



The Great Vampire Capriccio

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

Detective: _____ Date: _____

The Crimson Goblet has gone missing from Castle Sombra! A sneaky vampire crept past the gargoyles and snatched it. We must find out who took it before the Great Bat Festival 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 Bat-Burglar is _____

Possible suspects

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

NAME	VAMPIRE SKILL	VAMPIRE GEAR	DOMINANT HAND	HAIRSTYLE	SECRET FEAR
Bunnacula	Hypnotic Stare	Super Fangs	Right Handed	Slicked Back	Squeaky Toy
Mavis	Shadow Slidestep	Super Fangs	Right Handed	Slicked Back	Garlic Perfume
Marceline	Bat Morphing	Super Fangs	Right Handed	Slicked Back	Squeaky Toy
Scarlet	Bat Morphing	Glow Cloak	Right Handed	Spiky Purple	Bright Flashlight
Alucard	Wall Climbing	Super Fangs	Right Handed	Slicked Back	Squeaky Toy
Vladimir	Shadow Slidestep	Bat Radar	Right Handed	Spiky Purple	Bright Flashlight
Angel	Shadow Slidestep	Bat Radar	Right Handed	Silver Streak	Bright Flashlight
Barry Bat	Bat Morphing	Bat Radar	Right Handed	Slicked Back	Squeaky Toy
Carmilla	Bat Morphing	Super Fangs	Left Handed	Silver Streak	Garlic Perfume
Fangula	Shadow Slidestep	Bat Radar	Right Handed	Spiky Purple	Squeaky Toy
Orlok	Hypnotic Stare	Super Fangs	Right Handed	Slicked Back	Bright Flashlight
Gothica	Bat Morphing	Sonic Whistle	Right Handed	Slicked Back	Garlic Perfume
Bella	Hypnotic Stare	Glow Cloak	Right Handed	Silver Streak	Bright Flashlight
Rudolph	Mist Floating	Super Fangs	Left Handed	Spiky Purple	Bright Flashlight
Drake	Shadow Slidestep	Sonic Whistle	Left Handed	Silver Streak	Garlic Perfume
Countessa	Hypnotic Stare	Fog Bomb	Right Handed	Slicked Back	Squeaky Toy
Edward	Wall Climbing	Sonic Whistle	Right Handed	Spiky Purple	Squeaky Toy
Vicky Vamp	Bat Morphing	Glow Cloak	Left Handed	Slicked Back	Squeaky Toy
Nosferatu	Mist Floating	Glow Cloak	Right Handed	Slicked Back	Bright Flashlight
Dracula	Bat Morphing	Glow Cloak	Left Handed	Silver Streak	Squeaky Toy
Sibella	Bat Morphing	Sonic Whistle	Left Handed	Slicked Back	Squeaky Toy

CLUE 1 Place value

We found a combination lock on the secret vampire vault! Inspect the digit in the tens place to crack the first lock.

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

T 2000	8000	700	T 2000	8000	300	700	500	5000	900	700	1000	4000	900	T 2000	9000	1000	700	80	
500	900	400	50	900	800	50													

What is the value of the 2 in 12,310? → **T**

What is the value of the 5 in 8,522? → **F**

What is the value of the 8 in 78,123? → **H**

What is the value of the 3 in 327? → **I**

What is the value of the 8 in 5,183? → **A**

What is the value of the 5 in 35,447? → **D**

What is the value of the 9 in 9,707? → **U**

What is the value of the 9 in 1,967? → **O**

What is the value of the 7 in 720? → **E**

What is the value of the 1 in 1,725? → **S**

What is the value of the 4 in 54,051? → **N**

What is the value of the 4 in 405? → **G**

What is the value of the 5 in 2,353? → **B**

What is the value of the 8 in 899? → **M**

Scratch space:

CLUE 2 Addition

We gathered all the plastic bat treats left on the floor. Add them together to find the total count.

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

T			T																
8165	6930	3574	8165	6930	7484	3574	9346	3574	9290	6495	2456	3613	3574	5768	5711	9290	7484	4420	8100

T									T				
8165	6930	3574	7484	4283	4283	7484	8100	6930	8165	6930	2456	4420	5768

$3804 + 4361 = \square \rightarrow$ T	$3700 + 2795 = \square \rightarrow$ C	$1919 + 1655 = \square \rightarrow$ E
$4120 + 2810 = \square \rightarrow$ H	$3636 + 5654 = \square \rightarrow$ S	$2185 + 3526 = \square \rightarrow$ U
$2722 + 4762 = \square \rightarrow$ I	$6433 + 2913 = \square \rightarrow$ F	$1637 + 2783 = \square \rightarrow$ N
$3008 + 5092 = \square \rightarrow$ G	$744 + 1712 = \square \rightarrow$ A	$1745 + 2538 = \square \rightarrow$ R
$1825 + 1788 = \square \rightarrow$ P	$2357 + 3411 = \square \rightarrow$ D	

Scratch space:

CLUE 3

Subtraction

The castle kitchen had some garlic bread stolen. Subtract the missing slices from the original pile to find the difference.

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

A					A											
1090	3215	1809	7833	2639	1090	2309	5203	4648	1176	5203	3215	8703	1090	1054	2639	6551
4648	6049	2639	3117	1058	4429	4429	1090	1058	3907	1090	6529	1090	5203			

$$2411 - 1321 = \square \rightarrow \boxed{\text{A}}$$

$$9089 - 2560 = \square \rightarrow \boxed{\text{W}}$$

$$6448 - 2019 = \square \rightarrow \boxed{\text{L}}$$

$$5894 - 4840 = \square \rightarrow \boxed{\text{R}}$$

$$5161 - 2044 = \square \rightarrow \boxed{\text{V}}$$

$$8854 - 4206 = \square \rightarrow \boxed{\text{T}}$$

$$6214 - 1011 = \square \rightarrow \boxed{\text{Y}}$$

$$3031 - 722 = \square \rightarrow \boxed{\text{K}}$$

$$8262 - 1711 = \square \rightarrow \boxed{\text{D}}$$

$$3080 - 1271 = \square \rightarrow \boxed{\text{Q}}$$

$$4142 - 1503 = \square \rightarrow \boxed{\text{E}}$$

$$6323 - 2416 = \square \rightarrow \boxed{\text{N}}$$

$$4597 - 3539 = \square \rightarrow \boxed{\text{I}}$$

$$2620 - 1444 = \square \rightarrow \boxed{\text{O}}$$

$$10600 - 2767 = \square \rightarrow \boxed{\text{U}}$$

$$12325 - 3622 = \square \rightarrow \boxed{\text{C}}$$

$$9119 - 3070 = \square \rightarrow \boxed{\text{H}}$$

$$3961 - 746 = \square \rightarrow \boxed{\text{S}}$$

Scratch space:

CLUE 4

Multiplication facts (1-12)

The spooky gargoyles stand in equal rows along the castle roof. Multiply the rows by the columns to count them all.

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

W																			
24	30	25	8	55	50	32	21	132	70	18	6	10	30	32	81	21	6	10	
63	21	18	100	21	54	54	63	30	132	6	30	50	30						

$2 \times 12 = \square \rightarrow \boxed{\text{W}}$

$8 \times 1 = \square \rightarrow \boxed{\text{O}}$

$3 \times 7 = \square \rightarrow \boxed{\text{A}}$

$5 \times 10 = \square \rightarrow \boxed{\text{N}}$

$2 \times 3 = \square \rightarrow \boxed{\text{C}}$

$11 \times 12 = \square \rightarrow \boxed{\text{S}}$

$7 \times 9 = \square \rightarrow \boxed{\text{H}}$

$9 \times 6 = \square \rightarrow \boxed{\text{T}}$

$6 \times 5 = \square \rightarrow \boxed{\text{E}}$

$9 \times 2 = \square \rightarrow \boxed{\text{I}}$

$5 \times 5 = \square \rightarrow \boxed{\text{F}}$

$5 \times 11 = \square \rightarrow \boxed{\text{U}}$

$1 \times 10 = \square \rightarrow \boxed{\text{K}}$

$9 \times 9 = \square \rightarrow \boxed{\text{B}}$

$4 \times 8 = \square \rightarrow \boxed{\text{D}}$

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

$7 \times 10 = \square \rightarrow \boxed{\text{L}}$

Scratch space:

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

A pack of cute baby bats wants to share a stash of red juice boxes equally. Divide the juice boxes to see how many each bat gets.

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:

$45 \div 9 = \boxed{}$

$20 \div 5 = \boxed{}$

$63 \div 9 = \boxed{}$

$48 \div 4 = \boxed{}$

$99 \div 11 = \boxed{}$

$7 \div 7 = \boxed{}$

$2 \div 1 = \boxed{}$

$55 \div 5 = \boxed{}$

$21 \div 7 = \boxed{}$

$10 \div 1 = \boxed{}$

$6 \div 1 = \boxed{}$

Step 2 - cross out the sentence with each answer:

1. The villain floated on a dark mist, then threw down a smoky purple fog bomb.
2. The villain slid through the shadows, then threw down a smoky purple fog bomb.
3. The villain crawled straight up the stone wall, then turned on high tech bat radar.
4. The villain used a glowing hypnotic stare, then flashed shiny plastic super fangs.
5. The villain crawled straight up the stone wall, then flashed shiny plastic super fangs.
6. The villain used a glowing hypnotic stare, then blew a loud silver sonic whistle.
7. The villain turned into a tiny bat, then turned on high tech bat radar.
8. The villain turned into a tiny bat, then flashed shiny plastic super fangs.
9. The villain slid through the shadows, then turned on high tech bat radar.
10. The villain crawled straight up the stone wall, then blew a loud silver sonic whistle.
11. The villain floated on a dark mist, then flashed shiny plastic super fangs.
12. The villain floated on a dark mist, then activated a bright neon glow cloak.

Answer Key

The Great Vampire Capriccio

Culprit: Marceline

Bat Morphing · Super Fangs · Right Handed · Slicked Back · Squeaky Toy

Trail: Start 21 → Clue 1 20 → Clue 2 14 → Clue 3 6 → Clue 4 4 → Clue 5 1

Clue 1 (Place value): "THE THIEF DOES NOT USE A FOG BOMB"

What is the value of the 2 in 12,310? = 2000 (T) · What is the value of the 5 in 8,522? = 500 (F) · What is the value of the 8 in 78,123? = 8000 (H) · What is the value of the 3 in 327? = 300 (I) · What is the value of the 8 in 5,183? = 80 (A) · What is the value of the 5 in 35,447? = 5000 (D) · What is the value of the 9 in 9,707? = 9000 (U) · What is the value of the 9 in 1,967? = 900 (O) · What is the value of the 7 in 720? = 700 (E) · What is the value of the 1 in 1,725? = 1000 (S) · What is the value of the 4 in 54,051? = 4000 (N) · What is the value of the 4 in 405? = 400 (G) · What is the value of the 5 in 2,353? = 50 (B) · What is the value of the 8 in 899? = 800 (M)

Clue 2 (Addition): "THE THIEF ESCAPED USING THEIR RIGHT HAND"

$3804 + 4361 = 8165$ (T) · $3700 + 2795 = 6495$ (C) · $1919 + 1655 = 3574$ (E) · $4120 + 2810 = 6930$ (H) · $3636 + 5654 = 9290$ (S) · $2185 + 3526 = 5711$ (U) · $2722 + 4762 = 7484$ (I) · $6433 + 2913 = 9346$ (F) · $1637 + 2783 = 4420$ (N) · $3008 + 5092 = 8100$ (G) · $744 + 1712 = 2456$ (A) · $1745 + 2538 = 4283$ (R) · $1825 + 1788 = 3613$ (P) · $2357 + 3411 = 5768$ (D)

Clue 3 (Subtraction): "A SQUEAKY TOY SCARED THE VILLAIN AWAY"

$2411 - 1321 = 1090$ (A) · $9089 - 2560 = 6529$ (W) · $6448 - 2019 = 4429$ (L) · $5894 - 4840 = 1054$ (R) · $5161 - 2044 = 3117$ (V) · $8854 - 4206 = 4648$ (T) · $6214 - 1011 = 5203$ (Y) · $3031 - 722 = 2309$ (K) · $8262 - 1711 = 6551$ (D) · $3080 - 1271 = 1809$ (Q) · $4142 - 1503 = 2639$ (E) · $6323 - 2416 = 3907$ (N) · $4597 - 3539 = 1058$ (I) · $2620 - 1444 = 1176$ (O) · $10600 - 2767 = 7833$ (U) · $12325 - 3622 = 8703$ (C) · $9119 - 3070 = 6049$ (H) · $3961 - 746 = 3215$ (S)

Clue 4 (Multiplication facts (1-12)): "WE FOUND A SLICKED BACK HAIR AT THE SCENE"

$2 \times 12 = 24$ (W) · $8 \times 1 = 8$ (O) · $3 \times 7 = 21$ (A) · $5 \times 10 = 50$ (N) · $2 \times 3 = 6$ (C) · $11 \times 12 = 132$ (S) · $7 \times 9 = 63$ (H) · $9 \times 6 = 54$ (T) · $6 \times 5 = 30$ (E) · $9 \times 2 = 18$ (I) · $5 \times 5 = 25$ (F) · $5 \times 11 = 55$ (U) · $1 \times 10 = 10$ (K) · $9 \times 9 = 81$ (B) · $4 \times 8 = 32$ (D) · $10 \times 10 = 100$ (R) · $7 \times 10 = 70$ (L)

Clue 5 (Division facts (1-12)): surviving statement is box 8 → Marceline

$45 \div 9 = 5$ · $20 \div 5 = 4$ · $63 \div 9 = 7$ · $48 \div 4 = 12$ · $99 \div 11 = 9$ · $7 \div 7 = 1$ · $2 \div 1 = 2$ · $55 \div 5 = 11$ · $21 \div 7 = 3$ · $10 \div 1 = 10$ · $6 \div 1 = 6$