



The Mystery of the Missing Monument Miniature

Grade 5 math · Addition, Subtraction, Multiplication, Place value, Fractions of a number · Reading level grades 5-6

Detective: _____ Date: _____

A priceless miniature replica of the Washington Monument has vanished from its display case in the East Room! The Chief Usher noticed a strange draft and found a trail of clues leading down the historic corridors. As junior Secret Service agents, it is up to us to crack the codes, track the clues through the famous rooms, and catch the culprit before the big state dinner begins tonight.

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 Phantom Curator is _____

Possible suspects

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

NAME	SIGNATURE DISGUISE	SECURITY PASS	WRITING HAND	WIG COLOR	DISTRACTION
Rosalynn	Tour Guide Blazer	Kitchen Access Fob	Right Handed Writer	Mahogany Brown Wig	Cherry Pie Scent
Betty	Secret Service Suit	Garden Gate Pass	Right Handed Writer	Mahogany Brown Wig	Ticking Clock Sounds
Dwight	Historical Reenactor Coat	Garden Gate Pass	Left Handed Writer	Silver Grey Wig	Bright Camera Flashes
Abraham	Historical Reenactor Coat	Oval Office Keycard	Left Handed Writer	Powder White Wig	Ticking Clock Sounds
George	Secret Service Suit	Press Room Badge	Right Handed Writer	Powder White Wig	Ticking Clock Sounds
Woodrow	Chef Apron	Press Room Badge	Right Handed Writer	Mahogany Brown Wig	Bright Camera Flashes
Gerald	Chef Apron	Press Room Badge	Left Handed Writer	Mahogany Brown Wig	Ticking Clock Sounds
Eleanor	Press Photographer Jacket	Garden Gate Pass	Right Handed Writer	Powder White Wig	Ticking Clock Sounds
Martha	Secret Service Suit	Garden Gate Pass	Left Handed Writer	Mahogany Brown Wig	Ticking Clock Sounds
Harry	Press Photographer Jacket	Oval Office Keycard	Left Handed Writer	Silver Grey Wig	Ticking Clock Sounds
Jacqueline	Press Photographer Jacket	Kitchen Access Fob	Left Handed Writer	Mahogany Brown Wig	Ticking Clock Sounds
Mary	Press Photographer Jacket	Oval Office Keycard	Right Handed Writer	Powder White Wig	Ticking Clock Sounds
Jimmy	Tour Guide Blazer	Kitchen Access Fob	Left Handed Writer	Mahogany Brown Wig	Ticking Clock Sounds
John	Chef Apron	Vault Code Scroll	Right Handed Writer	Powder White Wig	Ticking Clock Sounds
Nancy	Chef Apron	Vault Code Scroll	Left Handed Writer	Mahogany Brown Wig	Bright Camera Flashes
Edith	Secret Service Suit	Oval Office Keycard	Left Handed Writer	Mahogany Brown Wig	Ticking Clock Sounds
Bess	Historical Reenactor Coat	Garden Gate Pass	Left Handed Writer	Mahogany Brown Wig	Ticking Clock Sounds
Mamie	Tour Guide Blazer	Press Room Badge	Right Handed Writer	Mahogany Brown Wig	Ticking Clock Sounds
Ronald	Press Photographer Jacket	Press Room Badge	Left Handed Writer	Mahogany Brown Wig	Cherry Pie Scent
James	Tour Guide Blazer	Garden Gate Pass	Left Handed Writer	Silver Grey Wig	Bright Camera Flashes
Franklin	Historical Reenactor Coat	Kitchen Access Fob	Right Handed Writer	Powder White Wig	Cherry Pie Scent

CLUE 1 Addition

We tallied the visitor badges collected at both the East and West gates today. Adding these totals together gave us the secure access code to decrypt our first clue.

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

T 4426 8554 4203	4246 7905 2155 2155 5946 7905 4661	6334 5439 4203 6784	T 4661 5439 4426
8554 5946 4246 4203	T 4426 8554 4203	T 7606 7905 4426 4574 8554 4203 4661	5946 4574 4574 4203 6784 6784
7264 5439 3749			

$2875 + 1551 = \square \rightarrow \boxed{T}$	$2973 + 2466 = \square \rightarrow \boxed{O}$	$3236 + 5318 = \square \rightarrow \boxed{H}$
$2759 + 1902 = \square \rightarrow \boxed{N}$	$1223 + 932 = \square \rightarrow \boxed{L}$	$2206 + 1997 = \square \rightarrow \boxed{E}$
$1970 + 4364 = \square \rightarrow \boxed{D}$	$2755 + 3191 = \square \rightarrow \boxed{A}$	$5058 + 2206 = \square \rightarrow \boxed{F}$
$2897 + 1349 = \square \rightarrow \boxed{V}$	$2841 + 5064 = \square \rightarrow \boxed{I}$	$1174 + 2575 = \square \rightarrow \boxed{B}$
$1702 + 2872 = \square \rightarrow \boxed{C}$	$4459 + 2325 = \square \rightarrow \boxed{S}$	$4089 + 3517 = \square \rightarrow \boxed{K}$

Scratch space:

CLUE 2

Subtraction

We compared the original silver spoon inventory from 1800 with today's counts. Subtracting the missing historical items revealed the exact cabinet where the next clue was hidden.

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

T										T				T						T		
3209	6549	8315	5085	3114	5085	1604	8315	5112	3209	3083	4581	8566	3209	8315	5085	3083	8566	3209	6549			

T									T				
3209	6549	8315	8566	4581	6999	8315	1242	3209	6549	8790	5832	3170	

$4846 - 1637 = \square \rightarrow \boxed{\text{T}}$

$4932 - 1818 = \square \rightarrow \boxed{\text{U}}$

$8672 - 357 = \square \rightarrow \boxed{\text{E}}$

$3178 - 1936 = \square \rightarrow \boxed{\text{F}}$

$10859 - 3860 = \square \rightarrow \boxed{\text{L}}$

$11125 - 4576 = \square \rightarrow \boxed{\text{H}}$

$3615 - 445 = \square \rightarrow \boxed{\text{D}}$

$6935 - 1850 = \square \rightarrow \boxed{\text{S}}$

$6640 - 2059 = \square \rightarrow \boxed{\text{R}}$

$10054 - 4222 = \square \rightarrow \boxed{\text{N}}$

$3508 - 1904 = \square \rightarrow \boxed{\text{P}}$

$12198 - 3408 = \square \rightarrow \boxed{\text{A}}$

$9290 - 4178 = \square \rightarrow \boxed{\text{C}}$

$6163 - 3080 = \square \rightarrow \boxed{\text{W}}$

$10234 - 1668 = \square \rightarrow \boxed{\text{I}}$

Scratch space:

CLUE 3
Multiplication facts (1-12)

The grand press room was set up with identical rows of chairs for the briefing. Multiplying the number of rows by the seats in each row unlocked the third clue on the computer.

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

T																	
121	132	72	120	132	1	45	72	7	56	72	120	100	56	18	1	22	100

							T			
72	56	1	9	18	100	5	121	10	5	24

$11 \times 11 = \square \rightarrow$ T	$5 \times 1 = \square \rightarrow$ E	$1 \times 1 = \square \rightarrow$ N	
$10 \times 12 = \square \rightarrow$ K	$2 \times 11 = \square \rightarrow$ D	$10 \times 10 = \square \rightarrow$ S	
$6 \times 3 = \square \rightarrow$ U	$9 \times 1 = \square \rightarrow$ F	$8 \times 9 = \square \rightarrow$ C	$1 \times 7 = \square \rightarrow$ L
$3 \times 8 = \square \rightarrow$ M	$12 \times 11 = \square \rightarrow$ I	$9 \times 5 = \square \rightarrow$ G	
$1 \times 10 = \square \rightarrow$ H	$8 \times 7 = \square \rightarrow$ O		

Scratch space:

CLUE 4

A suspicious sticky note pointed us to a historical plaque near the Rose Garden. Identifying the digit in the tens place of the dedication year gave us the key to reveal the fourth clue.

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

900 600 900 90 700 9000 900 200 10 100 8000 700 3000 200 800 300 8000 900 200 2000

3000 900 800 2000 8000 700 30 30 6000 2000

What is the value of the 9 in 52,918? → **A**

What is the value of the 8 in 301,843? → **S**

What is the value of the 3 in 23,877? → **W**

What is the value of the 7 in 84,756? → ☐

What is the value of the 1 in 76,167? → **B**

What is the value of the 2 in 90,287? → **N**

What is the value of the 1 in 476,513? → **Y**

What is the value of the 6 in 26,490? → **E**

What is the value of the 3 in 811,314? → **T**

What is the value of the 9 in 49,446? → **G**

What is the value of the 9 in 25,796? → **H**

What is the value of the 8 in 98,766? → **R**

What is the value of the 3 in 20,132? → **P**

What is the value of the 2 in 12,795? → **D**

What is the value of the 6 in 95,681? → **M**

Scratch space:

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

The blueprint of the secret underground tunnels was divided into equal grids. Calculating a simple fraction of the total rooms pointed our search team directly to the final clue.

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:

$2/8 \text{ of } 20 = \boxed{}$

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

$2/10 \text{ of } 50 = \boxed{}$

$1/5 \text{ of } 15 = \boxed{}$

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

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

$1/2 \text{ of } 8 = \boxed{}$

$1/5 \text{ of } 10 = \boxed{}$

$2/8 \text{ of } 48 = \boxed{}$

$3/5 \text{ of } 15 = \boxed{}$

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

Step 2 - cross out the sentence with each answer:

1. The villain leads a fake tour group wearing a tour guide blazer, then escapes onto the south lawn using a garden gate pass.
2. The villain wanders the historic halls in a historical reenactor coat, then swipes the lincoln desk key using an oval office keycard.
3. The villain slips past the security desk wearing a secret service suit, then unlocks the podium cabinet with a press room badge.
4. The villain wanders the historic halls in a historical reenactor coat, then sneaks into the pantry with a kitchen access fob.
5. The villain slips past the security desk wearing a secret service suit, then escapes onto the south lawn using a garden gate pass.
6. The villain blends into the briefing room wearing a press photographer jacket, then cracks the secret archive with a vault code scroll.
7. The villain sneaks into the state dining room in a chef apron, then unlocks the podium cabinet with a press room badge.
8. The villain wanders the historic halls in a historical reenactor coat, then escapes onto the south lawn using a garden gate pass.
9. The villain sneaks into the state dining room in a chef apron, then sneaks into the pantry with a kitchen access fob.
10. The villain slips past the security desk wearing a secret service suit, then swipes the lincoln desk key using an oval office keycard.
11. The villain blends into the briefing room wearing a press photographer jacket, then unlocks the podium cabinet with a press room badge.
12. The villain leads a fake tour group wearing a tour guide blazer, then cracks the secret archive with a vault code scroll.

Answer Key

The Mystery of the Missing Monument Miniature

Culprit: Bess

Historical Reenactor Coat · Garden Gate Pass · Left Handed Writer · Mahogany Brown Wig · Ticking Clock Sounds

Trail: Start 21 → Clue 1 17 → Clue 2 10 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Addition): "THE VILLAIN DOES NOT HAVE THE KITCHEN ACCESS FOB"

$2875 + 1551 = 4426$ (T) · $2973 + 2466 = 5439$ (O) · $3236 + 5318 = 8554$ (H) · $2759 + 1902 = 4661$ (N) · $1223 + 932 = 2155$ (L) · $2206 + 1997 = 4203$ (E) · $1970 + 4364 = 6334$ (D) · $2755 + 3191 = 5946$ (A) · $5058 + 2206 = 7264$ (F) · $2897 + 1349 = 4246$ (V) · $2841 + 5064 = 7905$ (I) · $1174 + 2575 = 3749$ (B) · $1702 + 2872 = 4574$ (C) · $4459 + 2325 = 6784$ (S) · $4089 + 3517 = 7606$ (K)

Clue 2 (Subtraction): "THE SUSPECT WRITES WITH THEIR LEFT HAND"

$4846 - 1637 = 3209$ (T) · $4932 - 1818 = 3114$ (U) · $8672 - 357 = 8315$ (E) · $3178 - 1936 = 1242$ (F) · $10859 - 3860 = 6999$ (L) · $11125 - 4576 = 6549$ (H) · $3615 - 445 = 3170$ (D) · $6935 - 1850 = 5085$ (S) · $6640 - 2059 = 4581$ (R) · $10054 - 4222 = 5832$ (N) · $3508 - 1904 = 1604$ (P) · $12198 - 3408 = 8790$ (A) · $9290 - 4178 = 5112$ (C) · $6163 - 3080 = 3083$ (W) · $10234 - 1668 = 8566$ (I)

Clue 3 (Multiplication facts (1-12)): "TICKING CLOCK SOUNDS CONFUSE THEM"

$11 \times 11 = 121$ (T) · $5 \times 1 = 5$ (E) · $1 \times 1 = 1$ (N) · $10 \times 12 = 120$ (K) · $2 \times 11 = 22$ (D) · $10 \times 10 = 100$ (S) · $6 \times 3 = 18$ (U) · $9 \times 1 = 9$ (F) · $8 \times 9 = 72$ (C) · $1 \times 7 = 7$ (L) · $3 \times 8 = 24$ (M) · $12 \times 11 = 132$ (I) · $9 \times 5 = 45$ (G) · $1 \times 10 = 10$ (H) · $8 \times 7 = 56$ (O)

Clue 4 (Place value): "A MAHOGANY BROWN STRAND WAS DROPPED"

What is the value of the 9 in 52,918? = 900 (A) · What is the value of the 8 in 301,843? = 800 (S) · What is the value of the 3 in 23,877? = 3000 (W) · What is the value of the 7 in 84,756? = 700 (O) · What is the value of the 1 in 76,167? = 100 (B) · What is the value of the 2 in 90,287? = 200 (N) · What is the value of the 1 in 476,513? = 10 (Y) · What is the value of the 6 in 26,490? = 6000 (E) · What is the value of the 3 in 811,314? = 300 (T) · What is the value of the 9 in 49,446? = 9000 (G) · What is the value of the 9 in 25,796? = 90 (H) · What is the value of the 8 in 98,766? = 8000 (R) · What is the value of the 3 in 20,132? = 30 (P) · What is the value of the 2 in 12,795? = 2000 (D) · What is the value of the 6 in 95,681? = 600 (M)

Clue 5 (Fractions of a number): surviving statement is box 8 → Bess

$\frac{2}{8}$ of 20 = 5 · $\frac{2}{6}$ of 21 = 7 · $\frac{2}{10}$ of 50 = 10 · $\frac{1}{5}$ of 15 = 3 · $\frac{1}{5}$ of 5 = 1 · $\frac{5}{10}$ of 22 = 11 · $\frac{1}{2}$ of 8 = 4 · $\frac{1}{5}$ of 10 = 2 · $\frac{2}{8}$ of 48 = 12 · $\frac{3}{5}$ of 15 = 9 · $\frac{5}{10}$ of 12 = 6