1568 = 4466$ (A)

Clue 4 (Subtraction): "A SCRAP OF A LEATHER CAP WAS FOUND"

$5255 - 1291 = 3964$ (A) · $13222 - 4868 = 8354$ (H) · $6421 - 1679 = 4742$ (R) · $8819 - 348 = 8471$ (L) · $8486 - 196 = 8290$ (D) · $2566 - 418 = 2148$ (O) · $10990 - 4306 = 6684$ (P) · $13241 - 4249 = 8992$ (C) · $5542 - 3046 = 2496$ (W) · $10765 - 3725 = 7040$ (F) · $9673 - 1884 = 7789$ (S) · $9248 - 1256 = 7992$ (N) · $7355 - 4016 = 3339$ (E) · $8901 - 220 = 8681$ (U) · $6741 - 2676 = 4065$ (T)

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

$35 \div 7 = 5$ · $18 \div 6 = 3$ · $21 \div 3 = 7$ · $14 \div 7 = 2$ · $12 \div 1 = 12$ · $40 \div 4 = 10$ · $88 \div 11 = 8$ · $45 \div 5 = 9$ · $18 \div 3 = 6$ · $10 \div 10 = 1$ · $36 \div 9 = 4$