The Mystery of the Missing Golden Cauldron

Grade 6 math · Addition, Multiplication, Subtraction, Percentages, Division · Reading level grades 5-6

Detective: _____ **Date:** _____

Late last night, someone broke into the Mistveil Academy vault and snatched the ancient Golden Cauldron. The Master Alchemist caught a brief glimpse of the intruder fleeing into the dark corridors. Work through the clues to uncover who took it!

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 potion thief is _____

Possible suspects

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

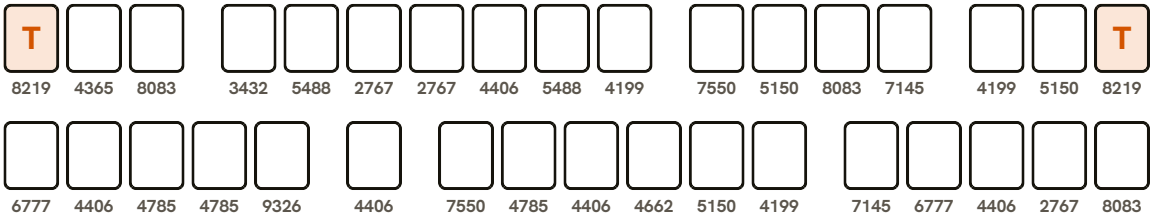
NAME	SPELL SPECIALTY	MAGICAL RELIC	WAND HAND	HAIR COLOR	COUNTER CHARM
Vespera Night	Telekinesis	Rune Stone	Left Handed	Emerald Green	Bell Sound
Alistair Finch	Illusionism	Dragon Scale	Left Handed	Emerald Green	Bell Sound
Zephyr Darkmore	Telekinesis	Crystal Orb	Right Handed	Midnight Blue	Mirror Flash
Flavia Marsh	Levitation	Phoenix Feather	Right Handed	Silver White	Garlic Vapor
Yvaine Ember	Pyromancy	Rune Stone	Left Handed	Emerald Green	Bell Sound
Ignatius Pryce	Levitation	Rune Stone	Left Handed	Emerald Green	Garlic Vapor
Orion Graves	Levitation	Phoenix Feather	Left Handed	Emerald Green	Bell Sound
Thalia Spellman	Pyromancy	Crystal Orb	Right Handed	Emerald Green	Bell Sound
Kaelen Shadow	Transmutation	Rune Stone	Right Handed	Silver White	Mirror Flash
Ulric Ravencroft	Illusionism	Phoenix Feather	Left Handed	Midnight Blue	Garlic Vapor
Jovita Frost	Pyromancy	Dragon Scale	Right Handed	Silver White	Mirror Flash
Elazar Vance	Illusionism	Crystal Orb	Right Handed	Midnight Blue	Garlic Vapor
Severin Drake	Transmutation	Crystal Orb	Left Handed	Silver White	Mirror Flash
Beatrix Vane	Transmutation	Crystal Orb	Right Handed	Emerald Green	Bell Sound
Quinton Ash	Telekinesis	Phoenix Feather	Left Handed	Silver White	Garlic Vapor
Xenon Starling	Transmutation	Crystal Orb	Left Handed	Emerald Green	Bell Sound
Gideon Sterling	Pyromancy	Phoenix Feather	Right Handed	Emerald Green	Mirror Flash
Rosalind Hexley	Illusionism	Crystal Orb	Right Handed	Emerald Green	Garlic Vapor
Hespera Dusk	Transmutation	Dragon Scale	Right Handed	Silver White	Bell Sound
Delphina Blackwood	Pyromancy	Time Hourglass	Left Handed	Silver White	Bell Sound
Persephone Mire	Pyromancy	Time Hourglass	Left Handed	Emerald Green	Mirror Flash

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CLUE 1 Addition

We gathered all the scattered potion vials outside the alchemy lab to tally the total evidence.

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



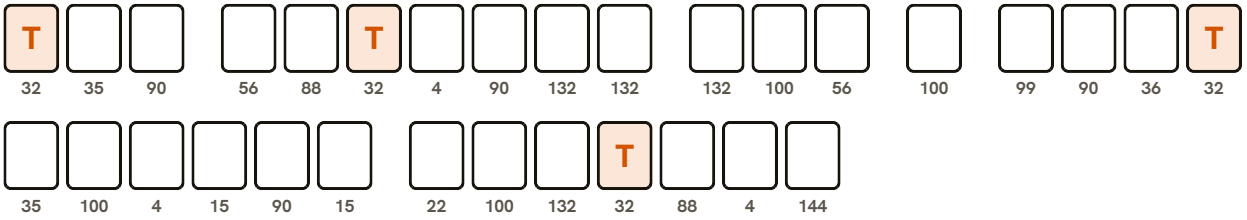
3465 + 4754 = ☐ → T	2760 + 2390 = ☐ → O	3635 + 4448 = ☐ → E
3611 + 3939 = ☐ → D	1862 + 2544 = ☐ → A	2966 + 1819 = ☐ → R
3315 + 3830 = ☐ → S	2602 + 1763 = ☐ → H	3053 + 3724 = ☐ → C
1031 + 1736 = ☐ → L	2871 + 1328 = ☐ → N	1563 + 3099 = ☐ → G
1368 + 2064 = ☐ → V	4466 + 4860 = ☐ → Y	3734 + 1754 = ☐ → I

Scratch space:

CLUE 2 Multiplication facts (1-12)

> Next, we inspected the spell shelves, counting six rows of eight glowing crystal jars each.

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



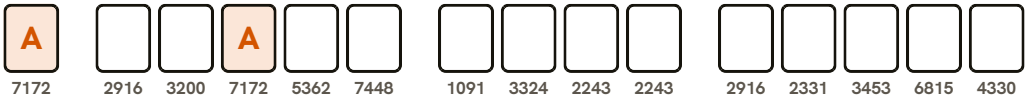
4 × 8 = ☐ → T	7 × 5 = ☐ → H	11 × 9 = ☐ → L
12 × 3 = ☐ → F	7 × 8 = ☐ → W	12 × 12 = ☐ → G
11 × 2 = ☐ → C	1 × 4 = ☐ → N	10 × 9 = ☐ → E
3 × 5 = ☐ → D	10 × 10 = ☐ → A	11 × 12 = ☐ → S
8 × 11 = ☐ → I		

Scratch space:

CLUE 3 Subtraction

> We compared the library scroll ledger against the remaining spellbooks to see how many were taken.

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





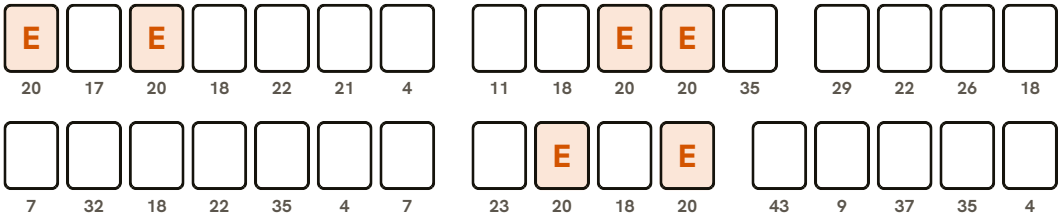
9169 - 1997 = ☐ → A	3920 - 596 = ☐ → E	4986 - 2070 = ☐ → S
6199 - 1534 = ☐ → T	7182 - 367 = ☐ → N	5508 - 3265 = ☐ → L
4085 - 885 = ☐ → H	6714 - 3261 = ☐ → U	7214 - 2884 = ☐ → D
8558 - 1110 = ☐ → P	1418 - 327 = ☐ → B	8909 - 4757 = ☐ → C
6559 - 4228 = ☐ → O	7054 - 1692 = ☐ → R	

Scratch space:

CLUE 4 Percentages

An enchanted hourglass showed what percentage of magical power remained in the chamber.

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



25% of 80 = ☐ → E

25% of 68 = ☐ → M

50% of 86 = ☐ → F

5% of 740 = ☐ → U

20% of 145 = ☐ → H

5% of 180 = ☐ → O

40% of 80 = ☐ → T

20% of 115 = ☐ → W

10% of 110 = ☐ → G

50% of 70 = ☐ → N

25% of 84 = ☐ → L

10% of 40 = ☐ → D

20% of 130 = ☐ → I

5% of 140 = ☐ → S

40% of 45 = ☐ → R

5% of 440 = ☐ → A

Scratch space:

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

> Finally, we divided the search area equally among all five student prefect teams.

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 ÷ 3 = ☐	48 ÷ 4 = ☐	20 ÷ 2 = ☐	8 ÷ 4 = ☐	12 ÷ 2 = ☐
56 ÷ 7 = ☐	35 ÷ 5 = ☐	4 ÷ 1 = ☐	11 ÷ 1 = ☐	9 ÷ 9 = ☐
18 ÷ 2 = ☐				

Step 2 - cross out the sentence with each answer:

1. The villain conjured a blinding illusion spell, then left behind a glowing rune stone.
2. The villain conjured a blinding illusion spell, then brushed past with a heavy dragon scale.
3. The villain transmuted the metal lock into salt, then shattered a delicate crystal orb.
4. The villain conjured a blinding illusion spell, then shattered a delicate crystal orb.
5. The villain cast a levitation spell on the cabinet, then dropped a burning phoenix feather.
6. The villain cast a levitation spell on the cabinet, then accidentally turned a time hourglass.
7. The villain blazed through the wooden barrier, then dropped a burning phoenix feather.
8. The villain conjured a blinding illusion spell, then dropped a burning phoenix feather.
9. The villain transmuted the metal lock into salt, then left behind a glowing rune stone.
10. The villain blazed through the wooden barrier, then left behind a glowing rune stone.
11. The villain telekinetically slid the golden lock, then dropped a burning phoenix feather.
12. The villain telekinetically slid the golden lock, then left behind a glowing rune stone.

TEACHER / PARENT

Answer Key

The Mystery of the Missing Golden Cauldron

Culprit: Orion Graves

Levitation · Phoenix Feather · Left Handed · Emerald Green · Bell Sound

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

Clue 1 (Addition): "THE VILLAIN DOES NOT CARRY A DRAGON SCALE"

3465 + 4754 = 8219 (T) · 2760 + 2390 = 5150 (O) · 3635 + 4448 = 8083 (E) · 3611 + 3939 = 7550 (D) · 1862 + 2544 = 4406 (A) · 2966 + 1819 = 4785 (R) · 3315 + 3830 = 7145 (S) · 2602 + 1763 = 4365 (H) · 3053 + 3724 = 6777 (C) · 1031 + 1736 = 2767 (L) · 2871 + 1328 = 4199 (N) · 1563 + 3099 = 4662 (G) · 1368 + 2064 = 3432 (V) · 4466 + 4860 = 9326 (Y) · 3734 + 1754 = 5488 (I)

Clue 2 (Multiplication facts (1-12)): "THE WITNESS SAW A LEFT HANDED CASTING"

4 × 8 = 32 (T) · 7 × 5 = 35 (H) · 11 × 9 = 99 (L) · 12 × 3 = 36 (F) · 7 × 8 = 56 (W) · 12 × 12 = 144 (G) · 11 × 2 = 22 (C) · 1 × 4 = 4 (N) · 10 × 9 = 90 (E) · 3 × 5 = 15 (D) · 10 × 10 = 100 (A) · 11 × 12 = 132 (S) · 8 × 11 = 88 (I)

Clue 3 (Subtraction): "A SHARP BELL SOUND STUNNED THE SUSPECT"

9169 - 1997 = 7172 (A) · 3920 - 596 = 3324 (E) · 4986 - 2070 = 2916 (S) · 6199 - 1534 = 4665 (T) · 7182 - 367 = 6815 (N) · 5508 - 3265 = 2243 (L) · 4085 - 885 = 3200 (H) · 6714 - 3261 = 3453 (U) · 7214 - 2884 = 4330 (D) · 8558 - 1110 = 7448 (P) · 1418 - 327 = 1091 (B) · 8909 - 4757 = 4152 (C) · 6559 - 4228 = 2331 (O) · 7054 - 1692 = 5362 (R)

Clue 4 (Percentages): "EMERALD GREEN HAIR STRANDS WERE FOUND"

25% of 80 = 20 (E) · 25% of 68 = 17 (M) · 50% of 86 = 43 (F) · 5% of 740 = 37 (U) · 20% of 145 = 29 (H) · 5% of 180 = 9 (O) · 40% of 80 = 32 (T) · 20% of 115 = 23 (W) · 10% of 110 = 11 (G) · 50% of 70 = 35 (N) · 25% of 84 = 21 (L) · 10% of 40 = 4 (D) · 20% of 130 = 26 (I) · 5% of 140 = 7 (S) · 40% of 45 = 18 (R) · 5% of 440 = 22 (A)

Clue 5 (Division facts (1-12)): surviving statement is box 5 → Orion Graves

9 ÷ 3 = 3 · 48 ÷ 4 = 12 · 20 ÷ 2 = 10 · 8 ÷ 4 = 2 · 12 ÷ 2 = 6 · 56 ÷ 7 = 8 · 35 ÷ 5 = 7 · 4 ÷ 1 = 4 · 11 ÷ 1 = 11 · 9 ÷ 9 = 1 · 18 ÷ 2 = 9