



The Mystery of the Missing Harp

Grade 3 math · Place value, Addition, Subtraction, Rounding, Division · Reading level grades 3-4

Detective: _____ **Date:** _____

The historic Jubal Harp has vanished from the vault display cabinet at Hope Abbey Museum! Detective Marcus needs your help working through clues around the grounds to discover who snatched the artifact before evening service starts.

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 the scroll snatcher 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	CARRIED ITEM	DOMINANT HAND	HAIR COLOR	SCENT SENSITIVITY
Daniel	Brass Key	Cedar Box	Left Handed	Bright Red Hair	Bitter Myrrh
Deborah	Rope Ladder	Linen Sack	Left Handed	Dusty Silver Hair	Bitter Myrrh
Gideon	Silver Horn	Cedar Box	Left Handed	Dark Brown Hair	Fresh Cedar
Martha	Silver Horn	Clay Jar	Right Handed	Dark Brown Hair	Strong Frankincense
Samson	Lantern Beam	Cedar Box	Right Handed	Dusty Silver Hair	Fresh Cedar
Esther	Lantern Beam	Linen Sack	Left Handed	Bright Red Hair	Strong Frankincense
Hannah	Rope Ladder	Linen Sack	Right Handed	Dark Brown Hair	Strong Frankincense
Phoebe	Lantern Beam	Clay Jar	Right Handed	Bright Red Hair	Strong Frankincense
Abigail	Rope Ladder	Olive Oil Flask	Right Handed	Bright Red Hair	Bitter Myrrh
Peter	Lantern Beam	Clay Jar	Right Handed	Dark Brown Hair	Strong Frankincense
Ruth	Bronze Shield	Olive Oil Flask	Right Handed	Dusty Silver Hair	Bitter Myrrh
Aaron	Rope Ladder	Olive Oil Flask	Right Handed	Dark Brown Hair	Fresh Cedar
Jonah	Brass Key	Clay Jar	Left Handed	Dusty Silver Hair	Strong Frankincense
Elijah	Rope Ladder	Palm Branch	Right Handed	Dark Brown Hair	Strong Frankincense
Joanna	Lantern Beam	Linen Sack	Left Handed	Bright Red Hair	Bitter Myrrh
Marcus	Lantern Beam	Olive Oil Flask	Right Handed	Dusty Silver Hair	Strong Frankincense
Naomi	Rope Ladder	Cedar Box	Right Handed	Dark Brown Hair	Strong Frankincense
Isaac	Brass Key	Palm Branch	Right Handed	Bright Red Hair	Strong Frankincense
Barnabas	Lantern Beam	Cedar Box	Left Handed	Dusty Silver Hair	Fresh Cedar
Lydia	Brass Key	Cedar Box	Left Handed	Dark Brown Hair	Strong Frankincense
Timothy	Lantern Beam	Olive Oil Flask	Left Handed	Bright Red Hair	Bitter Myrrh

CLUE 1

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

What is the value of the 5 in 7,353? → **T**

What is the value of the 3 in 932? → **R**

What is the value of the 6 in 688? → **Y**

What is the value of the 7 in 9,765? → **E**

What is the value of the 1 in 613? → **H**

What is the value of the 4 in 648? → **D**

What is the value of the 2 in 2,904? → **L**

What is the value of the 1 in 71,945? → **K**

What is the value of the 3 in 93,070? → **\$**

What is the value of the 9 in 951? → **N**

What is the value of the 4 in 74,800? → **A**

What is the value of the 1 in 165? → **C**

What is the value of the 6 in 6,033? →

What is the value of the 5 in 75,441? →

What is the value of the 7 in 7,009? →

Scratch space:

CLUE 2 Addition

To open the museum library door, the detective tallies up the total number of study scrolls collected today.

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

T									T						T
968	591	316	790	962	790	683	316	487	968	704	973	790	496	311	968

				T							
593	976	736	591	968	591	973	496	400	316	400	

$400 + 568 = \square \rightarrow$ T	$373 + 310 = \square \rightarrow$ P	$220 + 267 = \square \rightarrow$ C
$444 + 532 = \square \rightarrow$ I	$152 + 344 = \square \rightarrow$ N	$190 + 126 = \square \rightarrow$ E
$357 + 236 = \square \rightarrow$ R	$348 + 388 = \square \rightarrow$ G	$277 + 314 = \square \rightarrow$ H
$638 + 324 = \square \rightarrow$ U	$276 + 124 = \square \rightarrow$ D	$303 + 487 = \square \rightarrow$ S
$462 + 511 = \square \rightarrow$ A	$452 + 252 = \square \rightarrow$ W	$107 + 204 = \square \rightarrow$ O

Scratch space:

CLUE 3

Subtraction

To clear out false leads, the team calculates the difference between total clay lamps and missing ones.

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

T			T															
627	174	255	627	174	558	255	320	523	894	141	894	271	894	718	320	523	295	346

	T																
857	627	523	295	141	838	320	523	894	141	519	558	141	298	255	141	857	255

$999 - 372 = \square \rightarrow \boxed{\text{T}}$

$899 - 42 = \square \rightarrow \boxed{\text{S}}$

$568 - 45 = \square \rightarrow \boxed{\text{R}}$

$1221 - 383 = \square \rightarrow \boxed{\text{G}}$

$864 - 146 = \square \rightarrow \boxed{\text{Y}}$

$801 - 243 = \square \rightarrow \boxed{\text{I}}$

$490 - 219 = \square \rightarrow \boxed{\text{W}}$

$445 - 147 = \square \rightarrow \boxed{\text{C}}$

$426 - 106 = \square \rightarrow \boxed{\text{F}}$

$519 - 173 = \square \rightarrow \boxed{\text{M}}$

$198 - 24 = \square \rightarrow \boxed{\text{H}}$

$338 - 83 = \square \rightarrow \boxed{\text{E}}$

$612 - 317 = \square \rightarrow \boxed{\text{O}}$

$726 - 207 = \square \rightarrow \boxed{\text{K}}$

$184 - 43 = \square \rightarrow \boxed{\text{N}}$

$1062 - 168 = \square \rightarrow \boxed{\text{A}}$

Scratch space:

Rounding

The courtyard step counter only shows rounded numbers when people cross the stone bridge.

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

Round 23 to the nearest ten $\rightarrow$ **D**

Round 3,518 to the nearest thousand → **B**

Round 70 to the nearest ten → **F**

Round 87 to the nearest ten $\rightarrow$ **T**

Round 927 to the nearest hundred $\rightarrow$ **H**

Round 81 to the nearest ten $\rightarrow$ **R**

Round 1,785 to the nearest thousand → **K**

Round 50 to the nearest ten $\rightarrow$ **U**

Round 548 to the nearest hundred $\rightarrow$

Round 382 to the nearest hundred → **E**

Round 5,664 to the nearest thousand → **V**

Round 573 to the nearest hundred $\rightarrow$ **A**

Round 6,662 to the nearest thousand $\rightarrow$

Round 9,395 to the nearest thousand → **C**

Round 5,343 to the nearest thousand → **W**

Round 42 to the nearest ten → **N**

Round 244 to the nearest hundred $\rightarrow$ **S**

Scratch space:

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

To share the evidence fairly, the lead detective splits the clue cards into equal piles for each search group.

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:

$9 \div 9 = \boxed{}$

$24 \div 8 = \boxed{}$

$132 \div 11 = \boxed{}$

$45 \div 9 = \boxed{}$

$16 \div 2 = \boxed{}$

$63 \div 9 = \boxed{}$

$24 \div 12 = \boxed{}$

$8 \div 2 = \boxed{}$

$44 \div 4 = \boxed{}$

$18 \div 2 = \boxed{}$

$72 \div 12 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain scaled a rope ladder, then grabbed the cedar box.
2. The villain raised a bronze shield, then snatched the clay jar.
3. The villain shined a lantern beam, then snatched the clay jar.
4. The villain unlocked with a brass key, then snatched the clay jar.
5. The villain raised a bronze shield, then took the olive oil flask.
6. The villain raised a bronze shield, then swiped the palm branch.
7. The villain shined a lantern beam, then grabbed the cedar box.
8. The villain scaled a rope ladder, then took the olive oil flask.
9. The villain shined a lantern beam, then took the olive oil flask.
10. The villain sounded a silver horn, then snatched the clay jar.
11. The villain sounded a silver horn, then swiped the palm branch.
12. The villain scaled a rope ladder, then swiped the palm branch.

Answer Key

The Mystery of the Missing Harp

Culprit: Martha

Silver Horn · Clay Jar · Right Handed · Dark Brown Hair · Strong Frankincense

Trail: Start 21 → Clue 1 17 → Clue 2 11 → Clue 3 7 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE VILLAIN DOES NOT CARRY A LINEN SACK"

What is the value of the 5 in 7,353? = 50 (T) · What is the value of the 3 in 932? = 30 (R) · What is the value of the 6 in 688? = 600 (Y) · What is the value of the 7 in 9,765? = 700 (E) · What is the value of the 1 in 613? = 10 (H) · What is the value of the 4 in 648? = 40 (D) · What is the value of the 2 in 2,904? = 2000 (L) · What is the value of the 1 in 71,945? = 1000 (K) · What is the value of the 3 in 93,070? = 3000 (S) · What is the value of the 9 in 951? = 900 (N) · What is the value of the 4 in 74,800? = 4000 (A) · What is the value of the 1 in 165? = 100 (C) · What is the value of the 6 in 6,033? = 6000 (V) · What is the value of the 5 in 75,441? = 5000 (O) · What is the value of the 7 in 7,009? = 7000 (I)

Clue 2 (Addition): "THE SUSPECT WAS NOT RIGHT HANDED"

$400 + 568 = 968$ (T) · $373 + 310 = 683$ (P) · $220 + 267 = 487$ (C) · $444 + 532 = 976$ (I) · $152 + 344 = 496$ (N) · $190 + 126 = 316$ (E) · $357 + 236 = 593$ (R) · $348 + 388 = 736$ (G) · $277 + 314 = 591$ (H) · $638 + 324 = 962$ (U) · $276 + 124 = 400$ (D) · $303 + 487 = 790$ (S) · $462 + 511 = 973$ (A) · $452 + 252 = 704$ (W) · $107 + 204 = 311$ (O)

Clue 3 (Subtraction): "THE THIEF RAN AWAY FROM STRONG FRANKINCENSE"

$999 - 372 = 627$ (T) · $899 - 42 = 857$ (S) · $568 - 45 = 523$ (R) · $1221 - 383 = 838$ (G) · $864 - 146 = 718$ (Y) · $801 - 243 = 558$ (I) · $490 - 219 = 271$ (W) · $445 - 147 = 298$ (C) · $426 - 106 = 320$ (F) · $519 - 173 = 346$ (M) · $198 - 24 = 174$ (H) · $338 - 83 = 255$ (E) · $612 - 317 = 295$ (O) · $726 - 207 = 519$ (K) · $184 - 43 = 141$ (N) · $1062 - 168 = 894$ (A)

Clue 4 (Rounding): "DETECTIVES FOUND DARK BROWN HAIR AT THE SCENE"

Round 23 to the nearest ten = 20 (D) · Round 3,518 to the nearest thousand = 4000 (B) · Round 70 to the nearest ten = 70 (F) · Round 87 to the nearest ten = 90 (T) · Round 927 to the nearest hundred = 900 (H) · Round 81 to the nearest ten = 80 (R) · Round 1,785 to the nearest thousand = 2000 (K) · Round 50 to the nearest ten = 50 (U) · Round 548 to the nearest hundred = 500 (I) · Round 382 to the nearest hundred = 400 (E) · Round 5,664 to the nearest thousand = 6000 (V) · Round 573 to the nearest hundred = 600 (A) · Round 6,662 to the nearest thousand = 7000 (O) · Round 9,395 to the nearest thousand = 9000 (C) · Round 5,343 to the nearest thousand = 5000 (W) · Round 42 to the nearest ten = 40 (N) · Round 244 to the nearest hundred = 200 (S)

Clue 5 (Division facts (1-12)): surviving statement is box 10 → Martha

$9 \div 9 = 1$ · $24 \div 8 = 3$ · $132 \div 11 = 12$ · $45 \div 9 = 5$ · $16 \div 2 = 8$ · $63 \div 9 = 7$ · $24 \div 12 = 2$ · $8 \div 2 = 4$ · $44 \div 4 = 11$ · $18 \div 2 = 9$ · $72 \div 12 = 6$